

Adhesive for thermal insulation boards

Description

ISOMAT AK-T33 is a cement-based adhesive for thermal insulation boards. It provides high adhesive strength, elasticity and moisture resistance.

Fields of application

ISOMAT AK-T33 is used in combination with the plasters MARMOCRET PLUS and MARMOCRYL, as a system for the external thermal insulation of buildings. It is suitable for fixing thermal insulation polystyrene boards on the facades of buildings.

Technical data

Form:	cementitious mortar
Color:	grey
Water demand:	6,00 l/25 kg bag
Bulk density of dry mortar:	1,55 \pm 0,10 kg/lit
Bulk density of	
fresh mortar:	1,75 \pm 0,10 kg/lit
Application temperature:	from +5°C to +35°C
Pot life:	at least 6 h
Adhesive strength to concrete:	≥ 0,80 N/mm²
Adhesive strength to extruded polystyrene:	≥ 0,07 N/mm ²
Adhesive strength to expanded polystyrene:	\geq 0,04 N/mm ²
Compressive strength:	8,00 N/mm ²
Flexural strength:	3,50 N/mm ²
Capillary water absorption:	\leq 0,5 kg/m ² min ^{0,5}

Directions for use

1. Substrate

The surface to be covered with boards should be free of dust, grease, loose particles, paints etc. It is recommended that it is dampened before application.

2. Application

ISOMAT AK-T33 is gradually added into water under continuous stirring until a homogeneous paste is formed. A low revolution mixer is recommended for mixing. The mixture should be left for about 10 minutes to rest and then should be re-stirred a bit.

On smooth substrates the adhesive is spread on the thermo-insulation board and combed using a notched trowel in order to be uniformly applied on the whole of the surface.

<u>On uneven substrates</u> the adhesive is applied with a trowel around the perimeter of the thermo-insulation board and in selected spots in the center.

Next, the thermal insulation boards are fixed by pressing them on the desired position.

Consumption

3,0-4,0 kg/m², depending on the trowel's notch size and the nature of the substrate.

Packaging

ISOMAT AK-T33 is supplied in paper bags of 25kg.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- ISOMAT AK-T33 contains cement and reacts as alkaline with moisture, so it is classified as irritant.
- Very porous surfaces such as aerated concrete, gypsum boards, chipboards etc. must be primed first with UNI-PRIMER acrylic primer.
- Consult usage risks and safety advice written on the bag.

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Fiber-reinforced adhesive for thermal insulation boards

Description

ISOMAT AK-T35 is a fiber-reinforced cementbased adhesive, enriched with polymers (resins). It provides high initial and final adhesive strength, elasticity and resistance to moisture. It is qualified as absolutely non-slip adhesive with increased open time.

Fields of application

ISOMAT AK-T35 is used in combination with the plasters MARMOCRET PLUS and MARMOCRYL, as a system for the external thermal insulation of buildings. It is suitable for fixing thermal insulation polystyrene boards on the facades of buildings. Moreover, when applied reinforced with fiberglass mesh on fixed thermal insulation boards, it constitutes the ideal substrate for the subsequent plaster.

Technical data

Form:	cementitious mortar
Color:	white, grey
Water demand:	5,75 l/25 kg bag
Bulk density of dry mortar:	1,50 \pm 0,10 kg/lit
Bulk density	
of fresh mortar:	1,65 \pm 0,10 kg/lit
Application temperature:	from +5°C to +35°C
Pot life:	at least 6 h
ISOMAT AK-T35 (white) Adhesive strength to concrete:	≥ 0.80 N/mm²
	2 0,00 11/11/1
Adhesive strength to extruded polystyrene:	\geq 0,10 N/mm ²
Adhesive strength to	
expanded polystyrene:	\geq 0,05 N/mm ²
Compressive strength:	$13,50 \pm 2,00 \text{ N/mm}^2$
Flexural strength:	$3{,}50\pm1{,}00\text{ N/mm}^{2}$

Capillary water absorption:	\leq 0,2 kg/m ² min ^{0,5}
ISOMAT AK-T35 (grey)	
Adhesive strength to concrete:	≥ 0,80 N/mm ²
	_ 0,00 10/11/1
Adhesive strength to extruded polystyrene:	≥ 0,08 N/mm ²
1 , , ,	≥ 0,00 N/IIIII
Adhesive strength	> 0. 05 N//mm ²
to expanded polystyrene:	≥ 0, 05 N/mm ²
Compressive strength:	$12{,}00\pm2{,}00~\text{N/mm}^{2}$
Flexural strength:	$4,00\pm1,00~\text{N/mm}^{2}$
Capillary water absorption:	\leq 0,2 kg/m ² min ^{0,5}
Directions for use	

1 Substrate

The surface to be covered with boards should be free of dust, grease, loose particles, paints etc. It is recommended that it is dampened before application.

2. Application

As adhesive:

ISOMAT AK-T35 is gradually added into water under continuous stirring until a homogeneous paste is formed. A low revolution mixer is recommended for mixing. The mixture should be left for about 10 minutes to rest and then should be re-stirred a bit.

On smooth substrates the adhesive is spread on the thermo-insulation board and combed using a notched trowel in order to be uniformly applied on the whole of the surface.

<u>On uneven substrates</u> the adhesive is applied with a trowel around the perimeter of the thermo-insulation board and in selected spots in the center.

Next, the thermo-insulation boards are fixed by pressing them on the desired position.

As reinforced mortar:

Initially the material is applied with a notched trowel in a maximum thickness of 3 mm. On the still fresh layer the fiberglass mesh is placed and pressed with a smooth trowel to get fully





encased in the adhesive. Finally, the surface is smoothed out and the excess adhesive is removed.

Consumption

As adhesive: 3,0-4,0 kg/m², depending on the trowel's notch size and the nature of the substrate.

As reinforced mortar: approx. 1,5 kg/m²/mm.

Packaging

ISOMAT AK-T35 is supplied in paper bags of 25 kg.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- ISOMAT AK-T35 contains cement and reacts as alkaline with moisture, so it is classified as irritant.
- Very porous surfaces such as aerated concrete, gypsum boards, chipboards etc. must be primed first with UNI-PRIMER acrylic primer.
- Consult usage risks and safety advice written on the bag.

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Fibre-reinforced adhesive for thermo-insulation boards

Description

ISOMAT AK-T55 is a fibre-reinforced cementbased adhesive, enriched with polymers (resins). It provides high initial and final adhesive strength, elasticity and resistance to moisture.

It is classified as a GP CS IV W2 rendering mortar according to EN 998-1 and as a C2 adhesive according to EN 12004.

Fields of application

ISOMAT AK-T55 is used in combination with MARMOCRET PLUS and MARMOCRYL renders as a system for creating external thermo-insulated facades.

It is suitable for fixing thermo-insulation boards of extruded or expanded polystyrene, mineral wool, polyurethane, cork, etc. on facades made of concrete, render, or masonry.

Moreover, when reinforced with fibreglass mesh and applied on the exterior side of fixed thermoinsulation boards, it constitutes the ideal substrate for the subsequent render layer.

Technical data

Form:	cementitious mortar
Color:	white
Water demand:	5,50 l/25 kg bag
Bulk density of dry mortar:	$1,50 \pm 0,10$ kg/l
Bulk density of fresh mortar:	$1,60 \pm 0,10$ kg/l
Application temperature:	from +5°C to +35°C
Pot life:	at least 4 h
Compressive strength:	$12{,}00\pm1{,}00~\text{N/mm}^{2}$
Flexural strength:	$5{,}50\pm0{,}50\text{ N/mm}^{2}$
Adhesion on concrete (28 days):	≥ 1,30 N/mm ²
Adhesion on XPS (28 days):	\geq 0,15 N/mm ²

Adhesion on EPS (28 days):	≥ 0,10 N/mm² (EPS failure)
Capillary water absorption:	$\leq 0,2 \text{ kg/m}^2 \text{min}^{0.5}$
Thermal conductivity $(\lambda_{10,dry})$:	0,45 W/mK
Water vapour permeability coefficient (µ):	5/20

Directions for use

1. Substrate

The surface to be covered with boards should be free of dust, grease, loose particles, paints etc. It is recommended that it is dampened before application.

2. Application

As adhesive:

ISOMAT AK-T55 is gradually added into water under continuous stirring until a homogeneous paste is formed. A low revolution mixer is recommended for mixing. The mixture should be left for about 10 minutes to rest and then should be re-stirred a bit.

<u>On smooth substrates</u> the adhesive is spread on the surface and combed using a notched trowel in order to be uniformly applied on the whole of the surface.

<u>On uneven substrates</u> the adhesive is applied with a trowel around the perimeter of the thermo-insulation board and in selected spots in the center.

Next, the thermo-insulation boards are fixed by pressing them on the desired position.

As reinforced mortar:

Initially the material is applied with a smooth trowel in a maximum thickness of 3 mm. On the still fresh layer the fiberglass mesh is placed and pressed with the trowel to get fully encased in the adhesive. Finally, the surface is smoothed out and the excess adhesive is removed.



Consumptio

As adhesive: 3,0-4,0 kg/m², depending on the trowel's notch size and the nature of the substrate.

As reinforced mortar: approx. 1,5 kg/m²/mm.

Packaging

ISOMAT AK-T55 is supplied in paper bags of 25 kg.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.



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EN 12004

Improved cementitious adhesive for tiling

Remarks

- ISOMAT AK-T55 contains cement and reacts as alkaline with moisture, so it is classified as irritant.
- Very porous surfaces such as aerated concrete, gypsum boards, chipboards etc. must be primed first with the acrylic primer UNI-PRIMER.
- Consult usage risks and safety advice written on the bag.



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EN 998-1

General purpose rendering mortar (GP) for external use

Reaction to fire: Class A1 Adhesion: 1,3 N/mm² – FP: A Water absorption: W2 Water vapour diffusion coeff.: μ 5/20 Thermal conductivity: ($\lambda_{10 \text{ dev}}$) 0,45 W/mK

Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar

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ADHESIVES FOR SPECIAL APPLICATIONS

3.3



Adhesive for mineral wool thermo-insulation boards

Description

ISOMAT AK-T65 is a cement-based adhesive, enriched with polymers (resins). It provides high initial and final adhesive strength, elasticity and resistance to moisture.

It is classified as a GP CS IV W2 rendering mortar according to EN 998-1.

Fields of application

ISOMAT AK-T65 is used in combination with MARMOCRET PLUS and MARMOCRYL renders as a system for creating external thermo-insulated facades.

It is suitable for fixing thermo-insulation boards of mineral wool on facades made of concrete, render, or masonry.

Moreover, when reinforced with fibreglass mesh and applied on the exterior side of fixed thermoinsulation boards, it constitutes the ideal substrate for the subsequent render layer.

Technical data

Form:	cementitious mortar
Color:	grey
Water demand:	6 l/25 kg bag
Bulk density of dry mortar:	1,45 0,10 kg/l
Bulk density of fresh mortar:	1,60 0,10 kg/l
Application temperature:	from +5°C to +35°C
Pot life:	at least 4 h
Compressive strength:	13,50 1,00 N/mm ²
Flexural strength:	5,00 0,50 N/mm ²
Adhesion on concrete (28 days):	≥ 1,60 N/mm ²
Adhesion on mineral wool (28 days):	≥ 0,10 N/mm² (MW failure)
Capillary water absorption:	\leq 0,1 kg/m ² min ^{0.5}

Thermal conductivity $(\lambda_{_{10,dry}})$:	0,43 W/mK
Water vapour permeability coefficient (µ):	5/20

Directions for use

1. Substrate

The surface to be covered with boards should be free of dust, grease, loose particles, paints etc. It is recommended that it is dampened before application.

2. Application

As adhesive:

ISOMAT AK-T65 is gradually added into water under continuous stirring until a homogeneous paste is formed. A low revolution mixer is recommended for mixing. The mixture should be left for about 10 minutes to rest and then should be re-stirred a bit.

<u>On smooth substrates</u> the adhesive is spread on the surface and combed using a notched trowel in order to be uniformly applied on the whole of the surface.

<u>On uneven substrates</u> the adhesive is applied with a trowel around the perimeter of the thermo-insulation board and in selected spots in the center.

Next, the thermo-insulation boards are fixed by pressing them on the desired position.

As reinforced mortar:

Initially the material is applied with a smooth trowel in a maximum thickness of 3 mm. On the still fresh layer the fiberglass mesh is placed and pressed with the trowel to get fully encased in the adhesive. Finally, the surface is smoothed out and the excess adhesive is removed.

Consumption

As adhesive: 3,0-4,0 kg/m², depending on the trowel's notch size and the nature of the substrate. As reinforced mortar: approx. 1,5 kg/m²/mm. 33



Packaging

ISOMAT AK-T65 is supplied in paper bags of 25 kg.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- ISOMAT AK-T65 contains cement and reacts as alkaline with moisture, so it is classified as irritant.
- Very porous surfaces such as aerated concrete, gypsum boards, chipboards etc. must be primed first with the acrylic primer UNI-PRIMER.
- Consult usage risks and safety advice written on the bag.

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EN 998-1

General purpose rendering mortar (GP) for external use

Reaction to fire: Class A1 Adhesion: 1,6 N/mm² – FP: A Water absorption: W2 Water vapour diffusion coeff.: μ 5/20 Thermal conductivity: (λ_{todev}) 0,43 W/mK

Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar

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3.3



ISOMAT AK-BLOCK

Polymer-modified thin layer masonry mortar for fixing aerated concrete blocks

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Description

ISOMAT AK-BLOCK is a high quality polymer modified cement-based mortar for fixing aerated concrete blocks. It provides high initial and final adhesive strength and moisture resistance. It possesses increased open time for the application.

Certified with the CE marking, according to EN 998-2, as a designed thin layer masonry mortar, for external use, in elements subject to structural requirements. Certificate number: 0906-CPD-02412008

Fields of application

ISOMAT AK-BLOCK is used for fixing aerated concrete elements.

Technical data

Form [.]	cementitious mortar
Color:	white, grey
Water demand white:	6,75 l/25 kg bag
Water demand grey:	6,00 l/25 kg bag
Application temperature:	from +5°C to +35°C
Application thickness:	up to 10 mm
Pot life:	at least 4,5 h
Maximum grain size: (EN 1015-1)	0,5 mm
Correction time: (EN 1015-9)	>7 min
Compressive strength: (EN 1015-11)	Category M 5
Initial shear strength: (tab. value)	0,3 N/mm ²
Reaction to fire: (EN 13501-1)	Class A1
Density (dry hardened mortar): (EN 1015-10)	1450 kg/m³
Water absorption: (EN 1015-18)	0,3 kg/m ² min ^{0,5}

Water vapour permeability: (EN 1745, tab. value)	μ 5/20
Thermal conductivity: (EN 1745, tab. mean v	(λ _{10,dry}) 0,45 W/mK alue; P = 50 %)

Temperature resistance: from -30°C to +90°C

Directions for use

The aerated concrete elements must be free of dust. ISOMAT AK-BLOCK is gradually added into water under continuous stirring, until a uniform paste is formed. A low revolution mixer is recommended for mixing.

The mixture should be left about 10 minutes to rest and should be stirred slightly again. The aerated concrete adhesive is spread on the substrate using a notched trowel, in order to be applied uniformly on the whole surface. The aerated concrete elements are fixed by pressing them in the desired position.

Consumption

Approx. 13 kg for building 1 m³ of aerated concrete wall.

Packaging

ISOMAT AK-BLOCK is supplied in 25 kg paper bags.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- ISOMAT AK-BLOCK contains cement, which reacts as alkaline with water and is classified as irritant.
- Consult the safety advice and precautions written on the packaging.



ISOMAT AK-BLOCK

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> 12 0906-CPD-02412008

EN 998-2:2010

Designed thin layer masonry mortar for external use in elements subject to structural requirements

Maximum grain size: 0,5 mm Correction time:> 7 min Compressive strength:Category M5 Initial shear strength: 0,3 N/mm²(tab.value) Reaction to fire: Class A1 Density (dry hardened mortar) 1450 kg/m³ Water absorption: 0,3 kg/m²min^{0,5} Watervapour permeability: μ 5/20 (tab.value) Thermal conductivity: ($\lambda_{10,dry}$) 0,45 W/mK (tab.meanvalue; P=50%) Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar

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3.3



ISOMAT AK-GLASS

Polymer modified mortar for fixing and pointing glass-blocks

Description

ISOMAT AK-GLASS is a polymer modified cement-based mortar for fixing and pointing glass-blocks. It features excellent workability, superior adhesion on glass-blocks and resistance to abrasion and moisture. It is certified with the CE marking, according to EN 998-2, as a designed general purpose masonry mortar, for external use, in elements subject to structural requirements. Certificate number: 0906-CPD-02412008.

Fields of application

ISOMAT AK-GLASS is used for fixing and pointing glass-blocks.

Technical data

Form:	cementitious powder	
Color:	white	
Water demand:	5,50 l/25 kg bag	
Application temperature:	from +5°C to +35°C	
Compressive strength: (EN 1015-11)	Category M 20	
Flexural strength:	5,5 N/mm ²	
Initial shear strength: (tab. value)	0,15 N/mm ²	
Reaction to fire: (EN 13501-1)	Class A1	
Density (dry hardened mortar): (EN 1015-10)	1700 kg/m³	
Water absorption: (EN 1015-18)	0,3 kg/m ² min ^{0,5}	
Water vapour permeability: µ 15/35 (EN 1745, tab. value)		
Thermal conductivity: $(\lambda_{10,dry})$ 0,75 W/mK (EN 1745, tab. mean value; P = 50 %)		
Pot life:	at least 3,5 h	

Directions for use

1. Substrate

The glass-blocks have to be free of dust, grease etc.

2. Application

ISOMAT AK-GLASS is added to water under continuous stirring until a mixture possessing the desired workability comes up. The material is applied with a trowel as usual. Pointing of the joints follows using the same material.

Consumption

Approx. 13 kg for building 1 m² of ordinary glass-block wall.

Packaging

ISOMAT AK-GLASS is supplied in paper bags of 25 kg and plastic bags of 5 kg.

Shelf-life - Storage

- Paper bags of 25 kg: 12 months from production date
 Plastic bags of 5 kg:
- 18 months from production date

All of the above are in effect if the product is stored in original unopened packaging, in places protected from moisture and frost.

Remarks

- ISOMAT AK-GLASS contains cement, which reacts as alkaline with water and is classified as irritant.
- Consult the safety advice and precautions written on the packaging.

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ISOMAT AK-FIRE

Refractory mortar for laying and grouting firebricks

Description

ISOMAT AK-FIRE is a cement-based mortar for firebricks. It contains high alumina cement, and quartz aggregates of selected particle size. It provides excellent resistance to high temperatures and extensive temperature changes, high initial and final adhesive strength and resistance to moisture.

It is certified with the CE marking, according to EN 998-2, as a designed general purpose masonry mortar, for external use, in elements subject to structural requirements. Certificate number: 0906-CPD-02412008.

Fields of application

Suitable for laying and grouting all kinds of firebricks in places where high temperatures are developed (fireplaces, wood ovens, stoves, barbecues, chimneys etc.). Ideal for repairing damaged mortar joints and firebricks. Suitable for indoor and outdoor applications.

Technical data

Form:	cementitious powder
Color:	grey
Water demand:	4,75 l/25 kg bag
Bulk density of dry mortar:	1,55 \pm 0,10 kg/lit
Bulk density of fresh mortar:	1,80 \pm 0,10 kg/lit
Application temperature: Compressive strength: (EN 1015-11)	from +5°C to +35°C Category M 25
Flexural strength: Reaction to fire: (EN 13501-1)	> 6,0 N/mm ² Class A1
Density (dry hardened mortar): (EN 1015-10)	1700 kg/m³
Water absorption: (EN 1015-18)	0,3 kg/m²min ^{0,5}

Directions for use

1. Substrate

Firebricks should be clean, free of dust, mud, loose particles etc. Before application, the firebricks must be thoroughly dampened.

2. Application

ISOMAT AK-FIRE is added into water under continuous stirring, until a mixture with the desired workability is formed. The product is applied by hand using a trowel. For the joint formation it is recommended to use plastic or metallic spacers.

In case of using ISOMAT AK-FIRE for pointing, the joints are filled with the product by trowel and the surface is smoothed with a very thin trowel or a special blade. At the same time the finishing work is done with a slightly wet sponge. Outdoors or at high temperatures, repeated watering with a sponge is recommended, to avoid quick drying of the grout.

Consumption

The consumption of ISOMAT AK-FIRE depends on the dimensions of the firebricks and the joint's width. Indicatively, for firebricks with dimensions 20x10x3 cm and joint width 1 cm the consumption is about 5 kg/m².

Packaging

ISOMAT AK-FIRE is supplied in bags of 5 kg and 25 kg.



ISOMAT AK-FIRE

Shelf-life - Storage

- Paper bags of 25 kg: 12 months from production date
- Plastic bags of 5 kg: 18 months from production date

All of the above are in effect if the product is stored in original unopened packaging, in places protected from moisture and frost.

Remarks

- The fireplace or the oven should not be used until the mortar has developed sufficient initial strength and, preferably, at least one week after the end of the application.
- Consult the safety advice and precautions written on the packaging.

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0906-CPD-02412008

EN 998-2:2010

General purpose rendering mortar (GP) for external use

Designed general purpose masonry mortar for external use in elements subject to structural requirements

Compressive strength: Category M 25 Initial shear strength: 0,15 N/mm² (tab. value) Reaction to fire: Class A1 Density (dry hardened mortar): 1700 kg/m³ Water absorption: 0,3 kg/m²min^{0,5} Water vapour permeability: μ 15/35 (tab. value) Thermal conductivity: ($\lambda_{t0,dry}$) 0,75 W/mK (tab. mean value; P = 50 %) Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar

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ISOMAT MT 200

Pre-mixed, cement-based mortar for marbles

Description

Pre-mixed, cement-based mortar for fixing marbles, that needs only the addition of water. The composition of ISOMAT MT 200 ensures the maintenance of the color and the whiteness of the marbles, while it prevents their staining.

- Simplification and acceleration of application.
- Provides high initial and final adhesive strength.
- · Excellent workability.
- Stable standardized properties.
- Due to the special particle size granulation of the product, the mortar does not lose the volume during the application of the marbe.
- Suitable for indoor or outdoor use.

Fields of application

It is used for fixing marbles of all dimensions on cement-based substrates. Suitable for indoor and outdoor applications.

Technical data

Form:	cementitious mortar
Color:	white
Particle size:	up to 3 mm
Water demand:	4,25 l/ 25 kg bag
Bulk density of dry mortar:	1,80 ± 0,10 kg/lit
Bulk density of fresh mortar:	1,75 ± 0,10 kg/lit
Compressive strength:	11,00 ± 1,00 N/mm ²
Flexural strength:	2,80 ± 0,20N/mm ²
Adhesive strength: (28 days)	1,20 ± 0,10 N/mm ²
Pot life:	3 h at +20°C
Maximum layer thickness:	30 mm

Directions for use

ISOMAT MT 200 is added into clean water under continuous stirring, until a mortar with the required workability is formed. The mortar is applied by hand using a trowel at a maximum layer thickness of 3 cm.

In cases where extremely high adhesion of the marbles is required. Then, in addition it should be used the adhesive ISOMAT AK-MARBLE. The adhesive is applied on the marble and is spread ("combed") using a notched trowel. The marbles should be fixed within 10 minutes in order to avoid "skin" formation at the surfase of ISOMAT MT 200.

Consumption

Approx. 15kg/m²/cm.

Packaging

Bags of 25 kg.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- In cases where the properties of ISOMAT MT 200 should be improved (bonding to the substrate, elasticity) it is recommended the addition of polymer latex ADIPLAST into the mixing water in proportion of 1:1 by volume.
- ISOMAT MT 200 contains cement and reacts as alkaline with moisture, so it is classified as irritant .
- Consult usage risks and safety advice written on the bag.

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ISOMAT AK-EPOXY NORMAL

2-component epoxy adhesive

Description

ISOMAT AK-EPOXY NORMAL is a 2-component solvent-free epoxy adhesive. It has high compressive, flexural and shear adhesion bond strength. It is resistant to several acids, alkalis, corrosive agents for concrete, cleaning agents, sea water and salted water. It is easy to use due to the simple mixing proportion of the two components (A:B = 1:1 by volume). It is classified as type R2T adhesive, according to EN 12004.

Fields of application

ISOMAT AK-EPOXY NORMAL is suitable for fixing marbles, granites and most of the building materials to several substrates (concrete, wood, metal etc.), On walls or floors. Ideal for applications where high adhesion is required. Suitable for indoor or outdoor use.

Technical data

Basis:	2-component epoxy resin
Color:	light yellow
Mixing proportion:	1:1 by volume
Compressive strength:	70 N/mm ²
Flexural strength:	18 N/mm ²
Initial shear adhesion strength (7 days) :	> 11,6 N/mm ²
Shear adhesion strength after water immersion:	> 3,3 N/mm ²
Shear adhesion strength after thermal shock:	> 2,4 N/mm ²
Slip:	≤ 0,5 mm
Minimum hardening temperature:	+8°C
Pot life:	40 min at +25°C
Minimum cure time:	6 h at +25°C

Full cure time:

4 days at +25°C

Cleaning of tools:

Tools should be cleaned with SM-12 solvent immediately after use.

Directions for use

1. Substrate

The substrate should be dry, clean, statically sufficient, slightly rough and free of materials that prevent bonding such as dust, loose particles, oil residues etc.

2. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, in a predetermined mixing proportion. Equal quantities by volume from comp. A and comp. B are placed into a clean container and mixed for about 5 minutes by using an appropriate hand tool (e.g. small trowel), until a uniform pasty putty is formed.

3. Application

Before the application it is recommended to roughen the surface of marble or granite by using a cut-off wheel machine. ISOMAT AK-EPOXY NORMAL is applied by trowel on the roughened surface and then the marble or granite is fixed by pressing on the desired position.

Consumption

The consumption depends on the dimensions and weight of the bonded material. On vertical surfaces if the marble/granite will not be fastened mechanically, the adhesive should be applied at least on 10% of the surface.

Packaging

ISOMAT AK-EPOXY NORMAL is supplied in packages (A+B) of 20 lit, 4 lit and 1 lit, with components A and B having fixed predetermined volume proportions.



ISOMAT AK-EPOXY NORMAL

Shelf-life - Storage

24 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.

CE

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EN 12004

Improved reaction resin adhesive with reduced slip

- Reaction to fire - Initial shear adhesion	Class F
- Thild shear adhesion strength - Shear adhesion strength	≥ 2 N/mm ²
after thermal shock - Shear adhesion strength	≥ 2 N/mm²
after water immersion	≥ 2 N/mm ²

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3.3



ISOMAT AK-EPOXY FAST

2-component, fast-setting epoxy adhesive

Description

ISOMAT AK-EPOXY FAST is a 2-component, fast-setting solvent-free epoxy adhesive. It has high compressive, flexural and shear adhesion bond strength. It is resistant to several acids, alkalis, corrosive agents for concrete, cleaning agents, sea water and salted water. It is easy to use due to the simple mixing proportion of the two components (A:B = 1:1 by volume). It is classified as type R2T adhesive, according to EN 12004.

Fields of application

ISOMAT AK-EPOXY FAST is suitable for fixing marbles, granites and most of the building materials to several substrates (concrete, wood, metal etc.), on walls or floors. Ideal for fixing on vertical surfaces due to its fast setting (7 minutes). Suitable for indoor or outdoor use.

Technical data

Basis:	2-component epoxy resin
Color:	grey-green
Mixing proportion:	1:1 by volume
Compressive strength:	60 N/mm ²
Flexural strength:	15 N/mm ²
Initial shear adhesion strength (7 days) :	> 10,6 N/mm ²
Shear adhesion strength after water immersion:	> 5,7 N/mm ²
Shear adhesion strength after thermal shock:	> 7,9 N/mm²
Slip:	\leq 0,5 mm
Minimum hardening temperature:	+5°C
Pot life:	3 min at +25°C
Minimum cure time:	1 h at +25°C
Full cure time:	24 h at +25°C

Cleaning of tools: Tools should be cleaned with SM-12 solvent immediately after use.

Directions for use

1. Substrate

The substrate should be dry, clean, statically sufficient, slightly rough and free of materials that prevent bonding such as dust, loose particles, oil residues etc.

2. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, in a predetermined mixing proportion. Equal quantities by volume from comp. A and comp. B are placed into a clean container and mixed for about 2-3 minutes by using an appropriate hand tool (e.g. small trowel), until a uniform pasty putty is formed.

3. Application

Before the application it is recommended to roughen the surface of marble or granite by using a cut-off wheel machine. ISOMAT AK-EPOXY FAST is applied by trowel on the roughened surface and then the marble or granite is fixed by pressing on the desired position.

Consumption

The consumption depends on the dimensions and weight of the bonded material. On vertical surfaces if the marble/granite will not be fastened mechanically, the adhesive should be applied at least on 10% of the surface.

Packaging

ISOMAT AK-EPOXY FAST is supplied in packages (A+B) of 20 lit, 4 lit and 1 lit, with components A and B having fixed predetermined volume proportions.



ISOMAT AK-EPOXY FAST

Shelf-life - Storage

24 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.

CE

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80

EN 12004

Improved reaction resin adhesive with reduced slip

- Reaction to fire - Initial shear adhesion	Class F
- Thild shear adhesion strength - Shear adhesion strength	≥ 2 N/mm²
after thermal shock - Shear adhesion strength	≥ 2 N/mm²
after water immersion	≥ 2 N/mm ²

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3.3



MONTAGE-S

High quality adhesive for fast and powerful bonding

Description

High quality pasty adhesive in a solvent solution. MONTAGE-S is based on caoutchouc and synthetic resins. It is used for fast and powerful bonding on almost all construction materials. No need for drilling, screwing or nailing.

Fields of application

MONTAGE-S is suitable for direct bonding on almost all kinds of substrates, like wood frames and skirting boards, panels, wood floorings, wood and metallic baseboards, ceramic tiles, decorative frames, natural stones, wall sockets etc.

MONTAGE-S is not suitable for bonding mirrors, polystyrene insulation boards or other materials sensitive to solvents.

Technical data	
Color:	beige
Solid material content:	approximately 72%
Density:	1,2 kg/lit
Temperature of application:	from +5°C up to +40°C
Temperature resistance:	from -20°C up to +50°C
Detachment strength (MEL 050): after 24 hours: after 72 hours: after 7 days:	> 1,5 N/mm² > 2 N/mm² > 2 N/mm²

Directions for use

1. Substrate

Substrates must be dry and free from dust, grease, etc.

2. Application

MONTAGE-S is ready-to-use. The cartridge is inserted in the special hand gun and the nozzle is cut slantwise.

For bonding light weight materials MONTAGE-S is applied on one surface in spots in a distance of 20 cm between them or strips. Then the surfaces are assembled by pressing down firmly or by using a rubber hammer. For bonding heavy weight materials or materials subject to pressure, MONTAGE-S is initially applied as mentioned above by putting both surfaces in contact with one another. Then they must be separated and wait for 5 minutes before readjusting the assembly by pressing down firmly or by using a rubber hammer. Heavy weight materials exceeding 10 kg/m² must be supported for 8-24 hours

Cleaning:

While fresh the adhesive can be washed away with water. Once it has hardened it can be removed only mechanically.

Consumption

Typical consumption: 1 cartridge / 12 linear meters.

Packaging

Cartridge 310 ml.

Shelf-life - Storage

Shelf-life is 12 months, in dry and not high temperature conditions.

Remarks

 Materials bonded with MONTAGE-S can receive loading after 48 hours. **3**.3

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suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the

control of our company. Therefore the user is responsible for confirming that the chosen product is suitable for the envisaged application.

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MONTAGE-W

High quality solvent free adhesive for fast and powerful bonding

Description

High quality solvent free adhesive based on acrylic emulsion. It is used for fast and powerful bonding on all kinds of porous substrates, like wood, concrete, masonry, gypsum boards etc. No need for drilling, screwing or nailing.

Fields of application

MONTAGE-W is suitable for direct bonding of thermal insulation polystyrene boards, sound insulation boards, wood frames and skirting boards, panels, wood floorings, baseboards, tiles, decorative frames, natural stones, wall sockets etc., on porous substrates.

Technical data

Color:	beige
Solid material content:	approximately 80%
Density:	1,4 kg/lit
Temperature of application:	from +5°C up to +40°C
Temperature resistance:	from -20°C up to +70°C
Minor adjustment open time:	15 min
Detachment strength (MEL 050): after 2 hours: after 24 hours: after 72 hours:	> 1,5 N/mm ² > 2,5 N/mm ² > 3 N/mm ²

Directions for use

1. Substrate

Substrates must be dry and free from dust, grease, etc.

2. Application

MONTAGE-W is ready-to-use. The cartridge is inserted in the special hand gun and the nozzle is cut slantwise. Then it is applied on one surface in spots in a distance of 20 cm between them or strips. Put both surfaces in contact with one another for a good wetting, separate the supports, wait for 5 minutes and readjust the assembly by pressing down firmly or by using a rubber hammer.

Heavy weight materials exceeding 8 kg/m² must be supported for at least 15 hours. For highly absorbent substrates (e.g. gypsum) is recommended to dilute the adhesive with water and use a brush to apply it on the surface to be bonded. Afterwards the same bonding procedure as mentioned above is repeated.

Cleaning:

While fresh the adhesive can be washed away with water. Once it has hardened it can be removed only mechanically.

Consumption

Typical consumption: 1 cartridge / 12 linear meters.

Packaging

Cartridge 310 ml.

Shelf-life - Storage

Shelf-life is 12 months, in dry and not high temperature conditions.

Remarks

- Materials bonded with MONTAGE-W can receive loading after 48 hours.
- In cases of using the adhesive on non absorbent substrates the surface of the material to be bonded must be absorbent.

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ISOMAT AK-PARQUET

Polyurethane adhesive for wooden floorings

Description

ISOMAT AK-PARQUET is a powerful, polyurethane based adhesive for wooden floorings. It provides:

- · Excellent bond strength,
- High resistance to temperature fluctuations from -40°C to +90°C.
- Sound insulation properties.
- Permanent elasticity and high mechanical strength.
- Very good bonding to various substrates.
- Painting ability.
- Simple application as it is ready to use and there is no need for mixing components
- It is solvent and water free and thus does not affect the wood.

Fields of application

Suitable for bonding all types of parquet (solid, lam parquet etc.), strips and longstrips onto cement based substrates, old wooden floorings, tile layers, marble, mosaic, metallic surfaces etc. Ideal for floors with underfloor heating system

Technical data		
Form:	pasty	
Color:	beige	
Density:	1,45 kg/l	
Skin formation:	45 min	
Curing time:	3mm/ 24hrs (23°C, 50% R.H)	
Hardness SHORE A:	50 ± 5	
Tensile strength (ISO 8339) :	1,5 N/mm ²	
Elongation at break (ISO 8339) :	400%	
Directions for use		

1. Substrate

Substrate must be dry and free of dust, loose particles, grease etc.

2. Application

The adhesive is uniformly applied to the substrate with a notched trowel for wooden floorings. Place the wooden flooring on the adhesive by applying slight pressure. If the final surface has to be polished, this must be done at least 24 hours after the application depending on the temperature. Nevertheless, it is recommended to wait 2-3 days so that the parquet is fully bonded.

Consumption

1,2-1,4 Kg/m^{2} depending on the notch size of the trowel and the nature of the substrate.

Packaging

ISOMAT AK-PARQUET is supplied in plastic buckets of 12 kg (each bucket contains 2 aluminium sacks of 6kg).

Shelf-life - Storage

12 months from production date if stored in dry and not high temperature conditions.

Remarks

- The fluidity of the adhesive depends on the temperature. In low temperature it is more dense
- In floors with under-floor heating. Before the application of the adhesive, the system should operate for at least two weeks.
- The moisture of wood should be between the recommended limits.
- The moisture of substrate should be between the limits that are recommended for the fixing of wooden floorings.
- Relative air humidity should be between 40% -70% and ambient temperature should be from +10°C up to +35°C.
- Consult the safety advice and precautions written on the packaging.



SUPERBOND-PU

Polyurethane adhesive for powerful bonding

Description

High performance one-component polyurethane adhesive, without solvents.

- It provides powerful bonding on all
- construction materials
- Ready to use.
- Great endurance to ageing and weather
- Resistance to temperature fluctuations from $-40^{\circ}C$ to $+110^{\circ}C$.

Fields of application

SUPERBOND-PU is used for powerful bonding on all construction materials such as wood , concrete, aluminium, tiles etc. It is also suitable for every wood construction and for wood furniture industry. Ideal for minor-repairs

Technical data	
Base:	polyurethane
Color:	white
Application temperature:	from +5°C to +40°C
Adhesive strength:	3,5 N/mm ²

Directions for use

1. Substrate

Substrate must be clean and free of dust, loose particles, grease etc.

Spraying the surface with water will accelerate the development of bond strength.

2. Application

The cartridge is inserted in the special hand gun and the nozzle is cut slantwise.

The adhesive is applied in spots or strips on one surface and then the 2 surfaces are pressed firmly or by using a rubber hammer. Cleaning :

While the material is still fresh it can be cleaned with acetone. If the material is hardened, may be removed only mechanically

Consumption

Typical consumption: 1 cartridge / 12 linear meters.

Packaging

Cartridge 280 ml.

Shelf-life - Storage

12 months from production date if stored in dry and not high temperature conditions.

Remarks

Initial hardening of SUPERBOND-PU in a thickness of 0,1mm it is achieved in approx. 1-2 hours depending on the temperature and humidity. Full bonding strength of the adhesive depends on the environmental conditions (temperature, humidity), the thickness of adhesive and the type of application.

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UNCOUPLING MEMBRANE

Uncoupling membrane

Description

Uncoupling membrane from reinforced fabric with high tensile strength, for floors and walls.

Fields of application

Suitable for uncoupling of sound and problematic substrates. Allows subsequent coverings to function as independent layers in relation with the substrate. Suitable for indoor walls or floors in a variety of substrates such as concrete, cement mortars, old layers of tiles, mosaics, masonry etc.

Technical data white

white
0,50 mm +/- 0,10 mm
100 cm
$210 gr/m^2$
+ 5° C - + 30° C

Directions for use

1. Substrate

Substrate must be stable, clean and suitable for tiling.

2. Application

The uncoupling membrane is adhered on the substrate using the tile adhesives ISOMAT AK 20 or ISOMAT AK 22 applied by a

trowel with 3mm or 4mm teeth. Apply ISOMAT AK 20 or ISOMAT AK 22 on the substrate and place the membrane over the still fresh adhesive.

Lay the membranes in a way that they overlap by approximately 5 cm and adhere them also in this area over the entire surface.

After the adhesive has hardened beneath the membrane the tiles are fixed as usual using ISOMAT AK 20 or ISOMAT AK 22.

Packaging

Rolls of 1 m x 30 m.

Storage

Stored in original, unopened packaging, in places protected from moisture and frost.



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WATERPROOFING AND UNCOUPLING MEMBRANE

Waterproofing and uncoupling membrane

Description

Waterproofing and uncoupling membrane for outdoor and indoor use. The special lower nonwoven material ensures safe isolation of the floor covering.

Fields of application

Suitable for waterproofing and uncoupling of sound and problematic substrates. Especially used in damp areas and on terraces, balconies etc. It can be placed on walls or floors and on a variety of substrates such as concrete, cement mortars, old tile layers, mosaics, masonry etc.

Technical data	
Color:	top green- bottom white
Thickness:	0,80 mm
Weight:	450 gr/m ²
Width:	100 cm
Application/ substrate temperature:	+ 5° C - + 30° C
Slotted disk water pressure test 2, 5 bar:	passed

Tested acc. to DIN EN 1928, DIN 4102 part 1, DIN EN ISO 527, DIN 16726, DIN 28052-6 Test certificate of the MPA Brunswick (Germany)

Directions for use

1. Substrate

Substrate must be stable, clean and suitable for tiling.

2. Application

The membrane is adhered on the substrate using the tile adhesives ISOMAT AK 20 or ISOMAT AK 22 applied by a trowel with 3mm or 4mm teeth.

Subsequently press the membrane carefully into the layer of the adhesive with the green side on top using the smooth edge of the trowel. Place the single membrane end to end and fix the supplied tape homogeneously over the joints.

Apply a thin coat of the tile adhesive on both sides of the joint and carefully press in the entire surface of the sealing tape.

After the adhesive has hardened beneath the membrane the tiles are fixed as usual using ISOMAT AK 20, ISOMAT AK 22 or ISOMAT AK 25 depending the application.

Packaging

Rolls of 1m x 15 m. Supplied tape of 12cm x 25 m.

Shelf-life - Storage

Stored in original, unopened packaging, in places protected from moisture and frost.

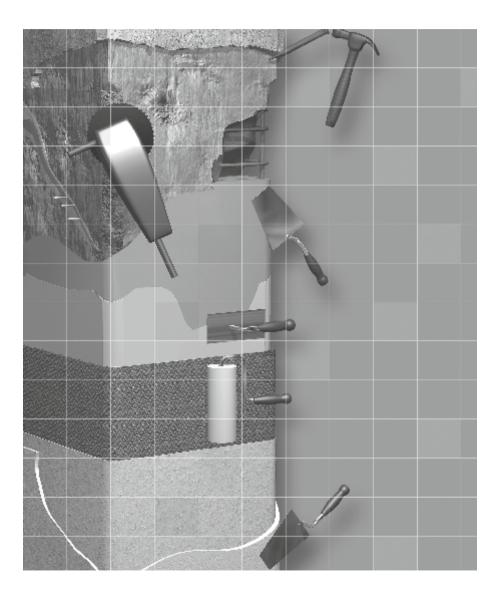
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4. REPAIRING MATERIALS & PAINTS





FERROSEAL

Cement-based anticorrosive coating for reinforcement elements Bonding agent

Description

FERROSEAL is a ready to use cement mortar protecting steel reinforcement elements from corrosion and acting as a bonding layer between the old and new mortar or concrete in repair works.

It is classified as a product for reinforcement corrosion protection according to EN 1504-7. Certificate Nr. 2032-CPD-10.11.

Fields of application

FERROSEAL is used:

- To protect steel reinforcement in repair works to reinforced concrete suffering damages as a result of an earthquake, carbonation, or defective casting.
- For preventive protection of steel reinforcement in lean building elements or in cases where the structural element is expected to work in wet surroundings.
- As a bonding layer between old and new concrete or mortar.

Technical data

Form:	cementitious powder
Color:	redbrown
Water requirement:	27% by weight
Bulk densityof dry mortar:	1,40 \pm 0,10 kg/lit
Bulk density of fresh mortar:	1,90 \pm 0,10 kg/lit
Shear adhesion (coated steel to concrete): (EN 15184)	Pass ^{*1}
Corrosion protection: (EN 15183)	Pass ^{'2}
Compressive strength:	$32{,}00\pm5{,}00\text{ N/mm}^{2}$
Flexural strength:	$7{,}00\pm2{,}00\text{ N/mm}^2$
Pot life:	1 h at +20ºC
* ¹ . The test is considered t	o have been passed

*': The test is considered to have been passed if the bond stress determined with the coated bars is in each case at least 80% of the reference bond stress determined for the uncoated bars.

*²: The test is considered to have been passed if the coated zones of the steels are free of corrosion and if rust creep at the ground plate edge: <1 mm.</p>

Directions for use

1. Substrate

- Reinforcement elements must be free of rust (cleaning degree SA 2 ½ according to DIN 55928-4), dust, grease etc.
- Concrete or mortar to be bonded must be free of loose materials, dust, grease etc.

2. Application

FERROSEAL is added into water under continuous stirring in proportions of FERROSEAL to water = 2,65 to 1 until a uniform mass is formed with no lumps.

- As an anticorrosive coating the material is applied using a brush of medium hardness in two layers. Layer thickness exceeding 1mm per coat should be avoided because of the risk of crack appearance in the material. Each new layer is applied once the previous one has dried.
- As a bonding layer between old and new concrete or mortar, the material is applied in one layer approx. 2 mm thick. Application of new concrete or mortar is done whilst bonding layer is still fresh.

Consumption

Anticorrosive protection of reinforcement elements: 0,07-0,13 kg per running meter of reinforcement element, depending on the rod's diameter.

Bonding layer: approx. 2 kg/m².

Packaging

FERROSEAL is supplied in metallic cans of 1 kg and plastic containers of 5 kg and 15 kg.





Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- The product contains cement, which reacts as alkaline with water, and is classified as irritant.
- Consult the directions for safe use and precautions written on the packaging.

CE

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2032-CPD-10.11

EN 1504-7

Reinforcement corrosion protection product for uses other than low performance requirements

Shear adhesion: Pass Corrosion protection: Pass Dangerous substances: comply with 5.4 4.1.1

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FERROSEAL-MCI

Corrosion inhibiting impregnation

Description

FERROSEAL-MCI is an aqueous solution with high penetrating properties. It is a surface applied corrosion inhibitor, designed for use as an impregnation of steel reinforced concrete. It has the ability to migrate through concrete and to form a protective layer on the surface of the reinforcement steel.

- It extends the working life of the structure.
- It inhibits the start of corrosion in new structures.
- It reduces the corrosion rate on existing structures.
- It does not change the appearance of the concrete structure.
- It does not alter the water vapour diffusion properties of concrete.
- It is easy to apply.

Fields of application

FERROSEAL-MCI is used as a precautionary corrosion protection of steel reinforced concrete structures above and below ground. Also it is ideal for repairs of reinforced concrete. Furthermore it is suitable as an anticorrosive protection for structures of reinforced concrete that are exposed on aggressive environment such as bridges, aqueducts etc.

Technical data Form: liquid Color: transparent Density: 1,02 kg/l

11 Directions for use

1. Substrate

pH:

The substrate must be dry, sound and free of dust, grease, loose materials, paints etc. If cleaning is required it is recommended to be done by water blasting. The surface must be dry before the application of FERROSEAL-MCI. Damaged concrete must be first repaired, (removal of loose concrete, restoration of the reinforcement, reprofilling) by using the proper repairing products.

2. Application

FERROSEAL-MCI is ready to use and should not be diluted with water. It is applied on the substrate by spraying, by brush or by roller, until the surface is fully saturated. Usually 3 to 5 layers must be applied to achieve the minimum required consumption. Each laver is applied after the previous one has dried. To increase the migration speed of FERROSEAL-MCI inside concrete, the surface can be sprayed with water 1-2 times after 2-3 days of the application. In case the treated surface with FERROSEAL-MCI will be later covered by paint or by a repairing mortar, this can be done if it has been previously water blasted (not earlier than 2 days after the application of FERROSEAL-MCI).

Consumption

Approximately 0,5 kg/m². To achieve adequate protection of the steel reinforcement the consumption should not be less than 0,3 kg/m².

Packaging

Containers of 1, 5 and 20 kg.

Shelf-life - Storage

24 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Temperature during the application should be at least +5°C.
- The following materials should be protected from contact with FERROSEAL-MCI: silicone sealants, PVC, epoxy and polyurethane layers, metallic surfaces (aluminium, copper, galvanized steel), wood, marbles and natural stones.
- Do not use it on surfaces saturated with water.
- Consult the safety instructions written on the packaging.



DUROCRET

Polymer-modified, repairing cement mortar

Description

DUROCRET is a pre-mixed, polymer-modified, cement-based mortar, without corrosive ingredients, suitable for indoor and outdoor applications, offering:

- Abrasion resistance.
- · Very good bonding to the substrate.
- Water impermeability.
- · Simplification of works.

It is classified as a PCC R2 type mortar, for concrete repairs, according to EN 1504-3

Fields of application

DUROCRET is used for concrete or brickwork repair and patching, groove formation etc. A version in redbrown color is suitable for works on tile roofs (ridgepoles).

Technical data

Form:	cementitious powder
Colors:	grey, white, redbrown
Working time:	4 h at +20°C
DUROCRET Grey	
Water demand:	4,60 l/25 kg bag
Bulk density of dry mortar	: 1,55 \pm 0,10 kg/lit
Bulk density	
of fresh mortar:	1,85 \pm 0,10 kg/lit
Compressive strength:	$18,50 \pm 1,00 \text{ N/mm}^2$
Flexural strength:	$6{,}50\pm0{,}10\text{ N/mm}^2$
Elastic modulus:	15,6 \pm 0,10 GPa
Carbonation resistance:	Passses
Chloride ion content:	0,00%
Adhesion strength:	1,7 N/mm ²
Thermal compatibility Part 1 (50 freeze-thaw	
cycles):	1,6 N/mm ²
Capillary absorption:	\leq 0,45 kg·m ⁻² ·h ^{-0,5}
Reaction to fire:	Euroclass A1

DUROCRET White

Water demand:	4,60 l/25 kg bag
Bulk density of dry mortar:	1,55 \pm 0,10 kg/lit
Bulk density	
of fresh mortar:	1,85 \pm 0,10 kg/lit
Compressive strength:	$17{,}50\pm2{,}00~\text{N/mm}^2$
Flexural strength:	$6,00 \pm 0,10 \text{ N/mm}^2$
Elastic modulus:	15,6 \pm 0,10 GPa
Carbonation resistance:	Passses
Chloride ion content:	0,00%
Adhesion strength:	1,7 N/mm ²
Thermal compatibility	
Part 1 (50 freeze-thaw cycles):	1.6 N/mm ²
5 ,	,
Capillary absorption:	≤ 0,47 kg·m ⁻² ·h ^{-0,5}
Reaction to fire:	Euroclass A1
DUROCRET Redbrown	
Water demand:	4,60 l/25 kg bag
Bulk density of dry mortar:	1,55 \pm 0,10 kg/lit
Bulk density	
of fresh mortar:	1,95 \pm 0,10 kg/lit
Compressive strength:	13,00 \pm 1,00 $\textrm{N/mm}^{2}$
Flexural strength:	$6{,}00\pm0{,}10\text{ N/mm}^{2}$
Chloride ion content:	0,00%
Adhesion strength:	1,10 N/mm ²
Capillary absorption:	≤0,5 kg·m ⁻² ·h ^{-0,5}
Reaction to fire:	Euroclass A1

Directions for use

1. Substrate

The substrate should be clean, free of dust, oily or loose materials etc. The surface should be dampened, before the application of DUROCRET.

4.1.1



DUROGRET

2. Application

DUROCRET is added into water under continuous stirring, until a mixture with the desired workability is formed. The material is applied using a trowel as usual.

Consumption

Approx. 15 kg/m²/cm of layer thickness. To form a groove, 5-6 cm wide: 1,9-2,7 kg/m.

Packaging

DUROCRET is supplied in paper bags of 25 kg and plastic bags of 5 kg.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- In hot weather DUROCRET should be watered after application, to be protected from water loss.
- DUROCRET contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on the bag.

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EN 1504-3

Concrete repair product for non structural repair PCC mortar (based on hydraulic cement, polymer modified)

Compressive strength: class R2 Chloride ion content: $\leq 0,05\%$ Adhesive Bond: $\geq 0,8$ MPa Thermal compatibility part 1: $\geq 0,8$ MPa Capillary absorption: $\leq 0,5$ kg·m²·h^{0.5} Dangerous substances: comply with 5.4 Reaction to fire: Euroclass A1

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DUROCRET-FAST

Fast-setting, repairing cement mortar

Description

DUROCRET-FAST is a fast setting, fiber reinforced cementitious repairing mortar, enriched with polymers, without corrosion ingredients, for internal and external applications, offering:

- Abrasion resistance.
- Very good adhesion to the substrate.
- Superior workability.
- Simplification of works.

It is classified as type PCC R2, repairing cement mortar for concrete, according to EN 1504-3.

Fields of application

DUROCRET-FAST is suitable for repairs on concrete, cement mortars, masonry, plasters and generally wherever high strength and fast application is necessary. DUROCRET-FAST is applied up to 3 cm thickness for large scale applications and up to 5 cm for localized repairs.

Technical data

cementitious powder
grey
4, 50 l /25 kg bag
45 min at +20°C
1,50 kg/l
2,00 kg/l
5,00 ± 0,50 N/mm ² 16,00 ± 1,00 N/mm ² 25,00 ± 1,00 N/mm ²
2,00 ± 0,30 N/mm ² 4,00 ± 0,30 N/mm ² 6,50 ± 0,30N/mm ²
≥ 1,5 MPa

Thermal compatibility Part 1 (50 freeze-thaw cycles):

≥ 1,4 MPa

Directions for use

1. Substrate

The substrate must be clean, free of dust, oil, loose materials etc. and should be thoroughly dampened, before the application of DUROCRET-FAST.

2. Application

DUROCRET-FAST is added into water under continuous stirring, until a mixture is formed. The material is applied using a trowel.

Consumption

Approx. 17 kg/m²/cm of layer thickness.

Packaging

DUROCRET-FAST is supplied in bags of 25 kg.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- In high temperature conditions DUROCRET-FAST should be dampened after application in order to be protected from water loss.
- DUROCRET-FAST contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on the bag.



ROGRET-FAST

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EN 1504-3		
Concrete repair product for non structural repair PCC mortar (based on hydraulic cement, polymer modified)		
Compressive strength: class R2		
Chloride ion content: ≤ 0,05% Adhesive Bond: ≥ 0,8 MPa		
Thermal compatibility part 1: ≥ 0,8 MPa		

Capillary absorption: ≤ 0,5 kg·m⁻²·h^{-0,5} Dangerous substances: comply with 5.4

Reaction to fire: Euroclass A1

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CEMENT-BASED MATERIALS



DUROCRET-PENETRATE

Repairing and waterproofing cement mortar with crystallizing effect

Description

DUROCRET-PENETRATE is a pre-mixed, cement-based mortar, without corrosive ingredients, suitable for indoor and outdoor applications. It consists of special active chemicals, which in contact with moisture and the present hydroxide of lime, react and form insoluble bonds (crystals). These crystals block the capillary pores and seal the shrinkage cracks inside the concrete, so as to prevent any further water absorption.

It offers:

- High compressive and flexural strength
- Abrasion resistance.
- Very good bond strength to the substrate.
- Simplification of works.
- Continuous protection of the construction from water presence as it remains permanent active.
- Excellent bond strength to concrete, under both positive and negative water pressure.
- Sealing of hair cracks with width up to 0,4 mm, even if they appear afterwards.
- Protection of the construction from corrosion of the reinforcement steel of concrete.

There is no influence on the waterproofing of construction, in case of damaging the concrete surface or DUROCRET-PENETRATE. It does not affect the vapour permeability of concrete. It has a simple and low-cost application.

It is classified as a CC R2 type mortar, for concrete repairs, according to EN 1504-3

Fields of application

DUROCRET-PENETRATE combines two actions in one product, repair and waterproofing.

It is used for concrete or brickwork repair and patching, groove formation etc. It is suitable for repairs of basements, foundations, manholes, water tanks, sewage tanks, before the application of the brushable sealing slurry AQUAMAT-PENETRATE.

Technica	data	
Form:	cementitious powder	
Color:	grey	
Pot life:	40 min at +20°C	
Water demand:	4,50 l/ 25 kg bag	
Bulk density of dry mortar:	1,35 \pm 0,10 kg/lit	
Bulk density of fresh mortar:	2,20 \pm 0,10 kg/lit	
Compressive strength:	$42,0 \pm 2,00 \text{ N/mm}^2$	
Flexural strength:	$8,0\pm1,00\text{ N/mm}^2$	
Carbonation resistance:	Passses	
Chloride ion content:	0,00%	
Adhesion strength:	\geq 2,0 N/mm ²	
Capillary absorption:	≤ 0,5 kg·m ⁻² ·h ^{-0,5}	
Reaction to fire:	Euroclass A1	
Directions for use		

1. Substrate

The substrate should be clean, free of dust, oily or loose materials etc. Very smooth surfaces should be treated with mild sand blasting or water-blasting, or carefully with chemical washup with 15% hydrochloric acid. Water leaks should be plugged with AQUAFIX rapid setting cement. The surface should be dampened, before the application of DUROCRET-PENETRATE.

2. Application

DUROCRET-PENETRATE is added into the exact recommended water quantity, under continuous stirring, until a homogenous mixture is formed. The material is applied using a trowel as usual. After the end of application, the final surface must be treated for the next 2-3 days, so as for the waterproofing layer to remain slightly wet and harden properly. Damping of the surface should be done by the time DUROCRET-PENETRATE has started hardening in order to avoid the possibility of damages.



DUROCRET-PENETRATE

Usually 2-3 times water spraying is enough per day.

The applied surface should be protected from rain and frost.

Consumption

Approx. 17 kg/m²/cm of layer thickness. To form a groove, 5-6 cm wide: 1,9-2,7 kg/m.

Packaging

DUROCRET-PENETRATE is supplied in paper bags of 25 kg.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- The use of excess amount of water than the recommended one, may cause increase of the flow of the material after some minutes, making the application difficult. Always use the exact recommended quantity of water.
- Application temperature should be between +5°C and +30°C.
- DUROCRET-PENETRATE contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on the bag.
- In case DUROCRET-PENETRATE is to be covered with mortar, plaster or tiles, consult the Technical Department of ISOMAT

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EN 1504-3

Concrete repair product for non structural repair CC mortar (based on hydraulic cement)

Compressive strength: class R2 Chloride ion content: $\leq 0,05\%$ Adhesive Bond: $\geq 0,8$ MPa Thermal compatibility part 1: $\geq 0,8$ MPa Capillary absorption: $\leq 0,5$ kg·m⁻²·h^{-0.5} Dangerous substances: comply with 5.4 Reaction to fire: Euroclass A1

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4.1.1



DUROCRET-DECO

Cement screed for surface finishing on floors and walls

Description

DUROCRET-DECO is a pre-mixed, polymermodified, fiber reinforced, cement-based mortar, without corrosive ingredients, suitable for indoor and outdoor applications, offering:

- Abrasion resistance.
- Very good bonding to the substrate.
- Water impermeability.
- Special aesthetic.

It is classified as a PCC R2 type mortar, for concrete repairs, according to EN 1504-3.

Fields of application

DUROCRET-DECO is used as a cement screed finish over cement based substrates. It is suitable for stairs, floors, walls and also for special constructions such as built-in sanitary articles (washbasins, showers etc.). It can be applied in houses, hotels or wherever aesthetic intervention is needed.

Technical data		
Form:	cementitious powder	
Colors:	white, grey, light grey, light ochre, mocha, crocus	
Working time:	2 h at +20ºC	
Water demand:	4,75 l/25 kg bag	
Bulk density of dry mortar:	$1,45 \pm 0,05 \text{ kg/l}$	
Bulk density of fresh mortar:	$1,95 \pm 0,05 \text{ kg/l}$	
Compressive strength:	22,00 \pm 1,00 N/mm ²	
Flexural strength:	$6{,}00\pm0{,}10\text{ N/mm}^2$	
Chloride ion content:	0,00%	
Adhesion strength:	≥1,3 N/mm ²	
Thermal compatibility Part 1 (50 freeze-thaw cycles): 1,0 N/mm ²		
Capillary absorption:	\leq 0,30 kg·m ⁻² ·h ^{-0,5}	

Reaction to fire: Application thickness: Euroclass A1 2-10 mm per layer

Directions for use

1. Substrate

The substrate should be clean, free of dust, oily or loose materials etc. The surface should be dampened, before the application of DUROCRET-DECO. It is recommended to apply the acrylic primer UNI-PRIMER if the substrate is highly absorptive. Non absorptive substrates such as old tile layers should be primed with ISOMAT AK-PRIMER.

2. Application

DUROCRET-DECO is gradually added into the water under continuous stirring, until a homogeneous mixture is formed. The product is applied using a notched trowel in a thickness from 2mm up to10mm per layer and then it is flattened with the smooth edge of the trowel. For floor applications exceeding 5 mm thickness, it is recommended to embed a fiberglass reinforcing mesh on the combed surface by using the smooth edge of the trowel. After a while and once the product starts to harden (usually after 20min at 23 °C) it can be slightly dampened with water and just rubbed with a spongy float, or rubbed with the spongy float and pressed again with a smooth metallic trowel depending on the final desired appearance.

After 2 days from the application, NANOPRO-C, the water-repelling nano impregnation can be applied for waterproofing the surface. In areas such as kitchens NANOPRO-L could be applied as well for protection both from water and from oils. If a glossy surface is desired, the acrylic varnish VS-1 can be applied.

Consumption

Approx. 1,5 kg/m²/mm of layer thickness.

Packaging

DUROCRET-DECO is supplied in paper bags of 25 kg.



ROGRET-DEGO

Shelf-life - Storage

12 months from production date if the product is stored in original unopened packaging, in places protected from moisture and frost.

Remarks

- · Application temperature should be between +5°C and +30°C.
- During high ambient temperature DUROCRET-DECO should be sprayed with water after the application, to be protected from water loss.
- DUROCRET-DECO contains cement and reacts as alkaline with water. so it is classified as irritant.
- · Consult the usage risks and safety advice written on the bag.

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EN 1504-3

Concrete repair product for non structural repair PCC mortar (based on hydraulic cement, polymer modified)

Compressive strength: class R2 Chloride ion content: $\leq 0.05\%$ Adhesive Bond: ≥ 0.8 MPa Thermal compatibility part 1: ≥ 0,8 MPa Capillary absorption: ≤ 0,5 kg ·m²·h^{-0,5} Dangerous substances: comply with 5.4 Reaction to fire: Euroclass A1

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CEMENT-BASED MATERIALS

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RAPICRET

Fast setting patching mortar

Description

RAPICRET is a pre-mixed, cement-based, fast setting repairing mortar, offering:

- Very good adhesion to the substrate.
- Superior workability.
- · Reduced water permeability.

It is classified as a PCC R3 type mortar, for concrete repairs, according to EN 1504-3. Certificate Nr. 2032-CPD-10.11.

Fields of application

RAPICRET is suitable for quick repair of concrete elements, fixing, anchoring, patching of cavities or holes, groove formation etc. and generally wherever high strength and fast application is necessary. RAPICRET may be applied on floors, walls or ceilings.

Technical data

Form: powder	cementitious
Color:	grey
Water demand:	4,60 l/25 kg bag
Bulk density of dry mortar:	1,50 ± 0,10 kg/lit
Bulk density of fresh mortar:	1,95 ± 0,10 kg/lit
Compressive strength: • After 24 hours: • After 7 days: • After 28 days:	8,00 ± 2,00 N/mm ² 15,00 ± 2,00 N/mm ² 31,00 ± 3,00 N/mm ²
Flexural strength:	7,00 ± 2,00 N/mm ²
Elastic modulus:	15,3 ± 0,10 GPa
Carbonation resistance:	Passes
Chloride ion content:	0,00%
Adhesion strength:	\geq 1,60 N/mm ²
Thermal compatibility Part 1 (50 freeze-thaw cycles):	≥ 1,50 N/mm²
Capillary absorption:	\leq 0,48 kg·m ⁻² ·h ^{-0,5}

Reaction to fire:	Euroclass A1
Pot life:	15 ± 2 min at +20⁰C

Directions for use

1. Substrate

The substrate must be clean, free of dust, oil, loose materials etc. and should be thoroughly dampened, before the application of RAPICRET.

2. Application

RAPICRET is gradually added into the water (the mixing ratio RAPICRET:water is 3,6:1 by volume) under continuous stirring, until a tight, no-slump putty is formed suitable for patching or fixing works. Mixing time should not exceed 1min. It is recommended to mix a small quantity every time, because of the short working time (about 15 min. at +20°C). RAPICRET is applied in layers not more than 3 cm thick.

Consumption

Approx. 17,5 kg/m²/cm of layer thickness.

Packaging

RAPICRET is supplied in bags of 5 kg and 25 kg.

Shelf-life - Storage

Paper bags of 25 kg: 12 months from production date
Plastic bags of 5 kg:

18 months from production date

All of the above are in effect if the product is stored in original unopened packaging, in places protected from moisture and frost.



RAPICRET

Remarks

- Application temperature should be between +5°C and +30°C.
- Material that has started to harden should not be resoftened with water.
- In high temperature conditions, mixing with cold water is recommended, to avoid rapid setting.
- In low temperature conditions, mixing with warm water is recommended, to accelerate setting.
- RAPIČRET contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on the bag.

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EN 1504-3

Concrete repair product for non structural repair PCC mortar (based on hydraulic cement, polymer modified)

Compressive strength: class R3 Chloride ion content: $\leq 0,05\%$ Adhesive Bond: $\geq 1,5$ Mpa Elastic modulus: 15,3 GPa Thermal compatibility part 1: $\geq 1,5$ MPa Capillary absorption: $\leq 0,5$ kg·m⁻²·h^{-0.5} Dangerous substances: comply with 5.4 Reaction to fire: Euroclass A1

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High-strength fibre-reinforced repairing cement mortar for thin layers

Description

High strength, fibre-reinforced cementitious patching mortar enriched with polymers. It provides:

- Superior strength.
- Very good bonding to the substrate.
- Excellent workability.
- Reduced water permeability.
- Volume stability.

It is classified as a CC R3 mortar for concrete repairs, according to EN 1504-3. Certificate Nr. 2032-CPD-10.11.

Fields of application

MEGACRET-10 is suitable for demanding repairs to concrete elements. It is applied with a trowel or by gunning device on floors, walls, or ceilings in a thickness of up to 10 mm per layer.

Technical data

Form:	cementitious powder
Color:	grey
Water demand:	4,75 l/25 kg bag
Bulk density of dry mortar:	1,40 ± 0,10 kg/lit
Bulk density of fresh mortar:	2,00 ± 0,10 kg/lit
Compressive strength: • After 24 hours: • After 7 days: • After 28 days:	15,00 ± 5,00 N/mm ² 35,00 ± 5,00 N/mm ² 50,00 ± 5,00 N/mm ²
Flexural strength:	8,00 ± 2,00 N/mm ²
Elastic modulus:	15,00 ± 0,10 GPa
Carbonation resistance:	Passes
Chloride ion content:	0,00 %
Adhesion strength:	\geq 1,60 N/mm ²
Thermal compatibility Part 1 (50 freeze-thaw cycles):	≥ 1,5 N/mm ²
Capillary water absorption:	\leq 0,46 kg·m ⁻² ·h ^{-0,5}

Reaction to fire:	Euroclass A1
Pot life:	2 h at +20°C
Max. thickness/layer:	1 cm

Directions for use

1. Substrate

The substrate must be free of dust, grease or other foreign matters. Thorough dampening of the substrate before application is necessary.

2. Application

One 25 kg bag of MEGACRET-10 is gradually added into 4,75 l of water under continuous stirring, until a homogenous, tight mass appropriate for repair works has formed. Mixing can be done with a low revolution mixer or a concrete mixer. The material should be applied (pressed) with a trowel or gunning device at the desired thickness, up to 1 cm per layer. When a second layer is required, the surface of the first layer should be roughened to achieve better adhesion.

The final surface should be well protected from dehydration by covering it with wet cloths, polyethylene sheets or repeating dampening for 48 hours.

Consumption

Approx. 17,5 kg/m²/cm of layer thickness.

Packaging

MEGACRET-10 is available in 25 kg paper bags.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

• Application temperature must be between +5°C and +30°C.



- At low temperatures and when fast gaining of strength is required, mixing of the material with lukewarm water is recommended.
- When the required repairing thickness is more than 1 cm, MEGACRET-40 high- strength fibre reinforced repairing cement mortar can be applied alternatively (up to 4 cm/layer).
- The product contains cement, which reacts as alkaline with water and is classified as irritant.
- Consult the safety advice and precautions written on the packaging.

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EN 1504-3

Concrete repair product for non structural repair CC mortar (based on hydraulic cement)

Compressive strength: class R3 Chloride ion content: $\leq 0,05\%$ Adhesive Bond: $\geq 1,5$ Mpa Carbonation resistance: Passes Elastic modulus: 15 GPa Thermal compatibility part 1: $\geq 1,5$ MPa Capillary absorption: $\leq 0,5$ kg·m⁻²·h^{-0.5} Dangerous substances: comply with 5.4 Reaction to fire: Euroclass A1

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High-strength fibre-reinforced repairing cement mortar

Description

High strength, fiber-reinforced cementitious patching mortar enriched with polymers. It provides:

- Superior strength.
- Very good bonding to the substrate.
- Excellent workability.
- Reduced water permeability.
- Volume stability.

It is classified as a CC R4 mortar for concrete repairs, according to EN 1504-3. Certificate Nr. 2032-CPD-10.11.

Fields of application

MEGACRET-40 is suitable for demanding repairs to concrete elements. It is applied with a trowel or by gunning device on floors, walls, or ceilings.

Technical data

Form:	cementitious powder
Color:	grey
Water demand:	4,60 l/25 kg bag
Bulk density of dry mortar:	1,40 ± 0,10 kg/lit
Bulk density of fresh mortar:	2,10 ± 0,10 kg/lit
Compressive strength: • After 24 hours: • After 7 days: • After 28 days:	25,00 ± 5,00 N/mm ² 40,00 ± 5,00 N/mm ² 55,00 ± 5,00 N/mm ²
Flexural strength:	8,00 ± 2,00 N/mm ²
Elastic modulus:	21,70 ± 0,10 GPa
Carbonation resistance:	Passes
Chloride ion content:	0,00 %
Adhesion strength:	\geq 2,00 N/mm ²
Thermal compatibility Part 1 (50 freeze-thaw cycles):	≥ 2,00 N/mm ²

Capillary water absorption: \leq 0,48 kg·m ⁻² ·h ^{-0,5}	
Reaction to fire:	Euroclass A1
Pot life:	2 h at +20°C
Max. thickness/layer:	4 cm

Directions for use

1. Substrate

The substrate must be free of dust, grease or other foreign matters. Thorough dampening of the substrate before application is necessary.

2. Application

One 25 kg bag of MEGACRET-40 is gradually added into 4,60 kg of water under continuous stirring, until a homogenous, tight mass appropriate for repair works has formed. Mixing can be done with a low revolution mixer or a concrete mixer. The material should be applied (pressed) with a trowel or gunning device at the desired thickness, up to 4 cm per layer. When a second layer is required, the surface of the first layer should be roughened to achieve better adhesion.

The final surface should be well protected from dehydration by covering it with wet cloths, polyethylene sheets or repeating dampening for 48 hours.

Consumption

Approx. 17,5 kg/m²/cm of layer thickness.

Packaging

MEGACRET-40 is available in paper bags of 25 kg and in plastic bags of 5 kg.

Shelf-life - Storage

- Paper bags of 25 kg: 12 months from production date
- Plastic bags of 5 kg: 18 months from production date

All of the above are in effect if the product is stored in original unopened packaging, in places protected from moisture and frost.



Remarks

- Application temperature must be between +5°C and +30°C.
- At low temperatures and when fast gaining of strength is required, mixing of the material with lukewarm water is recommended.
- The product contains cement, which reacts as alkaline with water and is classified as irritant.
 Consult the safety advice and precautions
- Consult the safety advice and precautions written on the packaging.

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2032-CPD-10.11

EN 1504-3

Concrete repair product for non structural repair CC mortar (based on hydraulic cement)

Compressive strength: class R4 Chloride ion content: $\leq 0,05\%$ Adhesive Bond: $\geq 2,0$ Mpa Carbonation resistance: Passes Elastic modulus: 21,7 GPa Thermal compatibility part 1: $\geq 2,0$ MPa Capillary absorption: $\leq 0,5$ kg·m⁻²·h^{-0,5} Dangerous substances: comply with 5.4 Reaction to fire: Euroclass A1

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MEGACRET-40 FAST

Fast setting, high-strength, fiber-reinforced repairing cement mortar

Description

High strength, fiber-reinforced cementitious patching mortar. It provides:

- Superior strength.
- Very good bonding to the substrate.
- · Excellent workability.
- Reduced water permeability.
- · Volume stability.

It is classified as a CC R4 mortar for concrete repairs, according to EN 1504-3. Certificate Nr. 2032-CPD-10.11.

Fields of application

MEGACRET-40 FAST is suitable for demanding repairs to concrete elements and generally wherever high strength and fast application is necessary. It is an ideal solution when repair works take place during low ambient temperatures (\geq +5°C) due to its fast setting properties.

It is applied by trowel or by gunite machine on floors, walls, or ceilings.

Technical data

Form:	cementitious powder
Color:	grey .
Water demand:	4,60 l/25 kg bag
Bulk density of dry mortar:	1,40 ± 0,10 kg/l
Bulk density of fresh mortar:	2,10 ± 0,10 kg/l
At +5°C:	
Compressive strength: • After 24 hours:	> 6,00 N/mm ²
Flexural strength:After 24 hours:	> 2,00 N/mm ²

At +20°C:

Compressive strength:

compressive suchgui.	
After 24 hours:	> 25,00 N/mm ²
 After 7 days: 	> 40,00 N/mm ²
 After 28 days: 	> 45,00 N/mm ²
Flexural strength:After 24 hours:After 7 days:	> 5,00 N/mm ² > 8,00 N/mm ²
 After 28 days: 	> 9,00 N/mm ²
Elastic modulus:	21,3 GPa
Carbonation resistance:	Passes
Chloride ion content:	0,00%
Adhesion strength:	2,05 N/mm ²
Capillary water absorption:	0,33 kg·m²·h⁻⁰,⁵
Reaction to fire:	Euroclass A1
Pot life:	15 min at +20 °C 40 min at +5 °C
Max. thickness/layer:	4 cm

Directions for use

1. Substrate

The substrate must be free of dust, grease or other foreign matters. Thorough dampening of the substrate before application is necessary.

2. Application

One 25 kg bag of MEGACRET-40 FAST is gradually added into 4,60 l of water under continuous stirring, until a homogenous, tight mass appropriate for repair works has formed. Mixing can be done with a low revolution mixer or a concrete mixer. Mixing time should not exceed 1min. It is recommended to mix a small quantity every time, because of the short working time (about 15 min. at $+20^{\circ}$ C). The material should be applied (pressed) with a trowel or by a gunite machine at the desired thickness, up to 4 cm per layer. When a second layer is required, the surface of the first layer should be roughened to achieve better adhesion.



MEGACRET-40 FAST

The final surface should be well protected from dehydration by covering it with wet cloths, polyethylene sheets or repeating dampening for 48 hours.

Consumption

Approx. 17,5 kg/m²/cm of layer thickness.

Packaging

MEGACRET-40 FAST is available in paper bags of 25 kg.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature must be between +5°C and +30°C.
- The product contains cement, which reacts as alkaline with water and is classified as irritant.
- Consult the safety advice and precautions written on the packaging.

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2032-CPD-10.11

EN 1504-3

Concrete repair product for non structural repair CC mortar (based on hydraulic cement)

Compressive strength: class R4 Chloride ion content: $\leq 0,05\%$ Adhesive Bond: $\geq 2,0$ Mpa Carbonation resistance: Passes Elastic modulus: 21,3 GPa Thermal compatibility part 1: $\geq 2,0$ MPa Capillary absorption: $\leq 0,5$ kg·m⁻²·h^{-0.5} Dangerous substances: comply with 5.4 Reaction to fire: Euroclass A1

Τα τεχνικά δεδομένα και οι οδηγίες που περιλαμβάνονται σε αυτό το τεχνικό φυλλάδιο είναι αποτέλεσμα της γνώσης και της εμπερίας από το τμήμα έρευνας και ανάπτυξης της εταιρείας, καθώς και από την εφαρμογή του προίόντος στην πράξη. Ου αυστάσεις και οι πορτάσεις οχετικά με την χρήση του νύλικών γίνονται χωρίς εγνήσης, αφού οι εκάστοτε συνθήκες κατά την εφαρμογή τους είναι πέρα του ελέγχου της εταιρείας μας. Για τον λόγο αυτό είναι ευθύνη του χρήστη να βεβαιωθεί πως το υλικό είναι κατάληλο για την προβλειτόμενη εφαρμογή και τις συνθήκες του έργου. Η έκδοση του παρόντος τεχνικού φυλλαδίου ακμάλισμος καθά είλη προηγούμενη έκδοση για το ίδιοι προίόν.





High-strength, non-shrinking pourable cast grout for repairs and strengthening

Description

Pourable, high-strength, non-shrinking cementbased cast grout with special additives. It provides:

- Very good fluidity without segregation.
- · High initial and final strength.
- Efficient bonding to steel and concrete.
- Resistance to blows and vibrations.
- Low water permeability.

It is classified as a type B grout according to ASTM C 1107-99 and as a CC R4 mortar for concrete repairs, according to EN 1504-3. Certificate Nr. 2032-CPD-10.11.

Fields of application

MEGAGROUT-100 is applied in thickness of up to 100 mm and it's suitable for:

- Repairs in damaged concrete elements.
- Grouting in thin concrete jackets at existing concrete elements.
- Filling cavities and hollows in concrete elements.

Technical data

cementitious powder
grey
3,50 l/25 kg bag
1,75 ± 0,20 kg/lit
2,35 ± 0,20 kg/lit
55,00 ± 5,00 N/mm ² 78,00 ± 8,00 N/mm ² 90,00 ± 10,00 N/mm ²
11,00 ± 2,00 N/mm ²
36,30 ± 0,10 GPa
Passes
0,00 %
≥ 2,90 N/mm ²

Thermal compatibility Part 1 (50 freeze-thaw cycles):	≥ 2,00 N/mm²
Capillary water absorption:	≤0,48 kg·m ⁻² ·h ^{-0,5}
Reaction to fire:	Euroclass A1
Pot life:	1 h at +20ºC
Max. thickness/layer:	10 cm

Directions for use

1. Substrate

The substrate must be clean, free of dust, grease etc. Furthermore, it must be roughened in order to ensure proper bonding of the grout on it. Thorough dampening of the substrate before application is recommended.

2. Application

MEGAGROUT-100 after hydration is a fluid and fine-grained material, and part of it may escape the joints between particular elements of the formwork.

Therefore, formwork joints must be sealed with AQUAFIX rapid-setting cement or RAPICRET fast-setting patching mortar.

MEGAGROUT-100 is gradually added into 3 I of water and mixed well, with a low-revolution mixer (300 rpm.), until a uniform fluid mass is formed. An additional quantity of up to 0,50 I of water is added under stirring, until the desired fluidity is achieved. The mixture is then poured, taking care to avoid air entrapment. In every case, it must be ensured that the grout has filled all the spaces between the formwork and the existing construction.

Surfaces formed by MEGAGROUT-100 exposed to open air must be kept wet for at least 24 hours, covered with wet cloths or polyethylene sheets.

Consumption

Approx. 21,5 kg/m²/cm of layer thickness, or 2,1 kg for filling 1 lit of volume.



Packaging

MEGAGROUT-100 is available in 25 kg paper bags.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Temperature during application must be between +5°C to +30°C.
- Material that has started to set must not be softened again with water.
- The product keeps its fluidity for approx. 60 minutes at temperatures between +15°C and +25°C.
- At high temperatures, storage of the bags in a cool place is recommended, as well as mixing the material with cold water in order to achieve the appropriate fluidity for a sufficient length of time (about 60 minutes).
- At low temperatures and whenever fast development of strength is required, mixing of the material with lukewarm water and protection from cold by putting thermal insulating covers over the formwork are recommended.
- The product contains cement, which reacts as alkaline with water and is classified as irritant.
- Consult the directions for safe use and precautions written on the packaging.

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2032-CPD-10.11

EN 1504-3

Concrete repair product for non structural repair CC mortar (based on hydraulic cement)

Compressive strength: class R4 Chloride ion content: $\leq 0,05\%$ Adhesive Bond: $\geq 2,0$ Mpa Carbonation resistance: Passes Elastic modulus: 36,3 GPa Thermal compatibility part 1: $\geq 2,0$ MPa Capillary absorption: $\leq 0,5$ kg·m⁻²·h^{-0,5} Dangerous substances: comply with 5.4 Reaction to fire: Euroclass A1

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the department of Research and Development of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical data sheet automatically cancels any previous one concerning the same product.





High-strength, non-shrinking pourable cast grout for precision grouting of machinery

Description

Pourable, high-strength, non-shrinking cementbased cast grout with special additives. It provides:

- Very good fluidity without segregation.
- High initial and final strength.
- Efficient bonding to steel and concrete.
- Resistance to knocks and vibrations.
- Low water permeability.

It is classified as a type C grout according to ASTM C 1107-99 and as a CC R4 mortar for concrete repairs, according to EN 1504-3. Certificate Nr. 2032-CPD-10.11.

Fields of application

MEGAGROUT-101 is suitable for:

- Basing and encasing of machinery.
- Anchoring.
- Grouting of bases and bedplates of precision machinery.

Technical data

Form:	cementitious powder
Color:	grey
Water demand:	3,50 l/25 kg bag
Bulk density of dry mortar:	1,60 ± 0,10 kg/lit
Bulk density of fresh mortar:	2,35 ± 0,10 kg/lit
Compressive strength: • After 24 hours: • After 7 days: • After 28 days:	50,00 ± 5,00 N/mm ² 70,00 ± 8,00 N/mm ² 80,00 ± 10,00 N/mm ²
Flexural strength:	11,00 ± 2,00 N/mm ²
Elastic modulus:	34,10 ± 0,10 GPa
Carbonation resistance:	Passes
Chloride ion content:	0,00 %
Adhesion strength:	\geq 2,80 N/mm ²
Thermal compatibility Part 1 (50 freeze-thaw cycles):	≥ 2,00 N/mm ²

Capillary water absorption:	\leq 0,49 kg·m ⁻² ·h ^{-0,5}
Reaction to fire:	Euroclass A1
Pot life:	1 h at +20⁰C
Max. thickness/layer:	10 cm

Directions for use

1. Substrate

The substrate must be clean, free of dust, grease etc. Furthermore, it must be roughened in order to ensure proper bonding of the grout on it. Thorough dampening of the substrate before application is recommended.

2. Application

MEGAGROUT-101 after hydration is a fluid and fine-grained mixture, and part of it may escape the joints between particular elements of the formwork.

Therefore, formwork joints must be sealed with AQUAFIX rapid-setting cement or RAPICRET fast-setting patching mortar.

MEGAGROUT-101 is gradually added into 3 I of water and mixed well, with a low-revolution mixer (300 rpm.), until a uniform fluid mass is formed. An additional quantity of up to 0,50 I of water is added under stirring, until the desired fluidity is achieved. The mixture is then poured, taking care to avoid air entrapment. In every case, it must be ensured that the grout has filled all the spaces between the formwork and the existing construction.

Surfaces formed by MEGAGROUT-101 exposed to open air must be kept wet for at least 24 hours, covered with wet cloths or polyethylene sheets.

Consumption

Approx. 21,5 kg/m²/cm of layer thickness, or 2,1 kg for filling 1 lit of volume.

Packaging

MEGAGROUT-101 is available in 25 kg paper bags.



Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- The temperature during application must be between +5°C to +30°C.
- Material that has started to set must not be "softened" again with water.
- The product keeps its fluidity for approx. 60 minutes at temperatures between +15°C and +25°C.
- At high temperatures, storage of the bags in a cool place is recommended, as well as mixing the material with cold water in order to have the appropriate fluidity for a sufficient length of time (approx. 60 minutes).
- At low temperatures and whenever fast strength gain is required, mixing of the material with lukewarm water and protection from cold by placing thermal insulating covers over the formwork are recommended.
- The product contains cement, which reacts as alkaline with water and is classified as irritant.
- Consult the directions for safe use and precautions written on the packaging.

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2032-CPD-10.11

EN 1504-3

Concrete repair product for non structural repair CC mortar (based on hydraulic cement)

Compressive strength: class R4 Chloride ion content: $\leq 0,05\%$ Adhesive Bond: $\geq 2,0$ Mpa Carbonation resistance: Passes Elastic modulus: 34,1 GPa Thermal compatibility part 1: $\geq 2,0$ MPa Capillary absorption: $\leq 0,5$ kg·m⁻²·h^{-0.5} Dangerous substances: comply with 5.4 Reaction to fire: Euroclass A1

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EPOMAX-STUCCO

2-component epoxy putty, extra fine-graded

Description

EPOMAX-STUCCO is a 2-component epoxy system without solvents, offering very strong bonding to the substrate, high hardness and high mechanical strength. It is significantly resistant to acids, alkalis, detergents, sea water and temperature variations.

It is classified as a structural bonding agent according to EN 1504-4. Certificate Nr. 2032-CPD-10.11.

Fields of application

EPOMAX-STUCCO is ideal for puttying surfaces. It is also used for bonding of concrete, steel, stone, wood etc., for restoring damages on concrete and cement mortars, as well as for sealing cracks that will be repaired with EPOMAX-L10, EPOMAX-L20 or DUREBOND injectable epoxy resins.

Technical data

Basis:	2-component epoxy resin
A-component color:	white
B-component color:	grey
A+B color:	grey
Form:	paste
A-component density:	1,35 ± 0,05 kg/lit
B-component density:	1,35 ± 0,05 kg/lit
A+B density:	1,35 ± 0,05 kg/lit
Mixing proportion (A+B):	100:100 by weight
Pot life:	approx. 60 min at +20°C
Minimum hardening temperature:	+8ºC
Walkability:	after 16 hours at +23°C
Final strengths:	after 7 days at +23°C

Adhesion for hardened concrete to hardened concrete and for fresh concrete to hardened concrete: Passes (fracture in the concrete) (EN 12636)

Shear adhesion strength for hardened concrete to hardened concrete: (EN 12615)	7,8 N/mm²
Compressive strength: (EN 12190)	58,6 N/mm ²
Shrinkage: (EN 12671-1)	0,05%
Workable life: (EN ISO 9514)	60 minutes at +20°C
Sensitivity to water: (EN 12636)	Passes
Modulus of elasticity in compression: (EN 13412)	5.150 N/mm ²
Coefficient of thermal expansion: (EN 1770)	61 X 10 ⁻⁶
Glass transition temperature: (EN 12614)	≥ 74 °C
Reaction to fire: (EN 13501-1)	Euroclass E
Durability: (EN 13733)	Passes *
*The compressive shear load at failure after exposure to thermal cycling shall not be less than the lowest tensile strength of the bonded or the original concrete.	

•	
Compressive strength: (DIN EN 196-1)	58,6 N/mm ²
Flexural strength: (DIN EN 196-1)	30,8 N/mm ²
Cleaning of tools: Tools should be cleaned	l with SM-12 solvent,

immediately after use.



EPOMAX-STUCCO

Directions for use

1. Substrate

- The application surface should be:
- Dry and durable.
- Free of materials that prevent bonding, e.g. dust, grease, loose particles etc.

2. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, in a predetermined mixing proportion.

The whole quantity of comp. A and comp. B is placed into a clean container, and mixed for about 5 minutes by using an appropriate hand tool (e.g. small trowel), until a uniform pasty putty is formed.

In case that less quantity is needed than what is available in the packages, equal quantities by volume from component A and component B are taken and mixed thoroughly in a clean container, as described above.

3. Application - Consumption

EPOMAX-STUCCO is applied by trowel or spatula on a dry and clean surface. Consumption: Approx. 1,35 kg/m²/mm of layer thickness.

Packaging

EPOMAX-STUCCO is supplied in packages (A+B) of 1 kg, with components A and B having the fixed weight proportion.

Shelf-life - Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.

Remarks

 The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed.

Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.

- After hardening, EPOMAX-STUCCO is totally safe for health.
- Before application, study the safety advice mentioned on the product's labels.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory g, type SB is 350g/l (2010) for the ready to use product. The ready to use product EPOMAX-STUCCO contains max <350 g/l VOC.



4.1.2

EPOXY-BASED MATERIALS

EPOMAX-STUCCO

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2032-CPD-10.11
EN 1504-4
Structural bonding product for bonded mortar or concrete for uses other than low performance requirements
Bond/adhesion: pass Shear Strength: $\ge 6 \text{ N/mm}^2$ Compressive strength: $\ge 30 \text{ N/mm}^2$ Shrinkage expansion: $\le 0,1\%$ Workability: 60 minutes at +20 °C Sensitivity to water: pass Modulus of elasticity: $\ge 2000 \text{ N/mm}^2$ Coefficient of thermal expansion: $\le 100 \times 10^6 \text{ per K}$ Glass transition temperature: $\ge 40 \text{ °C}$ Reaction to fire: Euroclass E Durability: Pass Dangerous substances: comply with 5.4

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EPOMAX-EK

2-component epoxy putty

Description

EPOMAX-EK is a 2-component epoxy system without solvents, offering very strong bonding to the substrate, high hardness and high mechanical strength. It is significantly resistant to acids, alkalis, detergents, sea water and temperature variations.

It is classified as a structural bonding agent for mortar or concrete EN 1504-4. Certificate Nr. 2032-CPD-10.11.

Fields of application

EPOMAX-EK is used to restore damages on concrete and cement mortars, for reinforcement anchoring as well as for sealing cracks that will be repaired with EPOMAX-L10, EPOMAX-L20 or DUREBOND injectable epoxy resins. It bonds concrete, iron, stone, wood etc.

Technical data 2-compor

Basis:	2-component epoxy resin
A-component color:	white
A-component color.	wille
B-component color:	black
A+B color:	grey
Form:	paste
A-component density:	1,85 kg/lit
B-component density:	1,79 kg/lit
A+B density:	1,83 kg/lit
Mixing proportion	
(A+B):	100 : 22 by weight
Pot life:	approx. 25 min at +20°C
Minimum hardening	
temperature:	+8°C
Walkability:	after 16 hours at +23°C
Final strengths:	after 7 days at +23°C

Adhesion for hardened concrete to hardened concrete and for fresh concrete to hardened concrete: Passes (fracture in the concrete) (EN 12636)

Shear adhesion strength for hardened concrete to hardened concrete: (EN 12615)	8,1 N/mm²
Compressive strength: (EN 12190)	96 N/mm ²
Shrinkage: (EN 12671-1)	0,05%
Workable life: (EN ISO 9514)	25 minutes at +20°C
Sensitivity to water: (EN 12636)	Passes
Modulus of elasticity in compression: (EN 13412)	11.700 N/mm ²
Coefficient of thermal expansion: (EN 1770)	31 X 10 ⁻⁶
Glass transition temperature: (EN 12614)	≥ 75 °C
Reaction to fire: (EN 13501-1)	Euroclass E
Durability: (EN 13733)	Passes *
*The compressive shear loa exposure to thermal cycling than the lowest tensile strer or the original concrete.	shall not be less
Flexural strength: (DIN EN 196-1)	46 N/mm ²

Cleaning of tools: Tools should be cleaned with SM-12 solvent or water, immediately after use.

Directions for use

1. Substrate

The application surface should be:

- Dry and durable.
- Free of materials that prevent bonding, e.g. dust, grease, loose particles etc.





2. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. Mix thoroughly the whole quantity of comp. A with the whole quantity of comp. B, until a uniform grey color is obtained. Mixing should take place for about 5 minutes, using an appropriate hand tool (e.g. small trowel). It is important to stir the mixture thoroughly near the sides and bottom of the container, to achieve uniform dispersion of the hardener.

3. Application - Consumption

EPOMAX-EK is applied by trowel on the dry and clean surface.

Consumption: Approx. 1,85 kg/m²/mm of layer thickness.

Packaging

EPOMAX-EK is supplied in packages (A+B) of 1 kg, 2 kg and 4 kg, with components A and B having the fixed weight proportion.

Shelf-life - Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.

Remarks

- 24 hours after cracks are sealed with EPOMAX-EK, injections with injectable resins EPOMAX-L10, EPOMAX-L20 or DUREBOND may take place.
- The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed.

Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.

- After hardening, EPOMAX-EK is totally safe for health.
- Before application, study the safety advice mentioned on the product's labels.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory g, type SB is 350g/l (2010) for the ready to use product. The ready to use product EPOMAX-EK contains max <350 g/l VOC.



EPOMAX-EK

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ing the same product

EPOXY-BASED MATERIALS



EPOMAX-L20

2-component, injectable epoxy resin for cracks 0,1-1,0 mm wide

Description

EPOMAX-L20 is a 2-component, colorless epoxy system, without solvents, offering very strong bonding to concrete and steel as well as high compressive and flexural strength, even when applied on damp substrates. It is classified as a product for concrete injection according to EN 1504-5. Certificate Nr. 2032-CPD-10.11.

Fields of application

EPOMAX-L20 is used to repair concrete cracks 0,1-1,0 mm wide by injection, in order to bond and restore the original monolithic structure. Also to install and anchor reinforcement rods into existing concrete elements.

Technical data

Chemical basis:	2-component epoxy resin
Color of component A:	transparent
Color of component B:	transparent yellow
Color of A+B:	transparent yellow
Viscosity:	140 mPa.s_at +23ºC
Density of comp. A:	1,13 kg/lit
Density of comp. B:	1,00 kg/lit
Density of A+B:	1,10 kg/lit
Mixing ratio (A:B):	100:26,7 by weight
Pot life:	approx. 30 min at +20ºC
Minimum temperature for hardening:	+8°C
Final strength:	after 7 days at +23°C
Adhesion by tensile bond strength: (EN 12618-2)	5,4 N/mm²
Adhesion by slant shear strength: (EN 12618-3)	Monolithic failure

Volumetric shrinkage: (EN 12617-2)	2,0 %
Glass transition	
temperature:	≥ 74 °
(EN 12614)	
VAT - store to 1124 sto	

Workability:

- Minimum crack width: 0,1 mm
- Suitable for injection into dry and non dry medium

(EN 12618-2) Passes *

С

Durability: (EN 13733)

*The compressive shear load at failure after exposure to thermal cycling shall not be less than the lowest tensile strength of the bonded or the original concrete.

No
71 N/mm ²
> 35 N/mm ²

Cleaning of tools:

Tools must be cleaned thoroughly immediately after use with SM-12 solvent.

Directions for use

1. Substrate

The application surface should be free of materials that prevent bonding, e.g. dust, grease, loose particles etc. and without standing water.

2. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. The whole quantity of comp. B is added into comp. A. Mixing should take place for about 5 minutes, using an appropriate hand tool (e.g. small trowel). It is important to stir the mixture thoroughly near the sides and bottom of the container, to achieve uniform dispersion of the hardener.





3. Application procedure

Resin injections

- 1.Remove any existing plaster on both sides of the crack.
- Clean the crack from any dust or loose particles.
- 3.Seal the crack using EPOMAX-EK and fix injection nozzles along the crack, approx. every 20 cm.
- 4.After hardening of EPOMAX-EK, start injecting EPOMAX-L20 into the crack by pressing the material through the nozzles. For a horizontal crack, start from one end. For a vertical crack, start from the lowest point.
- 5.Place the resin outflow tube (e.g. spirit level tube) in the first nozzle. Inject into the first nozzle by handling the outflow valve of the compression boiler until EPOMAX-L20 begins to flow out of the adjacent nozzle or until no further pressure can be applied. Cap the first nozzle and continue the injection through the next nozzle. Repeat this process until the entire length of the crack has been treated.
- 6.Allow the material to cure and the next day remove (break) the beetling nozzles and restore plastering.

Anchoring

Open holes having a bigger diameter than the rods to be installed, as deep as possible. For vertical elements, holes should not be opened horizontally, but with a dipping direction (downwards). Blow compressed air to clean the holes. EPOMAX-L20 is poured into the holes in a quantity slightly more than necessary, so that putting the rod inside the hole will cause the material to flow out.

Consumption

To fill an empty space of 1lit, approx. 1,1 kg EPOMAX-L20 are required.

Packaging

EPOMAX-L20 is available in 1 kg packages (A+B). Components A and B are packed in predetermined mixing proportions by weight.

Shelf-life - Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.

Remarks

- The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.
- After hardening, EPOMAX-L20 is totally safe for health.
- Before application, consult the safety advice written on the product's label.



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POXY-BASED MATERIALS

EPOMAX-L20

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2032-CPD-10.11

EN 1504-4

Concrete injection product U (F1) W (1) (1/2) (8/35) (1) Force transmitting and filling of cracks 0,1 mm Dry and damp cracks 8 °C to 35 °C

Adhesion by tensile bond strength: > 2 N/mm² Adhesion by slant shear strength: monolithic failure Shrinkage: < 3 % Glass transition temperature: ≥ 40 °C Workability Crack width from 0,1 mm Moisture state of the crack: dry and damp Durability: Pass Corrosion behaviour: deemed to have no corrosion effect Dangerous substances: comply with 5.4

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EPOMAX-L10

2-component, injectable epoxy resin for cracks 0,5-3,0 mm wide

Description

EPOMAX-L10 is a 2-component, colorless epoxy system, without solvents, offering very strong bonding to concrete and steel as well as high compressive and flexural strength, even when applied on damp substrates. It complies with the requirements of ASTM C 881-90, Type I, Grade 1, Class B+C. It is classified as a product for concrete injection according to EN 1504-5. Certificate Nr. 2032-CPD-10.11.

Fields of application

EPOMAX-L10 is used to repair concrete cracks 0,5-3 mm wide by injection, in order to bond and restore the original monolithic structure. Also to install and anchor reinforcement rods into existing concrete elements.

Technical data

Technica	li uala
Basis:	2-component epoxy resin
A-component color:	transparent
B-component color:	yellow transparent
A+B color:	yellow transparent
Viscosity:	230 mPa's at +23ºC
A-component density:	1,08 kg/lit
B-component density:	1,00 kg/lit
A+B density:	1,05 kg/lit
Mixing proportion (A+B):	100 : 25 by weight
Pot life:	approx. 45 min at +20ºC
Water Absorption: (ASTM D 570)	0,62% w/w after 7 days
Minimum hardening temperature:	+8°C
Final strengths:	after 7 days at +23°C
Adhesion by tensile bond strength: (EN 12618-2)	4,9 N/mm ²

Adhesion by slant shear strength: (EN 12618-3)	Monolithic failure
Volumetric shrinkage: (EN 12617-2)	1,7 %
Glass transition temperature: (EN 12614)	≥ 74 °C
 Workability: Minimum crack width: Suitable for injection into medium (EN 12618-2) 	0,5 mm dry and non dry
Durability: (EN 13733)	Passes *

*The compressive shear load at failure after exposure to thermal cycling shall not be less than the lowest tensile strength of the bonded or the original concrete.

Corrosion behaviour:	No
Compressive strength: (DIN EN 196-1)	70 N/mm ²
Flexural strength: (DIN EN 196-1)	63 N/mm ²
Tensile strength: (ASTMD 638)	25,7 N/mm ²
Elongation at break: (ASTM D 638)	2,2%

Cleaning of tools: Tools should be cleaned with SM-12 solvent or water, immediately after use.

Directions for use

1. Substrate

The application surface should be free of materials that prevent bonding, e.g. dust, grease, loose particles etc. and without standing water.

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EPOMAX-L10

2. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. The whole quantity of comp. B is added into comp. A. Mixing should take place for about 5 minutes, using an appropriate hand tool (e.g. small trowel). It is important to stir the mixture thoroughly near the sides and bottom of the container, to achieve uniform dispersion of the hardener.

In case less than one package is required, 4 parts by weight of comp. A and 1 part by weight of comp. B should be poured into a clean container and mixed as above.

3. Application

Resin injections

- 1.Remove any existing plaster on either side of the crack.
- 2.Clean the crack from any dust or loose particles.
- 3.Seal the crack using EPOMAX-EK and fix injection nozzles along the crack, approx. every 20 cm.
- 4.After hardening of EPOMAX-EK, start injecting EPOMAX-L10 into the crack by pressing the material through the nozzles. For a horizontal crack, start from one end. For a vertical crack, start from the lowest point.
- 5.Place the resin outflow tube (e.g. spirit level tube) in the first nozzle. Inject into the first nozzle by handling the outflow valve of the compression boiler until EPOMAX-L10 begins to flow out of the adjacent nozzle or until no further pressure can be applied. Cap the first nozzle and continue the injection through the next nozzle. Repeat this process until the entire length of the crack has been treated.
- 6.Allow the material to cure and the next day remove (break) the beetling nozzles and restore plastering.

Anchoring

Open holes having a bigger diameter than the rods to be installed, as deep as possible. For vertical elements, holes should not be opened horizontally, but with a dipping direction (downwards). Blow compressed air to clean the holes. EPOMAX-L10 is poured into the holes in a quantity slightly more than necessary, so that putting the rod inside the hole will cause the material to flow out.

Consumption

To fill an empty space of 1lit, approx. 1,1 kg EPOMAX-L10 are required.

Packaging

EPOMAX-L10 is supplied in packages (A+B) of 1 kg and 3 kg, with components A and B having the fixed weight proportion.

Shelf-life - Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.

Remarks

- The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.
- After hardening, EPOMAX-L10 is totally safe for health.
- Before application, study the safety advice mentioned on the product's labels.



EPOMAX-L10

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2032-CPD-10.11
EN 1504-4
Concrete injection product U (F1) W (1) (1/2) (8/35) (1) Force transmitting and filling of cracks 0,1 mm Dry and damp cracks 8 °C to 35 °C
Adhesion by tensile bond strength: > 2 N/mm ² Adhesion by slant shear strength: monolithic failure Shrinkage: < 3 % Glass transition temperature: \ge 40 °C Workability Crack width from 0,5 mm Moisture state of the crack: dry and damp Durability: Pass Corrosion behaviour: deemed to have no corrosion effect Dangerous substances: comply with 5.4

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D

EPOXY-BASED MATERIALS



2-component, injectable epoxy resin for cracks >3 mm wide Bonding agent

Description

DUREBOND is a 2-component epoxy system without solvents, offering excellent bonding to concrete and steel and high compressive and flexural strength, even when applied on damp substrates.

It complies with the requirements of ASTM C 881-90, Type II, Grade 2, Class B+C. It is classified as a structural bonding agent for mortar or concrete and as a product for concrete injection according to EN 1504-4 and EN 1504-5. Certificate Nr. 2032-CPD-10.11.

Fields of application

DUREBOND is used as a bonding bridge for bonding fresh concrete or mortar to old hardened concrete, mortar or metallic surfaces. DUREBOND is also used to repair concrete cracks wider than 3 mm by injection, in order to bond and restore the original monolithic structure.

DUREBOND is an ideal aid for installing and anchoring reinforcement rods into existing concrete elements.

Technic	al data
Basis:	2-component epoxy resin
A-component color:	grey
B-component color:	brownish green
A+B color:	grey
Viscosity:	3.400 mPas at +23°C
A-component density:	1,57 kg/lit
B-component density:	1,04 kg/lit
A+B density:	1,47 kg/lit
Mixing proportion (A+B):	100 : 20 by weight
Working time:	approx. 40 min at +20°C
Minimum hardening temperature:	+8°C
Final strength:	after 7 days at +23°C
Flexural strength: (DIN EN 196-1)	87 N/mm ²

Tensile strength: (ASTMD 638)	29,9 N/mm ²
Modulus of elasticity: (DIN 1048)	3.500 N/mm ²
Water absorption: (ASTM D 570)	0,29% w/w after 24 h
Adhesive strength:	> 3 N/mm ² (breaking point of concrete)

EN 1504-4 as a structural bonding agent:

Adhesion for hardened concrete to hardened concrete and for fresh concrete to hardened concrete: Passes (fracture in the concrete) (EN 12636)

Shear adhesion strength for hardened concrete to hardened concrete: 8,8 N/mm² (FN 12615)

(EN 12615)	
Compressive strength: (EN 12190)	101 N/mm ²
Shrinkage: (EN 12671-1)	0,05%
Workable life: (EN ISO 9514)	40 minutes at +20°C
Sensitivity to water: (EN 12636)	Passes
Modulus of elasticity in compression: (EN 13412)	3.470 N/mm ²
Coefficient of thermal expansion:	52 X 10 ⁻⁶ (EN 1770)
Glass transition temperature: (EN 12614)	≥ 73 °C
Reaction to fire: (EN 13501-1)	Euroclass E
Durability:	Passes *

*The compressive shear load at failure after exposure to thermal cycling shall not be less than the lowest tensile strength of the bonded or the original concrete.

(EN 13733)



EN 1504-5, as an injection product for concrete:

Adhesion by tensile bond strength: 5,9 N/mm² (EN 12618-2)

≥ 73 °C

Passes *

Adhesion by slant shear strength: Monolithic failure

(EN 12618-3) Volumetric shrinkage: 1,5 % (EN 12617-2)

Glass transition temperature: (EN 12614)

Workability:

- · Minimum crack width: 3 mm
- Suitable for injection into dry and non dry medium (EN 12618-2)

Durability: (EN 13733)

*The compressive shear load at failure after exposure to thermal cycling shall not be less than the lowest tensile strength of the bonded or the original concrete.

Corrosion behaviour: No

Cleaning of tools:

Tools should be cleaned with SM-12 solvent or water, immediately after use.

Directions for use

1. Substrate

The application surface should be:

- Dry and durable.
- Free of materials that prevent bonding, e.g. dust, grease, loose particles etc. and without standing water.

2. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. The whole quantity of comp. B is added into comp. A. Mixing should take place for about 5 minutes, using an appropriate hand tool (e.g. small trowel) or with a low revolution mixer (300 rpm). It is important to stir the mixture thoroughly near the sides and bottom of the container, to achieve uniform dispersion of the hardener. If less than one package is required, 5 parts by weight of comp. A and 1 part by weight of comp. B should be poured into a clean container and mixed as above.

3. Application - Consumption

Bonding of fresh concrete to hardened concrete

DUREBOND is applied by roller or brush in one layer.

Consumption: Approx. 0,6 kg/m². Concrete or mortar laying follows, while DUREBOND is still fresh (within 90 min from application, at +20°C).

Resin injections

- 1.Remove any existing plaster on either side of the crack.
- 2.Clean the crack from any dust or loose particles.
- 3.Seal the crack using EPOMAX-EK and fix injection nozzles along the crack, approx. every 20 cm.
- 4.After hardening of EPOMAX-EK, start injecting DUREBOND into the crack by pressing the material through the nozzles. For a horizontal crack, start from one end. For a vertical crack, start from the lowest point.
- 5.Place the resin outflow tube (e.g. spirit level tube) in the first nozzle. Inject into the first nozzle by handling the outflow valve of the compression boiler until DUREBOND begins to flow out of the adjacent nozzle or until no further pressure can be applied. Cap the first nozzle and continue the injection through the next nozzle. Repeat this process until the entire length of the crack has been treated.
- 6.Allow the material to cure and the next day remove (break) the beetling nozzles and restore plastering. Consumption: To fill an empty space of 1lit, approx. 1,5 kg DUREBOND are required.



Anchoring

Open holes having a bigger diameter than the rods to be installed, as deep as possible. For vertical elements, holes should not be opened horizontally, but with a dipping direction (downwards). Blow compressed air to clean the holes. DUREBOND is poured into the holes in a quantity slightly more than necessary, so that putting the rod inside the hole will cause the material to flow out.

Consumption: To fill an empty space of 1lit, approx. 1,5 kg DUREBOND are required.

Packaging

DUREBOND is supplied in packages (A+B) of 1 kg and 4 kg with components A and B having the fixed weight proportion.

Shelf-life - Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.

Remarks

- The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.
- After hardening, DUREBOND is totally safe for health.
- Before application, study the safety advice mentioned on the product's labels.



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2032-CPD-10.11

EN 1504-4

Structural bonding product for bonded mortar or concrete for uses other than low performance requirements

Bond/adhesion: pass Shear Strength: \geq 6 N/mm² Compressive strength: \geq 30 N/mm² Shrinkage/expansion: \leq 0,1% Workability: 25 minutes at +20 °C Sensitivity to water: pass Modulus of elasticity: \geq 2000 N/mm² Coefficient of thermal expansion: \leq 100 X 10⁶ per K Glass transition temperature: \geq 40 °C Reaction to fire: Euroclass E Durability: Pass Dangerous substances: comply with 5.4

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2032-CPD-10.11

EN 1504-5

Concrete injection product U (F1) W (1) (1/2) (8/35) (1) Force transmitting and filling of cracks 0,1 mm Dry and damp cracks 8 °C to 35 °C

Adhesion by tensile bond strength: > 2 N/mm² Adhesion by slant shear strength: monolithic failure Shrinkage: < 3 % Glass transition temperature: ≥ 40 °C Workability Crack width from 0,1 mm Moisture state of the crack: dry and damp Durability: Pass Corrosion behaviour: deemed to have no corrosion effect Dangerous substances: comply with 5.4

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EPOMAX-ANCHOR

Fast curing anchoring adhesive for reinforcement rods

Description

EPOMAX-ANCHOR is 2- component polyester based anchoring adhesive. It does not contain solvents and styrene and has no shrinkage behavior.

Fields of application

EPOMAX-ANCHOR can be used as a fast curing anchoring adhesive for reinforced bars, threaded rods, anchor bolts.etc. It can also be used to install these fixtures into concrete, solid rock, hollow and solid masonry, etc.

Technical data

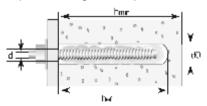
Base :	polyester styrene free
Color:	grey
Mixing proportion (A:B):	10:1 ratio by volume

Density: 1,65 kg/lit

Application temperature:between +5°C and 35°C Curing :

Temperature	Working time	Curing time
+ 5°C	25 min	120 min
+ 10°C	15 min	80 min
+ 20°C	6 min	45 min
+ 30°C	4 min	25 min
+ 35°C	2 min	20 min

Compression strength: 75 Mpa after 24h



Thread diameter d (mm)	8	10	12	16	20
Drill diameter d0 (mm)	10	12	14	18	24
Anchorage depth hef (mm)	80	90	110	125	170

Thread diameter d (mm)	8	10	12	16	20
Drill diameter d0 (mm)	10	12	14	18	24
Anchorage depth hef (mm)	80	90	110	125	170
Minimum part thickness h min (mm)	130	140	160	175	220
Edge distance C _{cr,N} (mm)	80	90	110	130	170
Axial distance S _{cr,N} (mm)	160	180	220	250	340
Design load values for concrete C20/25 N _{rk} (KN)	12,3	18,4	26,0	30,2	48,1
Recommended loads for concrete C20/25 F _{rec} (KN)	4,7	7,1	10,0	11,2	18,8



EPOMAX-ANCHOR

Directions for use

1. Installation to concrete or solid stone Drill correct diameter hole to the recommended depth. Then clean the hole thoroughly with a nylon brush and remove any loose particles using compressed air, hand pump, etc. Screw the mixer to the cartridge, after that, attach the mixer nozzle to the end of the cartridge and insert the cartridge into the applicator gun. Afterwards squeeze out to discard approximately 15 ml of compound, this quantity is not used. Starting from the back end, fill hole completely with the resin. Push anchor up to base of hole whilst turning it slightly. A visual check of resin filling is necessary. Allow the material to cure before attaching fixings and applying loads. Be consulted the relative table of curing times for EPOMAX-ANCHOR.

2. Installation to hollow substrates

Drill hole without percussion drill. Then remove any loose particles using compressed air, hand pump, etc. Screw the mixer to the cartridge, after that, attach the mixer nozzle to the end of the cartridge and insert the cartridge into the applicator gun. Afterwards squeeze out to discard approximately 15 ml of compound, this quantity is not used. Insert the perforated sleeve in the hole. Starting from the back end, fill the perforated sleeve with resin. Afterwards, push anchor up to the base of the sleeve whilst turning it slightly. Allow the material to cure before attaching fixings and applying loads. Be consulted the relative table of curing times for EPOMAX-ANCHOR.

Consumption

Depending on the application.

Packaging

Cartridges of 300 ml.

Shelf-life - Storage

Shelf-life is 12 months, in dry and frost-free conditions.

Remarks

EPOMAX-ANCHOR can be applied on low ambient temperatures up to -5° C, but the temperature of the product has to be at least 10°C.



EPOMAX-LD

2-component, epoxy impregnation adhesive for composite fabrics

Description

EPOMAX-LD is a 2-component solvent-free epoxy system. After hardening it provides strong bonding to the substrate, high hardness and increased compressive and flexural strength.

It is classified as a structural bonding agent for external reinforcement of concrete, according to EN 1504-4. Certificate Nr. 2032-CPD-10.11.

Fields of application

EPOMAX-LD is used for the impregnation of fabrics made of synthetic fibres, during the static and seismic strengthening of concrete elements. It is equally suitable for glass fibre and carbon fibre fabrics.

Technica	l data
Basis:	2-component epoxy resin
A-component color:	white
B-component color:	black
A+B color:	grey
Form:	paste
A-component density:	1,10 kg/lit
B-component density:	1,00 kg/lit
A+B density:	1,08 kg/lit
Mixing proportion (A+B):	100:19,4 by weight
Open time:	45 min at +20°C
Pot life:	35 min at +20°C
Minimum hardening temperature:	+8°C
Final strength:	after 7 days at +20°C
Tensile adhesion strength between steel plates: (EN 12188)	20,0 N/mm ²
Shear adhesion strength between steel prisms: (EN 12188)	16,8 N/mm²

Directions	for use		
Cleaning of tools: Tools should be cleaned with SM-12 solvent or water, immediately after use.			
Adhesive strength (on concrete):	> 4 N/mm ² (breaking point of concrete)		
Modulus of elasticity: (flexural) (ASTM D 790)	2.500 MPa		
Flexural strength: (ASTM D 790)	70 MPa		
Compressive strength: (ASTM D 695)	90 MPa		
Elongation at break:	1,7%		
Tensile strength: (ASTM D 638)	44,6 MPa		
Durability: (EN 13733)	Passes		
Reaction to fire: (EN 13501-1)	Euroclass E		
Glass transition temperature: (EN 12614)	≥ 75 °C		
Coefficient of thermal expansion: (EN 1770)	64 X 10 ⁻⁶		
Modulus of elasticity in compression: (EN 13412)	2.600 N/mm ²		
Workability: (EN ISO 9514)	35 minutes at +20°C		
Shrinkage: (EN 12671-1)	0,05%		

1. Substrate

The substrate must be:

- Dry and sufficiently strong and stable.
- Free of materials that might prevent bonding, e.g. dust, loose particles, grease or oil etc.



EPOMAX-LD

- It is recommended that before application the substrate should be mechanically treated by sand blasting or milling and cleaned with a high-suction vacuum cleaner.
- If there are cracks in the concrete, they have to be repaired by a resin injection process using materials like EPOMAX-L10, EPOMAX-L20 or DUREBOND.
- The substrate should be as flat as possible. Surface imperfections are repaired using MEGACRET-40 fibre-reinforced cementmortar or EPOMAX-EK epoxy paste.
- The edges of the structural element that will be covered with fabric have to be rounded off in a radius of 10-30 mm to achieve efficient confinement.

2. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportions by weight. Mix thoroughly the whole quantity of comp. A with the whole quantity of comp. B. Mixing should take place for about 5 minutes using a low revolution mixer or an appropriate hand tool (e.g. small trowel), until a uniform grey color mixture is obtained. It is important to stir the mixture thoroughly near the sides and bottom of the container, to achieve uniform dispersion of the hardener.

3. Application - Consumption

After mixing of the two components, EPOMAX-LD is applied on the dry and clean substrate using a brush, roller or trowel with a consumption of approx. 0,7 kg/m². Then the fabric is affixed by pressing with a plastic roller so that it gets thoroughly impregnated (saturated) by the resin. A second layer follows, if required.

After the last layer is dry, a final sealing layer of EPOMAX-LD is applied with a consumption of approx. 0,3 kg/m².

While the sealing layer is still fresh, quartz sand is broadcast on the surface to secure adequate bonding of the subsequent protective cementitious coating.

Packaging

EPOMAX-LD is supplied in packages (A+B) of 5 kg, with components A and B having the fixed weight proportion.

Shelf-life - Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.

Remarks

- The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.
- After hardening, EPOMAX-LD is totally safe for health.
- After the application, the EPOMAX-LD layer should be protected from immediate sun exposure.
- Before application, study the safety advice mentioned on the product's labels.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory g, type SB is 350g/l (2010) for the ready to use product. The ready to use product EPOMAX-LD contains max <350 g/l VOC.



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FIBRE REINFORCED POLYMERS

EPOMAX-LD

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2032-CPD-10.11

EN 1504-4

Structural bonding product for bonded mortar or concrete for uses other than low performance requirements

Bond/Adhesion strength: Pull off strength \geq 14N/mm² Slant shear strength at: $50^{\circ} \ge 50 \text{ N/mm}^2$ $60^{\circ} > 60 \text{ N/mm}^2$ $70^{\circ} \ge 70 \text{ N/mm}^2$ Shear Strength: ≥12 N/mm² Shrinkage expansion: $\leq 0,1\%$ Workability: 35 minutes at +20 °C Modulus of elasticity: ≥ 2000 N/mm² Coefficient of thermal expansion: $\leq 100 \text{ X} 10^{-6} \text{ per K}$ Glass transition temperature: ≥ 45 °C Reaction to fire: Euroclass E **Durability: Pass** Dangerous substances: comply with 5.4

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MEGAWRAP-200

Unidirectional carbon fabric for structural strengthening

Description

MEGAWRAP-200 is a fabric made of continuous single-oriented carbon fibers. In combination with the epoxy resin EPOMAX-LD it forms a Composite Material (FRP) that is used for the strengthening of structural elements as externally bonded reinforcement, providing high tensile strength and confinement.

Fields of application

The carbon fabrics MEGAWRAP-200 are used as external reinforcement, by impregnation and external bonding to structural elements with the epoxy resin EPOMAX-LD, to increase shear strength of beams and columns, confinement of columns as well as ductility of concrete crosspoints in repairing or strengthening works, concerning:

- Pro-seismic structural strengthening and adjustment to design code requirements.
- Ageing of construction materials, corrosion of reinforcement elements or/and construction defects.
- Load increase or change of use.
- Repairs in reinforced concrete elements after earthquakes.

Strengthening with Composite Materials could be obtained on concrete, wooden and steel elements, bearing masonry walls.

Technical data

Fabric properties:

Weight of carbon fibers:	200 g/m ²
Total fabric weight:	224 g/m ²
Design thickness:	0,11 mm
Fabric width:	60 cm (± 1 cm)
Fabric length:	50 m (± 0,5 m)
Fabric weight:	6,72 kg (net)

Fabric construction:

0°	Carbon Panex-35(200 g/m ²)	
90°	E-Glass (9,6 g/m ²)	
Stitch	Polyesteric (6,4 g/m ²)	
Binder	(8 g/m ²)	
Carbon fiber properties (Panex-35):		

Tensile strength f _{fib} :	3.800 MPa
Modulus of elasticity E _{fib} :	235 GPa
Ultimate strain ϵ_{fib} :	1,5%
Density:	1,81 g/cm ³

The mechanical properties refer to average test values (mean) and result from tensile tests made according to ASTM D4018-81.

Directions for use

1. Substrate

- The substrate must be free of loose parts, plaster, paint, oil or grease. After thorough cleaning, the surface is well rubbed with a hard brush.
- Any existing cracks in the concrete should be repaired by resin injections of EPOMAX-L10, EPOMAX-L20 or DUREBOND.
- The outside edges should be rounded in a radius of 10-30 mm.
- The substrate should be as flat as possible. Any surface imperfections must be repaired using MEGACRET-40 fibre-reinforced cement-mortar or EPOMAX-EK epoxy paste.

2. Application

 The properly prepared surface is coated with EPOMAX-LD resin. Then, MEGAWRAP-200 is cut with scissors in the desired dimensions. After careful placing (well stretched) on the wet surface, the fabric is slowly pressed with special plastic roller to achieve better contact with the substrate, thorough impregnation and removal of air bubbles'.



MEGAWRAP-200

The fabric direction should follow the principal tensile forces direction and its fibers should be as straight as possible. During the confinement of columns, overlapping of 15-20 cm is required between edges of the same fabric.

- If more than one layer of fabric is specified, aforementioned application process is repeated. In that case the previous layer should not be completely dry, otherwise good rubbing is required before the new application.
- Subsequently, the last fabric layer is brushed on the outside with EPOMAX-LD and then quartz sand is broadcasted on the still fresh resin coating in order to apply later a protective cementitious coating (plaster).

Advantages

- · Easy and fast work.
- Increase of the strength and ductility of structural elements without changing their geometry or increasing their rigidity.
- High resistance against time, moisture, alkaline and acid environment as well as fatigue.
- Very high tensile strength and modulus of elasticity of fibers.
- Protection of reinforcement against corrosion.

Packaging

MEGAWRAP-200 carbon fabric is available in rolls of 50 m long (\pm 0,5 m) and 60 cm wide (\pm 1 cm).

Remarks

- In some cases Pull-off method is required in order to test the substrate's tensile strength.
- Special attention should be given during cutting process of the fabric in order to prevent folding or crumpling.
- Working time of epoxy systems decreases when ambient temperature rises.

Additional technical documentation

- ISOMAT in cooperation with University of Patras have developed a computer application program running under Windows 98/2000/XP named "COMPOSITE DIMENSIONING" so to support the design process. Please ask for the program as well as for the relevant technical guidelines signed by Civil Engineering dept. of Patras' University and published by ISOMAT.
- In most cases, strengthening works with Composite Materials are subject to advanced engineering design, therefore the experience of the stuff involved as well as the close supervision of the project are in any case essential to ensure proper application.

4.1.3

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the department of Research and Development of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical data sheet automatically cancels any previous one concerning the same product.





EPOMAX-PL

2-component, epoxy adhesive paste for composite plates

Description

EPOMAX-PL is a 2-component epoxy system in pasty form. After hardening it provides strong bonding to the substrate, high hardness and increased compressive and flexural strength. It is classified as a structural bonding agent for external reinforcement of concrete, according to EN 1504-4. Certificate Nr. 2032-CPD-10.11.

Fields of application

EPOMAX-PL is used for bonding carbon plates during the structural strengthening of construction elements with fibre-reinforced polymer systems (F.R.P.).

Technical data

Basis:	2-component epoxy resin
A-component color:	white
B-component color:	black
A+B color:	light grey
Form:	paste
A-component density:	1,65 kg/lit
B-component density:	1,72 kg/lit
A+B density:	1,71 kg/lit
Mixing proportion (A+B):	100:20 by weight
Pot life:	approx. 45 min at +20ºC
Minimum hardening temperature:	+8°C
Final strength:	after 7 days at +20°C
Tensile adhesion strength between steel plates: (EN 12188)	17,7 N/mm²
Shear adhesion strength between steel prisms: (EN 12188)	14,4 N/mm²
Shrinkage: (EN 12671-1)	0,05%

Workability: (EN ISO 9514)	45 minutes at +20°C	
Modulus of elasticity in compression: (EN 13412)	6.200 N/mm ²	
Coefficient of thermal expansion: (EN 1770)	37 X 10 ⁻⁶	
Glass transition \ temperature: (EN 12614)	≥ 70 °C	
Reaction to fire: (EN 13501-1)	Euroclass E	
Durability: (EN 13733)	Passes	
Tensile strength: (ASTM D 638)	20,6 MPa	
Compressive strength: (ASTM D 695)	70 MPa	
Flexural strength: (ASTM D 790)	41 MPa	
Modulus of elasticity: (flexural) (ASTM D 790)	6.400 MPa	
Adhesive strength: (breaking point of concrete	> 4 N/mm² e)	
Cleaning of tools: Tools should be cleaned with SM-12 solvent or water, immediately after use.		
Directions for use		
1. Substrate		

The substrate must be:

- Dry and sufficiently strong and stable.
- Free of materials that might prevent bonding, e.g. dust, loose particles, grease or oil, etc.
- It is recommended that before application the substrate should be mechanically treated by sand blasting or milling and cleaned with a high-suction vacuum cleaner.



- If there are cracks in the concrete, they have to be repaired by a resin injection process using materials like EPOMAX-L10, EPOMAX-L20 or DUREBOND.
- The substrate should be as flat as possible. Surface imperfections are repaired using MEGACRET-40 fibre-reinforced cementmortar or EPOMAX-EK epoxy paste.

2. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. Mix thoroughly the whole quantity of comp. A with the whole quantity of comp. B. Mixing should take place for about 5 minutes using an appropriate tool (e.g. small trowel) until a uniform light grey color is obtained. It is important to stir the mixture thoroughly near the sides and bottom of the container, to achieve uniform dispersion of the hardener.

Packaging

EPOMAX-PL is supplied in packages (A+B) of 5 kg, with components A and B having the fixed weight proportion.

Shelf-life - Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.

Remarks

- The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.
- After hardening, EPOMAX-PL is totally safe for health.
- Before application, study the safety advice mentioned on the product's labels.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory g, type SB is 350g/I (2010) for the ready to use product. The ready to use product EPOMAX-PL contains max <350 g/I VOC.



EPOMAX-PL

2032
2032
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2032-CPD-10.11
EN 1504-4
Structural bonding product for bonded mortar or concrete for uses other than low performance requirements
Bond/Adhesion strength: Pull off strength \geq 14N/mm ² Slant shear strength at: 50° \geq 50 N/mm ² 60° \geq 60 N/mm ² 70° \geq 70 N/mm ² Shear Strength: \geq 12 N/mm ² Shrinkage expansion: \leq 0,1% Workability: 35 minutes at +20 °C Modulus of elasticity: \geq 2000 N/mm ² Coefficient of thermal expansion: \leq 100 X 10° per K Glass transition temperature: \geq 45 °C Reaction to fire: Euroclass E
Durability: Pass Dangerous substances: comply with 5.4

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FIBRE REINFORCED POLYMERS



MEGAPLATE

Carbon plates for structural strengthening

Description

MEGAPLATE is a prefabricated plate consisted of 100% unidirectional carbon fibers found in an epoxy resin matrix. In combination with the epoxy paste EPOMAX-PL, it is used for the strengthening of structural elements as externally bonded reinforcement, providing high tensile and flexural strength.

Fields of application

MEGAPLATE carbon plates, externally bonded to structural elements with the adhesive epoxy paste EPOMAX-PL, are used as reinforcement for the flexural strengthening of slabs, beams, columns and concrete walls and for the reduction of deflections and crackings in repairing or strengthening works, concerning:

- Pro-seismic structural strengthening and adjustment to design code requirements.
- Ageing of construction materials, corrosion of reinforcement elements or/and construction defects.
- Load increase or change of use.
- Repairs in reinforced concrete elements after earthquakes.

Strengthening with Composite Materials could be obtained on concrete, wooden and steel elements, masonry walls etc.

Technical data

MEGAPLATE carbon plates are produced in 7 different types according to their mechanical characteristics (tensile strength, modulus of elasticity etc). The technical data concerning the 2 most common types (found in stock) are presented below. Technical data for all MEGAPLATE types are provided in ISOMAT's brochure "Complete structural strengthening systems with Composite Materials".

(
Type of MEGAPLATE	THR-3000	HM-250
Tensile strength f_{f_k} (MPa)	2800	2000
Modulus of elasticity E _{fk} (GPa)	163	245
Ultimate strain $\epsilon_{_{fu}}$ (%)	1,60	0,77
Density (g/cm³)	1,61	1,61

Mechanical properties refer to minimum test values (characteristic) and result from tensile tests made according to EN 2561.

SPECIAL CHARACTERISTICS

The plates are produced and delivered with two peel-plies (a peel-ply on each side), which must be removed just before application. Upon removal of the peel ply, a clean and rough enough bonding surface is revealed (even in a dirty environment on site), to assure the good bonding both to the element and the final cementitious coating (e.g. plaster), without any need of additional cleaning or rubbing after traditional methods of preparation.

Directions for use

- The substrate must be free of loose parts, plaster, paint, oil or grease. After thorough cleaning, the surface is well rubbed with a hard brush.
- If any cracks in concrete are available, they have to be repaired by a resin injection process using epoxy resins of EPOMAX-L10, EPOMAX-L20 or DUREBOND.
- The substrate should be as flat as possible. Surface imperfections are repaired using MEGACRET-40 fibre-reinforced cement mortar or EPOMAX-EK epoxy paste.



MEGAPLATE

 Then, the peel ply is removed from one side of MEGAPLATE and EPOMAX-PL epoxy adhesive is applied by trowel on that side. After that, the carbon plates are placed and pressed on dry and clean surface with a plastic roller, so as to force paste to overflow, and free thereby any trapped air between the carbon plate and the concrete. The total thickness of EPOMAX-PL after pressure exertion should be 0,5-2 mm.

Advantages

- Industrialized production of the material assures standard quality and characteristics.
- Carbon plates are lightweight, they come in rolls and they are easy to cut in the desired length at site. Therefore, their application is simple, fast and efficient.
- MEGAPLATE possesses multiple times higher tensile strength compared to steel.
- Carbon plates are durable and resistant to fatigue, moisture, alkaline and acidic environment.
- MEGAPLATE carbon plates are thin and easy to cover or to paint.

Available dimensions

The standard dimensions of the 2 common MEGAPLATE types are:

- 50 mm x 1,2 mm
- 100 mm x 1,2 mm

Carbon plates (all 7 types) are also available upon special ordering, in width of 50, 80, 100, 120 and 150 mm and in thickness of 1,2 and 1,4 mm.

All types of plates can be delivered in rolls of 50, 100 and 250 m length.

Remarks

- In some cases the Pull-off method is required in order to test substrate's tensile strength.
- For further monitoring of the application efficiency, 1-2 additional carbon plates could be placed (not predicted by the design process), to be tested with the Pull-off method shortly after hardening of the system or periodically in lifetime of the strengthnening works.
- Open time of epoxy systems is reduced by the increase of ambient temperature.
- The application of EPOMAX-PL on the plate should be done in such manner so as to force concentration of excess paste along the plate axis and not close to it's edges.
- After placing the plates on the substrate, a trapped air detection test is conducted with gentle taps on the plate (sound test).

Additional technical documentation

- ISOMAT in cooperation with University of Patras have developed a software running under Windows 98/2000/XP named "COMPOSITE DIMENSIONING" so to support the design process. Please ask for the software as well as for the relevant technical guidelines signed by Civil Engineering dept. of Patras' University and published by ISOMAT.
- In most cases, strengthening works with Composite Materials are subject to advanced engineering design, therefore the experience of the stuff involved as well as the close supervision of the project are in any case essential to ensure proper application.





ISOMAT MT 80

Pre-mixed, cement-based mortar for masonry

Description

ISOMAT MT 80 is pre-mixed, cement-based mortar that is used for building various types of building materials. Its usage requires only the addition of water.

- It simplifies and accelerates the applications.
- Provides high initial and final adhesive
- strenath.
- It has excellent workability.
- Suitable for indoor and outdoor applications.
- · Due to the special particle size granulation of the product, the mortar flows slightly but does not collapse under the weight of the masonry units.

It is certified with the CE marking, according to EN 998-2, as a designed general purpose masonry mortar, for external use, in elements subject to structural requirements. Certificate number: 0906-CPD-02412008.

Fields of application

It is used on various types of building materials such as bricks, blocks, aerated concrete blocks, stone. etc.

Technical data

cementitious powder
grey
up to 3 mm
3,25 l/25 kg bag
1,70 \pm 0,10 kg/lit
1,70 \pm 0,10 kg/lit
Category M 5
>2,00 N/mm ²
0,15 N/mm ²
Class A1

Density (dry hardened mortar): (EN 1015-10)	1600 kg/m³
Water absorption: (EN 1015-18)	0,3 kg/m ² min ^{0,5}
Water vapour permeability: (EN 1745, tab. value)	μ 15/35
Thermal conductivity: (EN 1745, tab, mean value:	$(\lambda_{10,dry}) 0,67 \text{ W/mK}$ P = 50 %)

(EN 1745, tab. mean value; P = 50 %) 4,5 h at +20°C Pot life:

Directions for use

ISOMAT MT 80 is added into water under continuous stirring, until a mortar with the required workability is formed. The mortar is applied, using a trowel.

Consumption

Indicative consumption 20 kg/m² of masonry, for bricks of dimensions 6x9x12 cm.

Packaging

ISOMAT MT 80 is supplied in 15 kg and 25 kg paper bags.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- ISOMAT MT 80 contains cement and reacts as alkaline with water, so it is classified as irritant.
- · Consult the usage risks and safety advice written on.



ISOMAT MT 80

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0906-CPD-02412008

EN 998-2:2010

General purpose rendering mortar (GP) for external use

Designed general purpose masonry mortar for external use in elements subject to structural requirements

Compressive strength: Category M 5 Initial shear strength: $0,15 \text{ N/mm}^2$ (tab. value) Reaction to fire: Class A1 Density (dry hardened mortar): 1600 kg/m³ Water absorption: $0,3 \text{ kg/m}^2\text{min}^{0.5}$ Water vapour permeability: μ 15/35 (tab. value) Thermal conductivity: ($\lambda_{to,dry}$) 0,67 W/mK (tab. mean value; P = 50 %) Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar



ISOMAT MT-80 S

Pre-mixed, cement-based masonry mortar that prevents the formation of salts

Description

ISOMAT MT-80 S is a pre-mixed, cement-based mortar for masonry. Due to its special formula it prevents the formation of salts. it needs only the addition of water.

- It simplifies and accelerates the applications.
- Provides high initial and final adhesive
- strength.
- It has excellent workability.
- Offers stable standardized properties
- Due to the special particle size granulation of the product, the mortar flows slightly but does not collapse under the weight of the masonry units.
- Suitable for indoor and outdoor applications.

It is certified with the CE marking, according to EN 998-2, as a designed general purpose masonry mortar, for external use, in elements subject to structural requirements. Certificate number: 0906-CPD-02412008.

Fields of application

It is used on various types of building materials such as bricks, blocks, stone, etc, especially when the masonry will be exposed, since it does not allow the formation of salts.

Technical data

Form:	cementitious powder
Color:	grey
Particle size:	up to 3 mm
Water demand:	3,25 l/25 kg bag
Bulk density of dry mortar:	1,70 \pm 0,10 kg/lit
Bulk density of fresh mortar:	1,80 \pm 0,10 kg/lit
Compressive strength: (EN 1015-11)	Category M 5
Flexural strength:	> 2,5 N/mm ²
Initial shear strength: (tab. value)	0,15 N/mm ²

Reaction to fire: (EN 13501-1)	Class A1
Density (dry hardened mortar): (EN 1015-10)	1600 kg/m ³
Water absorption: (EN 1015-18)	0,1 kg/m ² min ^{0,5}
Water vapour permeability: (EN 1745, tab. value)	μ 15/35
Thermal conductivity: (EN 1745, tab. mean value;	$(\lambda_{10,dry}) 0,67 \text{ W/mK}$; P = 50 %)
Pot life:	4 h at +20°C

Directions for use

ISOMAT MT-80 S is added into water under continuous stirring, until a mortar with the required workability is formed. The mortar is applied, using a trowel.

Consumption

Indicative consumption 20 kg/m² of masonry, for bricks of dimensions 6x9x12 cm.

Packaging

ISOMAT MT-80 S is available in paper bags of 25 kg

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- ISOMAT MT-80 S contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on.



ISOMAT MT 80 S

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0906-CPD-02412008

EN 998-2:2010

General purpose rendering mortar (GP) for external use

Designed general purpose masonry mortar for external use in elements subject to structural requirements

Compressive strength: Category M 5 Initial shear strength: $0,15 \text{ N/mm}^2$ (tab. value) Reaction to fire: Class A1 Density (dry hardened mortar): 1600 kg/m³ Water absorption: $0,1 \text{ kg/m}^2\text{min}^{0.5}$ Water vapour permeability: μ 15/35 (tab. value) Thermal conductivity: ($\lambda_{to,dry}$) 0,67 W/mK (tab. mean value; P = 50 %) Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar



UNICRET

Mortar for plastering and masonry

Description

UNICRET is a pre-mixed mortar, offering:

- Stable quality.
- Simplified application on site (needs only water).
- Very good workability.
- Very good adhesion to the substrate.

It is certified with the CE marking as a GP CS II W0 mortar according to EN 998-1 and according to EN 998-2, as a designed general purpose masonry mortar, for external use, in elements subject to structural requirements. Certificate number: 0906-CPD-02412008.

Fields of application

UNICRET is suitable for masonry and plastering applications. It is ideal for general repair works.

Technical data

Form:	cementitious powder
Colors:	grey, white
Pot life:	2 h at +20ºC
Water demand:	4,60 l/25 kg bag
UNICRET Grey	
Bulk density of dry morta	ar: 1,60 \pm 0,10 kg/lit
Bulk density	
of fresh mortar:	1,90 \pm 0,10 kg/lit
Compressive strength: (EN 1015-11)	$\begin{array}{l} 2,50 \pm 0,50 \text{ N/mm}^2 \\ \text{Category M 1} \end{array}$
Flexural strength:	1,0 \pm 0,30 N/mm²
Initial shear strength: (tab. value)	0,15 N/mm ²
Reaction to fire: (EN 13501-1)	Class A1
Density (dry hardened mortar): (EN 1015-10)	1700 kg/m³
Adhesive strength: (EN1015-12)	>0,40 N/mm ² (FP:B)

Capillary water absorption: (EN 1015-18)	W0 (1,6 kg/m ² min ^{0.5})
Thermal conductivity coefficient ($\lambda_{10,dry}$): (EN 1745, tab. mean value	0,75 W/(m [·] K) e; P = 50 %)
Water-vapor diffusion coefficient (µ): (EN 1745, tab. value)	15/35
UNICRET White	
Bulk density of dry mortar:	1,55 \pm 0,10 kg/l
Bulk density of fresh mortar:	1,80 \pm 0,10 kg/l
Compressive strength: (EN 1015-11)	$2,00 \pm 0,50 \text{ N/mm}^2$ Category M 1
Flexural strength:	$0{,}90\pm0{,}20\text{ N/mm}^{2}$
Initial shear strength: (tab. value)	0,15 N/mm ²
Reaction to fire: (EN 13501-1)	Class A1
Density (dry hardened mortar): (EN 1015-10)	1700 kg/m³

Directions for use

(EN 1745, tab. mean value; P = 50 %)

>0,30 N/mm² (FP:B)

W0 (1,4 kg/m²min^{0,5})

0,75 W/(mK)

15/35

1. Substrate The substrate must be clean, free of dust, oil, loose materials etc. and should be thoroughly dampened, before the application of UNICRET.

Adhesive strength:

coefficient ($\lambda_{10 drv}$):

coefficient (µ): (EN 1745, tab. value)

Water-vapor diffusion

(EN1015-12) Capillary water

absorption: (EN 1015-18) Thermal conductivity



UNICRET

On difficult or very smooth surfaces a spatterdash (rough cast) may precede, consisting of UNICRET improved with ADIPLAST latex, diluted in the mixing water in proportions of ADIPLAST : water = 1 : 3 by volume.

2. Application

UNICRET is added into water under continuous stirring until a mixture with the required workability is formed. It is applied like ordinary plaster or masonry mortar.

Consumption

Approx. 15,5 kg/m²/cm of layer thickness.

Packaging

UNICRET is supplied in bags of 25 kg.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.



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EN 998-1

General purpose rendering mortar (GP) for external use

Reaction to fire: Class A1 Adhesion: 0,3 N/mm² – FP: B Water absorption: W0 Water vapour diffusion coeff.: μ 15/35 Thermal conductivity: ($\lambda_{10,dry}$) 0,75 W/mK Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar

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0906-CPD-02412008

EN 998-2:2010

General purpose rendering mortar (GP) for external use

Designed general purpose masonry mortar for external use in elements subject to structural requirements

Compressive strength: Category M 1 Initial shear strength: 0,15 N/mm² (tab. value) Reaction to fire: Class A1 Density (dry hardened mortar): 1700 kg/m³ Water absorption: 1,6 kg/m²min^{0,5} Water vapour permeability: μ 15/35 (tab. value) Thermal conductivity: ($\lambda_{10,dry}$) 0,75 W/mK (tab. mean value; P = 50 %) Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar

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UNICRET-FAST

Fast-setting, white repairing mortar

Description

UNICRET-FAST is a white, fast-setting mortar, offering:

- Stable quality.
- Simplified application (needs only water).
- Fast work.
- Very good workability.
- Very good adhesion to the substrate.

It is certified with the CE marking as a GP CS I W0 mortar according to EN 998-1 and according to EN 998-2, as a designed general purpose masonry mortar, for external use, in elements subject to structural requirements. Certificate number: 0906-CPD-02412008.

Fields of application

UNICRET-FAST is suitable for fast plaster repairs.

Technical data

Form:	cementitious powder
Color:	white
Water demand:	4,60 l/25 kg bag
Bulk density of dry mortar:	$1,70 \pm 0,10 \text{ kg/l}$
Bulk density of fresh mortar:	$1,90 \pm 0,10 \text{ kg/l}$
Compressive strength: (EN 1015-11)	$1,30 \pm 0,20 \text{ N/mm}^2$ Category M 1
Flexural strength:	$0{,}90\pm0{,}20\text{ N/mm}^{2}$
Initial shear strength:	0,15 N/mm ² (tab. value)
Reaction to fire:	Class A1 (EN 13501-1)
Density (dry hardened mortar): (EN 1015-10)	1700 kg/m³
Adhesive strength: (EN1015-12)	>0,40 N/mm ² (FP:B)
Capillary water absorption: (EN 1015-18)	W0 (1,4 kg/m ² min ^{0,5})

Thermal conductivity coefficient ($\lambda_{10,dry}$): (EN 1745, tab. mean va	0,75 W/(mK) alue; P = 50 %)
Water-vapor diffusion coefficient (µ): (EN 1745, tab. value)	15/35
Pot life:	2 h at +20⁰C
Painting:	after 3 h at +20°C
Directions for use	

1. Substrate

The substrate must be clean, free of dust, oil, loose materials etc. and should be thoroughly dampened, before the application of UNICRET-FAST.

On difficult or very smooth surfaces a spatterdash (rough cast) may precede, consisting of UNICRET-FAST improved with ADIPLAST latex, diluted in the mixing water in proportions of ADIPLAST : water = 1 : 3 by volume.

2. Application

UNICRET-FAST is added into water under continuous stirring until a mixture with the required workability is formed. It is applied like ordinary plaster or masonry mortar and it is treated (rubbed) with a sponge-faced float approx. 45 min after the application.

Consumption

Approx. 14,7 kg/m²/cm of layer thickness.

Packaging

UNICRET-FAST is supplied in paper bags of 25 kg and plastic bags of 5 kg.

Shelf-life - Storage

- Paper bags of 25 kg: 12 months from production date
 Plastic bags of 5 kg:
 - 18 months from production date



UNICRET-FAST

All of the above are in effect if the product is stored in original unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- The addition of ADIPLAST, polymer latex into the mixture of UNICRET-FAST results to slight retardation of its setting.
- In hot weather UNICRET-FAST should be kept damp after application, to be protected from water loss.
- UNICRET-FAST contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on the bag.

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EN 998-1

General purpose rendering mortar (GP) for external use

Reaction to fire: Class A1 Adhesion: 0,3 N/mm² – FP: B Water absorption: W0 Water vapour diffusion coeff.: μ 15/35 Thermal conductivity: ($\lambda_{10,dry}$) 0,75 W/mK Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar

CE

ISOMAT S.A.

17th km Thessaloniki - Ag. Athanasios, P.O. BOX 1043, 570 03 Ag. Athanasios, Greece

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0906-CPD-02412008

EN 998-2:2010

General purpose rendering mortar (GP) for external use

Designed general purpose masonry mortar for external use in elements subject to structural requirements

Compressive strength: Category M 1 Initial shear strength: 0,15 N/mm² (tab. value) Reaction to fire: Class A1 Density (dry hardened mortar): 1700 kg/m³ Water absorption: 1,4 kg/m²min^{0,5} Water vapour permeability: μ 15/35 (tab. value) Thermal conductivity: ($\lambda_{t0,dry}$) 0,75 W/mK (tab. mean value; P = 50 %) Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar

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4.2



DOMOLIT

Mortar plasticizer - Lime replacement

Description

DOMOLIT is a liquid admixture, used to replace lime to lime-cement mortars, offering to cement mortars all the advantages and eliminating the disadvantages of lime:

- Increases adhesion of fresh mixture to the substrate.
- Offers long working time before setting.
- Improves plasticity by its air entraining action.
- Increases cohesion of mortar, eliminates "blisters", plaster does not "hang".
- Increases masonry wall strength.
- Significantly reduces cost of mortar.
- Eliminates lime storage problems.
- Does not contain chlorides and other corrosive ingredients.

Certified with the CE marking as air entraining/plasticizing admixture for masonry mortar according to EN 934-3:T2, certificate number: 0906-CPD-02412007.

Fields of application

DOMOLIT is an ideal aid for preparing masonry, paving, plastering or marble mortars, as well as strong layers in general.

Technical data

Color:	darkbrown
Viscosity:	25 mPa's (Brookfield, +23°C)
Density:	1,01 – 1,03 kg/lit

Directions for use

DOMOLIT is added into the mixing water of mortars. Due to its plasticizing effect, less mixing water is required.

Dosage

Masonry or paving mortars:

50 g DOMOLIT per 25 kg of cement.

Preparation of 1 m³ mortar requires:

Cement:	225 kg
Sand:	0,90 m ³
DOMOLIT:	450 g

• Plastering mortars:

75 g DOMOLIT per 25 kg of cement.

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Packaging

DOMOLIT is supplied in plastic containers of 1 kg, 5 kg, 20 kg and in drums of 220 kg.

Shelf-life - Storage

18 months from production date if stored in original, unopened packaging, in temperature between +5°C and +35°C. Protect from direct sun exposure and frost.

Remarks

- DOMOLIT offers better workability when mixed with fine-particle sand.
- Excessive dosage (more than 0,4% by cement weight) will decrease mortar strength.



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> 09 0906-CPD-02412007 EN 934-3:2009

Air entraining/plasticizing admixture for masonry mortar





ASOLIT-POWDER

Mortar plasticizer - Lime replacement

Description

ASOLIT-POWDER is a powder mortar which, when added to cement mortars it gives them the workability of lime-cement mortars by replacing lime totally. It provides all the advantages of lime and eliminates all its disadvantages:

- Increases adhesion of fresh mixture to the substrate.
- Offers long working time before setting.
- Due to its air-entraining action it improves plasticity of mortars increasing their workability.
- Provides water impermeability.
- Increases cohesion of mortar, eliminates "blisters", plaster does not "hang".
- Increases significantly mortar strength and their resistance to frost.
- Significantly reduces cost of mortar.
- Eliminates lime storage problems.
- Does not contain chlorides and other corrosive ingredients.
- Does not cause cutaneous diseases.

Fields of application

ASOLIT-POWDER is an ideal aid for preparing masonry, paving, plastering and marble (skim coat) mortars, as well as strong coatings or layers in general.

Techr	Ical	62	
		6.61	

Color: Bulk density: beige 1.60 ka/lit

Directions for use

ASOLIT-POWDER is initially added into the mixing water and then cement, sand etc. are gradually added under continuous stirring. The mixture is applied as usual by hand or gunite machine.

Dosage

2,0-5,0 kg per mixer batch of half a bag (25 kg) of cement.

Packaging

ASOLIT-POWDER is available in paper bags of 30 kg.

Shelf-life - Storage

18 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

 ASOLIT-POWDER is equally effective in cement mortars containing either manufactured (crushed) or river sand.

CONSTRUCTION & REPAIRING OF MASONRY WALL

4.2





STUCCOCRET

Spatula putty

Description

STUCCOCRET is a white, extra fine-grained, polymer-modified cement-powder. With the addition of water, a paste with a very good workability is formed, suitable for stuccoing in interior areas.

It is classified as type GP CS II, W0 mortar according to EN998-1.

Fields of application

STUCCOCRET is used for smoothing and preparing interior surfaces that are going to be covered with paint or other coatings. It is suitable for surfaces made of concrete or plaster and replaces oil stuccos and other similar materials.

Technica	l data
Form:	powder
Color:	white
Water demand:	8 l/20 kg bag
Bulk density of dry mortar:	1,10 ± 0,10 kg/lit
Bulk density of fresh mortar:	1,60 ± 0,10 kg/lit
Bulk density of hardened mortar:	1,20 ± 0,10 kg/lit
Compressive strength:	$3{,}00\pm0{,}20\text{ N/mm}^{2}$
Flexural strength:	$1,30\pm0,10~\text{N/mm}^{2}$
Adhesive strength:	0,50 N/mm ²
Capillary water absorption:	\leq 1,5 kg/m ² min ^{0,5}
Thermal conductivity coefficient $(\lambda_{10,dry})$:	≤ 0,35 W/(mK) for P=50% ≤ 0,40 W/(mK) for P=90%
Water-vapor diffusion coefficient (µ): Pot life:	5/20 4 h at +23⁰C

Directions for use

1. Substrate

The substrate must be free of dust, paints etc. There is no need for priming or oil preparation before the application.

2. Application

The content of a STUCCOCRET bag is added to water under continuous stirring until a uniform mixture with the desired workability is formed, suitable for stuccoing. The mixture is applied by spatula in two layers. Second layer follows after the first one has dried out (after 2-3 hours). Grinding and painting of the final surface is done approx. after 12 hours.

Consumption

Approx. 1,1 kg/m²/mm of layer thickness.

Packaging

STUCCOCRET is available in paper bags of 10 kg and 20 kg and plastic bags of 4 kg.

Shelf-life - Storage

- Paper bags of 20 kg and 10 kg: 12 months from production date
- Plastic bags of 4 kg: 18 months from production date

All of the above are in effect if the product is stored in original unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- Consult the usage risks and safety advice written on the bag.



STUCCOCRET

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EN 998-1

General purpose plastering mortar (GP) for internal use

Reaction to fire: Class A1 Adhesion: 0,5 N/mm² – FP: A Water absorption: W0 Water vapour diffusion coeff.: μ 5/20 Thermal conductivity: ($\lambda_{10,dry}$) 0,35 W/mK Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar

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STUCCOCRET-PLUS

Spatula putty, with high coverage

Description

STUCCOCRET-PLUS is a white, extra finegrained, polymer-modified cement-powder. With the addition of water, a paste with a very good workability is formed, suitable for stuccoing in interior areas. Due to its small bulk density it easy to apply and covers up to 18% more surface than ordinary putties. It is classified as type GP CS II, W0 mortar according to EN 998-1.

Fields of application

STUCCOCRET-PLUS is used for smoothing and preparing interior surfaces that are going to be covered with paint or other coatings. It is suitable for surfaces made of concrete or plaster and replaces oil stuccos and other similar materials.

Techni	cal data
Form:	powder
Color:	white
Water demand:	8,8 l/ 20 kg bag
Bulk density of dry mortar:	1,00 ± 0,10 kg/l
Bulk density of fresh mortar:	1,25 ± 0,10 kg/l
Bulk density of hardened mortar:	0,90 ± 0,10 kg/lit
Compressive strength:	2,50 ± 0,50 N/mm ²
Flexural strength:	1,20 ± 0,20 N/mm ²
Adhesive strength:	>0,50 N/mm ²
Capillary water absorption:	\leq 1,5 kg/m ² min ^{0,5}
Thermal conductivity coefficient ($\lambda_{10,dry}$):	\leq 0,35 W/(mK) for P=50%
Water-vapor diffusion coefficient (µ):	5/20
Pot life:	6,5 h at +23⁰C

Directions for use

1. Substrate

The substrate must be free of dust, paints etc. There is no need for priming or oil preparation before the application.

2. Application

The content of a STUCCOCRET-PLUS bag is added to water under continuous stirring until a uniform mixture with the desired workability is formed, suitable for stuccoing. The mixture is applied by spatula in two layers. Second layer follows after the first one has dried out (after 2-3 hours). Grinding and painting of the final surface is done approx. after 12 hours.

Consumption

Approx. 0,9 kg/m²/mm of layer thickness.

Packaging

STUCCOCRET-PLUS is available in paper bags of 20 kg.

Shelf-life - Storage

12 months from production date if the product is stored in original unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- Consult the usage risks and safety advice written on the bag.



UCCOCRET-PLUS S

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EN 998-1
General purpose plastering mortar (GP) for internal use
Reaction to fire: Class A1
Adhesion: 0,7 N/mm ² – FP: A
Water absorption: W1
Water vapour diffusion coeff.: µ 5/20
Thermal conductivity: $(\lambda_{10,dry})$ 0,35 W/mK
Durability (against freeze/thaw): evaluation
based on provisions valid in the intended place of use of the mortar
place of use of the month

4.3.1

PUTTIES





PLANFIX

Polymer-modified cement putty

Description

PLANFIX is a polymer-modified, cement-based, fine-grained mortar, for indoor or outdoor application. With the addition of water a paste with very good workability is formed, suitable for puttying.

It is classified as a PCC R2 type mortar, for concrete repairs, according to EN 1504-3.

Fields of application

- Smoothing and repairing of exposed concrete.
- Sealing of cracks, pores or cavities on concrete surfaces.
- Total surface smoothing (stuccoing) with very thin layers instead of plastering or cement mortar application.

Technical data Form: cementitious powder Colors: grey, white Pot life: 4-7 h at +20°C PLANFIX Grev Water demand: 6,00 l/25 kg bag Bulk density of dry mortar: $1,35 \pm 0,10$ kg/lit Bulk density of fresh mortar: 1,90 ± 0,10 kg/lit Compressive strenath: 25.00 ± 2.00 N/mm² Flexural strength: 8.00 ± 0.80 N/mm² Chloride ion content: 0,00% Adhesion strength: ≥ 1.80 N/mm² Thermal compatibility Part 1 (50 freeze-thaw \geq 0.8 N/mm² cycles): Capillary absorption: $\leq 0,25 \text{ kg} \cdot \text{m}^{-2} \cdot \text{h}^{-0.5}$ Reaction to fire: Euroclass A1 PLANFIX White Water demand: 6,25 l/25 kg bag

Bulk density of dry mortar: Bulk density	1,35 \pm 0,10 kg/lit	
of fresh mortar:	1,90 \pm 0,10 kg/lit	
Compressive strength:	$24{,}00\pm2{,}00\text{ N/mm}^{2}$	
Flexural strength:	$8{,}00\pm1{,}00\text{ N/mm}^{2}$	
Chloride ion content:	0,00%	
Adhesion strength	\geq 1,70 N/mm ²	
Thermal compatibility Part 1 (50 freeze-thaw		
cycles)	\geq 0,8 N/mm ²	
Capillary absorption	\leq 0,25 kg·m ⁻² ·h ^{-0,5}	
Reaction to fire	Euroclass A1	
Directions for use		

1. Substrate

The substrate must be stable and free of dust, grease, loose material etc. Before application of PLANFIX the surface should be thoroughly dampened.

2. Application

PLANFIX is gradually added into water, in a clean vessel, under continuous stirring, until a uniform pasty putty is formed. Approx. 3 parts by volume PLANFIX should be mixed with 1 part of water.

Consumption

Approx. 1,3 kg/m²/mm of layer thickness.

Packaging

PLANFIX grey is supplied in bags of 5 kg and 25 kg, whereas PLANFIX white is supplied in 25 kg bags.

Shelf-life - Storage

- Paper bags of 25 kg: 12 months from production date
- Plastic bags of 5 kg: 18 months from production date

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All of the above are in effect if the product is stored in original unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- In hot weather PLANFIX should be watered after application, to be protected from water loss.
- PLANFIX contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on the bag.

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EN 1504-3

Concrete repair product for non structural repair PCC mortar (based on hydraulic cement, polymer modified)

Compressive strength: class R2 Chloride ion content: $\leq 0,05\%$ Adhesive Bond: $\geq 0,8$ MPa Thermal compatibility part 1: $\geq 0,8$ MPa Capillary absorption: $\leq 0,5$ kg·m⁻²·h^{-0.5} Dangerous substances: comply with 5.4 Reaction to fire: Euroclass A1

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PUTTIES



PLANFIX-FINE

Polymer-modified cement putty, extra fine-graded

Description

PLANFIX-FINE is a polymer-modified, cementbased, extra fine-grained putty mortar, for indoor or outdoor application. With the addition of water a paste is formed, having very good workability, suitable for thin layers (e.g. puttying). Because of its particle-size it can also be applied using a gunning device. It is classified as a PCC R2 type mortar, for concrete repairs, according to EN 1504-3.

Fields of application

- Smoothing and repairing of exposed concrete.
- Sealing of cracks, pores or cavities on concrete surfaces.
- Total surface smoothing (stuccoing) with very thin layers, instead of plastering or cement mortar application.

Technical data

Form:	cementitious powder
Color:	grey, white
Pot life:	4-7 h at +20°C
PLANFIX-FINE Grey	
Water demand:	6,75 l/25 kg bag
Bulk density of dry mortar:	1,35 \pm 0,10 kg/lit
Bulk density of fresh mortar:	1,85 ± 0,10 kg/lit
Compressive strength:	$20,00 \pm 2,00 \text{ N/mm}^2$
Flexural strength:	7,00 \pm 1,00 N/mm ²
Chloride ion content:	0,00%
Adhesion strength:	\geq 1,7 N/mm ²
Thermal compatibility Part 1 (50 freeze-thaw	
cycles):	\geq 0,8 N/mm ²
Capillary absorption:	\leq 0,15 kg·m ⁻² ·h ^{-0,5}
Reaction to fire:	Euroclass A1

PLANFIX-FINE White

Water demand:	6,75 l/25 kg bag	
Bulk density of dry mortar:	\pm 1,35 \pm 0,10 kg/lit	
Bulk density of fresh mortar:	1,85 \pm 0,10 kg/lit	
Compressive strength:	$20{,}00\pm2{,}00\text{ N/mm}^{2}$	
Flexural strength:	7,00 \pm 1,00 $\textrm{N/mm}^{2}$	
Chloride ion content:	0,00%	
Adhesion strength:	\geq 1,6 N/mm ²	
Thermal compatibility Part 1 (50 freeze-thaw		
cycles):	\geq 0,8 N/mm ²	
Capillary absorption	\leq 0,15 kg·m ⁻² ·h ^{-0,5}	
Reaction to fire	Euroclass A1	
Directions for use		

1. Substrate

The substrate must be stable and free of dust, grease, loose materials etc. Before application of PLANFIX-FINE the surface should be thoroughly dampened.

2. Application

PLANFIX-FINE is gradually added into water, in a clean pot, under continuous stirring, until a uniform pasty putty is formed. Approx. 3 parts by volume PLANFIX-FINE should be mixed with 1part of water.

Consumption

Approx. 1,3 kg/m²/mm of layer thickness.

Packaging

PLANFIX-FINE grey is supplied in bags of 25 kg, whereas PLANFIX-FINE white is supplied in bags of 5 kg and 25 kg.



PLANFIX-FINE

Shelf-life - Storage

- Paper bags of 25 kg: 12 months from production date
- Plastic bags of 5 kg: 18 months from production date

All of the above are in effect if the product is stored in original unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- In hot weather PLANFIX-FINE should be watered after application, to be protected from water loss.
- PLANFIX-FINE contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on the bag.

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EN 1504-3

Concrete repair product for non structural repair PCC mortar (based on hydraulic cement, polymer modified)

Compressive strength: class R2 Chloride ion content: $\leq 0,05\%$ Adhesive Bond: $\geq 0,8$ MPa Thermal compatibility part 1: $\geq 0,8$ MPa Capillary absorption: $\leq 0,5$ kg·m⁻²·h^{-0.5} Dangerous substances: comply with 5.4 Reaction to fire: Euroclass A1

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PLANFIX-FINE PROFESSIONAL

Polymer-modified cement putty, extra fine-graded, ideal for professionals

Description

PLANFIX-FINE PROFESSIONAL is a polymermodified, cement-based, extra fine-grained putty mortar, for indoor or outdoor application. With the addition of water a paste is formed, having very good workability, suitable for thin layers (e.g. puttying).

Compared to ordinary putties it offers the following advantages:

- It is light weight and more easy to apply,
- · It is easier to sand it,
- It has less consumption

Because of its particle-size it can also be applied using a gunite machine. It is classified as a PCC R2 type mortar, for concrete repairs, according to EN 1504-3.

Fields of application

- Smoothing and repairing of exposed concrete.
- Sealing of cracks, pores or cavities on concrete surfaces.
- Total surface smoothing (stuccoing) with very thin layers, instead of plastering or cement mortar application.

Technical data

Form:	cementitious powder
Color:	white
Pot life:	4 h at +20°C
Water demand:	8 l/25 kg bag
Bulk density of dry mortar:	1,25 \pm 0,10 kg/l
Bulk density of fresh mortar:	$1,60 \pm 0,10$ kg/l
Compressive strength:	>10 N/mm ²
Flexural strength:	>3 N/mm ²
Chloride ion content:	0,00%
Adhesion strength:	\geq 1,0 N/mm ²

Thermal compatibility Part 1 (50 freeze-thaw cycles): ≥ 0.8 N/mm² Reaction to fire Euroclass A1

Directions for use

1. Substrate

The substrate must be stable and free of dust, grease, loose materials etc. Before application of PLANFIX-FINE PROFESSIONAL the surface should be thoroughly dampened.

2. Application

PLANFIX-FINE PROFESSIONAL is gradually added into water, in a clean pot, under continuous stirring, until a uniform pasty putty is formed. Approx. 3 parts by volume PLANFIX-FINE should be mixed with 1 part of water.

Consumption

Approx. 1,2 kg/m²/mm of layer thickness.

Packaging

PLANFIX-FINE PROFESSIONAL is supplied in bags of 25 kg.

Shelf-life - Storage

12 months from production date if the product is stored in original unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- In hot weather PLANFIX-FINE PROFESSIONAL should be sprayed with water after the application, to be protected from water loss.
- PLANFIX-FINE PROFESSIONAL contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on the bag.



PLANFIX-FINE PROFESSIONAL

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EN 1504-3

Concrete repair product for non structural repair PCC mortar (based on hydraulic cement, polymer modified)

Compressive strength: class R1 Chloride ion content: $\leq 0,05\%$ Adhesive Bond: $\geq 0,8$ MPa Thermal compatibility part 1: $\geq 0,8$ MPa Dangerous substances: comply with 5.4 Reaction to fire: Euroclass A1

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PUTTI



FLEX-COVER

2-component flexible putty

Description

FLEX-COVER is a 2-component, fiberreinforced, flexible putty. It is consisted of a cement-based powder (component A) and a resin emulsion (component B). It provides high elasticity, water impermeability and durability over time.

Fields of application

FLEX-COVER is used for local sealing and waterproofing of cracks, junctions between floors or ceilings and walls, window recesses etc., as well as for puttying surfaces with haircracks. It can be applied on plaster, concrete, gypsum boards, cement boards, wood etc. Suitable for indoor and outdoor applications.

Technical data

	Component A	Component B
Basis:	cementitious powder	acrylic polymer dispersion
Color:	white	white
Mixing ratio:1	part by weight	0,3 parts by weight

Combined product:

90 min at +20°C
1,80 kg/lit
7,00 \pm 1,00 $\textrm{N/mm}^{\textrm{2}}$
$1,70\pm0,50~\text{N/mm}^2$

Directions for use

1. Substrate

The substrate must be stable, free of oil, dust, loose materials etc., and thoroughly dampened before the application of FLEX-COVER.

2. Application

The content of the bag (component A) is added to the liquid (component B) under continuous stirring, until a uniform pasty putty is formed. The putty is applied by spatula in one or two layers, depending on application's thickness. The second layer is applied after the first one has dried.

Consumption

- For sealing a 5x5mm joint: 40 gr per running meter of joint.
- For surface puttying:
 - 1,6 kg/m²/mm of layer thickness.

Packaging

Combined 2,6 kg package (2 kg cement based powder + 0,6 kg resin emulsion).

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

Remarks

- Temperature during application should be between +5°C and +30°C.
- In hot weather FLEX-COVER should be watered after application, to be protected from water loss.
- The A-component of FLEX-COVER contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult usage risks and safety advice written on the package.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory g, type WB is 30g/l (2010) for the ready to use product. The ready to use product FLEX-COVER contains max <30 g/l VOC.





FAST-COVER

Ready-to-use, lightweight acrylic spackling putty

Description

FAST-COVER is a ready-to-use acrylic spackling putty for fast filling and patching of cracks, crevices or holes with a single-step application. It can be painted after 30 min.

Fields of application

FAST-COVER is applied on porous surfaces such as plaster, gypsum board or other drywall structures, wood, etc. in thickness of up to 5 cm. It does not crack and it does not need sanding.

Technical data

Color:	white
Density:	0,36 kg/lit
Application temperature: Painting:	from +5°C to +35°C after 30 min

Directions for use

1. Substrate

The cracks or holes are thoroughly cleaned (wiped, brushed etc.) in order to prepare a substrate free of dust, grease, loose particles etc. Before application, the material is well stirred until a pasty mix comes up.

2. Application

The putty is applied with a putty knife on the desired spot and it is pressed to fill completely the void space. The surface is smoothed out with the putty knife. After drying of the repaired surface (in approx. 30 minutes), painting can follow.

Packaging

FAST-COVER is supplied in plastic containers of 0,5 lit, 1 lit and 5 lit.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory g, type WB is 30g/I (2010) for the ready to use product. The ready to use product FAST-COVER contains max <30 g/I VOC.





GB-COVER

Pasty acrylic gypsum board putty - Joint compound

Description

GB-COVER is a ready-to-use putty, suitable for stuccoing (skim coat puttying) and pointing of gypsum boards. It is very convenient in application and rubbing. It provides a flat and smooth final surface, ready for priming and painting.

Fields of application

GB-COVER is ideal for gypsum board stuccoing, whereas in combination with joint tapes it is used as a joint compound for pointing and crack filling.

Technical data		
Form:	pasty	
Color:	white	
Density:	1,65 kg/lit	
Drying time:	1-2 h	
Subsequent layer in:	2-3 h	
Minimum application Temperature:	+5°C	

Directions for use

1. Substrate

The substrate must be stable and free of dust, grease, loose particles etc.

2. Application

a) Stuccoing

GB-COVER is applied by trowel using a dragging technique in two coats. The second coat follows after the first is dry.

B) Pointing and crack filling

First a self-sticking joint tape is placed along the joint or the crack. GB-COVER is applied on the dry and clean surface in two layers using a trowel. The second layer follows after the first is dry. Alternately, if the tape is not self-sticking, one GB-COVER layer is first applied along the joint or the crack and, while it's still fresh, the tape is placed and pressed to get embedded to the joint compound. When the surface dries off, the second layer follows.

After stuccoing or pointing, the final surface is smoothed out by glass paper in order to be primed and then painted.

Consumption

2,0-3,0 kg/m², depending on layer thickness.

Packaging

GB-COVER is supplied in plastic containers of 7 kg and 20 kg.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between +5°C and +35°C. Protect from direct sun exposure and frost.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory g, type WB is 30g/l (2010) for the ready to use product. The ready to use product GB-COVER contains max <30 g/l VOC.

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JOINT-FILLER

Joint compound for cement boards

Description

JOINT-FILLER is a polymer-modified, fibrereinforced, cement-based joint compound for cement boards. It features great flexibility, high mechanical strength and superb adhesion to the substrate. It can be applied and rubbed easily. It provides a smooth final surface ready for any additional covering (paint, tiles etc.).

Fields of application

JOINT-FILLER is suitable for filling cement board joints, always in combination with the alkali-resistant, self-sticking fibreglass tapes. Ideal for sealing locally surface cracks, pores etc. Also suitable for patching the cement boards' fastening screws.

Technical data		
Basis:	cementitious powder	
Color:	grey	
Water demand:	4,50 l/20 kg bag	
Bulk density of dry mortar:	1,20 ± 0,20 kg/lit	
Bulk density of fresh mortar:	1,90 ± 0,20 kg/lit	
Compressive strength:	16,00 ± 4,00 N/mm ²	
Flexural strength:	5,50 ± 1,00 N/mm ²	
Pot life:	4 h at +23⁰C	
Minimum application temperature:	+5°C	

Directions for use

1. Substrate

Cement boards must have been placed firmly and their fastening screws should not exceed the surface. The joint must be clean, free of dust, grease, loose particles etc. Before JOINT-FILLER application, the joint must be thoroughly dampened.

2. Application

JOINT-FILLER is gradually added to the water under continuous stirring, until a homogeneous mixture with the required workability is formed. Primarily, the alkali-resistant, self-sticking fibreglass tape is placed along the joint. Then, the product is applied to the properly prepared surface with a stainless metallic spatula, until the ioint is totally filled.

For sealing locally surface cracks, pores etc. the surface should only being stuccoed. Once the product has dried, the surface is sanded by hand using sandpaper.

Consumption

Approx. 100-150 gr per joint meter.

Packaging

Bags of 20 kg.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.





ISOMAT CLASSIC

High quality emulsion paint for interior use

Description

High quality emulsion paint for interior use. ISOMAT CLASSIC is characterized by excellent surface coverage and workability as well as superb resistance to frequent washing and ageing. It provides strong adhesion to any kind of old or new substrate like plaster, concrete, gypsum boards etc. It is ammonia free. It provides a final surface with an excellent mat finish.

Fields of application

ISOMAT CLASSIC is used for indoor applications, on new or old surfaces, on ordinary building materials such as concrete, plaster, gypsum boards etc.

Technical data

Colors:	white and 1950 selected (ISOMAT COLOR SYSTEM)
Туре:	100% emulsion paint
Viscosity (Poise):	14-16
Density:	1,43 kg/l
pH:	8-9 at +23⁰C
Opacity:	min 97%
Whiteness:	min 87%
Bond strength:	1,90 N/mm ²
Resistance to washing:	>20.000 cycles
Drying Time:	1 h (in touch)
Recoating in:	3-4 h

Cleaning of tools: After use, tools should be cleaned immediately with water.

Directions for use

1. Substrate

Substrate should be dry and free of grease, loose particles, dust etc.

- Cracks or joints may be filled with ISOMASTIC-A acrylic sealant.
- Concrete imperfections should be repaired with DUROCRET polymer-modified mortar.
- Plastered wall may be repaired with UNICRET and UNICRET-FAST premixed mortars.
- For puttying surfaces, STUCCOCRET spatula putty should be used.

Priming with the acrylic, micronized, water based primer PRIMER CLASSIC should follow, thinned up to 50% with clean water. PRIMER CLASSIC is also ideal to use for the stabilization of the surface, when the substrate is loose or crumbly. Priming is not necessary if the substrate is sound.

2. Application

Before using, stir the content lightly and apply as is or thinned 5-10% with clean water. Two coats of ISOMAT CLASSIC are applied using a roller, brush or airless gun. The second coat is applied once the first coat has completely dried.

Coverage

ISOMAT CLASSIC covers 12 m²/l, on previously prepared surfaces.

Packaging

ISOMAT CLASSIC is supplied in buckets of 0,75, 3 and 10I.



ISOMAT CLASSIC

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory a, type WB is 30g/l (2010) for the ready to use product. The ready to use product ISOMAT CLASSIC contains max <30 g/l VOC.

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ISOMAT BATH & KITCHEN

High quality antimold emulsion paint

Description

High quality antimold emulsion paint for interior use. Thanks to its special fungicidal ingredients, ISOMAT BATH & KITCHEN prevents drastically the growth of mold and bacteria, in areas with high concentration of moisture and vapors, such as kitchens, bathrooms, basements etc. It is characterized by excellent surface coverage and workability, as well as superb resistance to frequent washing and ageing. It provides strong adhesion to any kind of old or new substrate like plaster, concrete, bricks, gypsum boards, wood etc. It is ammonia free. It provides a final surface with an excellent mat finish.

Fields of application

ISOMAT BATH & KITCHEN is used for indoor applications, on new or old surfaces, on ordinary building materials such as concrete, plaster, gypsum boards etc.

Technical data

Colors:	white and 256 selected (ISOMAT COLOR SYSTEM)
Туре:	100% emulsion paint
Viscosity (Poise):	14-16
Density:	1,43 kg/l
pH:	8-9 at +23ºC
Opacity:	min 97%
Whiteness:	min 87%
Bond strength:	1,90 N/mm ²
Resistance to washing:	>20.000 cycles
Drying Time:	1 h (in touch)
Recoating in:	3-4 h

Cleaning of tools:

After use, tools should be cleaned immediately with water.

Directions for use

1. Substrate

Substrate should be dry and free of grease, loose particles, dust etc.

- Cracks or joints may be filled with ISOMASTIC-A acrylic sealant.
- Concrete imperfections should be repaired with DUROCRET polymer-modified mortar.
- Plastered wall may be repaired with UNICRET and UNICRET-FAST premixed mortars.
- For puttying surfaces, STUCCOCRET spatula putty should be used.

For the recoating of surfaces with mold growth, cleaning with ISOMAT's antimold cleaning agent CL-MOLD is required. After 24 hours remove the mold traces, rinse with clean water and allow the surface to completely dry.

Priming with the acrylic, micronized, water based primer PRIMER CLASSIC should follow, thinned up to 50% with clean water. PRIMER CLASSIC is also ideal to use for the stabilization of the surface, when the substrate is loose or crumbly. Priming is not necessary if the substrate is sound.

2. Application

Before using, stir the content lightly and apply as it is or thinned 5-10% with clean water. Two coats of ISOMAT BATH & KITCHEN are applied using a roller, brush or airless gun. The second coat is applied once the first coat has completely dried. Temperature during application and drying should be between +10 °C and +35°C.

overage

ISOMAT BATH & KITCHEN covers 12 m²/l, on previously prepared surfaces.

Packaging

ISOMAT BATH & KITCHEN is supplied in buckets of 0,75, 3 and 10I.



ISOMAT BATH & KITCHEN

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory a, type WB is 30g/I (2010) for the ready to use product. The ready to use product ISOMAT BATH & KITCHEN contains max <30 g/I VOC.

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ISOMAT PROFESSIONAL CLASSIC

Emulsion paint for interior use, ideal for professionals

Description

Emulsion paint for interior use, ideal for professionals. ISOMAT PROFESSIONAL CLASSIC is recommended for use in areas, where frequent painting is required, such as in public buildings, hotels, hospitals, schools, entertainment venues etc. It is characterized by great workability and surface coverage, as well as high resistance to washing and ageing. It dries and can be recoated rapidly.

Fields of application

ISOMAT PROFESSIONAL CLASSIC is used for indoor applications, on new or old surfaces, on ordinary building materials such as concrete, plaster, gypsum boards etc.

Technical data

Colors:	white and 1444 selected (ISOMAT COLOR SYSTEM)
Туре:	100% emulsion paint
Viscosity (Poise):	24
Density:	1,62 kg/l
Opacity:	min 99%
Whiteness:	min 91%
Bond strength:	1,70 N/mm ²
pH:	8-9 at +23ºC
Resistance to washing:	>2.000 cycles
Drying Time:	1 h (in touch)
Recoating in:	3-4 h

Cleaning of tools:

After use, tools should be cleaned immediately with water.

Directions for use

1. Substrate

Substrate should be dry and free of grease, loose particles, dust etc.

- Cracks or joints may be filled with ISOMASTIC-A acrylic sealant.
- Concrete imperfections should be repaired with DUROCRET polymer-modified mortar.
- Plastered wall may be repaired with UNICRET and UNICRET-FAST premixed mortars.
- For puttying surfaces, STUCCOCRET spatula putty should be used.

Priming with the acrylic, micronized, water based primer PRIMER CLASSIC should follow, thinned up to 50% with clean water. PRIMER CLASSIC is also ideal to use for the stabilization of the surface, when the substrate is loose or crumbly. Priming is not necessary if the substrate is sound.

2. Application

Before using, stir the content lightly and apply as is or thinned 5-10% with clean water. Two coats of ISOMAT PROFESSIONAL CLASSIC are applied using a roller, brush or airless gun. The second coat is applied once the first coat has completely dried.

Coverage

ISOMAT PROFESSIONAL CLASSIC covers 12 $m^2/l,$ on previously prepared surfaces.

Packaging

ISOMAT PROFESSIONAL CLASSIC is supplied in buckets of 3 and 10I.



ISOMAT PROFESSIONAL CLASSIC

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory a, type WB is 30g/l (2010) for the ready to use product. The ready to use product ISOMAT PROFESSIONAL CLASSIC contains max <30 g/l VOC.

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ISOMAT HYDROCHROMA

Water based emulsion paint with high coverage ability for interior use

Description

Water-based emulsion paint for interior use. It is characterized by great workability and surface coverage.

Fields of application

ISOMAT HYDROCHROMA is recommended for use on new surfaces or surfaces already coated with a water-based emulsion paint, where washing and soiling resistance are not required, such as in ceilings, storage rooms, staircases etc.

Technical data

Colors:	white and 878 selected (ISOMAT COLOR SYSTEM)
Туре:	water-based emulsion paint
Viscosity (Poise):	25-30
Density:	1,60 kg/l
pH:	10-11 at +23°C
Opacity:	min 90%
Whiteness:	min 65%
Drying Time:	1 h (in touch)
Recoating in:	3-4 h

Cleaning of tools:

After use, tools should be cleaned immediately with water.

Directions for use

1. Substrate

Substrate should be dry and free of grease, loose particles, dust etc.

- Cracks or joints may be filled with ISOMASTIC-A acrylic sealant.
- Concrete imperfections should be repaired with DUROCRET polymer-modified mortar.
- Plastered wall may be repaired with UNICRET and UNICRET-FAST premixed mortars.

 For puttying surfaces, STUCCOCRET spatula putty should be used.

Priming with the acrylic, micronized, water based primer PRIMER CLASSIC should follow, thinned up to 50% with clean water. PRIMER CLASSIC is also ideal to use for the stabilization of the surface, when the substrate is loose or crumbly. Priming is not necessary if the substrate is sound.

2. Application

Before using, stir the content lightly and apply it in two layers either as it is or thinned by 10-20% with clean water. The second coat is applied thinned by 10-15% with clean water, after the first coat has completely dried. Temperature during application and drying of the color should be among +10°C and +35°C.

Coverage

ISOMAT HYDROCHROMA covers 11 m²/l, on previously prepared surfaces.

Packaging

ISOMAT HYDROCHROMA is supplied in buckets of 3 and 9 l.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+40^{\circ}$ C. Protect from direct sun exposure and frost.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory a, type WB is 30g/l (2010) for the ready to use product.

The ready to use product ISOMAT HYDROCHROMA contains max <30 g/l VOC. 432





PRIMER CLASSIC

Acrylic micronized water based primer

Description

Acrylic, micronized, water based primer. It offers excellent bonding and high penetration. It is odorless, as well as environment and user friendly, therefore it is recommended for use in internal areas that are inhabited. It has a slightly blue color in order to be easily visible in fully primed surfaces.

Fields of application

It is suitable for use in new surfaces, such as plasters, concrete, bricks etc., that are going to be covered with emulsion paints. Furthermore, it has the ability to harden and protect from moisture porous surfaces that are coated with lime, adhesives or old paint.

Technical data		
Form:	emulsion	
Color:	blue	
Density:	1,00 kg/l	
pH:	8-9	
Drying Time:	1 h (in touch)	
Recoating in:	4 h	

Cleaning of tools:

Remove as much paint as possible from the used tools before cleaning. Clean the tools thoroughly with water and detergent immediately after use.

Directions for use

1. Substrate

The surface to be primed must be dry and free of dust, grease, dirt etc. while any imperfections on plaster should be restored.

2. Application

PRIMER CLASSIC is applied in one layer thinned up to 50% with clean water. For highly porous substrates use it undiluted. It is applied by brush, roller or spraying.

Consumption

About 10-15 m²/l. per layer, depending on surface absorption and thinning percentage.

Packaging

PRIMER CLASSIC is available in plastic containers of 1, 5, 10 and 20 l.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between +5°C and +35°C. Protect from direct sun exposure and frost.

Remarks

Temperature during application should be at among $+10^{\circ}$ C and $+35^{\circ}$ C.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory h, type WB is 30g/l (2010) for the ready to use product. The ready to use product PRIMER CLASSIC contains max <30 g/l VOC.





CL-MOLD

Special antimold agent

Description

Special liquid with antifungal activity for both indoor and outdoor use. Cleans and disinfects surfaces from mold, bacteria and algae. It is odorless and friendly for the user and the environment.

Fields of application

It can be applied to painted surfaces affected by mold, but also proactively to prevent the growth of microorganisms on the surface of the paint, in areas with high humidity. It is very effective in surfaces such as walls, ceilings, natural stones, bricks, cement, swimming pools, etc. Furthermore, it can be used for decontamination of fungi and for maintaining the sanitary conditions in areas such as kitchens, restaurants, hotels, industries or food warehouses. bakeries, etc.

Technical data		
Form :	liquid	
Color :	light blue	
Density :	1 kg/l	
pH :	6-7	

Directions for use

As a liquid for removing mold: CL-MOLD is applied undiluted to the surface affected by mold, bacteria or algae, with a cloth or sponge and is left to act for at least 24 hours. Then remove the mold residue with a sponge, rinse with clean water and allow to completely dry. Preventive use: Apply CL-MOLD onto the painted surfaces from time to time to ensure long term protection from the growth of microorganisms.

Disinfectant use: As a disinfectant liquid CL-MOLD is applied to surfaces diluted 1:10 with water.

Consumption

About 15-20 m² per litre, according to the surface absorption.

Packaging

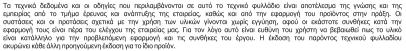
Supplied on containers of 1I.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

Remarks

Consult the usage risks and safety advice written on the container.





ISOMAT ACRYL

High quality acrylic emulsion paint for exterior use

Description

High quality acrylic emulsion paint for exterior use. ISOMAT ACRYL is characterized by high water-repellency, excellent surface coverage and durability in harsh weather conditions and ageing. It is also vapor permeable allowing the building to breathe. It provides strong adhesion to any kind of old or new substrate like plaster, concrete, wood etc. It has an excellent workability and dries quickly. It is certified as cool paint. It provides a final surface with an excellent mat finish.

Fields of application

ISOMAT ACRYL is used for indoor or outdoor applications, on new or old surfaces, on substrates such as concrete, plaster, bricks, gypsum boards, asbestos-cement, wood etc.

Technical data

Colors:	white and 1950 selected (ISOMAT COLOR SYSTEM)
Туре:	100% acrylic emulsion paint
Density:	1,47 kg/l
pH:	8-9 at +23°C
Opacity:	min 98 %
Whiteness:	min 91 %
Capillary water absorption:	0,06 kg/m²h⁰.₅
Bond strength:	2,09 N/mm ²
Viscosity (Poise):	17
Solar reflectance:	88%
Infrared emittance coef.:	0,86
Drying time:	30 min (in touch)
Recoating in:	3-4 h

Cleaning of tools:

Remove as much paint as possible from the used tools before cleaning. Clean the tools thoroughly with water and detergent immediately after use.

Directions for use

1. Substrate

Substrate should be dry and free of grease, loose particles, dust etc.

- Cracks or joints are filled with ISOMASTIC-A acrylic sealant.
- Any imperfections on concrete should be patched with DUROCRET polymer-modified mortar and on exposed concrete with PLANFIX or PLANFIX-FINE polymer-modified putties.
- Plastered wall may be patched using UNICRET and UNICRET-FAST premixed mortars.

Priming with the silicone acrylic, micronized, water based primer PRIMER ACRYL should follow, thinned up to 50% with clean water or with acrylic solvent primer PRIMER ACRYL-S, thinned up to 100% with SM-18 of ISOMAT or with WHITE SPIRIT. These primers are also ideal to use for the stabilization of the surface, when the primer is loose or crumbly.

2. Application

Before using, stir the content lightly and apply it as it is or thinned 5-10% with clean water. Two coats of ISOMAT ACRYL are applied using a roller, brush or airless gun. The second coat is applied after the first coat has completely dried. Temperature during application and drying of the paint should be among 10°C and 35°C.

Coverage

ISOMAT ACRYL covers 12 m²/l per coat, on previously prepared surfaces.



ISOMAT-ACRYL

Packaging

ISOMAT ACRYL is supplied in buckets of 0,75, 3 and 10 l.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory c, type WB is 40g/l (2010) for the ready to use product. The ready to use product ISOMAT ACRYL contains max <40 g/l VOC.





ISOMAT PROFESSIONAL ACRYL

Acrylic emulsion paint for exterior use, ideal for professionals

Description

ISOMAT PROFESSIONAL ACRYL is recommended for new or old surfaces that require frequent painting, such as public buildings, hotels, hospitals, schools as well as surfaces that are tarnished by graffiti. It is characterized by great workability and surface coverage, as well as high resistance to ageing. It dries and can be recoated rapidly.

Fields of application

ISOMAT PROFESSIONAL ACRYL is used for indoor or outdoor applications, on new or old surfaces, on substrates such as concrete, plaster, bricks, gypsum boards, asbestoscement, wood etc.

Ideal for professionals as it consists an economic and reliable solution for painting.

Technical data

white and 1421 selected (ISOMAT COLOR SYSTEM)
100% acrylic emulsion paint
1,47 kg/l
8-9 at +23°C
min 97 %
min 87 %
0,08 kg/m²h⁰.₅
1,80 N/mm ²
11-16
1 h (in touch)
3-4 h

Cleaning of tools:

Remove as much paint as possible from the used tools before cleaning. Clean the tools thoroughly with water and detergent immediately after use.

Directions for use

1. Substrate

Substrate should be dry and free of grease, loose particles, dust etc.

- Cracks or joints are filled with ISOMASTIC-A acrylic sealant.
- Any imperfections on concrete should be patched with DUROCRET polymer-modified mortar and on exposed concrete with PLANFIX or PLANFIX-FINE polymer-modified putties.
- Plastered wall may be patched using UNICRET and UNICRET-FAST premixed mortars.

Priming with the silicone acrylic, micronized, water based primer PRIMER ACRYL should follow, thinned up to 50% with clean water or with acrylic solvent primer PRIMER ACRYL-S, thinned up to 100% with SM-18 of ISOMAT or with WHITE SPIRIT. These primers are also ideal to use for the stabilization of the surface, when the primer is loose or crumbly.

2. Application

Before using, stir the content lightly and apply it as it is or thinned 5-10% with clean water. Two coats of ISOMAT PROFESSIONAL ACRYL are applied using a roller, brush or airless gun. The second coat is applied after the first coat has completely dried. Temperature during application and drying of the paint should be among 10°C and 35°C.

Coverage

ISOMAT PROFESSIONAL ACRYL covers 12 m²/l per coat, on previously prepared surfaces.

Packaging

ISOMAT PROFESSIONAL ACRYL is supplied in buckets of 3 and 10 I.



ISOMAT PROFESSIONAL ACRYL

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory c, type WB is 40g/l (2010) for the ready to use product. The ready to use product ISOMAT PROFESSIONAL ACRYL contains max <40 g/l VOC.





ISOMAT SILICONE

High quality silicone emulsion paint for exterior use

Description

High quality new-generation emulsion paint based on silicone and acrylic resins, for exterior use. ISOMAT SILICONE is characterized by extremely high water-repellency, surface coverage and weather resistance. It is superior to any conventional acrylic paint as it waterproofs the surface, protecting it from mould while allowing maximum breathability. It is ideal for areas with high moisture and harsh weather conditions. It is also recommended for the restoration of historical or traditional buildings. It provides strong adhesion to any kind of old or new substrate like plaster, concrete, wood etc. It has an excellent workability and dries quickly. It provides a final surface with an excellent mat finish.

Fields of application

ISOMAT SILICONE is used for indoor or outdoor applications, on new or old surfaces, on substrates such as concrete, plaster, bricks, gypsum boards, asbestos-cement, wood etc.

Technical data

Colors:	white and 180 selected (ISOMAT COLOR SYSTEM)
Туре:	silicone emulsion paint
Density:	1,45 kg/l
pH:	8-9 at +23°C
Opacity:	min 97 %
Whiteness:	min 85 %
Capillary water absorption:	0,03 kg/m²hº,5
Bond strength:	2,0 N/mm ²
Viscosity (Poise):	16-18
Drying time:	1 h (in touch)
Recoating in:	16 h

Cleaning of tools:

Remove as much paint as possible from the used tools before cleaning. Clean the tools thoroughly with water and detergent immediately after use.

Directions for use

1. Substrate

Substrate should be dry and free of grease, loose particles, dust etc.

- Cracks or joints are filled with ISOMASTIC-A acrylic sealant.
- Any imperfections on concrete should be patched with DUROCRET polymer-modified mortar and on exposed concrete with PLANFIX or PLANFIX-FINE polymermodified putties.
- Plastered wall may be patched using UNICRET and UNICRET-FAST premixed mortars.

Priming with the silicone-acrylic, micronized, water based primer PRIMER ACRYL should follow, thinned up to 50% with clean water or with acrylic solvent primer PRIMER ACRYL-S, thinned up to 100% with SM-18 of ISOMAT or with WHITE SPIRIT. These primers are also ideal to use for the stabilization of the surface, when the primer is loose or crumbly.

2. Application

Before using, stir the content lightly and apply it as it is or thinned 5-10% with clean water. Two coats of ISOMAT SILICONE are applied using a roller, brush or airless gun. The second coat is applied after the first coat has completely dried. Temperature during application and drying of the paint should be among 10°C and 35°C.

Coverage

ISOMAT SILICONE covers 12 m^2/l per coat, on previously prepared surfaces.



ISOMAT-SILICONE

Packaging

ISOMAT SILICONE is supplied in buckets of 3 and 10 l.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between +5°C and +35°C. Protect from direct sun exposure and frost.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory c, type WB is 40g/l (2010) for the ready to use product.

The ready to use product ISOMAT SILICONE contains max <40 g/l VOC.

Τα τεχνικά δεδομένα και οι οδηγίες που περιλαμβάνονται σε αυτό το τεχνικό φυλλάδιο είναι αποτέλεσμα της γνώσης και της εμπειρίας από το τμήμα έρευνας και ανάπτιξης της εταιρείας, καθώς και από την εφαρμογή του προϊόντος στην πράξη. Οι αυατόταεις και οι προτάσεις σχετικά με την χρήση των υλικών γίνονται χωρίς εγνύηση, αφού οι εκάστοτε αυνθήκες κατά την εφαρμογή τους είναι πέρα του ελέγχου της εταιρείας μας. Για τον λόγο αυτό είναι ευθύνη του χρότητη να βεβαιωθεί πως το υλικό είναι κατάλληλο για την προβλεπόμενη εφαρμογή και τις συνθήκες του έργου. Η έκδοση του παρόντος τεχνικού φυλλαδίου ακυρώνει κάθε άλλη προηγισμόψενή εκδοση για το δίο προΐν.





FLEXCOAT

High quality, elastic, waterproofing paint

Description

High quality, elastic, waterproofing paint, based on acrylic resins. FLEXCOAT offers total water impermeability for the protection of walls against rain. It has high elasticity and crack bridging ability on surfaces that show hairline cracks. The paint is vapor permeable, allowing the building to breathe. It features total surface coverage, excellent bonding and superb resistance to weather conditions and washing. It is certified as a cool paint.

Fields of application

It is suitable for outdoor and indoor applications, on old and new surfaces, such as exposed concrete, plaster, brickwork, asbestos cement, gypsum boards etc. It may also be applied over bituminous layers, bituminous membranes and polyurethane layers for their protection against sunlight. Indoors, it is recommended in areas where frequent cleaning and high resistance are required, like kitchens, bathrooms, garages, hospitals, industrial areas etc.

Technical data

Colors:	white and 1420 selected (ISOMAT COLOR SYSTEM)
Туре:	100% acrylic paint
Viscosity (Poise):	14-17
Density:	1,34 kg/l
pH:	8-9 at +20°C
Opacity:	min 90%
Whiteness:	min 85%
Capillary water absorption:	0,03 kg/m²h ^{0,5}
Bond strength:	2,00 N/mm ²
Resistance to washing: Solar reflectance:	>20.000 cycles 89%

Infrared emittance coef:	0,86
Drying time:	1 h (in touch)
Recoating:	3-4 h

Cleaning of tools:

Remove as much paint as possible from the used tools before cleaning. Clean the tools thoroughly with water and detergent immediately after use.

Directions for use

1. Substrate

The substrate should be clean, dry and free of grease, dust and loose materials.

- Cracks or joints should be filled with ISOMASTIC-A sealant.
- Imperfections on concrete should be repaired with polymer-modified mortar DUROCRET and on exposed concrete with polymermodified putty PLANFIX or PLANFIX-FINE.
- Plaster repairs are done with UNICRET or UNICRET-FAST ready made mortars.

Priming with acrylic FLEX-PRIMER should follow, with consumption 100-200 g/m², depending on the substrate's absorptivity. FLEX-PRIMER is especially recommended for loose or crumbling plasters.

2. Application

FLEXCOAT is used as it is or thinned with up to 5% of water. It should be thoroughly stirred before application. It is applied by roller, brush or airless spray in two layers. The second coat follows after drying of the first. In cases of severe, isolated cracks, FLEXCOAT may be reinforced along the crack with a polyester fabric tape (30 g/m²), 10 cm wide. In cases of multiple cracks, FLEXCOAT may be totally reinforced with the same polyester fabric, 100 cm wide.

Coverage

FLEXCOAT covers 8-12 m²/l, on previously prepared surfaces.

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Packaging

FLEXCOAT is supplied in plastic buckets of 3 lit and 10 lit.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory c, type WB is 40g/l (2010) for the ready to use product.

The ready to use product FLEXCOAT contains max <40 g/l VOC.





PRIMER ACRYL-S

Acrylic, solvent-based primer

Description

Acrylic, solvent based primer. It offers excellent bonding and high penetration. Penetrates and anchors to the porous of the substrate, waterproofing it while allowing it to breathe. Furthermore, it has the ability to harden weak substrates, such as frail plasters etc. It dries and is recoated rapidly and doesn't cause yellow stains to the finishing paints.

Fields of application

It is recommended for use in new or old external porous surfaces that are going to be covered with acrylic, waterproofing, emulsion and cement-based paints or silicone and acrylic plasters.

Technical data	
Color:	transparent
Density:	0,85 kg/l
Drying Time:	1 h (in touch)
Recoating in:	2 h
Cleaning of toolog	

Cleaning of tools: Clean the tools thoroughly with SM-18 of

ISOMAT immediately after use.

Directions for use

1. Substrate

The surface to be primed must be dry and free of dust, grease, dirt etc. while any imperfections on plaster should be restored.

2. Application

PRIMER ACRYL-S is applied in one layer thinned up to 100% with SM-18 of ISOMAT or with white spirit. For highly porous substrates use it undiluted. Adjacent surfaces like windows and solventsensitive materials like polystyrene, sealants or mastics etc., should be protected during application.

Consumption

About 10-15 m²/lit. per layer, depending on surface absorption and thinning percentage.

Packaging

PRIMER ACRYL-S is available in containers of 1, 5, and 15 l.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between +5°C and +35°C. Protect from direct sun exposure and frost.

Remarks

Temperature during application should be at among $+10^{\circ}$ C and $+35^{\circ}$ C.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory h, type SB is 750g/l (2010) for the ready to use product. The ready to use product PRIMER ACRYL-S contains max <750 g/l VOC.





PRIMER ACRYL

Silicone acrylic micronized water based primer

Description

Silicone acrylic micronized water based primer. It offers excellent bonding, high penetration as well as durability to alkaline surfaces. Penetrates and anchors to the porous of the substrate, waterproofing it while allowing it to breathe. It also protects from rising moisture and salts stains. Furthermore, it has the ability to harden weak substrates, such as frail plasters etc. It has a slightly yellow color in order to be easily visible in fully primed surfaces.

Fields of application

It is recommended for use in new or old external porous surfaces that are going to be covered with acrylic, silicone, waterproofing, elastomeric and emulsion paints or silicone and acrylic plasters. It is odorless, as well as environment and user friendly.

Technical data

Form:	emulsion
Color:	slightly yellow
Density:	1,00 kg/l
pH:	9-10
Drying Time:	1 h (in touch)
Recoating in:	4 h

Cleaning of tools:

Remove as much paint as possible from the used tools before cleaning. Clean the tools thoroughly with water and detergent immediately after use.

Directions for use

1. Substrate

The surface to be primed must be dry and free of dust, grease, dirt etc. while any imperfections on plaster should be restored.

2. Application

PRIMER ACRYL is applied in one layer thinned up to 50% with clean water. For highly porous substrates use it undiluted. It is applied by brush, roller or spraving.

Consumption

About 10-15 m²/l. per layer, depending on surface absorption and thinning percentage.

Packaging

PRIMER ACRYL is available in plastic containers of 1, 5, 10 and 20 l.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

Remarks

Temperature during application should be at among $+10^{\circ}$ C and $+35^{\circ}$ C.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory h, type WB is 30g/l (2010) for the ready to use product. The ready to use product PRIMER ACRYL contains max <30 g/l VOC.





FLEX-PRIMER

High quality acrylic water-based primer

Description

Highly penetrative, polymer emulsion. It stabilizes porous substrates and ensures the proper adhesion of water-based paints, tile-adhesives, flexible mortars, brushable elastomeric coatings, acrylic plasters etc. By penetrating inside the pores of the substrate, it acts as a bonding layer between the substrate and the paint, adhesive, mortar, coating etc., to be applied.

Fields of application

Used in combination with the highly elastic waterproofing paint FLEXCOAT, it forms an ideal system for the waterproofing of walls. FLEX-PRIMER is a ready-to-use primer suitable for ensuring the adhesion of water-based paints and acrylic plasters on porous substrates made of concrete, masonry, plaster, gypsum boards, chip boards etc.

It stabilizes weak or crumbling plasters etc. It is also used for stabilizing and reducing the water absorption of surfaces like gypsum boards or chip boards, on which tile-adhesives, AQUAMAT-ELASTIC (2-component, elastic sealing slurry) or ISOMAT SL 17 (brushable, elastomeric liquid membrane for waterproofing under tiles), are going to be subsequently applied.

It is suitable for indoor and outdoor applications.

	Technical data
Form:	emulsion
Color:	white
Density:	1,00 kg/lit

Directions for use

1. Substrate

The surface to be primed must be dry and free of dust, grease, dirt etc.

2. Application

FLEX-PRIMER is thoroughly stirred and uniformly applied on the substrate by brush, roller or spraying, before painting.

Consumption

5-10 $\ensuremath{\text{m}}^2\ensuremath{\text{kg}}$, depending on the absorptivity of the substrate.

Packaging

FLEX-PRIMER is available in plastic containers of 1 kg, 5 kg, 10 kg and 20 kg.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between +5°C and +35°C. Protect from direct sun exposure and frost.

Remarks

• Temperature during application should be at least +5°C.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory h, type WB is 30g/l (2010) for the ready to use product. The ready to use product FLEX-PRIMER contains max <30 g/l VOC.

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the department of Research and Development of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical data sheet automatically cancels any previous one concerning the same product.





SM-18 Special solvent for PRIMER ACRYL-S

Description

SM-18 is a mixture of solvents with a distinctive smell.

Fields of application

SM-18 is used for diluting PRIMER ACRYL-S. Furthermore SM-18 is suitable for diluting solvent based lacquers and varnishes for application by brush or roller and for cleaning of tools after working with such materials.

Technical data

Color:

Density:

Directions for use

transparent

0,79 kg/l

SM-18 is used for diluting the acrylic primer PRIMER ACRYL-S in portions up to 100% by weight.

Consumption

Consumption varies depending on the nature of the application.

Packaging

0,75 I, 5 I and 20 I containers.

Shelf-life - Storage

Shelf-life in sealed containers is 36 months, protected from high temperature (<+30°C).

Remarks

- When applying SM-18 in closed areas, care should be taken for proper ventilation.
- Smoking and use of flame should be avoided during application.
- Before use, read safety instructions on the product label.





ISOLAC AQUA

Premium quality, water-based, enamel paint

Description

Premium quality, new generation, water-based, enamel paint for wooden surfaces. It is suitable for both indoor and outdoor use. ISOLAC AQUA is characterized by high flexibility and coverage. It has excellent resistance to weather, ageing and frequent washing and therefore it does not yellow. It has strong adhesion and is suitable for repainting surfaces coated with water-based or solvent-based enamel paints. It is almost odorless, it has excellent workability and dries quickly. It is available in gloss (ISOLAC AQUA GLOSS) and in satin finish (ISOLAC AQUA-SATIN).

Fields of application

ISOLAC-AQUA is used for indoor or outdoor applications, on new or old wood surfaces.

Technical data

ouruuu
white and 305 selected (ISOMAT COLOR SYSTEM)
water-based enamel paint
1,25 kg/l (GLOSS), 1,30 kg/l (SATIN)
8-9 at +23⁰C
min 97 %
min 95 %
/ 2:05
0,05 kg/m²h⁰.⁵
2,0 N/mm ²
15-20
1 h (in touch)
6 h

Cleaning of tools:

Remove as much paint as possible from the used tools before cleaning. Clean the tools thoroughly with water and detergent immediately after use.

Directions for use

1. Substrate

The substrate should be dry and free of grease, loose particles, dust etc., while any imperfections should be rubbed down with sandpaper. Priming with ISOLAC PRIMER AQUA, should follow, thinned up to 5-10% with clean water for application by brush or by roller and up to 20-30% for airless spray application.

2. Application

Before using ISOLAC AQUA, slightly stir its content and apply it in two layers either thinned by 5-10% with clean water for application by brush or by roller and up to 20-30% for airless spray application.

The second coat is applied after the first coat has completely dried. Temperature during application and drying of the colour should be among $+10^{\circ}$ C and $+35^{\circ}$ C.

Coverage

ISOLAC AQUA covers 12 m²/l per coat, on previously prepared surfaces.

Packaging

ISOLAC AQUA is supplied in buckets of 0,75 and 2,5 I.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory d, type WB is 130g/l (2010) for the ready to use product.

The ready to use product ISOLAC AQUA contains max <130 g/l VOC.

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the department of Research and Development of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical data sheet automatically cancels any previous one concerning the same product.





ISOLAC AQUA-PRIMER

Acrylic, water-based, primer

Description

Acrylic water based primer for wooden surfaces. It is suitable for both indoor and outdoor use. It offers excellent bonding and high surface coverage. It is odorless, as well as environment and user friendly.

Fields of application

It is used in new or old wooden surfaces and constitutes the ideal substrate for the waterbased enamel paint ISOLAC-AQUA.

Technical data

Colors:	white
Туре:	100% acrylic water-based primer
Density:	1,30 kg/l
pH:	8-9 at +23⁰C
Bond strength:	2,0 N/mm ²
Viscosity (Poise):	13-17
Drying time:	1 h (in touch)
Recoating in:	6 h

Cleaning of tools:

Remove as much paint as possible from the used tools before cleaning. Clean the tools thoroughly with water and detergent immediately after use.

Directions for use

1. Substrate

The substrate should be dry and free of grease, loose particles, dust etc., while any imperfections should be rubbed down with sandpaper.

2. Application

ISOLAC AQUA PRIMER is applied in one or two layers thinned up to 5-10% with clean water for brush or roller and up to 20-30% for airless spray. After drying it should be rubbed down with sandpaper in order to form a smooth surface for the final paint coat. Temperature during application and drying of the primer should be among +10°C and +35°C.

Coverage

ISOLAC AQUA PRIMER covers 12 m²/l per coat, on previously prepared surfaces.

Packaging

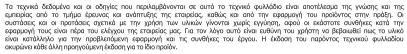
ISOLAC AQUA PRIMER is supplied in buckets of 0,75 and 2,5 l.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory g, type WB is 30g/l (2010) for the ready to use product. The ready to use product ISOLAC AQUA PRIMERcontains max <30 g/l VOC.







EPOXYCOAT

2-component epoxy coating

Description

EPOXYCOAT is a 2-component, colored epoxy system with solvents, offering high hardness and abrasion resistance. It is resistant to acids. alkalis, petroleum products, solvents, water, sea water, weather conditions etc.

It is certified with the CE marking and classified as a coating for surface protection of concrete, according to EN 1504-2. Certificate Nr. 2032-CPD-10.11.

Fields of application

EPOXYCOAT is used as a protective and decorative coating on cement-based substrates, e.g. concrete, plaster, cement-mortars or screeds, as well as on metallic surfaces. It is suitable for industrial areas, laboratories, slaughter-houses, canned food factories, wine making factories, gas stations, car repair shops etc.

Technical data	
Basis:	2-component epoxy resin
Colors:	RAL 9016 (white) RAL 7035 (light grey) RAL 7040 (grey) RAL 1015 (beige) other colors by special order
Viscosity:	3.000 mPas at +23°C
Density:	1,47 kg/lit
Mixing proportion (A:B):	100:11 by weight
Pot life:	approx. 90 min at +20ºC
Minimum hardening temperature:	+8°C
Walkability:	after 24 h at +23°C
Successive layer:	after 24 h at +23°C
Final strength:	after 7 days at +23°C

Abrasion resistance: < 3000 ma (EN ISO 5470-1)

Capillary absorption and 0,01 kg/m²·h^{0,5} permeability to water: (EN 1062-3, requirement of

EN 1504-2: w < 0.1) Resistance to thermal

shock (EN 13687-5, rigid systems, at 70°C): No bubbles, cracks

	or delamination Pull-off test $\ge 2 \text{ N/mm}^2$
Impact resistance: (EN ISO 6272-1)	5 Nm (Class I)
Adhesion strength by	
pull off test (EN 1542):	> 3 N/mm ² (breaking point of concrete)
Reaction to fire: (EN 13501-1)	Euroclass F
Cleaning of tools:	

Tools should be cleaned with SM-12 solvent immediately after use.

Directions for use

1. Substrate

The surface to be coated should be:

- Dry and stable.
- Free of materials that prevent bonding, e.g. dust, loose particles, grease etc.
- · Protected from underneath moisture attack.

Also, it should meet the following requirements:

a) Cementitious substrates

at least C20/25
cement content
350 kg/m ³
at least 28 days
less than 4%

b) Iron or steel substrates Should be free of rust or any dirt that prevents bonding.



According to the nature of the substrate, it should be prepared by brushing, grinding, milling, sand blasting, water blasting, shot blasting etc. Following this, the surface should be cleaned from dust with a high suction vacuum cleaner.

2. Priming

a) Cementitious substrates Cement-based surfaces are primed using DUROFLOOR-BI epoxy impregnation in one layer or EPOXYCOAT diluted 10-15% by weight with SM-14 special solvent.

Consumption of DUROFLOOR-BI: approx. 150 g/m².

<u>b) Metallic substrates</u> Metallic substrates are primed using EPOXYCOAT-AC anti-corrosive epoxy coating in 2 layers.

Consumption: 150-200 g/m²/layer.

3. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. The whole quantity of component B is added into component A. Mixing of the 2 components should take place for about 5 minutes, using a low revolution mixer (300 rpm). It is important to stir the mixture thoroughly near the sides and bottom of the container, to succeed uniform dispersion of the hardener.

4. Application - Consumption

EPOXYCOAT should be applied within 24 hours after priming and after the primer has dried. EPOXYCOAT is used as it is or diluted up to 5% by weight with SM-14 special solvent. It is applied by roller, brush or spray in 2 layers minimum. The second layer follows after drying of the first, but within 24 hours. Consumption: 200-300 g/m²/layer.

Packaging

EPOXYCOAT is supplied in packages (A+B) of 8 kg, with components A and B having the fixed weight proportion.

Shelf-life - Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory j, type SB is 500g/l (2010) for the ready to use product. The ready to use product EPOXYCOAT contains max <500 g/l VOC.

Remarks

- The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.
- EPOXYCOAT contains solvents. In cases of applications in closed rooms, measures should be taken for good ventilation.
- Bonding between successive layers may be severely affected by the intervention moisture or dirt.
- Epoxy layers should be protected from moisture for 4-6 hours after application. Moisture may whiten the surface or/and make it sticky. It may also disturb hardening. Faded or sticky layers in parts of the surface should be removed by grinding or milling and laid again.





- In case that longer time than predicted interferes between the application of successive layers or in case that old floors are going to be laid again, the surface should be thoroughly cleaned and ground before application of the new layer.
- After hardening, EPOXYCOAT is totally safe for health.
- Before application, study the safety advice mentioned on the product's labels.

CE

2032

ISOMAT S.A. 17th km Thessaloniki - Ag. Athanasios, P.O. BOX 1043, 570 03 Ag. Athanasios, Greece

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2032-CPD-10.11

EN 1504-2

Surface protection products

Coating

Abrasion resistance: < 3000 mgCapillary absorption: w < 0,1 kg/m²·h^{0.5} Resistance to

thermal shock: > 2,0 N/mm²

Impact resistance: Class I

Adhesion strength: \geq 3,0 N/mm²

Reaction to fire: Euroclass F

Dangerous substances comply with 5.4

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EPOXYCOAT-S

2-component epoxy coating

Description

EPOXYCOAT-S is a 2-component, colored epoxy system with solvents, offering high hardness and abrasion resistance. It is resistant to acids, alkalis, petroleum products, solvents, water, sea water, weather conditions etc. It is certified with the CE marking and classified as a coating for surface protection of concrete, according to EN 1504-2. Certificate Nr. 2032-CPD-10.11.

Fields of application

EPOXYCOAT-S is used as a protective and decorative coating on cement-based substrates, e.g. concrete, plaster, cement-mortars or screeds, as well as on metallic surfaces. It is suitable for industrial areas, laboratories, slaughter-houses, canned food factories, wine making factories, gas stations, car repair shops etc.

It is especially suitable for painting of swimming pools.

Technical data				
Basis:	2-component epoxy resin			
Colors:	RAL 9003 (white) blue for swimming pools other colors by special order			
Viscosity:	4.000 ± 500 mPa's at +23°C			
Density:	1,34 kg/lit			
Mixing proportion (A:B):	100:20 by weight			
Working time:	approx. 80 min at +20ºC			
Minimum hardening temperature:	+8°C			
Walkability:	after 24 h at +23°C			
Successive layer:	after 24 h at +23°C			
Final strength:	after 7 days at +23°C			

Abrasion resistance: (EN ISO 5470-1)

Capillary absorption and

< 3000 ma

No bubbles, cracks or

delamination Pull-off

point of concrete)

Euroclass F

permeability to water: $0,01 \text{ kg/m}^2 \cdot h^{0.5}$ (EN 1062-3, requirement of EN 1504-2: w < 0.1)

Resistance to thermal shock (EN 13687-5, rigid systems, at 70°C):

 $\label{eq:test} test \ge 2 \ \text{N/mm}^2$ Impact resistance: 6 Nm (Class I) (EN ISO 6272-1) Adhesion strength by pull off test (EN 1542): > 3 N/mm^2 (breaking

Reaction to fire: (EN 13501-1)

Cleaning of tools:

Tools should be cleaned with SM-12 solvent immediately after use.

Directions for use

1. Substrate

The surface to be coated should be:

- Dry and stable.
- Free of materials that prevent bonding, e.g. dust, loose particles, grease etc.
- Protected from underneath moisture attack.

Also, it should meet the following requirements:

a) Cementitious substrates	
Concrete quality:	at least C20/25
Cement screed quality:	cement content
	350 kg/m³
Age:	at least 28 days
Moisture content:	less than 4%

<u>b) Iron or steel substrates</u> Should be free of rust or any dirt that prevents bonding.





According to the nature of the substrate, it should be prepared by brushing, grinding, milling, sand blasting, water blasting, shot blasting etc. Following this, the surface should be cleaned from dust with a high suction vacuum cleaner.

2. Priming

a) Cementitious substrates

Cement-based surfaces are primed using DUROFLOOR-BI epoxy impregnation in one layer or EPOXYCOAT-S diluted 10-20% by weight with SM-14 special solvent. Consumption of DUROFLOOR-BI: approx. 150 g/m².

b) Metallic substrates

Metallic substrates are primed using EPOXYCOAT-AC anti-corrosive epoxy coating in 2 layers.

Consumption: 150-200 g/m²/layer.

3. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. The whole quantity of component B is added into component A. Mixing of the 2 components should take place for about 5 minutes, using a low revolution mixer (300 rpm). It is important to stir thoroughly the mixture near the sides and bottom of the container, to succeed uniform dispersion of the hardener.

4. Application - Consumption

EPOXYCOAT-S should be applied within 24 hours after priming and after the primer has dried.

EPOXYCOAT-S is used as it is or diluted up to 5% by weight with SM-14 special solvent. It is applied by roller, brush or spray in 2 layers minimum. The second layer follows after drying of the first, but within 24 hours. Consumption: 200-300 g/m²/layer.

Packaging

EPOXYCOAT-S is supplied in packages (A+B) of 2 kg and 9,6 kg, with components A and B having the fixed weight proportion.

Shelf-life - Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory j, type SB is 500g/l (2010) for the ready to use product. The ready to use product EPOXYCOAT-S contains max <500 g/l VOC.

Remarks

- The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.
- EPOXYCOAT-S contains solvents. In cases of applications in closed rooms, measures should be taken for good ventilation.
- Bonding between successive layers may be severely affected by the intervention moisture or dirt.
- Epoxy layers should be protected from moisture for 4-6 hours after application.
 Moisture may whiten the surface or/and make it sticky. It may also disturb hardening. Faded or sticky layers in parts of the surface should be removed by grinding or milling and laid again.





- In case that longer time than predicted interferes between the application of successive layers or in case that old floors are going to be laid again, the surface should be thoroughly cleaned and ground before application of the new laver.
- After hardening, EPOXYCOAT-S is totally safe for health.
- · Before application, study the safety advice mentioned on the product's labels.

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2032-CPD-10.11

EN 1504-2

Surface protection products

Coating

Abrasion resistance: < 3000 mg

Capillary absorption: w < 0,1 kg/m²·h^{0,5}

Resistance to

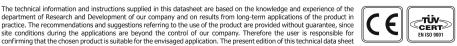
thermal shock: $\geq 2.0 \text{ N/mm}^2$

Impact resistance: Class I

Adhesion strength: \geq 3.0 N/mm²

Reaction to fire: Euroclass F

Dangerous substances comply with 5.4



The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the

practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore the user is responsible for

confirming that the chosen product is suitable for the envisaged application. The present edition of this technical data sheet

automatically cancels any previous one concerning the same product.



EPOXYCOAT-W

2-component, water based epoxy coat

Description

EPOXYCOAT-W is a 2-component, colored epoxy system without solvents. It offers high strength and abrasion resistance. It is resistant to acids, alkalis, petroleum products, water, sea water and weather conditions.

It is ideal for applications in indoor areas and, in general, in cases where solvents are undesirable.

It is certified with the CE marking and classified as a coating for surface protection of concrete, according to EN 1504-2. Certificate Nr. 2032-CPD-10.11.

Fields of application

EPOXYCOAT-W is used as a protective and decorative coating on cement-based substrates, e.g. concrete, plaster, cement-mortars, as well as on metallic surfaces. It is suitable for industrial rooms, laboratories, slaughterhouses, canned food factories, wine factories, gas stations, car repair shops etc. It is also suitable for surfaces in direct contact with food products, according to W-347, EPA 330.5 and EPA 110.2.

Technical data

Basis:	2-component epoxy resin
Colors:	RAL 7035 (light grey) RAL 1015 (beige), other colors after special order
Viscosity:	4.200 mPa.s at + 230C
Density:	1,53 kg/lit
Mixing proportion (A:B):	100:23 by weight
Pot life:	approx. 90 min at + 20°C
Minimum hardening	
temperature:	+ 8°C
Walkability:	after 24 h at + 23ºC

Successive layer:	after 8 h to 48 h at + 23ºC
Final strength:	after 7 days at + 23°C
Abrasion resistance: (EN ISO 5470-1)	< 3000 mg
Capillary absorption and permeability to water: (EN 1062-3, requirement of EN 1504-2: w < 0,1)	0,01 kg/m ² ·h ^{0.5}
Resistance to thermal shock (EN 13687-5,	
rigid systems, at 70°C):	No bubbles, cracks or delamination Pull-off test ≥ 2 N/mm ²
Impact resistance: (EN ISO 6272-1)	5 Nm (Class I)
Adhesion strength by pull off test (EN 1542):	> 3 N/mm ² (breaking point of concrete)
Reaction to fire: (EN 13501-1)	Euroclass F
Cleaning of tools: Tools should be cleaned immediately after use.	with water,

Directions for use

1. Substrate

The surface to be coated should be:

- Dry and stable.
- Free of materials that prevent bonding, e.g. dust, loose particles, grease etc.
- · Protected from underneath moisture attack.
- Also, it should meet the following requirements:

a) Cementitious substrate	es
Concrete quality:	at least C20/25
Cement screed quality:	cement content
	350 kg/m ³
Age:	at least 28 days
Moisture content:	less than 4%





b) Iron or steel substrates

Should be free of rust or any dirt that prevents bonding.

According to the nature of the substrate, it should be treated by brushing, grinding, sand blasting, water blasting etc. Following this, the surface should be cleaned from dust with a high suction vacuum cleaner.

2. Priming

a) Cementitious substrates Cement-based surfaces are primed using EPOXYCOAT-W diluted with water up to 20% by weight.

Consumption of EPOXYCOAT-W: approx. 200 g/m 2 .

<u>b) Metallic substrates</u> Metallic substrates are primed using EPOXYCOAT-AC anti-corrosive epoxy coating in one or two layers. Consumption EPOXYCOAT-AC: approx. 150 g/m²/layer.

3. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. The whole quantity of component B is added into component A. Mixing of the 2 components should take place for about 5 minutes, using a low revolution mixer (300 rpm). It is important to stir the mixture thoroughly near the sides and bottom of the container, to achieve uniform dispersion of the hardener.

4. Application - Consumption

EPOXYCOAT-W should be applied within 48 hours after priming and after the primer has dried.

It is applied by roller, brush or spray in 2 layers minimum.

The first layer of EPOXYCOAT-W is used as it is or diluted with water up to 10% by weight. The second coat follows after drying of the first, but within 48 hours.

Consumption: 200-300 g/m²/layer.

Packaging

EPOXYCOAT-W is supplied in packages (A+B) of 3 kg and 9 kg, with components A and B having the fixed weight proportion.

Shelf-life - Storage

24 months from production date if stored in original, unopened packaging, in temperature between +5°C and +35°C. Protect from direct sun exposure and frost.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory j, type WB is 140g/l (2010) for the ready to use product. The ready to use product EPOXYCOAT-W contains max <140 g/l VOC.

Remarks

- The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.
- Bonding between successive layers may be severely affected by the intervention moisture or dirt.
- In case that longer time than predicted interferes between the application of successive layers or in case that old floors are going to be laid again, the surface should be thoroughly cleaned and ground before application of the new layer.
- Before application, study the safety advice mentioned on the product's labels.





Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory j, type WB is 140g/l (2010) for the ready to use product. The ready to use product EPOXYCOAT-W contains max <140 g/l VOC.

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EN 1504-2

Surface protection products

Coating

Abrasion resistance: < 3000 mgCapillary absorption: w < 0,1 kg/m²·h^{0.5} Resistance to thermal shock: $\geq 2,0 \text{ N/mm}^2$ Impact resistance: Class I Adhesion strength: $\geq 3,0 \text{ N/mm}^2$

Reaction to fire: Euroclass F

Dangerous substances comply with 5.4

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the department of Research and Development of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical data sheet automatically cancels any previous one concerning the same product.





after 24 h at +23°C after 7 days at +23°C

No bubbles, cracks or delamination

Pull-off test $\geq 2 \text{ N/mm}^2$

8 Nm (Class I)

> 3 N/mm² (breaking

point of concrete)

see the table to the

Euroclass E

annex of the

pull

< 3000 ma

EPOXYCOAT-VSF

2-component, solvent-free epoxy coating

Description

EPOXYCOAT-VSF is a 2-component, solventfree colored epoxy system, offering high hardness and abrasion resistance and is specially designed for high aggressive chemical environments. It is resistant to acids, alkalis, petroleum products, solvents, water, sea water, weather conditions etc.

It is certified with the CE marking and classified as a coating for surface protection of concrete, according to EN 1504-2. Certificate Nr. 2032-CPD-10.11.

Fields of application

EPOXYCOAT-VSF is used as a protective and decorative coating on cement-based substrates, e.g. concrete, plaster, cement-mortars or screeds, as well as on metallic surfaces. It is suitable for industrial areas, laboratories, slaughter-houses, canned food factories, wine making factories, gas stations, car repair shops etc

It is also suitable for surfaces in direct contact with food products, according to W-347, ISO 8467

Technical data

Basis:	2-component epoxy resin
Colors:	RAL 7032 (sand grey) other colors by special order
Viscosity:	8.000 500 mPa's at +23ºC
Density:	1,60 kg/lit
Mixing proportion (A:B):	77:23 by weight
Pot life:	approx. 40 min at +20ºC
Minimum hardening temperature:	+8°C
Walkability:	after 24 h at +23°C

Successive layer:	
Final strength:	

Abrasion resistance: (EN ISO 5470-1)

Capillary absorption and permeability to water: 0,01 kg/m²·h^{0,5} (EN 1062-3, requirement of EN 1504-2: w < 0,1)

Resistance to thermal shock (EN 13687-5.

rigid systems, at 70°C):

Impact resistance: (EN ISO 6272-1)

Adhesion strength by off test (EN 1542):

Reaction to fire: (EN 13501-1) Chemical resistance :

technical leaflet Cleaning of tools: Tools should be cleaned with SM-12 solvent

immediately after use.

Directions for use

1. Substrate

The surface to be coated should be:

- Dry and stable.
- · Free of materials that prevent bonding, e.g. dust, loose particles, grease etc.
- Protected from underneath moisture attack.

Also, it should meet the following requirements:

a) Cementitious substrates

Concrete quality:	at least C20/25
Cement screed quality:	cement content 350 kg/m ³



EPOXYCOAT-VSF

Age:

at least 28 days less than 4%

b) Iron or steel substrates

Moisture content:

Should be free of rust or any dirt that prevents bonding.

According to the nature of the substrate, it should be prepared by brushing, grinding, milling, sand blasting, water blasting, shot blasting etc. Following this, the surface should be cleaned from dust with a high suction vacuum cleaner.

2. Priming

a) Cementitious substrates Cement-based surfaces are primed using DUROFLOOR-BI epoxy impregnation in one layer. Consumption of DUROFLOOR-BI: approx. 150 g/m².

b) Metallic substrates

Metallic substrates are primed using EPOXYCOAT-AC anti-corrosive epoxy coating in 2 layers.

Consumption: 150-200 g/m²/layer.

3. Mixing of components

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. The whole quantity of component B is added into component A. Mixing of the 2 components should take place for about 5 minutes, using a low revolution mixer (300 rpm). It is important to stir the mixture thoroughly near the sides and bottom of the container, to succeed uniform dispersion of the hardener.

4. Application - Consumption

EPOXYCOAT-VSF should be applied within 24 hours after priming and after the primer has dried.

EPOXYCOAT-VSF is used as it is. It is applied by roller, brush or spray in 2 layers minimum. The second layer follows after drying of the first, but within 24 hours.

Consumption: 200-300 g/m²/layer.

Packaging

EPOXYCOAT-VSF is supplied in packages (A+B) of 10 kg, with components A and B having the fixed weight proportion.

Shelf-life - Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.

Remarks

- The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.
- Bonding between successive layers may be severely affected by the intervention moisture or dirt.
- Epoxy layers should be protected from moisture for 4-6 hours after application. Moisture may whiten the surface or/and make it sticky. It may also disturb
- hardening. Faded or sticky layers in parts of the surface should be removed by grinding or milling and laid again.
- In case that longer time than predicted interferes between the application of successive layers or in case that old floors are going to be laid again, the surface should be thoroughly cleaned and ground before application of the new layer.
- After hardening, EPOXYCOAT-VSF is totally safe for health.
- Before application, study the safety advice mentioned on the product's labels.



EPOXYCOAT-VSF

Chemical Resistance

ANNEX

Test group*	Т	1d	3d	7d	28d	90d	180d	360d
PG 1 (Petrol)	20°C	Α	Α	Α	А	Х	Х	Х
PG 4 (all hydrocarbons w/o Benzol, unused engine								
and lubricating oils, jet fuels, heating fuel,	20°C	A	A	A	А	X	X	Х
Diesel; incl. PG 2, 3)								
PG 4a (Benzol)	20°C	A	A	A	А	A	A	Х
PG 5 (Alcohols with max. 48% Methanol, Glycol Ether)	20°C	A	A	Α	Х	Х	Х	Х
PG 5a (all Alcohols and Glycol Ether)	20°C	A	A	A	Х	X	X	к
PG 6a (Aliphatic and aromatic halogen hydrocarbons)	20°C	К						
PG 7 (Esters and Ketones)	20°C	Α	Α	Α	Х	К		
PG 8 (aqueous solutions of Aliphatic Aldehyds up to 40%)	20°C	Α	Α	Α	Х	Х	Х	Х
PG 9 (aqueous solutions of organic acids up to 10%	20°C	Α	Α	Α	Х	Х	Х	К
PG 9a (organic acids (carbon acids, except formic acid)	20°C	Α	Α	к				
and the respective salts (in aqueous solutions)	200	^	^	IX.				
PG 10 (Inorganic acids up to 20%)	20°C	A	A	Α	Х	Х	Х	Х
PG 11 (Inorganic alkalis)	20°C	Α	A	Α	А	Α	A	Α
PG 15 (cyclic and acyclic Ethers)	20°C	A	A	Α	К			
PG 15a (acyclic Ethers)	20°C	Α	Α	Α	Х	Х	Х	Х
Test medium	т	1d	3d	7d	28d	90d	180d	360d
Ethanol 96%	20°C	Х	Х	Х	К	Х	K	
Ammonia 10%	20°C	Α	Α	Α	Х	Х	Х	Х
Heating fuel	20°C	Α	Α	Α	А	Α	Α	Α
NaOH 50%	20°C	A	Α	Α	Α	Α	Α	Α
Nitric acid 20%	20°C	Α	Α	Х	Х	К		
Hydrochloric acid 37%	20°C	Α	Α	Α	Х	Х	К	
Sulphuric acid 50%	20°C	Α	Α	Α	Х	Х	Х	Х
Sulphuric acid 80%	20°C	Α	х	Х	Х	Х	Х	Х

A: Resistant

X: Resistant but with discoloration

K: Not resistant

*according to EN 13529



EPOXYCOAT-VSF

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory j, type SB is 500g/I (2010) for the ready to use product. The ready to use product EPOXYCOAT-VSF contains max <500 g/I VOC.

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Surface protection products

Coating

Abrasion resistance: < 3000 mg Capillary absorption: w < 0,1 kg/m²·h^{0.5} Resistance to thermal shock: \ge 2,0 N/mm² Impact resistance: Class I Adhesion strength: \ge 3,0 N/mm² Reaction to fire: Euroclass F

Dangerous substances comply with 5.4

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the department of Research and Development of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical data sheet automatically cancels any previous one concerning the same product.



brasion



EPOXYCOAT-AC

2-component, anticorrosive epoxy primer

Description

EPOXYCOAT-AC is a 2-component, colored epoxy system with solvents, offering high strength and abrasion resistance. It is highly resistant to organic and anorganic acids, alkalis, petroleum products, solvents, water, sea water etc. It offers excellent protection against corrosion of metal surfaces. It is classified as a product for reinforcement corrosion protection according to EN 1504-7. Certificate Nr. 2032-CPD-10.11.

Fields of application

EPOXYCOAT-AC is used as an active anticorrosive & anti-rust coating on iron and steel surfaces, especially on surfaces that are going to be coated with the epoxy resins EPOXYCOAT-W, EPOXYCOAT-VSF, EPOXYCOAT and EPOXYCOAT-S. It may also be used solely as a final coating, if its redbrown or grey color is satisfying. Application examples include protection of silos, steel bridges, fences, iron roofs, pipes, reinforcement bars etc.

Technical data

Basis:	2-component epoxy resin
Colors:	RAL 3009 (redbrown) RAL 7040 (grey)
Viscosity:	350 mPas at +23⁰C
Density (A+B):	1,40 kg/lit
Mixing proportion (A:B):	100:13,5 by weight
Pot life:	approx. 2,5 h at +20°C
Minimum hardening temperature:	+8°C
Walkability:	after 24 h at +23°C
Successive layer:	after 3-24 h at +23°C
Final strength:	after 7 days at +23°C
Adhesive strength:	> 3 N/mm ² (breaking point of concrete)

Basis: Shear adhesion	2-component epoxy
(coated steel to concrete): (EN 15184)	Pass ¹¹
Corrosion protection: (EN 15183)	Pass ^{*2}
Glass transition temperature: (EN 12614)	≥ 68 °C

*1: The test is considered to have been passed if the bond stress determined with the coated bars is in each case at least 80% of the reference bond stress determined for the uncoated bars.

*²: The test is considered to have been passed if the coated zones of the steels are free of corrosion and if rust creep at the ground plate edge <1 mm.</p>

Cleaning of tools:

Tools should be cleaned with SM-12 solvent immediately after use.

Directions for use

1. Substrate

The surface to be coated should be:

- Dry and stable.
- Free of materials that prevent bonding, e.g. dust, loose particles, grease etc.
- Free of rust or any corrosion that may prevent bonding.

According to the nature of the substrate, it should be prepared by brushing, grinding, sand blasting, etc. Following this, the surface should be cleaned from dust.

2. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. The whole quantity of component B is added into component A.





Mixing of the 2 components should take place for about 5 minutes, using a low revolution mixer (300 rpm). It is important to stir the mixture thoroughly near the sides and bottom of the container, to succeed uniform dispersion of the hardener.

3. Application - Consumption

<u>a) As a primer</u>

EPOXYCOAT-AC is applied by roller, brush or spray in two layers. The second layer follows after the first has dried, but within 24 hours. Consumption: 150-200 g/m²/layer. Painting with EPOXYCOAT-W, EPOXYCOAT-VSF, EPOXYCOAT or EPOXYCOAT-S epoxy coatings should follow within the next 24 hours.

b) As a paint

EPOXYCOAT-AC is applied by roller, brush or spray in 3 - 4 layers. Every next layer follows after drying of the previous one, but within 24 hours.

Consumption: 150-200 g/m²/layer.

Packaging

EPOXYCOAT-AC is supplied in packages (A+B) of 3 kg and 8 kg, with components A and B having the fixed weight proportion.

Shelf-life - Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.

Remarks

 The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.

- EPOXYCOAT-AC contains solvents. In cases of application in closed rooms, measures should be taken for good ventilation.
- Bonding between successive layers may be severely affected by the intervention moisture or dirt between them.
- Epoxy layers should be protected from moisture for 4-6 hours after application.
 Moisture may whiten the surface or/and make it sticky. It may also disturb hardening. Faded or sticky layers in parts of the surface should be removed by grinding or milling and laid again.
- In case that longer time than predicted interferes between the application of successive layers or in case that old floors are going to be laid again, the surface should be thoroughly cleaned and ground before application of the new layer.
- After hardening, EPOXYCOAT-AC is totally safe for health.
- Before application, study the safety advice mentioned on the product's labels.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory j, type SB is 500g/l (2010) for the ready to use product. The ready to use product EPOXYCOAT-AC contains max <500 g/l VOC.



4.3.5

POXY PAINTS & PRIMERS

EPOXYCOAT-AC

CE

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2032-CPD-10.11

EN 1504-7

Reinforcement corrosion protection product for uses other than low performance requirements

Shear adhesion: Pass Corrosion protection: Pass Glass transition temperature: ≥ 68 °C Dangerous substances: comply with 5.4





DUROFLOOR-BI

2-component, colorless epoxy impregnation

Description

DUROFLOOR-BI is a 2-component, colorless epoxy system with solvents. Due to its low viscosity and its great fluidity, it can penetrate deep into the substrate and fill pores and capillaries. The impregnated surfaces become stable and durable, resistant to abrasion, frost and chemicals, especially wastes, mineral oils and petroleum products.

It is classified as SR-B2,0 according to EN 13813.

Fields of application

DUROFLOOR-BI is used for the impregnation of cement-based substrates, e.g. old and new concrete, cement-mortar or plaster etc. It is suitable for floors in parking lots, warehouses, laboratories, industries, gas stations, car repair shops etc.

It is also used as a primer for EPOXYCOAT, EPOXYCOAT-VSF and EPOXYCOAT-S epoxy coatings.

Technical data	
Basis:	2-component epoxy resin
Color:	transparent
Viscosity:	45 mPas at +23°C
Density (A+B):	0,92 kg/lit
Mixing proportion (A:B):	100 : 29 by weight
Pot life:	approx. 10 h at +20ºC
Minimum hardening temperature:	+8°C
Walkability:	after 24 h at +23°C
Successive layer:	after 10-24 h at +23°C
Final strength:	after 7 days at +23°C

Adhesive strength:

> 3 N/mm² (breaking point of concrete)

Cleaning of tools:

Tools should be thoroughly cleaned with SM-12 solvent immediately after use.

Directions for use

1. Substrate

- The flooring surface should be:
- Dry and stable.
- Free of materials that prevent bonding, e.g. dust, loose particles, grease etc.
- Protected from underneath moisture attack.

Also, it should meet the following requirements: Concrete quality: at least C20/25 Cement screed quality: cement content

Aae: Moisture content:

350 ka/m³ at least 28 days less than 4%

According to the nature of the substrate, it should be prepared by brushing, grinding, cleaning with a high suction vacuum cleaner etc.

Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. The whole quantity of component B is added into component A. Mixing of the 2 components should take place for about 5 minutes, using a low revolution mixer (300 rpm). It is important to stir the mixture thoroughly near the sides and bottom of the container, to achieve uniform dispersion of the hardener.

DUROFLOOR-BI

3. Application - Consumption

DUROFLOOR-BI is applied by roller, brush or spray in 1-2 layers, according to the substrate's absorptivity. Second layer follows 15 min after the first is applied.

Consumption: 150-250 g/m²/layer.

DUROFLOOR-BI may be applied on new concrete (approx. 3 days old) because curing is not disturbed. It may also be applied on slightly wet substrates (moisture content up to 6%). In both cases a small impregnation depth is achieved.

If a depth of impregnation of about 5 mm into concrete is required, moisture content should be less than 3%.

Packaging

DUROFLOOR-BI is supplied in packages (A+B) of 4 kg and 10 kg, with components A and B having the fixed weight proportion.

Shelf-life - Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.

Remarks

 The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.

- DUROFLOOR-BI contains solvents. In cases of applications in closed rooms, measures should be taken for good ventilation.
- Non-uniform absorptivity of the substrate may cause a non-uniform surface appearance after impregnated.
- Bonding between successive layers may be severely affected by the intervention of moisture or dirt between them.
- Epoxy layers should be protected from moisture for 4-6 hours after application. Moisture may whiten the surface or/and make it sticky. It may also disturb hardening. Faded or sticky layers in parts of the surface should be removed by grinding or milling and laid again.
- In case that longer time than predicted interferes between the application of successive layers or in case that old floors are going to be laid again, the surface should be thoroughly cleaned and ground before application of the new layer.
- After hardening, DUROFLOOR-BI is totally safe for health.
- Before application, study the safety advice mentioned on the product's labels.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory h, type SB is 750g/l (2010) for the ready to use product. The ready to use product DUROFLOOR-BI contains max <750 g/l VOC.



DUROFLOOR-BI

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EN 13813 SR-B2,0 Primer

Reaction to fire: NPD Release of corrosive substances: SR Water permeability : NPD Wear resistance: NPD Bond strength: B2,0 Impact resistance: NPD Sound insulation: NPD Sound absorption: NPD Thermal resistance: NPD Chemical resistance: NPD

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EPOXY PAINTS & PRIMERS



SM-14 Special solvent for epoxy coatings

Description

SM-14 is a mixture of solvents used for diluting (thinning) epoxy coatings.

Fields of application

SM-14 is used for diluting EPOXYCOAT, EPOXYCOAT-S, EPOXYCOAT-AC epoxy coatings and for cleaning of tools after working with such materials.

Technical data

Color: Density: transparent 0,85 kg/lit

Directions for use

SM-14 is used for diluting epoxy coatings when added in portions up to 10%.

It may also be used for removing epoxy coating residues from tools.

Consumption

Consumption varies depending on the nature of the application.

Packaging

5 lit containers.

Shelf-life - Storage

Shelf-life in sealed containers is 36 months, protected from high temperature (<+30°C).

Remarks

- When applying SM-14 in closed areas, care should be taken for proper ventilation.
- Smoking and use of flame should be avoided during application.
- Before use, read safety instructions on the product label.





PS-20

Silicone-based solution for waterproofing

Description

PS-20 is a transparent, ready-to-use, siliconebased solution with solvents, for the waterproofing of inorganic substrates.

- Offers excellent water-repellence and long time protection.
- It is water-vapor permeable, permitting breathing of the structure.
- Does not form a skin on the application surface and does not alter its appearance.
- Protects the surface from salt stains (rashes) and effects of frost or filth because it prevents absorption of rain water or dirt.
- Suitable for very alkaline substrates.
- Quickly efficient after application.

Fields of application

PS-20 is applied on various surfaces (natural or synthetic stone, unpainted plaster, exposed masonry, decorative bricks, roof tiles, tiles, exposed concrete etc.) for their protection against rain effect. Moreover it is suitable for waterproofing of tile joints.

Technical data

Color:

Density:

transparent 0,79 kg/lit

Directions for use

1. Substrate

Surfaces where PS-20 is going to be applied should clean, dry and have open pores. Adjacent surfaces like windows, painted elements, solvent-sensitive materials like polystyrene, sealants or mastics, bitumen, should be protected during application.

2. Application

PS-20 is applied by brush, roller or spray. One or two layers are usually sufficient. The second layer is applied once the first layer has completely dried. Waterproofing is more effective on surfaces with inclination and without standing water.

Consumption

0,2-0,4 lit/m², depending on the absorptivity of the substrate.

Packaging

PS-20 is supplied in metal containers of 1 lit, 3 lit and 20 lit.

Shelf-life - Storage

18 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

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PROTECTIVE MATERIALS - VARNISHES



PS-21 Silicone-based solution without solvents for waterproofing

Description

PS-21 is a ready-to-use, silicone-based solution without solvents, for the waterproofing of inorganic substrates.

- It provides excellent water-repellence.
- It is vapor permeable, permitting breathing of the structure.
- Does not form a skin on the application surface and does not alter its appearance.
- Protects the surface from salt stains, effects of frost or filth, because it prevents absorption of rain water or dirt.
- It is suitable for very alkaline substrates.
- It is quickly effective after application.
- · Protects from carbonation
- It is suitable for slightly wet substrates.

Fields of application

PS-21 is used for the protection of horizontal or vertical surfaces against rain effect and for the waterproofing of tile joints. It is also suitable for the waterproofing of natural stone, plaster, exposed bricks, roof tiles, exposed concrete etc. It can also be applied on unpolished marble surfaces to protect them from water and dirt absorption. It can be used even on slightly wet substrates.

Technical data

Color:	transparent when dry
Density:	0,99 kg/lit

Directions for use

1. Substrate

Surfaces where PS-21 is going to be applied should have open pores and be clean.

2. Application

<u>a) Horizontal surfaces</u> In case of horizontal absorptive surfaces (absorbent tiles, mosaic, etc.) the application can be done with a squeegee. The material is left to act for 5 minutes, next the excessive material is removed using a squeegee and the surface is cleaned with a slightly wet cloth. The final cleaning of the surface can be done after 6 hours. Waterproofing is more effective on surfaces with inclination and without standing water.

b) Vertical surfaces

In vertical surfaces PS-21 is applied by spray, brush or roller. One or two layers are usually sufficient. The second layer follows while the first is still fresh. Better impregnation is succeeded in dry or slightly wet absorbent substrates.

c) Waterproofing of tile joints

The application of PS-21 for waterproofing tile joints can be done by brush or squeegee.

d) Impregnation

PS-21 can be used also for the impregnation of building materials, like tiles, bricks etc., diluted with water in proportions of 1:1 to 1:4.

Consumption

0,2-0,4 lit/m², depending on the absorptivity of the substrate.

Packaging

PS-21 is supplied in plastic containers of 1 lit, 5 lit and 20 lit.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.





NANOPRO-C

Nano-impregnation for protecting porous surfaces

Description

Water-based emulsion with high penetrating ability, based on nano-molecular structure. Protects porous surfaces, from moisture and salt stains, while prevents from fungi-mould growth. After it has dried, it is transparent. It does not become yellow due to UV radiation and permits breathing of the structure. It does not form a skin on the application surface and does not alter its appearance.

Fields of application

NANOPRO- C is used to protect from moisture and salt stains porous substrates such as surfaces of concrete, masonry, plaster, tile grouts, gypsum boards, chip boards, natural stone etc. Suitable for indoor and outdoor application.

Technical data		
Form:	emulsion	
Color:	white	
Density:	0,99 kg/lit	
pH:	7,5	

Cleaning of tools:

Tools are cleaned with water immediately after use.

Directions for use

1. Substrate

The surface to be primed must be dry and free of dust, grease, dirt etc.

2. Application

NANOPRO-C is thoroughly stirred and uniformly applied on the substrate by brush, roller or spraying, until full impregnation. On very porous substrates a second layer might be required, which is applied within 3 hours after the first one.

Total resistance in absorbing moisture is achieved 2 days after the application.

Consumption

100-200 ml/ m^2 , depending on the absorptivity of the substrate.

Packaging

NANOPRO-C is available in plastic containers of 1I, 5 I and 20 I and in drums of 220 I.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

Remarks

Temperature during application must be between $+5^{\circ}$ C to $+30^{\circ}$ C.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory g, type WB is 30g/l (2010) for the ready to use product. The ready to use product NANOPRO-C contains max <30 g/l VOC.





NANOPRO-M

Nano-impregnation for protecting marbles

Description

Water-based emulsion with highly penetrating ability based on nano-molecular structure. When applied on unporous surfaces, it seals and protects them from moisture and stains. After it has dried, it is transparent. It does not become yellow due to UV radiation and permits breathing of the structure. It does not form a skin on the application surface and does not alter its appearance.

Fields of application

NANOPRO-M is used to protect from stains unporous substrates such as surfaces of polished marbles, granites, tiles, porcelain etc. Suitable for indoor and outdoor application.

	Technical data
Form:	emulsion
Color:	white
Density:	0,99 kg/lit
pH:	7,5

Cleaning of tools:

Tools are cleaned with water immediately after use.

Directions for use

1. Substrate

The surface to be primed must be dry and free of dust, grease, dirt etc.

2. Application

NANO-PRO-M is thoroughly stirred and uniformly applied on the substrate by brush, roller or spraying, 10-15 minutes after the application and before get dried, the excessive material is removed using a wet cloth. For surfaces which are very sensitive to stains, a second layer can be applied within 3 hours after the first one.

Total resistance in absorbing moisture is achieved 7 days after the application.

Consumption

50-70 ml/m^{2}, depending on the absorptivity of the substrate.

Packaging

NANOPRO-M is available in plastic containers of 1I, 5I and 20I.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

Remarks

Temperature during application must be between $+5^{\circ}$ C to $+30^{\circ}$ C.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory g, type WB is 30g/l (2010) for the ready to use product. The ready to use product NANOPRO-M contains max <30 g/l VOC.

4.3.6





NANOPRO-L

Nano-impregnation for protecting surfaces from oils

Description

Water-based emulsion with high penetrating ability, based on nano-molecular structure. Protects porous and slightly porous surfaces (marbles, granites etc.), from oil stains, moisture and salt stains while prevents from fungi-mould growth.

If used at the recommended dosage, it does not form skin on the application surface and does not alter the appearance of most surfaces.

Fields of application

NANOPRO-L is used to protect from oil stains, moisture and salt stains either non absorptive surfaces such as polished marbles, granites etc. or porous surfaces, such as concrete. masonry, plaster, tile grouts, gypsum boards, chip boards, natural stones etc. Suitable for indoor and outdoor application.

Technical data		
Form:	emulsion	
Color:	white (slightly yellow)	
Density:	0,99 kg/lit	
pH:	7,25	

Cleaning of tools:

Tools are cleaned with water immediately after use.

Directions for use

1. Substrate

The substrate must be dry and free of dust, grease, dirt etc.

2. Application

NANOPRO-L is thoroughly stirred and uniformly applied on the substrate by brush, roller or spraying. After about 15 minutes and before the material has dried, the surface is cleaned by rubbing with a slightly damp cloth. For very absorptive surfaces a second layer can be applied before the first layer is totally dry. Total resistance in absorbing oils and moisture is achieved 2 days after the application.

Consumption

50-100 ml/m², depending on the absorptivity of the substrate.

Packaging

NANOPRO-L is available in plastic containers of 11. 5I and 20I.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between +5°C and +35°C. Protect from direct sun exposure and frost.

Remarks

Temperature during application must be between +5°C to +35°C

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory g, type WB is 30g/I (2010) for the ready to use product. The ready to use product NANOPRO-L contains max <30 g/l VOC.

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4.3.6



VS-1 Acrylic stone varnish

Description

VS-1 is a ready-to-use, transparent acrylic varnish with solvents, used to impregnate natural stone (slate or sinter stone etc.) and artificial building materials (decorative bricks, roof tiles etc.)

- Provides great water-repellence.
- Offers durable protection.
- Brightens up the natural color of the material on which it is applied.
- Frees the surfaces from salt rash as well as frost and dirt effects, due to its resistance to rainwater and impurity absorption.
- It is suitable for indoor and outdoor use.

Fields of application

VS-1 brings out the natural color of the material on which it is applied, protecting at the same time the surfaces from the influence of rainwater and atmospheric pollution. It is suitable for the impregnation of natural stone, exposed masonry, roof tiles etc. It is applied on walls and floors, in indoor or outdoor areas.

Technical data

transparent

Color: Density:

0,90 kg/lit

Directions for use

1. Substrate

The surfaces to be treated with VS-1 should have open pores. Adjacent surfaces such as windows, painted surfaces and materials susceptible to solvent attack such as polystyrene, joint mastics, bitumen etc., have to be protected during VS-1 application.

2. Application

The application of VS-1 is carried out by brush, roller or spray in two layers. The second layer follows after the first one is dry.

Consumption

150-200 ml/m² per layer, depending on the absorptivity of the surface.

Packaging

VS-1 is supplied in metal containers of 1 lit and 4 lit.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory h, type SB is 750g/l (2010) for the ready to use product. The ready to use product VS-1 contains max <750 g/l VOC.





ISOMAT AG 77

Anti-graffiti protection emulsion

Description

Brushable, paraffin-based emulsion for the protection of surfaces from graffiti, environmental impurities or stains etc. Does not change surface appearance and allows easy cleaning. Provides great durability and resistance to weather conditions.

Fields of application

ISOMAT AG 77 is applied on concrete, plaster, stone, metal, marble, painted surfaces etc. to protect them from graffiti or environmental impurities. It also makes poster detachment easy. Suitable for facades, statues, monuments, metal sign-boards etc.

Technical data

Form:	emulsion
Color:	white (transparent when drying)
Specific weight:	1,00 kg/lit
pH:	7-8
Application temperature:	from +5°C to +40°C
Resistance to ageing:	2-3 years

Directions for use

1. Substrate

The substrate must be dry and free of dust, grease and old stains.

2. Application

The material is slightly stirred before use and then applied undiluted with brush, roller or spray in 1-2 layers, depending on the absorptivity of the surface. Second layer follows after the first one is dry. On highly absorptive surfaces the first layer can be diluted with water up to 10% by weight. Cleaning of a surface treated with ISOMAT AG 77 is easily done by using hot water under pressure or rubbing with a sponge. For persistent stains the use of detergent or SM-12 special cleaner is recommended. After cleaning, the surface must be protected again.

Consumption

50-100 ml/m², depending on the absorptivity of the surface.

Packaging

ISOMAT AG 77 is supplied in plastic containers of 1 lit and 3 lit.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between +5°C and +35°C. Protect from direct sun exposure and frost.

Remarks

In the case of painted surfaces, cleaning should be fast and careful so that there is no color wear or damage.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory i, type WB is 140g/l (2010) for the ready to use product.The ready to use product ISOMAT AG 77 contains max <140 g/l VOC.

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CL-CLEAN

Tile and natural stone cleaner

Description

CL-CLEAN is a special cleaning liquid based on organic acid, used to clean residues of concrete, cement, plaster, tile grout and salts. It is suitable for cleaning in cases related with potable water or food storage, since it does not leave any residues.

Fields of application

CL-CLEAN is used to clean residues of cement, lime or salts, left on ceramic tile, natural stone or unpolished marble surfaces. It is also suitable for cleaning building facades from cement mortar remnants or salts.

Technical data	
Form:	transparent liquid
pH:	approx. 0,5
Density:	1,12 kg/lit
	Directions for use

Directions for use

CL-CLEAN is spread on the surface to be cleaned as it is or diluted with water, up to 1:1. Let the liquid act for 2-3 minutes and brush the surface with a hard (not metallic) brush. Wash the surface with plenty of water. In difficult cases it might be necessary to repeat the procedure.

Use of rubber gloves is necessary during application.

Consumption

150-200 g/m², depending on the case.

Packaging

CL-CLEAN is available in plastic containers of 1 kg, 5 kg and 20 kg.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between +5°C and +35°C. Protect from direct sun exposure and frost.

Remarks

- The product contains organic acid and is classified as corrosive.
- Consult the usage risks and safety advice written on the label.
- In cases of application in closed areas, take measures for good ventilation.
- For enamel surfaces, cleaning should be short and should be followed by thorough wash immediately afterwards.
- Metallic tools or containers are not suitable for the application of CL-CLEAN.
- To avoid any danger of color fading, a test on a limited surface is recommended before extended application.





SM-12

Special solvent for epoxy systems

Description

SM-12 is a liquid mixture of solvents that is used as a tool cleaner in applications of a wide range of epoxy systems and other kinds of resins.

Fields of application

SM-12 is used in applications of epoxy coatings, paints etc.

Technical data	
transparent	

Density:

Color:

Directions for use

0.80 ka/lit

SM-12 is used undiluted for cleaning of tools from epoxy resin residues and mixed with water at ratios of up to 1:1 (by volume) for cleaning of tools from water-based paint residues.

Consumption

Consumption varies depending on the nature of the application.

Packaging

SM-12 is supplied in plastic containers of 5 lit.

Shelf-life - Storage

Shelf-life in sealed containers is 36 months, protected from high temperature (<+30°C).

Remarks

- Consult the safety advice and precautions written on the label and on the product's material safety data sheet.
- In cases of application in closed areas, measures for good ventilation should be taken.
- The product is classified as highly flammable and therefore smoking and use of flame should be avoided in the working area during use.

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SM-16 Special solvent for polyurethane coatings

Description

SM-16 is a solvent used for diluting (thinning) polyurethane coatings.

Fields of application

SM-16 is used for diluting the brushable polyurethane waterproofing membrane ISOFLEX-PU, especially when it is going to be applied by spraying, and also for cleaning the tools used for the application of ISOFLEX-PU. Furthermore SM-16 can clean the tools from epoxy coatings residues and can be used as a thinner for epoxy coatings.

Technical data

Color: transparent Density: 0,87 kg/l Directions for use

Directions for use

SM-16 is used for diluting polyurethane coatings when added in portions up to 10%.

Consumption

Consumption varies depending on the nature of the application.

Packaging

5 I containers.

Shelf-life - Storage

Shelf-life in sealed containers is 36 months, protected from high temperature (<+30°C).

Remarks

- When applying SM-16 in closed areas, care should be taken for proper ventilation.
- Smoking and use of flame should be avoided during application.
- Before use, read safety instructions on the product label.





FD-CLEAN

Oil and grease remover from concrete floors

Description

FD-CLEAN is a special liquid cleaning agent used for removing oil, grease and fat residues (e.g. lubricants, grease, animal and vegetable fat and oils, cheese-making products residues etc.) from concrete floors so that epoxy layers may be applied on them without adhesion problems. FD-CLEAN penetrates the pores of the concrete floor soaked with oil or fat residues and emulsifies them, so that they can be removed with water.

Fields of application

FD-CLEAN is used for removing lubricants and mineral oils from concrete floors in garages, repair shops, areas with machinery equipment etc. and for removing oil and fat residues from concrete floors in food-industries, fat products warehouses etc.

Technical data		
Form: Density:	colorless liquid 0.92 kg/lit	
	Directions for use	

First, the floor surface is cleaned from superficial dirt by using high-pressure and hightemperature water-blast. Subsequently the floor surface must be properly prepared e.g. by milling, shot blasting etc. so that the pores of the substrate are opened. FD-CLEAN is then spread on the floor and rubbed meticulously with a hard wire-brush in order to penetrate the substrate pores and emulsify the oil or fat that have soaked its surface.

After at least 30 minutes the emulsified oil or fat is removed from the pores by high-pressure and high-temperature water-blast.

Consumption

0,8-1,0 kg/m², depending on the absorptivity and the oil or grease burden of the substrate.

Packaging

FD-CLEAN is supplied in plastic containers of 4 kg and 18 kg.

Shelf-life - Storage

Shelf-life in sealed packages is 12 months, in areas protected from high temperature $(< +30^{\circ}C)$.

Remarks

- Consult the usage risks and safety advice written on the label.
- In cases of application in closed areas, measures should be taken for good ventilation.
- Smoking and use of flame should be avoided during application.

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CL-MOLD

Special antimold agent

Description

Special liquid with antifungal activity for both indoor and outdoor use. Cleans and disinfects surfaces from mold, bacteria and algae. It is odorless and friendly for the user and the environment.

Fields of application

It can be applied to painted surfaces affected by mold, but also proactively to prevent the growth of microorganisms on the surface of the paint, in areas with high humidity. It is very effective in surfaces such as walls, ceilings, natural stones, bricks, cement, swimming pools, etc. Furthermore, it can be used for decontamination of fungi and for maintaining the sanitary conditions in areas such as kitchens, restaurants, hotels, industries or food warehouses. bakeries, etc.

	Technical data	
Form :	liquid	
Color :	light blue	
Density :	1 kg/l	
pH :	6-7	

Directions for use

As a liquid for removing mold: CL-MOLD is applied undiluted to the surface affected by mold, bacteria or algae, with a cloth or sponge and is left to act for at least 24 hours. Then remove the mold residue with a sponge, rinse with clean water and allow to completely dry. Preventive use: Apply CL-MOLD onto the painted surfaces from time to time to ensure long term protection from the growth of microorganisms.

Disinfectant use: As a disinfectant liquid CL-MOLD is applied to surfaces diluted 1:10 with water.

Consumption

About 15-20 m² per litre, according to the surface absorption.

Packaging

Supplied on containers of 1I.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between +5°C and +35°C. Protect from direct sun exposure and frost.

Remarks

Consult the usage risks and safety advice written on the container.





CL-UNIVERSAL

General use cleaner

Description

General use cleaner.

Fields of application

CL-UNIVERSAL is used to dilute and remove stains of coffee, wine, oils, rease, nicotine, soot and other stains from tiles, marbles, granites, formicas etc. Suitable for domestic use (floors, walls, kitchen, cupboards-fitments) and for food industries, slaughterhouses, creameries etc.

Technical data

Form : liquid pH : 10-11

Directions for use

CL-UNIVERSAL is applied on the surface to be cleaned and is left to dilute the stain for a few minutes. Then the surface is brushed by a broom or a sponge and finally it is rinsed with plenty of water. For floor mopping it is diluted in a ratio of 50ml : 3I of water.

Consumption

15-20m²/l ,depending on kind of stains.

Packaging

Supplied on containers of 0,75 l, 5 l and 20 l.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

Remarks

- Consult the usage risks and safety advice written on the container.
- Irritating to eyes. Keep out of the reach of children. If swallowed, seek medical advice immediately and show this container or label.
- Avoid contact with eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Contains less than 5% of non ionic surfactants. Also contains methylchloroisothiazolinone, methylisothiazolinone and perfume.





CL-MARBLE

Cleaner for marbles and granites

Description

Special liquid cleaner for marbles and granites. CL-MARBLE removes the stains without affecting the shining of the marbles or granites.

Fields of application

CL-MARBLE is used to clean stains of coffee, wine, oils, nicotine, soot and other stains from marbles and granites. It does not contain acids and does not affect the sensitive surfaces.

Technical data	
Form :	liquid
pH :	6,5-7,5
	Directions for use

CL-MARBLE is applied undiluted on the surface with the stain and is left there until the stain has diluted and disappeared. It usually takes 24 hours until a stain is removed completely. During the application it might be needed to add some more quantity. For difficult stains repeat the same process.

Consumption

15-20m²/I, depending on kind of stains.

Packaging

Supplied on containers of 0,75 I, 5 I and 20 I.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between +5°C and +35°C. Protect from direct sun exposure and frost.

Remarks

- Consult the usage risks and safety advice written on the container.
- Harmful if swallowed. Risk of serious damage to eyes. Keep out of the reach of children. If swallowed, seek medical advice immediately and show this container or label. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 Wear eye/face protection.
- Contains more than 15% but less than 30% bleaching agent based on oxygen. Also contains methylchloroisothiazolinone, methylisothiazolinone and perfume.

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CL-INDUSTRY

Cleaner for industrial floorings

Description

Special liquid cleaner for industrial areas. CL-INDUSTRY is reccomended for high demmandly cleanings and for difficult stains.

Fields of application

CL-INDUSTRY is used to clean stains of oils, grease and other intense stains from tiles, concrete, epoxy-floorings, metallic surfaces etc. It is ideal for industrial areas due to its powerful action and effectiveness. It is also suitable for cleaning stains of grease and oils on areas such as kitchens, restaurants etc.

Technical data

Form : liquid pH : 10,4-11,4

Directions for use

CL-INDUSTRY is applied undiluted on the surface to be cleaned and is left to dilute the stain for a few minutes, then the surface is brushed by a broom or a sponge and finally it is rinsed with plenty of water. For floor mopping it is diluted in a ratio of 50ml : 3I of water.

Consumptior

15-20m²/I ,depending on kind of stains.

Packaging

Supplied on containers of 0,75 I, 5 I and 20 I.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

Remarks

- Consult the usage risks and safety advice written on the container.
- Risk of serious damage to eyes. Keep out of the reach of children. If swallowed, seek medical advice immediately and show this container or label. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eye/face protection.:
- Contains more than 5% of non ionic surfactants but less than 15%. Also contains methylchloroisothiazolinone, methylisothiazolinone and perfume.





CL-GROUT

Cleaner for tile grouts

Description

Special liquid cleaner for tile grouts. CI-GROUT cleans deeply. After cleaning the grouts are having their initial color and are not affected.

Fields of application

CL-GROUT is used to clean tile grouts from salts, dirt, fungi, stains of coffee, wine etc. Suitable for domestic use and for hospitals, restaurants, industrial areas etc.

	Technical data
Form :	liquid
pH :	< 2
	Directions for use

CL-GROUT is applied on the grouts undiluted or slightly diluted with water depending on the type of stain, afterwards it is being brushed with a sponge and finally the surface is rinsed with plenty of water. For difficult stains the application is repeated.

Consumption

15-20m²/I ,depending on kind of stains.

Packaging

Supplied on containers of 0,75 I, 5 I and 20 I.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between +5°C and +35°C. Protect from direct sun exposure and frost.

Remarks

- Consult the usage risks and safety advice written on the container.
- Causes burns. Keep locked up and out of the reach of children. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water. Wear suitable protective clothing, gloves and eye/face protection.
- Contains less than 5% of non ionic surfactants. Also contains methylchloroisothiazolinone, methylisothiazolinone and perfume. The product contains phosphoric acid.





CL-EPOXY FLOOR

Cleaner for epoxy floorings

Description

Special liquid cleaner for epoxy floorings. CL-EPOXY FLOOR cleans deeply the epoxy floorings without affecting their shining.

Fields of application

CL-EPOXY FLOOR is used to clean stains of oils, grease and other intense stains from epoxy floorings. It is ideal for any area with an epoxy flooring such as industries, parking lots etc. It is also suitable for cleaning stains of grease and oils on areas such as kitchens, restaurants etc.

	Technical data	
Form :	liquid	
pH :	10,4-11,4	

Directions for use

CL-EPOXY FLOOR is applied undilluted on the surface to be cleaned and is left to dilute the stain for a few minutes, then the surface is brushed by a broom or a sponge and finally it is rinsed with plenty of water. For floor mopping it is diluted in a ratio of 50ml : 3I of water.

Consumption

15-20m²/I ,depending on kind of stains.

Packaging

Supplied on containers of 0,75 I, 5 I and 20 I.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

Remarks

- Consult the usage risks and safety advice written on the container.
- Risk of serious damage to eyes. Keep out of the reach of children. If swallowed, seek medical advice immediately and show this container or label. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eye/face protection.
- Contains more than 15% but less than 30% bleaching agent based on oxygen Also contains methylchloroisothiazolinone, methylisothiazolinone and perfume.



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ISOMASTIC-A

Elastoplastic acrylic sealant

Description

ISOMASTIC-A is a single-component elastoplastic sealant without solvents based on acrylic resins, providing:

- Resistance to temperature fluctuations from -20°C to +70°C.
- Excellent bonding to a wide range of constructing materials.
- · Painting ability after hardening.
- Frost-resistance.

Fields of application

ISOMASTIC-A is suitable for sealing horizontal or vertical joints, at indoor or outdoor areas, on substrates like concrete, plaster, masonry, wood, stone etc. Also, used for sealing hairline cracks on plaster and joints between wooden or metallic frames and walls, sills etc. It is not affected by frost and it is appropriate for dimensional deformation of up to 8%. It should not be used in regularly walkable joints or joints permanently immersed in water (water-tanks or reservoirs) or on bituminous substrates.

Technical data

Basis:	acrylic polymers
Colors:	white, grey
Skin formation:	after 10-15 min
Hardening time:	8-10 days for 5mm thickness of sealing, depending on the ambient temperature
Hardness according to SHORE A:	25 ± 3

Directions for use

1. Substrate

The substrate must be free of dust, loose materials etc.

In case of sealing hairline cracks, they should be widened with a cutting tool (e.g. chisel) or a cutting-wheel at a width of at least 3 mm. The joint or widened crack should be cleaned with a paintbrush or a wire brush and then airblasted.

To avoid undesirable soiling at joint edges, a self-adhesive paper-tape is applied alongside the edges and then removed immediately after sealing the joint (before skin formation).

2. Application

Insert cartridge in the special gun and cut nozzle in a slant way so that as it does not fit into the joint but just touches and slides along the edges.

Silicon is applied by driving the cartridge alongside the joint axis at a 45° angle. While still fresh, silicone is leveled using a trowel.

Cleaning of tools:

Tools must be cleaned thoroughly with water whilst material is still fresh. If material is hardened, tools may be mechanically cleaned.

Consumption

- Joint 10mm x 10mm: 1 cartridge / 2,8 m of joint length.
- Joint 5mm x 5mm: 1 cartridge / 11,2 m of joint length.

Packaging

ISOMASTIC-A is supplied in 280 ml cartridges.

Shelf-life - Storage

18 months from date of production in dry, frostfree conditions.

Remarks

- Temperature during application must be at least +15°C.
- During the first few hours of hardening the sealant must be protected from moisture.
- ISOMASTIC-A is naturally harmless and therefore no special precautions are needed.





DOMOSIL

General purpose silicone sealant

Description

DOMOSIL is a general purpose silicone for highly demanding jobs, providing:

- Resistance to temperature fluctuations from -40°C to +160°C.
- Excellent bonding to any kind of non- porous building material.
- Great endurance to ageing.

Fields of application

DOMOSIL is suitable for sealing vertical and horizontal joints 3-40 mm wide on non-porous material surfaces such as glass, aluminium, porcelain (tiles etc) and non-porous ceramics, in indoor or outdoor areas.

Technical data	
Base:	silicone
Color:	transparent, white
Skin formation:	after 20-30 min
Maturation speed:	1,5-2,0 mm/day
Hardness according to SHORE A:	19 ± 2

Directions for use

1. Substrate

Substrate must be free of dust, loose particles, grease etc. It is advisable that the joint is cleaned up using a paintbrush or a wire brush and then air-blasted.

To avoid undesirable soiling at joint edges, a self-adhesive paper-tape is applied alongside the edges and then removed immediately after sealing the joint (before skin formation).

2. Application

Insert cartridge in the special gun and cut nozzle in a slant way so that as it does not fit into the joint but just touches and slides along the edges.

Silicon is applied by driving the cartridge alongside the joint axis at a 45° angle. While still fresh, silicone is leveled using a trowel or by finger.

Cleaning of tools:

Tools must be cleaned thoroughly with water whilst material is still fresh. If material is hardened, tools may be mechanically cleaned.

Consumption

- Joint 10mm x 10mm: 1 cartridge / 3 m of joint length.
- Joint 5mm x 5mm: 1 cartridge / 12 m of joint length.

Packaging

Cartridges of 280 ml.

Shelf-life - Storage

Shelf-life is at least 12 months, in dry and frost-free conditions.

Remarks

• Ambient temperature during application must be between -10°C and +60°C.





DOMOSIL-S

Mildew-resistant silicone sealant

Description

DOMOSIL-S is a mildew-resistant silicone for highly demanding jobs, providing:

- High mechanical resistance.
- Resistance to temperature fluctuations from -60°C to +220°C.
- Excellent bonding to any kind of non porous building material.
- Great endurance to ageing.
- Prevention of mildew and fungi growth.

Fields of application

DOMOSIL-S is suitable for sealing vertical and horizontal joints 3-40 mm wide on non-porous material surfaces such as glass, aluminium, porcelain (tiles etc) and non-porous ceramics, in indoor or outdoor areas.

It is applied in high humidity areas (kitchens, bathrooms etc) as well as hospitals, biology and microbiology labs etc.

It prevents the growth of mildew or fungi, which cause black spots and stains in such areas. It is not recommended for use in aquariums because of the fungicide it contains.

Technical data

Base:	silicone
Color:	transparent, white
Skin formation:	after 10-15 min
Maturation speed:	2,0-2,5 mm/day
Hardness according to SHORE A:	19 ± 2

Directions for use

1. Substrate

Substrate must be free of dust, loose particles, grease etc. It is advisable that the joint is cleaned up using a paintbrush or a wire brush and then air-blasted.

To avoid undesirable soiling at joint edges, a selfadhesive paper-tape is applied alongside the edges and then removed immediately after sealing the joint (before skin formation).

2. Application

Insert cartridge in the special gun and cut nozzle in a slant way so that as it does not fit into the joint but just touches and slides along the edges.

Silicone is applied by driving the cartridge alongside the joint axis at a 45° angle. While still fresh, silicone is leveled using a trowel or by finger.

Cleaning of tools:

Tools must be cleaned thoroughly with water whilst material is still fresh. If material is hardened, tools may be mechanically cleaned.

Consumption

- Joint 10mm x 10mm: 1 cartridge / 3 m of joint length.
- Joint 5mm x 5mm: 1 cartridge / 12 m of joint length.

Packaging

Cartridges of 280 ml.

Shelf-life - Storage

Shelf-life is at least 12 months, in dry and frostfree conditions.

Remarks

• Ambient temperature during application must be between -10°C and +60°C.





DOMOSIL-MICRO

High performance anti-mould silicone sealant

Description

DOMOSIL-MICRO is a high performance, antimould, acetic silicone with built in Microban technology, providing:

- Prevention of mildew and fungi growth.
- Resistance to temperature fluctuations from -40°C to +120°C.
- Excellent bonding to any kind of building material.
- Great endurance to ageing and water.
- High mechanical resistance.

Fields of application

DOMOSIL-MICRO is suitable for sealing joints 3-40mm wide on materials such as glass, aluminium, non-porous ceramics, porcelain (tiles, sanitary products etc). It is applied in high humidity areas (kitchens, bathrooms etc). With normal cleaning practises DOMOSIL-MICRO remains stable even after 10 years. It is not recommended for use in aquariums because of the fungicide it contains and cannot be overpainted.

Technical data

Base:	silicone
Color:	transparent, white
Skin formation:	after 20-25 min
Maturation speed:	1,0-2,0 mm/day
Hardness according to SHORE A:	18 ± 2

Admissible joint movement :	25%
Elongation at break (%) DIN 53504	550%

Directions for use

1. Substrate

Substrate must be free of dust, loose particles, grease etc. It is advisable that the joint is cleaned up using a paintbrush or a wire brush and then air-blasted.

To avoid undesirable soiling at joint edges, a self-adhesive paper-tape is applied alongside the edges and then removed immediately after sealing the joint (before skin formation).

2. Application

Insert cartridge in the special gun and cut nozzle in a slant way so that as it does not fit into the joint but just touches and slides along the edges.

Silicon is applied by driving the cartridge alongside the joint axis at a 45° angle. While still fresh, silicone is leveled using a trowel or by finger.

Cleaning of tools:

Tools must be cleaned thoroughly with water whilst material is still fresh. If material is hardened, tools may be mechanically cleaned.

Consumption

- Joint 10mm x 10mm: 1 cartridge / 3 m of joint length.
- Joint 5mm x 5mm: 1 cartridge / 12 m of joint length.

Packaging

Cartridge of 280 ml.

Shelf-life - Storage

Shelf-life is at least 12 months, in dry and frostfree conditions.

Remarks

- Ambient temperature during application must be between -10°C and +40°C.
- Maturation speed of DOMOSIL-MICRO depends on the environmental conditions.
- Microban[®] is a registered trademark of Microban Products Company.





DOMOSIL-POOL

Silicone sealant for permanent water immersion

Description

DOMOSIL-POOL is an acetic silicone for permanent water immersion (swimming pools, aquariums etc), providing:

- · High mechanical resistance and deformability.
- Resistance to temperature fluctuations from -50°C to +200°C.
- · Excellent bonding to any kind of building material.
- · Great endurance to ageing and water.

Fields of application

DOMOSIL-POOL is appropriate for sealing vertical and horizontal joints 3-40mm wide, for indoor and outdoor applications. It has very good adhesion on surfaces such as glass, porcelain (tiles, sanitary products), aluminium etc. Suitable for sealing joints on aquariums, boats, glass-structures etc. It cannot be overpainted.

Technica	l data
Base:	silicone
Application temperature:	from +5 °C to +40 °C
Color:	transparent
Skin formation:	after 7 min (23°C, 50% R.H)
Maturation speed:	4,5 mm/1 st - day 10 mm/ 7 days
Hardness according to SHORE A:	23
Admissible joint movement :	25%
Elongation at break (%) DIN 53504:	550%

Directions for use

1. Substrate

Substrate must be free of dust, loose particles, grease etc. It is advisable that the joint is cleaned up using a paintbrush or a wire brush and then air-blasted.

To avoid undesirable soiling at joint edges, a self-adhesive paper-tape is applied alongside the edges and then removed immediately after sealing the joint (before skin formation).

2. Application

Insert cartridge in the special gun and cut nozzle in a slant way so that as it does not fit into the joint but just touches and slides along the edges.

Silicon is applied by driving the cartridge alongside the joint axis at a 45° angle. While still fresh, silicone is leveled using a trowel or by finger.

Cleaning of tools:

Cartridges of 280 ml.

Tools must be cleaned thoroughly with water whilst material is still fresh. If material is hardened, tools may be mechanically cleaned.

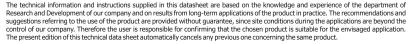
Consumption

- Joint 10mm x 10mm: 1 cartridge / 3 m of joint length.
 Joint 5mm x 5mm:
- 1 cartridge / 12 m of joint length.

Packaging

Shelf-life - Storage

Shelf-life is 12 months, in dry and frost-free conditions.





4 5



FLEX PU-20

Solvent free polyurethane construction joint sealant

Description

FLEX PU-20 is an one component, solvent-free polyurethane sealing mastic, providing:

- Resistance to temperature fluctuations from -40°C to +80°C.
- Excellent bonding to any kind of building material.
- High elasticity.
- Great endurance to ageing and weather.
- · Painting ability after hardening.

Fields of application

FLEX PU-20 is suitable for sealing vertical and horizontal joints, indoor or outdoor, on various materials like concrete aluminium, steel, wood, glass, natural and synthetic stones etc.

Technical data

Base:	polyurethane
Color:	grey
Application temperature:	from +5°C to +35°C
Skin formation:	after 100-120 min
Maturation speed:	3 mm/day
Admissible joint movement:	25%
Elastic recovery:	approx. 90%
Hardness according to SHORE A:	15-20

Directions for use

1. Substrate

Substrate must be free of dust, loose particles, grease etc. It is recommended that the joint is cleaned up by using a paintbrush or a wire brush and then air-blasted.

To avoid undesirable soiling at joint edges, a self-adhesive paper-tape is applied alongside the edges and then removed immediately after sealing the joint (before skin formation).

2. Application

Insert cartridge in the special gun and cut nozzle in a slant way so that as it does not fit into the joint but just touches and slides along the edges.

FLEX PU-20 is applied by driving the cartridge alongside the joint axis at a 45° angle. While still fresh, the mastic is leveled using a trowel.

Cleaning of tools:

Tools must be cleaned thoroughly with common solvents while material is still fresh. If material is hardened, tools may be mechanically cleaned.

Consumption

- Joint 10mm x 10mm: 1 cartridge / 3 m of joint length.
- Joint 5mm x 5mm: 1 cartridge / 12 m of joint length.

Packaging

- Cartridges of 310 ml.
- Sausages of 600 ml.

Shelf-life - Storage

Shelf-life is 12 months, in dry and frost-free conditions.

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FLEX PU-40

Solvent free polyurethane adhesive and sealant

Description

FLEX PU-40 is an one component, solvent-free polyurethane sealing mastic, providing:

- Resistance to temperature fluctuations from -40°C to +80°C.
- Excellent bonding to any kind of building material.
- High elasticity.
- Great endurance to ageing and weather.
- Painting ability after hardening.

Fields of application

FLEX PU-40 is suitable for sealing vertical and horizontal joints, indoor or outdoor, on various materials like concrete aluminium, steel, wood, glass, natural and synthetic stones etc. Also suitable for bonding these materials.

Technical data

Base:	polyurethane
Colors:	white, grey, brown
Application temperature:	from +5°C to +35°C
Skin formation:	after 70 min
Maturation speed:	4 mm/day
Elastic recovery:	approx. 80%
Hardness according to SHORE A:	35-40

Directions for use

1. Substrate

Substrate must be free of dust, loose particles, grease etc. It is recommended that the joint is cleaned up by using a paintbrush or a wire brush and then air-blasted.

To avoid undesirable soiling at joint edges, a self-adhesive paper-tape is applied alongside the edges and then removed immediately after sealing the joint (before skin formation).

2. Application

Insert cartridge in the special gun and cut nozzle in a slant way so that as it does not fit into the joint but just touches and slides along the edges.

FLEX PU-40 is applied by driving the cartridge alongside the joint axis at a 45[°] angle. While still fresh, the mastic is leveled using a trowel.

Cleaning of tools:

Tools must be cleaned thoroughly with common solvents while material is still fresh. If material is hardened, tools may be mechanically cleaned.

Consumption

- Joint 10mm x 10mm: 1 cartridge / 3 m of joint length.
- Joint 5mm x 5mm: 1 cartridge / 12 m of joint length.

Packaging

- Cartridges of 310 ml.
- Sausages of 600 ml.

Shelf-life - Storage

Shelf-life is 12 months, in dry and frost-free conditions.





FLEX PU-30 S

Polyurethane construction joint sealant, with solvents

Description

FLEX PU-30 S is an one component, polyurethane sealing mastic, with solvents, providing:

- Resistance to temperature fluctuations from -20°C to +90°C.
- Excellent bonding to any kind of building material.
- High elasticity.
- Great endurance to ageing (U.V radiation and weather).
- Painting ability after hardening only with water soluble paints.

Fields of application

FLEX PU-30 S is suitable for sealing vertical and horizontal joints 5-50mm thick, indoor or outdoor, on various materials like concrete, aluminium, steel, wood, glass, natural and synthetic stones etc.

Technical data

Base:	polyurethane
Color:	grey, white
Application temperature:	from +5°C to +40°C
Skin formation:	after 120-140 min
Maturation speed:	2-3 mm/day
Admissible joint movement:	± 25%
Elastic recovery:	approx. 90%
Hardness according to SHORE A:	30 ± 3
Tensile strength (ISO 8339):	0.82 N/mm ²
Modulus at 100% elongation (ISO 8339):	0.41 N/mm ²
Elongation at break: (ISO 8339)	450%

Directions for use

1. Substrate

Substrate must be dry and free of dust, loose particles, grease etc. It is recommended that the joint is cleaned up by using a paintbrush or a wire brush and then air-blasted. To avoid undesirable soiling at joint edges, a self-adhesive paper-tape is applied alongside the edges and then removed immediately after sealing the joint (before skin formation).

2. Application

Insert cartridge in the special gun and cut nozzle in a slant way so that as it does not fit into the joint but just touches and slides along the edges. FLEX PU-30 S is applied by driving the cartridge alongside the joint axis at a 45° angle. While still fresh, the mastic is leveled using a trowel.

Cleaning of tools:

Tools must be cleaned thoroughly with common solvents while material is still fresh. If material is hardened, tools may be mechanically cleaned.

Consumption

- Joint 10mm x 10mm: 1 cartridge / 3 m of joint length.
 Joint 5mm x 5mm:
 - 1 cartridge / 12 m of joint length.

Packaging

- Cartridges of 300 ml.
- Sausages of 600 ml.

Shelf-life - Storage

Shelf-life is 12 months, in dry and frost-free conditions.

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4.5



FLEX PU-50 S

Polyurethane adhesive and sealant, with solvents

Description

FLEX PU-50 S is an one component, polyurethane adhesive and sealing mastic, with solvents, providing:

- Resistance to temperature fluctuations from -20°C to +90°C.
- Excellent bonding to any kind of building material. High elasticity.
- Great endurance to ageing (U.V radiation and weather).
- Painting ability after hardening only with water soluble paints.

Fields of application

FLEX PU-50 S is suitable for sealing vertical and horizontal joints 5-30mm thick, indoor or outdoor, on various materials like concrete aluminium, steel, wood, glass, natural and synthetic stones etc. Also suitable for bonding these materials.

Technical data

Base:	polyurethane
Color:	grey, white
Application temperature:	from +5°C to +40°C
Skin formation:	after 35-40 min
Maturation speed:	4 mm/day
Elastic recovery:	approx. 90%
Hardness according to SHORE A:	50 ± 3
Tensile strength (ISO 8339):	3 N/mm²
Modulus at 100% elongation (ISO 8339):	1.4 N/mm ²
Elongation at break: (ISO 8339)	350%

Directions for use

1. Substrate

Substrate must be dry and free of dust, loose particles, grease etc. It is recommended that the joint is cleaned up by using a paintbrush or a wire brush and then air-blasted. To avoid undesirable soiling at joint edges, a

self-adhesive paper-tape is applied alongside the edges and then removed immediately after sealing the joint (before skin formation).

2. Application

Insert cartridge in the special gun and cut nozzle in a slant way so that as it does not fit into the joint but just touches and slides along the edges. FLEX PU-50 S is applied by driving the cartridge alongside the joint axis at a 45° angle. While still fresh, the mastic is leveled using a trowel.

Cleaning of tools:

Tools must be cleaned thoroughly with common solvents while material is still fresh. If material is hardened, tools may be mechanically cleaned.

Consumption

- Joint 10mm x 10mm:
 1 cartridge / 3 m of joint length.
- Joint 5mm x 5mm: 1 cartridge / 12 m of joint length.

Packaging

- Cartridges of 300 ml.
- Sausages of 600 ml.

Shelf-life - Storage

Shelf-life is 9 months, in dry and frost-free conditions.

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FLEX PU-2K

Two component, polyurethane joint sealant

Description

FLEX PU-2K is a two component joint sealant based on polyurethane resins. When mixed, the two components are vulcanised to an elastic and cohesive mass.

The sealant has excellent UV resistance and thermostability (it contains UV stabilizers and antioxidants).

Available in two types:

- FLEX PU-2KV for vertical surfaces
- FLEX PU-2KH for horizontal surfaces

Fields of application

FLEX PU-2K is suitable for sealing vertical and horizontal concrete joints in buildings, civil engineer and hydraulic (irrigation and water supply) works (canals, tanks, etc.).

Technical data

Uncured Sealant	
Density at +23°C:	1,45 gr/cm ³
Application temperature:	+5°C - +35°C
Pot life:	25-60 min
Vulcanization rate:	1-2 days
Cured Sealant	
Tension at 100% extension (DIN EN 28339):	15-20 N/cm ²
Tensile strength at break (DIN EN 28339):	35-45 N/cm ²
Elongation at break point (DIN EN 28339):	400-450%
Hardness (Shore A) :	14-18
Movement Capability:	+/- 25%
Recovery 100% extension:	90%

Directions for use

1. Preparation

• It is recommended that the minimum joint width should be no less than 1-1,5 cm and

1. Preparation

- It is recommended that the minimum joint width should be no less than 1-1,5 cm and the maximum no more than 5 cm. However, it can be used in applications where the joint width reaches 8 cm. The sealing depth can be adjusted to the 50% of the joint width, but the minimum limit is 1,5 cm.
- The joint walls need to be thoroughly cleaned from loose particles, dust etc by blowing with compressed air and primed with PRIMER V.
- The depth of the sealing is regulated, when necessary, with CELLUFILL (backing rod from expanded polyethylene).

2. Sealing

- The two components, packaged at a certain dosimetric rate, need to be thoroughly mixed with the use of a proper mixer, e.g. a helical one attached to a drill. The mixing must be continuous until the complete homogenisation of the mixture.
- The mixed sealant is applied into the joint by means of a special gun or a spatula (for minor applications).
- The surface of the uncured sealant is smoothed with a spatula, so as to form a slightly negative crescent.

Consumption

1,45 kg/l of joint volume

Packaging

FLEX PU 2K is supplied in packages (A+B) of 5 kg, with components A and B having the fixed weight proportion.

Shelf-life - Storage

Shelf-life is 6 months, in dry and frost-free conditions.

Remarks

Rain, as well as temperatures under 5°C or over 35°C during the application, must be avoided.





FLEX MS-45

Elastomeric adhesive and sealant

Description

One-component, elastomeric adhesive and sealant, based on hybrid polymeric resins.

- Resistance to temperature fluctuations from 40° C to +90°C.
- Excellent bonding to any kind of building material.
- High elasticity.
- Great endurance to ageing and weather.
- Adheres even to wet substrates even without primer.
- It prevents from fungi growth.
- Painting ability after hardening.

Fields of application

FLEX MS-45 is suitable for sealing vertical and horizontal joints 3-40mm wide, indoor or outdoor, on materials like glass, aluminium, wood, granite, marble, PVC etc. Also suitable for elastic bonding on various substrates.It is not recommended for joints immersed into water or in direct contact with food products.

Technical data

Base:	hybrid polymeric resins
olor:	grey, redbrown
Application temperature:	from +5°C to +40°C
Skin formation:	after 30-45 min
Maturation speed:	4 mm/day
Joint movement capability:	± 25%
Elastic recovery:	approx. 95%
Hardness according to SHORE A:	35-40
Elongation at break: (ISO 8339)	500%

Directions for use

1.Substrate

Substrate must be free of dust, loose particles, grease etc. It is recommended that the joint is cleaned up by using a paintbrush or a wire brush and then air-blasted.

To avoid undesirable soiling at joint edges, a self-adhesive paper-tape is applied alongside the edges and then removed immediately after sealing the joint (before skin formation).

2. Application

Insert cartridge in the special gun and cut nozzle in a slant way so that as it does not fit into the joint but just touches and slides along the edges. FLEX MS-45 is applied by driving the cartridge alongside the joint axis at a 45° angle. While still fresh, the mastic is levelled using a trowel.

Cleaning of tools:

Tools must be cleaned thoroughly with common solvents while material is still fresh. If material is hardened, tools may be mechanically cleaned.

Consumption

Indicative consumption: 1 cartridge /10 linear meters.

Packaging

Cartridges of 280 ml.

Shelf-life - Storage

Shelf-life is 12 months from production date in dry and frost-free conditions.





ELASTOTAN

Elastomeric adhesive sealant

Description

ELASTOTAN is an one component, elastomeric adhesive sealant, providing:

- Resistance to temperature fluctuations from -50°C to +150°C.
- Excellent bonding to any kind of building material.
- High elasticity.
- Great endurance to ageing and weather.

Fields of application

ELASTOTAN is suitable for sealing vertical and horizontal joints 3-50 mm wide on various material surfaces such as glass, aluminium, wood, etc. in indoor or outdoor areas. It is not recommended for use in aquariums or swimming pools.

Technical	data
Colors:	white, grey
Application temperature:	from +5°C to +40°C
Skin formation:	after 15-30 min
Maturation speed:	2-3 mm/day
Joint movement capability:	25%
Elastic recovery:	approx. 95%
Hardness according to SHORE A:	approx. 20

Directions for use

1. Substrate

Substrate must be free of dust, loose particles, grease etc. It is recommended that the joint is cleaned up by using a paintbrush or a wire brush and then air-blasted.

To avoid undesirable soiling at joint edges, a self-adhesive paper-tape is applied alongside the edges and then removed immediately after sealing the joint (before skin formation).

2. Application

Insert cartridge in the special gun and cut nozzle in a slant way so that as it does not fit into the joint but just touches and slides along the edges.

ELASTOTAN is applied by driving the cartridge alongside the joint axis at a 45° angle. While still fresh, the mastic is leveled using a trowel.

Cleaning of tools:

Tools must be cleaned thoroughly with common solvents while material is still fresh. If material is hardened, tools may be mechanically cleaned.

Consumption

- Joint 10mm x 10mm: 1 cartridge / 2,8 m of joint length.
- Joint 5mm x 5mm: 1 cartridge / 11,2 m of joint length.

Packaging

- Cartridges of 280 ml.
- Sausages of 600 ml.

Shelf-life - Storage

Shelf-life is 12 months, in dry and frost-free conditions.

Remarks

ELASTOTAN should not be applied on materials that lead oils.

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4.5



TIXOPHALTE

Elastoplastic and adhesive bituminous mastic sealant

Description

TIXOPHALTE is a plasto-elastic, neutral hardening mastic, based on a (thixotropic) high-quality modified bitumen/rubber composition and contains additives, filler and a non flammable solvent. Adheres and seals under many different conditions. Sticks to wet substrate (even under water). Sticks to most plastics, e.g. polyethylene.

Fields of application

- Roof-Terraces: Adhesives for all types of roofing felts; including SBS and APP bitumen modified membranes. Waterproof finishing of overlaps, connections and joints of roof edges, chimneys, light domes and bushings for exhaust pipes. Fixing rain water drain systems onto the roof.
- Constructions: Suitable for sealing vertical and horizontal joints, on various materials like concrete, brick or steel. Also suitable for the adhesion of common building materials.
- Hydraulic applications: For waterproofing cracks and joints in waterways, canals, dams, bridges and reservoirs taking advantage of its unique wet-weather and underwater properties.

Technical data

Form:	plasto elastic, neutral hardening mastic
Color:	black
Specific gravity:	1,38 kg/lit at +20°C
Curing time:	1-10 days, depending on substrate
Skin forming after flow resistance (14 days, 1.5mm):	30 min

Dripping point: + 200°C Stable at -35 to +110°C depending on load conditions.

Directions for use

1. Substrate

A clean, dry and dust free substrate is recommended. For special applications and/or on wet substrates an adhesion test is advised.

2. Application

TIXOPHALTE can be applied with a hand gun or a compressed airgun. Using the cartridge, the aluminium seal in the front screw spout has to be cut slantwise so that it has the size of the desired band of TIXOPHALTE. A clean spout is important for a uniform dose and a smooth finish. In order to obtain adequate adhesion on a wet substrate, it is important that the distance between substrate and spout is as small as possible and not more than 3 mm, so that the initial adhesion is obtained by displacing the water. When compressed-air guns are used (for the sausage-packing) the piston and the cylinder have to be greased properly. TIXOPHALTE must be applied in strips or spot wise, so that the solvent is able to evaporate easily. Ensure that there is adequate ventilation during use. The open time and hardening rate are influenced by factors such as temperature, type of substrate, absorbency behavior of the materials and the applied layer thickness of TIXOPHALTE. Immediately after applying TIXOPHALTE, the adhesion is sufficient to resist a low load. Maximum strength is obtained after curing by evaporation of the solvent. The final adhesive strength is strongly dependant on the type and nature of the bond. TIXOPHALTE can be removed with tools, such as a palette knife. Any residue can be cleaned by dissolving in a solvent (e.g special solvent SM-12)



TIXOPHALTE

Consumption

Approximately 1,4 kg/lit of joint volume.

Packaging

- Cartridges of 310 ml.
- Sausages of 1,4 lit.

Shelf-life - Storage

Storage life is 36 months in unopened packing, 12 months in opened. TIXOPHALTE should not be stored in direct sunlight or near a source of heat.

Remarks

- Contact with mineral oil (gasoline, kerosine, gas oil) softens the product.
- TIXOPHALTE does not tolerate solvent based paint.
- Ambient temperature during application is recommended to be between +5°C and +40°C.





ISOMAT PU-FOAM

One-component polyurethane foam

Description

One-component, self-expanding polyurethane foam which cures by reacting with moisture in the air. It expands twice the original volume. ISOMAT PU-FOAM offers:

- Excellent adhesion to most common materials
- High thermal and sound insulation
- · Endurance to moisture
- · Great endurance to ageing

Fields of application

ISOMAT PU-FOAM has an excellent adhesion on wood, cement, stone, metal etc. It is used for fixing door and window frames, filling holes, sealing voids on insulating materials, over pipe penetrations trough walls etc.

Technical data		
Base:	polyurethane	
Color:	yellow	
Density:	23-35 kg/m ³	
Service temperature limits of cured foam:	-55°C έως +100°C	
Skin formation:	7-8 min (20°C, R.H >30%)	
Curing time:	1h / 93% R.H,	
	18 h / RH, max 24h	
Reaction to fire (DIN 4102):	В3	
Shear strength:	> 3N/cm ²	

Directions for use

1. Substrate

Substrate must be clean and free of dust, loose particles, grease etc. Slightly dampening of the surface with water improves the temporary adhesion of foam during the application.

2. Application

Before use, shake well. Remove the lid and fix tightly the plastic nozzle. During processing the can must be held inverted with the valve in bottom position. The flow of the foam is adjusted by pressuring the valve. Care must be taken not to overfill the joints as the foam will expand after the application 2-2,5 times. In order to stop the expansion of the fresh foam, it can be after the application sprayed with water.

Consumption

One can provides up to 45 l of cured foam but the exact volume depends on temperature, relative humidity, space available for expansion etc.

Packaging

Cans of 750 ml

Shelf-life - Storage

12 months from production date if stored in frost-free and not high temperature conditions.

Remarks

- Minimum application temperature is +5 °C.
- It should not be stored in temperatures above +50°C. For longer shelf-life storage temperatures above +25 °C and under -5 °C must be avoided.
- The surface to be applied may be wet but not frozen.
- Before use the cans must be remain in normal temperature conditions for at least 12 hours.
- Cured foam should be protected from UV radiation.
- Fresh foam can be cleaned using a special cleaner. The cleaner just softens the foam. Once cured the foam is cleaned only by mechanical means.
- Always stored in upright position.
- Consult the safety advice and precautions written on the packaging.

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4 5



ISOMAT PU-FOAM PROFESSIONAL

One-component, low expansion polyurethane foam

Description

One-component, self-expanding, low expansion polyurethane foam which cures by reacting with moisture in the air. ISOMAT PU-FOAM PROFESSIONAL offers:

- Excellent adhesion to most common materials.
- · High thermal and sound insulation.
- Endurance to moisture.
- Great endurance to ageing.

Fields of application

ISOMAT PU-FOAM PROFESSIONAL has an excellent adhesion on wood, cement, stone, metal etc. It is used for fixing door and window frames, filling holes, sealing voids on insulating materials, over pipe penetrations trough walls etc.

Technical data

Base:	polyurethane
Color:	yellow
Density:	18-20 kg/m ³
Service temperature limits of cured foam:	-55°C έως +100°C
Skin formation:	7-8 min (20°C, R.H >30%)
Curing time:	1h / 93% R.H, 18 h / 15%RH, max 24h
Reaction to fire (DIN 4102):	B3
Shear strength:	0,07Mpa

Directions for use

1. Substrate

Substrate must be clean and free of dust, loose particles, grease etc. Slightly dampening of the surface with water improves the temporary adhesion of foam during the application.

2. Application

Before use, shake well. Remove the lid and fix tightly the can to the special gun. During processing the can must be held inverted with the special gun in bottom position. Care must be taken not to overfill the joints as the foam will expand.

Consumption

One can provides up to 40-45 l of cured foam but the exact volume depends on temperature, relative humidity, space available for expansion etc.

Packaging

Cans of 750 ml

Shelf-life - Storage

12 months from production date if stored in frost-free and not high temperature conditions.

Remarks

- Minimum application temperature is +5 °C.
- It should not be stored in temperatures above +50°C. For longer shelf-life storage temperatures above +25 °C and under -5 °C must be avoided.
- The surface to be applied may be wet but not frozen.
- Before use the cans must be remain in normal temperature conditions for at least 12 hours.
- Cured foam should be protected from UV radiation.
- Fresh foam can be cleaned using a special cleaner. The cleaner just softens the foam. Once cured the foam is cleaned only by mechanical means.
- Always stored in upright position.
- Consult the safety advice and precautions written on the packaging.





ASPHALTOS

Cold asphalt mix for instant road repair

Description

Ready to use, cold asphalt mixture for patching small potholes on asphalt or concrete pavements. It enables high flexibility, without being cracked due to contraction-expansion effects. It has superb adhesion to the substrate and doesn't get damaged by car tires. It features high resistance to weather conditions and aging. It ensures simple application without the need of substrate's preparation and without the requirement of any special equipment. The pavement can be opened to traffic immediately.

Fields of application

Suitable for the fast restoration of small damages (potholes, cracks etc.) on asphalt or concrete pavements. Ideal for local repairs on highways, country roads, streets, bridge decks, parking lots as well as on yards of industries, schools, hospitals etc.

Technical data		
Form:	cold asphalt mix	
Color:	black	
Density:	1,75 kg/lit	
Density of compressed mixture:	2,10 kg/lit	
Application temperature:	from -40°C to +60°C	

Directions for use

1. Substrate

The area which will be restored must be clean, free of dust, grease, loose particles etc., especially at its perimeter. Also it must be free of standing water. In case the depth of the repair exceeds 10 cm, it is recommended sand and gravel to be spread and to be compacted thoroughly.

2. Application

The repair mixture is ready to use and it does not need agitation or stirring. The pothole is filled with the asphalt mixture so as to exceed 1-2 cm above the pavement's level. Then, the product is properly compacted with a shovel, a roller or even with the tires of a car. Repaired pavement can be reopened to traffic immediately.

Consumption

Approx. 21 kg/m²/cm of layer thickness.

Packaging

ASPHALTOS is supplied in plastic containers of 25 kg.

Shelf-life - Storage

12 months from production date in sealed containers, in dry, frost-free and sun-free conditions.

Remarks

The product can be applied under any weather conditions except in case of rain.





Bituminous mastic

Description

Bituminous sealing mastic with excellent adhesion ability and great elasticity even at very low temperatures.

Fields of application

It is used for sealing joints on horizontal and vertical surfaces, for sealing/bridging hairline cracks, difficult points during application of bituminous membranes (gutters, joints, parapet finishings etc). Also used for repairing bituminous layers.

Technical data

Form:	viscous, gluey
Color:	black
Specific weight:	1,40 kg/lit
Distilled residue:	80-85%

Cleaning of tools:

Tools must be cleaned thoroughly immediately after use with petrol or a solvent.

Directions for use

ISOMAC is cold-applied with a trowel as it is. For lengthy horizontal joints it may be diluted with petrol and applied by injecting directly from the container.

Mastic starts to settle after 24 hours. Loss of mass, occurring as a result of solvent evaporation, is supplemented by the same material the day after the initial application.

Consumption

1,2-1,3 kg/lit.

Packaging

5 kg and 20 kg tin buckets.

Shelf-life - Storage

12 months from the date of production in sealed containers, in cool, dry and frost-free conditions.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory g, type SB is 350g/l (2010) for the ready to use product. The ready to use product ISOMAC contains max <350 g/l VOC.





5. PREMIXED PLASTERS





MARMOCRET-BOND

Mortar for bonding spatterdash of plaster

Description

MARMOCRET-BOND is a pre-mixed, cementbased mortar, that needs only the addition of water. MARMOCRET-BOND offers:

- Excellent adhesion to the substrate
- · Excellent workability.
- Simplification and acceleration of application.
- Ideal for application with plastering machine.
- Stable standardized properties.
- Suitable for indoor and outdoor applications.

It is classified as type GP CS IV, W1 mortar according to EN 998-1.

Fields of application

MARMOCRET-BOND is used to create the bonding spatterdash (rough cast) on concrete, masonry, thermo-insulation boards etc. for adhesion enhancement of the plaster that follows.

Technical data		
Form:	cementitious powder	
Color:	grey	
Particle size:	up to 3 mm	
Water demand:	4,50 l/25 kg bag	
Bulk density of dry mortar: Bulk density	1,65 \pm 0,10 kg/lit	
of fresh mortar:	1,90 \pm 0,10 kg/lit	
Compressive strength:	$13,\!00\pm2,\!00\;N/mm^{2}$	
Flexural strength:	$5{,}00\pm0{,}50N/mm^2$	
Adhesive strength:	0,60 N/mm ²	
Capillary water absorption: Thermal conductivity	\leq 0,4 kg/m ² min ^{0.5}	
coefficient ($\lambda_{10,dy}$):	\leq 0,71 W/(mK) for P=50% \leq 0,80 W/(mK) for P=90%	

Water-vapor diffusion coefficient (u): 15/35 Pot life:

3 h at +20°C

Directions for use

1. Substrate

The substrate must be free of dust, oilv or loose materials etc. and should be thoroughly dampened, before the application of MARMOCRET-BOND.

2. Application

MARMOCRET-BOND is added into water under continuous stirring, until a mortar with the required workability is formed. The mortar is applied with a plastering machine or by hand using a trowel.

The basic layer of plaster follows 1-2 days after the MARMOCRET-BOND application.

Consumption

Approx. 5 kg/m².

Packaging

MARMOCRET-BOND is supplied in 25 kg paper bags.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C
- MARMOCRET-BOND contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on.



5.1

CEMENT-BASED PLASTERS

MARMOGRET-BOND

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ISOMAT S.A.
17 th km Thessaloniki - Ag. Athanasios,
P.O. BOX 1043, 570 03 Ag. Athanasios, Greece
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05
EN 998-1 General purpose rendering mortar (GP) for external use
Reaction to fire: Class A1
Adhesion: 0,6 N/mm ² - FP: B
Water absorption: W1
Water vapour diffusion coeff.: µ 15/35

Water vapour diffusion coeff.: μ 15/35 Thermal conductivity: ($\lambda_{10,dry}$) 0,71 W/mK Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar





MARMOCRET-BASE

Base layer plaster

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MARMOCRET-BASE is a pre-mixed, cementbased plaster, that needs only the addition of water. MARMOCRET-BASE offers:

- High adhesion to the substrate.
- · Excellent workability.
- Simplification and acceleration of application.
- Ideal for application with plastering machine.
- Stable standardized properties.
- Excellent vapor permeability of the construction.
- · Suitable for indoor and outdoor applications.

It is classified as type GP CS II, W0 mortar according to EN 998-1.

Fields of application

MARMOCRET-BASE is used to create the "basic layer" of plaster.

It constitutes the ideal substrate for the subsequent final coat (finishing coat) of plaster when MARMOCRET or MARMOCRET PLUS premixed, colored, water-repellent finish coat plasters are used.

Technical data

Form:	cementitious powder
Color:	grey
Particle size:	up to 1,3 mm
Water demand:	5,00 l/25 kg bag
Bulk density of dry mortar:	1,60 \pm 0,10 kg/lit
Bulk density of fresh mortar:	1,70 \pm 0,10 kg/lit
Compressive strength:	$3,70\pm0,20\text{ N/mm}^{2}$
Flexural strength:	$1,20\pm0,10~\text{N/mm}^{2}$
Adhesive strength:	0,50 N/mm ²
Capillary water absorption:	\leq 1,0 kg/m ² min ^{0.5}

Thermal conductivity coefficient $(\lambda_{to,dry})$:	\leq 0,67 W/(mK) for P=50% \leq 0,76 W/(mK) for P=90%
Water-vapor diffusion coefficient (µ):	15/35
Pot life:	6 h at +20⁰C
Maximum layer thickness:	30 mm
Directi	ons for use

1. Substrate

The substrate must be free of dust, oily or loose materials etc. and should be thoroughly dampened, before the application of MARMOCRET-BASE.

2. Application

MARMOCRET-BASE is added into water under continuous stirring, until a mortar with the required workability is formed. The plaster is applied with a plastering machine or by hand, using a float or a trowel. The final coat of plaster should follow 7 days at least after the MARMOCRET-BASE application.

Consumption

Approx. 13,5 kg/m²/cm of plaster thickness.

Packaging

MARMOCRET-BASE is supplied in 25 kg paper bags.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.



MARMOCRET-BASE

Remarks

- Application temperature should be between +5°C and +30°C.
- In hot weather MARMOCRET-BASE should be watered after application, to be protected from water loss.
- MARMOCRET-BASE contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on.

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05

EN 998-1 General purpose rendering mortar (GP) for external use

Reaction to fire: Class A1 Adhesion: 0,5 N/mm² - FP: B Water absorption: W0 Water vapour diffusion coeff.: μ 15/35 Thermal conductivity: ($\lambda_{10,dy}$) 0,67 W/mK Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar

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MARMOCRET 1

One layer plaster

Description

MARMOCRET-1 is a pre-mixed one layer plaster (skim coat).Its usage needs only the addition of water. It replaces the two final layers (basic and finishing coat) of common plastering works, applied on maximum thickness of 3 cm.

- It offers high adhesion to the substrate and very good workability.
- Simplification and acceleration of application.
- Ideal for application with plastering machine.
- Stable standardized properties.
- Excellent vapor permeability of the construction.
- Suitable for indoor and outdoor applications.

It is classified as type OC CS II, W1 mortar according to EN 998-1.

Fields of application

It is used in plastering works. It is suitable for indoor and outdoor use and wherever acceleration of application is needed.

Technical data

Form:	cementitious powder
Color:	grey,white
Particle size:	up to 1,3 mm
Water demand:	6,00-6,50 l/30 kg bag
Bulk density of dry mortar:	1,50 \pm 0,10 kg/lit
Bulk density of fresh mortar:	1,65 \pm 0,10 kg/lit
Compressive strength:	$3,00\pm0,50~\text{N/mm}^2$
Flexural strength:	$1,00\pm0,10~\text{N/mm}^2$
Adhesive strength: (28 days)	0,30 N/mm ²

Capillary water absorption:	≤ 0,4 kg/m ² min ^{0,5}
Thermal conductivity coefficient $(\lambda_{10,dry})$:	≤ 0,47 W/(mK) for P=50% ≤ 0,54 W/(mK) for P=90%
Water-vapor diffusion coefficient (µ):	5/20
Pot life:	4 h at +20⁰C
Maximum layer thickness:	30 mm

Directions for use

1. Substrate

The substrate should be stable, free of dust, oily or loose materials etc. and should be thoroughly dampened. A bonding spatterdash (rough cast) with MARMOCRET-BOND should be applied on the surface, before the application of MARMOCRET 1. After the bonding spatterdash is dried follows the application of MARMOCRET 1.

2. Application

MARMOCRET -1 is added into clean water under continuous stirring, until a mortar with the required workability is formed. The plaster is applied by hand, using a float or a trowel, or with a plastering machine. The plaster is then smoothed by hand, using a spongy float, after sufficient setting has occurred. Working time depends on substrate's absorptivity, ambient temperature and workability of the mixture.

Consumption

Approx. 15 kg/m²/cm of plaster thickness.



MARMOCRET 1

Packaging

MARMOCRET 1 is supplied in 30 kg paper bags.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- In hot weather MARMOCRET 1 should be dampened after application, to be protected from water loss.
- MARMOCRET 1 contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on.

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09

EN 998-1 One coat rendering mortar (OC) for external use

Reaction to fire: Class A1 Adhesion after weathering cycles: $0,3 \text{ N/mm}^2$ - FP: B Water absorption: W1 Water permeability after weathering cycles: $\leq 1 \text{ cm/m}^2$ Water vapour diffusion coeff.: μ 5/20 Thermal conductivity: ($\lambda_{10,dry}$) 0,47 W/mK Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar

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MARMOCRET Fine

Cement-based plaster Smooth finish • White or colored • Water-repellent

Description

MARMOCRET Fine is a pre-mixed plaster (skim coat) with fine-grained aggregate (up to 1,3 mm) that needs only the addition of water. MARMOCRET Fine offers:

- Total water-repellance acc. to DIN 18550.
- Excellent vapor permeability (breathing
- ability).
- No need for facade painting.
- Stable standardized properties.
- Suitable for indoor and outdoor application.
- Cracking prevention unlike ordinary cementlime plasters.
- Simplified application on site (needs only water).

It is classified as type GP CS II, W1 mortar according to EN 998-1.

Fields of application

MARMOCRET Fine is used as the finishing coat of plastering works, to create a white or colored, water-repellent final smooth surface. It usually replaces the final plaster coat.

Technical data

Form:	cementitious powder
Particle size:	up to 1,3 mm
Color:	white
Water demand:	5,00-5,50 l/25 kg bag
Bulk density of dry mortar:	1,50 \pm 0,10 kg/lit
Bulk density of fresh mortar:	1,85 \pm 0,10 kg/lit
Compressive strength:	$3,50 \pm 1,00 \text{ N/mm}^2$
Flexural strength:	$1,50 \pm 0,20 \text{ N/mm}^2$
Adhesive strength:	$0{,}40\pm0{,}10\text{ N/mm}^2$
Capillary water absorption:	\leq 0,4 kg/m ² min ^{0,5}

Thermal conductivity coefficient $(\lambda_{10,dry})$:	\leq 0,47 W/(mK) for P=50% \leq 0,54 W/(mK) for P=90%	
Water-vapor diffusion coefficient (µ):	5/20	
Pot life:	4 h at +20°C	
Directions for use		

1. Substrate

The substrate must be free of dust, oily or loose materials etc. and should be thoroughly dampened, before the application of MARMOCRET Fine.

If a rendering coat precedes, it has to possess a compressive strength value equal or bigger than MARMOCRET Fine, in order to fulfill the general principle dictating that every preceding layer should be stronger than the next one. In case of colored (other than white) plaster application, priming with PL-PRIMER is recommended, which reduces the absorptivity of the substrate, ensuring uniform surface color. The substrate may be a rendering coat, but also a concrete or brickwork surface.

2. Application

MARMOCRET Fine is added into clean water under continuous stirring, until a mortar with the required workability is formed.

The mixer to be used should be clean, to avoid any alteration of the plaster's color. The plaster is applied by hand, using a float or a trowel, or with a plastering machine. The plaster is then smoothed by hand, using a spongy float, after sufficient setting has occurred. Working time depends on substrate's absorptivity, ambient temperature and workability of the mixture.



MARMOCRET Fine

Consumption

Approx. 1,4 kg/m²/mm of plaster thickness. Recommended thickness: 2-5 mm.

Packaging

MARMOCRET Fine is supplied in 25 kg paper bags.

Shelaf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- In hot weather MARMOCRET Fine should be watered after application, to be protected from water loss.
- MARMOCRET Fine contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on.

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05

EN 998-1 General purpose rendering mortar (GP) for external use

Reaction to fire: Class A1 Adhesion: 0,4 N/mm² - FP: B Water absorption: W1 Water vapour diffusion coeff.: μ 5/20 Thermal conductivity: ($\lambda_{10,dy}$) 0,47 W/mK Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar

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MARMOCRET Decor

Cement-based plaster Coarse-textured finish • White or colored • Water-repellent

Description

MARMOCRET Decor is a pre-mixed plaster (skim coat) with coarse aggregate (up to 3 mm), that needs only the addition of water. MARMOCRET Decor offers:

- Total water-repellance acc. to DIN 18550.
- Excellent vapor permeability (breathing ability).
- No need for facade painting.
- Stable standardized properties.
- Suitable for indoor and outdoor application.
- Cracking prevention unlike ordinary cementlime plasters.
- Simplified application on site (needs only water).

It is classified as type GP CS II, W1 mortar according to EN 998-1.

Fields of application

MARMOCRET Decor is used as the finishing coat of plastering works, to create a white or colored, water-repellent final coarse-textured surface. It usually replaces the final plaster coat.

Technical data

Form:	cementitious powder
Particle size:	up to 3 mm
Color:	white
Water demand:	5,00-5,50 l/25 kg bag
Bulk density of dry mortar:	1,50 ± 0,10 kg/lit
Bulk density of fresh mortar:	1,85 \pm 0,10 kg/lit
Compressive strength:	$3{,}50\pm1{,}00\text{ N/mm}^{2}$
Flexural strength:	$1{,}50\pm0{,}50\text{ N/mm}^{2}$
Adhesive strength:	$0{,}50\pm0{,}10\text{ N/mm}^{2}$

	mator	repenent
Capillary wa absorption:	ater	\leq 0,4 kg/m ² min ^{0.5}
Thermal co coefficient (≤ 0,47 W/(mK) for P=50% ≤ 0,54 W/(mK) for P=90%
Water-vapo coefficient (Pot life:		5/20 5 h at +20⁰C

Directions for use

1. Substrate

The substrate must be free of dust, oily or loose materials etc. and should be thoroughly dampened, before the application of MARMOCRET Decor.

If a rendering coat precedes, it has to possess a compressive strength value equal or bigger than MARMOCRET Decor, in order to fulfill the general principle dictating that every preceding layer should be stronger than the next one. In case of colored (other than white) plaster application, priming with PL-PRIMER is recommended, which reduces the absorptivity of the substrate, ensuring uniform surface color. The substrate may be a rendering coat, but also a concrete or brickwork surface.

2. Application

MARMOCRET Decor is added into clean water under continuous stirring, until a mortar with the required workability is formed. The mixer to be used should be clean, to avoid any alteration of the plaster's color.

The plaster is applied by hand, using a float or a trowel, or with a plastering machine in 2,5-3,5 mm thickness.

The plaster is then treated (pressed) by plastic or wooden float, in horizontal, vertical, or circular movements depending on the desirable appearance of the surface. Working time depends on substrate's absorptivity and ambient temperature.



MARMOCRET Decor

Consumption

Approx. 1.5 ka/m²/mm. Recommended thickness: 2,5-3,5 mm.

Packaging

MARMOCRET Decor is supplied in 25 kg paper bags.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- · Application temperature should be between +5°C and +30°C.
- In hot weather MARMOCRET Decor should be watered after application, to be protected from water loss.
- MARMOCRET Decor contains cement and reacts as alkaline with water, so it is classified as irritant.
- · Consult the usage risks and safety advice written on the bag.

automatically cancels any previous one concerning the same product.

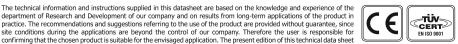
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05

FN 998-1 General purpose rendering mortar (GP) for external use

Reaction to fire: Class A1 Adhesion: 0.5 N/mm² - FP: B Water absorption: W1 Water vapour diffusion coeff.: µ 5/20 **Thermal conductivity:** $(\lambda_{10 \text{ dry}}) 0,47 \text{ W/mK}$ Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar



The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the



MARMOCRET PLUS Fine

Polymer-modified, cement-based plaster Smooth finish • White or colored • Water-repellent

Description

MARMOCRET PLUS Fine is a pre-mixed plaster (skim coat) with fine-grained aggregate (up to 1,3 mm), enriched with resins.

MARMOCRET PLUS Fine offers:

- Total water-repellance acc. to DIN 18550.
- Excellent vapor permeability (breathing ability).
- No need for facade painting.
- Stable standardized properties.
- Suitable for indoor and outdoor application.
- Cracking prevention unlike ordinary cement-lime plasters.
- Simplified application on site (needs only water).

It is classified as type GP CS II, W2 mortar according to EN 998-1.

Fields of application

MARMOCRET PLUS Fine is used to create a white or colored water-repellent final smooth surface on substrates with special demands in elasticity and adhesion. It usually replaces the final coat of plaster (finish or setting coat). In combination with the fibre-reinforced adhesive ISOMAT AK-THERMO it is used as a system for application on thermo-insulation boards.

Technical data

Form:	cementitious powder
Particle size:	up to 1,3 mm
Water demand:	5,00-5,50 l/25 kg bag
Bulk density of dry mortar:	1,50 \pm 0,10 kg/lit
Bulk density of fresh mortar:	1,85 \pm 0,10 kg/lit
Compressive strength:	$3{,}50\pm1{,}00\text{ N/mm}^2$
Flexural strength:	$1,50\pm0,50~\text{N/mm}^2$
Adhesive strength:	$0{,}60\pm0{,}20\text{ N/mm}^{2}$

Capillary water absorption:	\leq 0,2 kg/m ² min ^{0,5}
Thermal conductivity coefficient $(\lambda_{10,dy})$:	≤ 0,47 W/(mK) for P=50% ≤ 0,54 W/(mK) for P=90%
Water-vapor diffusion coefficient (µ): Pot life:	5/20 4 h at +20ºC

Colors

MARMOCRET PLUS Fine is available in white (N°100), shell (N°207), soft rose (N°227), light ochre (N°228), sand dune (N°230), corfu (N°308), amphora (N°325) and sky (N°403).

Directions for use

1. Substrate

The substrate must be free of dust, grease, loose particles etc.

When necessary, before the application of MARMOCRET PLUS Fine the substrate is well dampened or primed with PL-PRIMER, which reduces the absorptivity of the substrate to ensure color uniformity allover the surface.

2. Application

MARMOCRET PLUS Fine is added into clean water under continuous stirring, until a mortar with the required workability is formed. The mixer to be used should be clean, to avoid any alteration of the plaster's color.

The plaster is applied by hand, using a float or a trowel, or with a plastering machine. The plaster is then smoothed by hand, using a spongy float, after sufficient setting has occurred. Working time depends on substrate's absorptivity, ambient temperature and workability of the mixture.



MARMOCRET PLUS Fing

Consumption

Approx. 1,4 kg/m²/mm of plaster thickness. Recommended thickness: 2-3 mm.

Packaging

MARMOCRET PLUS Fine is supplied in 25 kg paper bags.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- In hot weather MARMOCRET PLUS Fine should be watered after application, to be protected from water loss.
- MARMOCRET PLUS Fine contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on the bag.

automatically cancels any previous one concerning the same product.

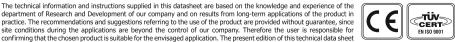
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05

EN 998-1 General purpose rendering mortar (GP) for external use

Reaction to fire: Class A1 Adhesion: 0,6 N/mm² - FP: B Water absorption: W2 Water vapour diffusion coeff.: μ 5/20 Thermal conductivity: ($\lambda_{10,dy}$) 0,47 W/mK Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar





MARMOCRET PLUS Decor

Polymer-modified, cement-based plaster Coarse-textured finish • White or colored • Water-repellent

Description

MARMOCRET PLUS Decor is a pre-mixed plaster (skim coat) with coarse aggregate (up to 3 mm), enriched with resins. MARMOCRET PLUS Decor offers:

- Total water-repellance acc. to DIN 18550.
- Excellent vapor permeability (breathing ability).
- No need for facade painting.
- Stable standardized properties.
- Suitable for indoor and outdoor application.
- Cracking prevention unlike ordinary cementlime plasters.
- Simplified application on site (needs only water).

It is classified as type GP CS II, W2 mortar according to EN 998-1.

Fields of application

MARMOCRET PLUS Decor is used to create a white or colored water-repellent final coarse-textured surface on substrates with special demands in elasticity and adhesion. It usually replaces the final coat of plaster (finish or setting coat).

In combination with the fibre-reinforced adhesive ISOMAT AK-THERMO it is used as a system for application on thermo-insulation boards.

Technical data

Form:	cementitious powder
Particle size:	up to 3 mm
Water demand:	5,00-5,50 l/25 kg bag
Bulk density of dry mortar:	1,50 \pm 0,10 kg/lit
Bulk density of fresh mortar:	1,85 \pm 0,10 kg/lit
Compressive strength:	$3{,}60\pm1{,}00\text{ N/mm}^{2}$
Flexural strength:	$1,75\pm0,50\text{ N/mm}^{2}$

Adhesive strength: Capillary water absorption:	$0,70 \pm 0,20 \text{ N/mm}^2$ $\leq 0,2 \text{ kg/m}^2 \text{ min}^{0.5}$
Thermal conductivity coefficient $(\lambda_{10,dry})$:	≤ 0,47 W/(mK) for P=50% ≤ 0,54 W/(mK) for P=90%
Water-vapor diffusion coefficient (µ): Pot life:	5/20 5 h at +20⁰C

Colors

MARMOCRET PLUS Decor is available in white (N° 100), shell (N° 207), soft rose (N° 227), light ochre (N° 228), sand dune (N° 230), corfu (N° 308), amphora (N° 325) and sky (N° 403).

Directions for use

1. Substrate

The substrate must be free of dust, grease, loose particles etc.

When necessary, before the application of MARMOCRET PLUS Decor the substrate is well dampened or primed with PL-PRIMER, which reduces the absorptivity of the substrate to ensure color uniformity allover the surface.

2. Application

MARMOCRET PLUS Decor is added into clean water under continuous stirring, until a mortar with the required workability is formed. The mixer to be used should be clean, to avoid any alteration of the plaster's color.

The plaster is applied by hand, using a float or a trowel, or with a plastering machine in 2,5-3,5 mm thickness.

The plaster is then treated (pressed) by plastic or wooden float, in horizontal, vertical, or circular movements depending on the desirable appearance of the surface. Working time depends on substrate's absorptivity and ambient temperature.



MARMOGRET PLUS Decor

Consumption

Approx. 1,4 kg/m²/mm of plaster thickness. Recommended thickness: 2,5-3,5 mm.

Packaging

MARMOCRET PLUS Decor is supplied in 25 kg paper bags.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- In hot weather MARMOCRET PLUS Decor should be watered after application, to be protected from water loss.
- MARMOCRET PLUS Decor contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on the bag.

automatically cancels any previous one concerning the same product.

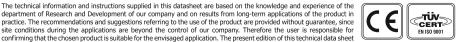
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05

EN 998-1 General purpose rendering mortar (GP) for external use

Reaction to fire: Class A1 Adhesion: 0,7 N/mm² - FP: B Water absorption: W2 Water vapour diffusion coeff.: μ 5/20 Thermal conductivity: ($\lambda_{10,dy}$) 0,47 W/mK Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar





MARMOCRET GRAFFIATO

Polymer-modified, cement-based plaster for extra rough-textured final surface

Description

MARMOCRET GRAFFIATO is a white, premixed plaster (skim coat), enriched with resins. It consists of aggregate with a special particle size granulation, to form an extra coarse-textured decorative surface. It offers the following benefits:

- Total water-repellance acc. to DIN 18550.
- Excellent vapor permeability (breathing ability).
- No need for facade painting.
- Stable standardized properties.
- Suitable for indoor and outdoor application.
- Cracking prevention unlike ordinary cementlime plasters.
- Simplified application on site (needs only water).

It is classified as type GP CS III, W1 mortar according to EN 998-1.

Fields of application

MARMOCRET GRAFFIATO is used to create a white water-repellent final extra coarsetextured surface on substrates with special demands in elasticity and adhesion. It usually replaces the final coat of plaster (finish or setting coat).

In combination with the fibre-reinforced adhesive ISOMAT AK-THERMO it is used as a system for application on thermo-insulation boards.

Technical data

Form:	cementitious powder
Color:	white
Particle size:	up to 4 mm
Water demand:	4,50-4,75 l/25 kg bag
Bulk density of dry mortar:	1,50 \pm 0,10 kg/lit
Bulk density of fresh mortar:	1,85 \pm 0,10 kg/lit

Compressive strength:	$3{,}70\pm0{,}20\text{ N/mm}^2$
Flexural strength:	$1{,}50\pm0{,}20\text{ N/mm}^{2}$
Adhesive strength:	$0{,}50\pm0{,}20\text{ N/mm}^{2}$
Capillary water absorption:	\leq 0,4 kg/m ² min ^{0,5}
Thermal conductivity coefficient $(\lambda_{10,dry})$:	≤ 0,47 W/(mK) for P=50% ≤ 0,54 W/(mK) for P=90%
Water-vapor diffusion	- 100
coefficient (µ):	5/20
Pot life:	5 h at +20ºC
Directions for use	

1. Substrate

The substrate must be free of dust, oily or loose materials etc. and should be thoroughly dampened, before the application of MARMOCRET GRAFFIATO.

2. Application

MARMOCRET GRAFFIATO is added into clean water under continuous stirring, until a mortar with the required workability is formed. The mixer to be used should be clean, to avoid any alteration of the plaster's color. The plaster is applied by hand, using a float or a trowel, or with a plastering machine. Immediately after the application, the plaster is treated (pressed) by wooden float, in horizontal, vertical, or circular movements depending on the desirable appearance of the surface. Working time depends on substrate's absorptivity and ambient temperature.

Consumption

Approx. 1,5 kg/m²/mm of plaster thickness. Recommended thickness: 3-4 mm.



MARMOCRET GRAFFIATO

Packaging

MARMOCRET GRAFFIATO is supplied in 25 kg paper bags.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- In hot weather MARMOCRET GRAFFIATO should be watered after application, to be protected from water loss.
- MARMOCRET GRAFFIATO contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on the bag.

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08

EN 998-1 General purpose rendering mortar (GP) for external use

Reaction to fire: Class A1 Adhesion: 0,5 N/mm² - FP: B Water absorption: W1 Water vapour diffusion coeff.: μ 5/20 Thermal conductivity: ($\lambda_{10,dy}$) 0,47 W/mK Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar 5.1

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the department of Research and Development of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical data sheet automatically cancels any previous one concerning the same product.





MARMOCRET-S

Mortar-binder for the preparation of white water-repellent plasters

Description

MARMOCRET-S is a pre-mixed compound that replaces cement and lime (i.e. the binding material) for the preparation of white final coat plasters (skim coats). It is mixed with marblesand and water and it offers:

- Total water-repellance.
- Uniform white color that does not need painting.
- Stable standardized properties.
- Simplified application on site (due to the replacement of cement and lime).

Fields of application

MARMOCRET-S replaces cement and lime for the preparation of final coat plasters (skim coats).

Technical data

Form:	cementitious powder
Color:	white
Bulk density of dry mortar (without marble-sand):	0,83 ± 0,05 kg/lit
Demand of marble-sand:	approx. 70 kg/15 kg MARMOCRET-S
Water demand:	approx. 18 l for 15 kg MARMOCRET-S + 70 kg marble-sand*
Bulk density	
of fresh mortar:	1,83 \pm 0,05 kg/lit *
Compressive strength:	$3{,}30\pm0{,}50~\text{N/mm}^{2}\text{*}$
Flexural strength:	1,20 \pm 0,50 N/mm ² *
Pot life:	4 h at +20°C *

* All measurements, except bulk density of dry mortar, have been extracted from a mixture of 18% MARMOCRET-S plus 82% marble-sand of particle-size 0-1,3 mm by weight.

Directions for use

1. Substrate

The substrate must be free of dust, oily or loose materials etc. and should be thoroughly dampened, before the application of MARMOCRET-S.

If a rendering coat precedes, it has to possess a compressive strength value equal or bigger than MARMOCRET-S, in order to fulfill the general principle dictating that every preceding layer should be stronger than the next one.

2. Application

One bag (15 kg) of MARMOCRET-S should be mixed with approx. 70 kg of marble-sand and the necessary water. The mixer to be used should be clean, to avoid any alteration of the plaster's color.

The plaster is applied by hand, using a float or a trowel, or with a plastering machine. Smoothing of the surface should take place after sufficient setting of the plaster, depending on weather conditions and workability of the mixture.

Consumption

One bag of MARMOCRET-S (15 kg), mixed with marble-sand as above, covers approx. 10 m^2 in a thickness of 5 mm.

Packaging

MARMOCRET-S is supplied in 15 kg paper bags.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.



MARMOCRET-S

Remarks

- Application temperature should be between +5°C and +30°C.
- In hot weather MARMOCRET-S should be watered after application, to be protected from water loss.
- MARMOCRET-S contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on the bag.

5.1

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MARMOCRET-SP

Restoration plaster for salt containing and wet walls

Description

MARMOCRET-SP is a pre-mixed, restoration plaster, particularly durable to salts and moisture. Due to its composition, it allows the renovation and protection of moisture attacked and salt damaged masonries.

- Excellent vapor permeability of the construction.
- · Stable standardized properties.
- Suitable for indoor and outdoor applications.
- Simplification and acceleration of application.
- Cracking prevention unlike ordinary cementlime plasters.
- Simplified application on site (needs only water).

It is classified as type R CS II according to EN 998-1.

Fields of application

MARMOCRET-SP is particularly suitable for buildings near the sea or in areas exposed to rising damp. Appropriate also for areas with high humidity such as bathrooms, basements, etc.

Technical data

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Form:	cementitious powder
Color:	white
Particle size:	up to 1,3 mm
Water demand:	7,0-7,5 l/25 kg bag
Bulk density of dry mortar:	1,30 \pm 0,10 kg/lit
Bulk density	
of fresh mortar:	1,40 \pm 0,10 kg/lit
Compressive strength:	$3,10\pm0,50~\text{N/mm}^2$
Flexural strength:	$1,30 \pm 0,20 \text{ N/mm}^2$
Adhesive strength (after 28days):	$0{,}50\pm0{,}10\text{ N/mm}^2$
Capillary water	
absorption:	\leq 1,3 kg/m ²

Water impregnation:	≤ 1 mm
Thermal conductivity coefficient ($\lambda_{t_{0,dry}}$):	\leq 0,35 W/(mK) for P=50% \leq 0,40 W/(mK) for P=90%
Water-vapor diffusion coefficient (µ):	7
Pot life:	4 h at +20ºC
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Directions for use

1. Substrate

Total removal of the old plaster, paint or any waterproofing materials that have been applied to the surface or at a distance of at least 80 cm from the area that has been damaged from salts or moisture.

a) Masonry:

Remove old masonry joints to a depth of 2cm and clean the surface mechanically. b) <u>Concrete:</u> The surface must be cleaned mechanically and be open-pored.

The surface must be load bearing and free from any substances or loose particles which can minimize the adhesion of MARMOCRET-SP. The mortar MARMOCRET-BOND is used to create the bonding spatterdash on the surface for adhesion enhancement of the MARMOCRET-SP.

AQUAMAT-F is used to create a horizontal barrier against the rising moisture, at the base of walls. Consult the respective Technical Leaflet of AQUAMAT-F.

2. Application

MARMOCRET-SP is added into water under continuous stirring, until a mortar with the required workability is formed. The plaster is applied by hand, using a float or a trowel, or with a plastering machine to a thickness of at least 1.5cm.



MARMOGRET-SP

The plaster is then treated by wooden float after sufficient setting has occurred. The treatment of the plaster is necessary in order to achieve an open porous surface and to ensure optimized vapour diffusion from the surface. The working time depends on the absorptivity of

the substrate, the temperature and the workability of the mortar.

Consumption

Approx. 10-11 kg/m²/cm.

Recommended application thickness:

- Minimum 1,5 cm
- Maximum 3 cm

Packaging

MARMOCRET-SP is supplied in 25 kg paper bags.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- Very damp substrates is possible to lead to longer waiting time before the treatment of the MARMOCRET-SP.
- MARMOCRET-SP is recommended to be covered with very vaporpermeable paints.
- In hot weather MARMOCRET-SP should be watered after application, to be protected from water loss.
- MARMOCRET-SP contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on.

automatically cancels any previous one concerning the same product.

System layout	
Horizontal barrier against the rising moisture	AQUAMAT-F
Bonding spatterdash	MARMOCRET-BOND
Restoration plaster	MARMOCRET-SP
Paint	Vapour permeable

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10

EN 998-1

Renovation mortar (R) for external use

Reaction to fire: Class A1 Adhesion: 0,5 N/mm² – FP: A Water absorption: 1,3 kg/m² Water vapour diffusion coeff.: μ 7 Thermal conductivity: ($\lambda_{to,dry}$) 0,35 W/mK Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar



The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the department of Research and Development of our company and on results from long-term applications of the product in

practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since

site conditions during the applications are beyond the control of our company. Therefore the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical data sheet



ISOMAT ST-1

Impregnation of salt damaged masonry

Description

Impregnation of masonry that inactivates salts. Due to its complexity ISOMAT ST-1 transforms water soluble salts (chlorides and sulphates) into insoluble.

Fields of application

It is used for the restoration of salt damaged masonry, in combination with the renovation plaster MARMOCRET-SP. ISOMAT ST-1 transforms the water soluble salts into insoluble and in that way prevents the invasion of lightly soluble salts into the wet, not yet hydrophobic restoration plaster. Therefore, the restoration plaster, after drying, provides to the masonry the necessary protection from salts.

Technical data	
Form:	aqueous solution
Color:	colourless
pH:	1,0
Density:	1,20 kg/lit
Directions for use	

The substrate must be firm, free of dust, loose particles etc.

Remove contaminated and destroyed plaster at least 80 cm around the damaged areas. Srape out the masonry joints at least 2 cm deep Sweep the surface with a steel broom thoroughly. The areas to be treated must be dry and clean. Brush ISOMAT ST-1 on the exposed masonry once ortwice depending on the salt exposure and absorbing capacity of the masonry.

<u>One treatment:</u> ISOMAT ST-1: water = 1:1 by volume.

<u>*Two treatments:*</u> 1st treatment ISOMAT ST-1 : water = 1:2 by volume, 2^{nd} treatment Isomat ST-1 : water = 1:1 by volume. Between the treatments there has to be a

waiting time of minimum two hours. Approx. 24 hours after the last treatment apply the renovation plaster MARMOCRET-SP, as described to the relevant Techical leaflet.

Consumption

Approx. 0,4-0,5 kg/m² for two treatments

Packaging

ISOMAT ST-1 is supplied in plastic containers of 1 kg, 5 kg, 20 kg.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

Remark

 Consult the safety advice and precautions written on the packaging.

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UNICRET

Mortar for plastering and masonry

Description

UNICRET is a pre-mixed mortar, offering:

- Stable quality.
- Simplified application on site (needs only water).
- Very good workability.
- Very good adhesion to the substrate.

It is certified with the CE marking as a GP CS II W0 mortar according to EN 998-1 and according to EN 998-2, as a designed general purpose masonry mortar, for external use, in elements subject to structural requirements. Certificate number: 0906-CPD-02412008.

Fields of application

UNICRET is suitable for masonry and plastering applications. It is ideal for general repair works.

Technical data

Form:	cementitious powder
Colors:	grey, white
Pot life:	2 h at +20°C
Water demand:	4,60 l/25 kg bag
UNICRET Grey	
Bulk density of dry mortar	: 1,70 ± 0,10 kg/lit
Bulk density	
of fresh mortar:	1,90 \pm 0,10 kg/lit
Compressive strength: (EN 1015-11)	2,50 0,50 N/mm ² Category M 1
Flexural strength:	1,0 0,30 N/mm ²
Initial shear strength: (tab. value)	0,15 N/mm ²
Reaction to fire: (EN 13501-1)	Class A1
Density (dry hardened mortar): (EN 1015-10)	1700 kg/m³
Adhesive strength: (EN1015-12)	>0,40 N/mm ² (FP:B)

Capillary water absorption: W0 (1,6 kg/m²min^{0.5}) (EN 1015-18) Thermal conductivity

coefficient ($\lambda_{10,dry}$): 0,75 W/(mK) (EN 1745, tab. mean value; P = 50 %)

Water-vapor diffusion coefficient (µ): 15/35 (EN 1745, tab. value)

UNICRET White

Directions	for use
Water-vapor diffusion coefficient (µ): (EN 1745, tab. value)	15/35
Thermal conductivity coefficient $(\lambda_{10,dry})$: (EN 1745, tab. mean value	0,75 W/(m [·] K) e; P = 50 %)
Capillary water absorption: (EN 1015-18)	W0 (1,4 kg/m ² min ^{0.5})
Adhesive strength: (EN1015-12)	>0,30 N/mm ² (FP:B)
Density (dry hardened mortar): (EN 1015-10)	1700 kg/m³
Reaction to fire: (EN 13501-1)	Class A1
Initial shear strength: (tab. value)	0,15 N/mm ²
Flexural strength:	0,90 0,20 N/mm ²
Compressive strength: (EN 1015-11)	2,00 0,50 N/mm ² Category M 1
Bulk density of fresh mortar:	1,80 0,10 kg/l
Bulk density of dry mortar:	1,55 0,10 kg/l

1. Substrate

The substrate must be clean, free of dust, oil, loose materials etc. and should be thoroughly dampened, before the application of UNICRET.



UNICRET

On difficult or very smooth surfaces a spatterdash (rough cast) may precede, consisting of UNICRET improved with ADIPLAST latex, diluted in the mixing water in proportions of ADIPLAST : water = 1 : 3 by volume.

2. Application

UNICRET is added into water under continuous stirring until a mixture with the required workability is formed. It is applied like ordinary plaster or masonry mortar.

Consumption

Approx. 15,5 kg/m²/cm of layer thickness.

Packaging

UNICRET is supplied in bags of 25 kg.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.



ISOMAT S.A. 17th km Thessaloniki - Ag. Athanasios, P.O. BOX 1043, 570 03 Ag. Athanasios, Greece 09

EN 998-1

General purpose rendering mortar (GP) for external use

Reaction to fire: Class A1 Adhesion: 0,3 N/mm² – FP: B Water absorption: W0 Water vapour diffusion coeff.: μ 15/35 Thermal conductivity: ($\lambda_{10,dry}$) 0,75 W/mK Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar

CE

ISOMAT S.A.

17th km Thessaloniki - Ag. Athanasios, P.O. BOX 1043, 570 03 Ag. Athanasios, Greece

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0906-CPD-02412008

EN 998-2:2010

General purpose rendering mortar (GP) for external use

Designed general purpose masonry mortar for external use in elements subject to structural requirements

Compressive strength: Category M 1 Initial shear strength: 0,15 N/mm² (tab. value) Reaction to fire: Class A1 Density (dry hardened mortar): 1700 kg/m³ Water absorption: 1,6 kg/m²min^{0,5} Water vapour permeability: μ 15/35 (tab. value) Thermal conductivity: ($\lambda_{10,dry}$) 0,75 W/mK (tab. mean value; P = 50 %) Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar

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UNICRET-FAST

Fast-setting, white repairing mortar

Description

UNICRET-FAST is a white, fast-setting mortar, offering:

- Stable quality.
- Simplified application (needs only water).
- Fast work.
- Very good workability.
- Very good adhesion to the substrate.

It is certified with the CE marking as a GP CS I W0 mortar according to EN 998-1 and according to EN 998-2, as a designed general purpose masonry mortar, for external use, in elements subject to structural requirements. Certificate number: 0906-CPD-02412008.

Fields of application

UNICRET-FAST is suitable for fast plaster repairs.

Technical data

Form:	cementitious powder
Color:	white
Water demand:	4,60 l/25 kg bag
Bulk density of dry mortar:	1,70 0,10 kg/l
Bulk density of fresh mortar:	1,90 0,10 kg/l
Compressive strength: (EN 1015-11)	1,30 0,20 N/mm ² Category M 1
Flexural strength:	0,90 0,20 N/mm ²
Initial shear strength:	0,15 N/mm ² (tab. value)
Reaction to fire:	Class A1 (EN 13501-1)
Density (dry hardened mortar): (EN 1015-10)	1700 kg/m³
Adhesive strength: (EN1015-12)	>0,40 N/mm ² (FP:B)
Capillary water absorption: (EN 1015-18)	W0 (1,4 kg/m ² min ^{0,5})

Thermal conductivity coefficient ($\lambda_{10,dry}$): (EN 1745, tab. mean v	0,75 W/(mK) alue; P = 50 %)
Water-vapor diffusion coefficient (µ): (EN 1745, tab. value)	15/35
Pot life:	2 h at +20⁰C
Painting:	after 3 h at +20°C
Directions for use	

1. Substrate

The substrate must be clean, free of dust, oil, loose materials etc. and should be thoroughly dampened, before the application of UNICRET-FAST.

On difficult or very smooth surfaces a spatterdash (rough cast) may precede, consisting of UNICRET-FAST improved with ADIPLAST latex, diluted in the mixing water in proportions of ADIPLAST : water = 1 : 3 by volume.

2. Application

UNICRET-FAST is added into water under continuous stirring until a mixture with the required workability is formed. It is applied like ordinary plaster or masonry mortar and it is treated (rubbed) with a sponge-faced float approx. 45 min after the application.

Consumption

Approx. 14,7 kg/m²/cm of layer thickness.

Packaging

UNICRET-FAST is supplied in paper bags of 25 kg and plastic bags of 5 kg.

Shelf-life - Storage

- Paper bags of 25 kg: 12 months from production date
 Plastic bags of 5 kg:
 - 18 months from production date



UNICRET-FAST

All of the above are in effect if the product is stored in original unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- The addition of ADIPLAST, polymer latex into the mixture of UNICRET-FAST results to slight retardation of its setting.
- In hot weather UNICRET-FAST should be kept damp after application, to be protected from water loss.
- UNICRET-FAST contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on the bag.

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EN 998-1

General purpose rendering mortar (GP) for external use

Reaction to fire: Class A1 Adhesion: 0,3 N/mm² – FP: B Water absorption: W0 Water vapour diffusion coeff.: μ 15/35 Thermal conductivity: ($\lambda_{10,dry}$) 0,75 W/mK Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar

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0906-CPD-02412008

EN 998-2:2010

General purpose rendering mortar (GP) for external use

Designed general purpose masonry mortar for external use in elements subject to structural requirements

Compressive strength: Category M 1 Initial shear strength: 0,15 N/mm² (tab. value) Reaction to fire: Class A1 Density (dry hardened mortar): 1700 kg/m³ Water absorption: 1,4 kg/m²min^{0,5} Water vapour permeability: μ 15/35 (tab. value) Thermal conductivity: ($\lambda_{t0,dry}$) 0,75 W/mK (tab. mean value; P = 50 %) Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar

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5.1



ISOMAT MT 80

Pre-mixed, cement-based mortar for masonry

Description

ISOMAT MT 80 is pre-mixed, cement-based mortar that is used for building various types of building materials. Its usage requires only the addition of water.

- It simplifies and accelerates the applications.
- Provides high initial and final adhesive
- strength.
- It has excellent workability.
- Suitable for indoor and outdoor applications.
- Due to the special particle size granulation of the product, the mortar flows slightly but does not collapse under the weight of the masonry units.

It is certified with the CE marking, according to EN 998-2, as a designed general purpose masonry mortar, for external use, in elements subject to structural requirements. Certificate number: 0906-CPD-02412008.

Fields of application

It is used on various types of building materials such as bricks, blocks, aerated concrete blocks, stone, etc.

Technical data

Form:	cementitious powder
Color:	grey
Particle size:	up to 3 mm
Water demand:	3,25-3,50 l/25 kg bag
Bulk density of dry mortar:	1,70 \pm 0,10 kg/lit
Bulk density of fresh mortar:	1,70 \pm 0,10 kg/lit
Compressive strength: (EN 1015-11)	Category M 5
Flexural strength:	>2,00 N/mm ²
Initial shear strength: (tab. value)	0,15 N/mm ²
Reaction to fire: (EN 13501-1)	Class A1

Density (dry hardened mortar): (EN 1015-10)	1600 kg/m ³
Water absorption: (EN 1015-18)	0,3 kg/m ² min ^{0,5}
Water vapour permeability: (EN 1745, tab. value)	μ 15/35

Thermal conductivity: $(\lambda_{10,dry}) 0,67 \text{ W/mK}$ (EN 1745, tab. mean value; P = 50 %)

Pot life:

4,5 h at +20°C

Directions for use

ISOMAT MT 80 is added into water under continuous stirring, until a mortar with the required workability is formed. The mortar is applied, using a trowel.

Consumption

Indicative consumption 20 kg/m 2 of masonry, for bricks of dimensions $6x9x12\,cm.$

Packaging

ISOMAT MT 80 is supplied in 15 kg and 25 kg paper bags.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- ISOMAT MT 80 contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on.



ISOMAT MT 80

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EN 998-2:2010

General purpose rendering mortar (GP) for external use

Designed general purpose masonry mortar for external use in elements subject to structural requirements

Compressive strength: Category M 5 Initial shear strength: $0,15 \text{ N/mm}^2$ (tab. value) Reaction to fire: Class A1 Density (dry hardened mortar): 1600 kg/m³ Water absorption: $0,3 \text{ kg/m}^2\text{min}^{0.5}$ Water vapour permeability: μ 15/35 (tab. value) Thermal conductivity: ($\lambda_{to,dry}$) 0,67 W/mK (tab. mean value; P = 50 %) Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the department of Research and Development of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical data sheet automatically cancels any previous one concerning the same product.



5.1



ISOMAT MT-80 S

Pre-mixed, cement-based masonry mortar that prevents the formation of salts

Description

ISOMAT MT-80 S is a pre-mixed, cement-based mortar for masonry. Due to its special formula it prevents the formation of salts. it needs only the addition of water.

- It simplifies and accelerates the applications.
- Provides high initial and final adhesive
- strength.
- It has excellent workability.
- Offers stable standardized properties
- Due to the special particle size granulation of the product, the mortar flows slightly but does not collapse under the weight of the masonry units.
- Suitable for indoor and outdoor applications.

It is certified with the CE marking, according to EN 998-2, as a designed general purpose masonry mortar, for external use, in elements subject to structural requirements. Certificate number: 0906-CPD-02412008.

Fields of application

It is used on various types of building materials such as bricks, blocks, stone, etc, especially when the masonry will be exposed, since it does not allow the formation of salts.

Technical data

Form:	cementitious powder
Color:	grey
Particle size:	up to 3 mm
Water demand:	3,40 l/25 kg bag
Bulk density of dry mortar:	1,70 \pm 0,10 kg/lit
Bulk density of fresh mortar:	1,80 \pm 0,10 kg/lit
Compressive strength: (EN 1015-11)	Category M 5
Flexural strength:	> 2,5 N/mm ²
Initial shear strength: (tab. value)	0,15 N/mm ²

Reaction to fire: (EN 13501-1)	Class A1
Density (dry hardened mortar): (EN 1015-10)	1600 kg/m ³
Water absorption: (EN 1015-18)	0,1 kg/m ² min ^{0,5}
Water vapour permeability: (EN 1745, tab. value)	μ 15/35
Thermal conductivity: (EN 1745, tab. mean value;	$(\lambda_{10,dry}) 0,67 \text{ W/mK} $ P = 50 %)
Pot life:	4 h at +20°C

Directions for use

ISOMAT MT-80 S is added into water under continuous stirring, until a mortar with the required workability is formed. The mortar is applied, using a trowel.

Consumption

Indicative consumption 20 kg/m² of masonry, for bricks of dimensions 6x9x12 cm.

Packaging

ISOMAT MT-80 S is available in paper bags of 25 kg

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- ISOMAT MT-80 S contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on.



ISOMAT MT 80 S

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EN 998-2:2010

General purpose rendering mortar (GP) for external use

Designed general purpose masonry mortar for external use in elements subject to structural requirements

Compressive strength: Category M 5 Initial shear strength: $0,15 \text{ N/mm}^2$ (tab. value) Reaction to fire: Class A1 Density (dry hardened mortar): 1600 kg/m³ Water absorption: $0,1 \text{ kg/m}^2\text{min}^{0.5}$ Water vapour permeability: μ 15/35 (tab. value) Thermal conductivity: ($\lambda_{to,dry}$) 0,67 W/mK (tab. mean value; P = 50 %) Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the department of Research and Development of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical data sheet automatically cancels any previous one concerning the same product.



5.1



Low w< 0.1 kg/m²h^{0.5})

MARMOCRYL Fine

Acrylic, pasty, ready-to-use plaster Smooth finish • White or colored • Water-repellent

Description

MARMOCRYL Fine is a ready-to-use, pasty, white or colored, acrylic plaster. It consists of aggregate with a special particle size granulation, to form a smooth decorative surface. It offers the following benefits:

- High elasticity and excellent bonding to the substrate.
- Total water-repellency acc. to EN1062-3.
- Excellent vapor permeability.
- No need for facade painting.
- Resistance to alkalis according to DIN 18556.
- Cracking prevention unlike ordinary cementlime plasters.
- Simplifies and makes the application faster.
- Suitable for indoor and outdoor application.

Certified with the CE marking according to EN 15824.

Fields of application

MARMOCRYL Fine is used as the finishing coat of plastering works, to create a white or colored, water-repellent smooth finish surface (thin layer). It can be applied on all kinds of building materials like plaster, concrete, cement boards, gypsum boards etc. Suitable for outdoor and indoor applications. It replaces the final plaster coat. Due to its high elasticity and its excellent bonding to the substrate it is also an ideal final layer for external thermo-insulated facades.

Technical data		
Form:	pasty	
Colors:	white and 305 colors from the NCS color system	
Density:	1,82 \pm 0,03 kg/lit	
Water vapour permeability:	V2	
(EN ISO 7783-2, V2: 0,14 ≤ Sd<1,4m)	Medium	

Water permeability: (EN 1062-3, W3:

Adhesion :0,4 MPa(EN 1542)0,4 MPaThermal conductivity: $\lambda=0,7$ W/(m · K)(EN 1745)Reaction to fire:Reaction to fire:Euroclass CDrying time:4-6 h $(23^{\circ}C \text{ and } 50\% \text{ R.H.})$

W3

Cleaning of tools:

Tools should be cleaned after use with water.

Available Types

MARMOCRYL Fine according to the particle size of aggregates is available in the following types:

Туре	Thickness of application
MARMOCRYL Fine 1 mm	approx. 1 mm
MARMOCRYL Fine 1,5 mm	Approx. 1,5 mm
MARMOCRYL Fine 2 mm	Approx. 2 mm

Consumption

Approx. 1,8 kg/m²/mm.

Directions for use

1. Substrate

The substrate must be dry and free of dust, oily or loose materials etc. Priming follows, using the special primer FLEX-PRIMER. Smooth or non adsorptive surfaces should be primed with PL-BOND. MARMOCRYL Fine is applied after the primer has dried.



MARMOCRYL Fine

2. Application

MARMOCRYL Fine should be thoroughly stirred before application. The stirring should be done with slow circular motions to avoid creating bubbles in the mass of the material. The plaster is applied by hand, using a smooth stainless metallic spatula, or with a plastering machine. While still fresh (approx. after 20 minutes) the plaster is treated (pressed) by plastic spatula. Working time depends on substrate's absorptivity and ambient temperature.

Packaging

MARMOCRYL Fine is supplied in plastic containers of 25 kg.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

Remarks

- Temperature during application should be between +5°C to +35°C.
- MARMOCRYL Fine while it is still fresh should be protected from high temperatures, rain and frost.
- Consult the usage risks and safety advice written on the bag.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory c, type WB is 40g/l (2010) for the ready to use product. The ready to use product MARMOCRYL Fine contains max <40 g/l VOC.

CE

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EN 15824

External render based on organic binder

Water vapour permeability: V2 Water absorption: W3 Adhesion: 0,4 MPa Durability: NPD Thermal conductivity: $\lambda = 0, 7$ W/(m \cdot K) Reaction to fire: Euroclass C

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MARMOCRYL Decor

Acrylic, pasty, ready-to-use plaster Coarse-textured finish • White or colored • Water-repellent

Description

MARMOCRYL Decor is a ready-to-use, pasty, white or colored, acrylic plaster. It consists of aggregate with a special particle size granulation, to form a coarse-textured decorative surface. It offers the following benefits:

- High elasticity and excellent bonding to the substrate.
- Enables to create coarse-textured decorative surfaces with different texture according to the way of rubbing.
- Total water-repellency acc. to EN1062-3.
- Excellent vapor permeability.
- No need for facade painting.
- Resistance to alkalis according to DIN 18556.
- Cracking prevention unlike ordinary cement-lime plasters.
- Simplifies and makes the application faster.
- Suitable for indoor and outdoor application.

Certified with the CE marking according to EN 15824.

Fields of application

MARMOCRYL Decor is used as the finishing coat of plastering works, to create a white or colored, water-repellent coarse-textured finish surface (thin layer). It can be applied on all kinds of building materials like plaster, concrete, cement boards, gypsum boards etc. Suitable for outdoor and indoor applications. It replaces the final plaster coat. Due to its high elasticity and its excellent

bonding to the substrate it is also an ideal final layer for external thermo-insulated facades.

Technical data

Form: Colors: pasty white and 305 colors from the NCS color system

	rependin
Density:	1,87 kg/lit
Water vapour permeability:	V2
(EN ISO 7783-2, V2: 0,14 ≤ Sd<1,4m)	Medium
Water permeability (EN 1062-3, W3:	W3 Low w< 0,1 kg/m²h⁰.⁵)
Adhesion : (EN 1542)	0,4 MPa
Thermal conductivity: (EN 1745)	λ =0,7 W/(m · K)
Reaction to fire:	Euroclass C
Drying time: R.H.)	4-6 h (23ºC and 50%
Cleaning of to also	

Cleaning of tools:

Tools should be cleaned after use with water.

Available Types

MARMOCRYL Decor according to the particle size of aggregates is available in the following types:

Туре	Thickness of application
MARMOCRYL	approx.
Decor 2 mm	2 mm
MARMOCRYL	approx.
Decor 3 mm	3 mm

Consumption

Approx. 1,6 kg/m²/mm.

Directions for use

1. Substrate

The substrate must be dry and free of dust, oily or loose materials etc. Priming follows, using the special primer FLEX-PRIMER. Smooth or non adsorptive surfaces should be primed with PL-BOND. MARMOCRYL Decor is applied after the primer has dried.



MARMOCRYL Decor

2. Application

MARMOCRYL Decor should be thoroughly stirred before application. The stirring should be done with slow circular motions to avoid creating bubbles in the mass of the material. The plaster is applied by hand, using a smooth stainless metallic spatula, or with a plastering machine. While still fresh (approx. after 20 minutes) the plaster is treated (pressed) by plastic float, in horizontal, vertical, or circular movements depending on the desirable appearance of the surface. Working time depends on substrate's absorptivity and ambient temperature.

Packaging

MARMOCRYL Decor is supplied in plastic containers of 25 kg.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

Remarks

- Temperature during application should be between +5°C to +35°C.
- MARMOCRYL Decor while it is still fresh should be protected from high temperatures, rain and frost.
- Consult the usage risks and safety advice written on the bag.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory c, type WB is 40g/l (2010) for the ready to use product. The ready to use product MARMOCRYL Decor contains max <40 g/l VOC.

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EN 15824

External render based on organic binder

Water vapour permeability: V2 Water absorption: W3 Adhesion: 0,4 MPa Durability: NPD Thermal conductivity: $\lambda = 0, 7$ W/(m \cdot K) Reaction to fire: Euroclass C

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MARMOCRYL Granit

Acrylic, pasty coating with a granite-like finish Decorative • Colored • Water-repellent

Description

MARMOCRYL Granit is an acrylic, pasty coating with a granite-like finish. It consists of colored aggregates with a small particle size, to form a coarse-textured decorative final surface. It offers the following benefits:

- High elasticity and excellent bonding to the substrate.
- Water-repellency.
- Excellent vapor permeability.
- No need for facade painting.
- · Resistance to alkalis according to DIN 18556.
- Cracking prevention unlike ordinary cementlime plasters.
- Simplifies and makes the application faster.
- Suitable for indoor and outdoor application.

Certified with the CE marking according to EN 15824 as a V2, W2 render.

Fields of application

MARMOCRYL Granit is used as the finishing coating (thin layer) of plastering works, to form a decorative, colored, water-repellent, coarsetextured surface. It can be applied on all kinds of building materials like plaster, concrete, cement boards, gypsum boards etc. Suitable for outdoor and indoor applications. It replaces the final plaster coat. Due to its high elasticity and its excellent bonding to the substrate it is also an ideal final layer for external thermo-insulated facades.

Technical data		
Form:	pasty	
Colors:	10 selected (MARMOCRYL Granit pallet)	
Density:	1,55 kg/lit	
Water vapour permeability: (EN ISO 7783-2, V2: 0,14≤Sd<1,4m)	V2 Medium	

Water permeability:	W2
(EN 1062-3, W3: 0,1 <sd≤0,5 kg="" m²h⁰.⁵)<="" td=""><td>Medium</td></sd≤0,5>	Medium
Adhesion: (EN 1542)	0,9 MPa
Thermal conductivity: (EN 1745)	λ=0,7 W/(mK)
Reaction to fire	Euroclass C
Drying time:	6-8 h
Cleaning of tools:	

Tools should be cleaned after use with water.

Consumption

1,8 kg/m²/mm. Recommended application thickness: Approx 2mm.

Directions for use

1. Substrate

The substrate must be dry and free of dust, oily or loose materials etc. Priming follows, using the special primer FLEX-PRIMER. Smooth or non adsorptive surfaces should be primed with PL-BOND. MARMOCRYL Granit is applied after the primer has dried.

2. Application

MARMOCRYL Granit should be thoroughly stirred before application. The stirring should be done with slow circular motions to avoid creating bubbles in the mass of the material. The plaster is applied by hand, using a smooth stainless metallic spatula, or with a plastering machine.

While still fresh MARMOCRYL Granit is treated (pressed) by metallic spatula. Working time depends on substrate's absorptivity and ambient temperature.

Packaging

MARMOCRYL Granit is supplied in plastic containers of 25 kg.



MARMOCRYL Granit

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between +5°C and +35°C. Protect from direct sun exposure and frost.

Remarks

- Temperature during application should be between +5°C to +35°C.
- MARMOCRYL Granit while it is still fresh should be protected from high temperatures, rain and frost.
- Consult the usage risks and safety advice written on the bag.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory c, type WB is 40g/l (2010) for the ready to use product. The ready to use product MARMOCRYL Granit contains max <40 g/l VOC.

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EN 15824

External render based on organic binder

Water vapour permeability: V2 Water absorption: W2 Adhesion: 0,9 MPa Durability: NPD Thermal conductivity: $\lambda = 0, 7$ W/(m \cdot K) Reaction to fire: Euroclass C

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5.2



MARMOCRYL SILICONE Fine

Silicone, pasty, ready-to-use plaster Smooth finish • White or colored • Water-repellent

Description

MARMOCRYL SILICONE Fine is ready-touse, pasty, white or colored, silicone acrylic plaster. It consists of aggregate with a special particle size granulation, to form a smooth decorative surface. It offers the following benefits:

- High elasticity and excellent bonding to the substrate.
- Total water-repellency acc. to DIN 52617.
- Excellent vapor permeability.
- No need for facade painting.
- Resistance to alkalis according to DIN 18556.
- Cracking prevention unlike ordinary cementlime plasters.
- Simplifies and makes the application faster.
- Suitable for indoor and outdoor application.

Certified with the CE marking according to EN 15824.

Fields of application

MARMOCRYL SILICONE Fine is used as the finishing coat of plastering works, to create a white or colored, water-repellent smooth finish surface (thin layer). It can be applied on all kinds of building materials like plaster, concrete, cement boards, gypsum boards etc. Suitable for outdoor and indoor applications. It replaces the final plaster coat. Due to its high elasticity and its excellent bonding to the substrate it is also an ideal

final layer for external thermo-insulated facades.

Technical data		
Form:	pasty	
Colors:	white and 305 colors from the NCS color system	
Density:	1,80 \pm 0,03 kg/lit	
Water vapour permeability: V1 (EN ISO 7783-2, V1: High Sd<0,14m)		

Water permeability: W3 (EN 1062-3, W3: Low w< 0,1 kg/m²h^{0.5})

(EN 1542) Thermal conductivity: λ =0,7 W/(m · K) (EN 1745)

Reaction to fire: Euroclass C Drving time: 4-6 h (23°C and 50% R.H.)

0.4 MPa

Cleaning of tools:

Adhesion:

Tools should be cleaned after use with water.

Available Types

MARMOCRYL SILICONE Fine according to the particle size of aggregates is available in the following types:

Туре	Thickness of application
MARMOCRYL	approx.
SILICONE Fine 1 mm	1 mm
MARMOCRYL	approx.
SILICONE Fine 1,5 mm	1,5 mm
MARMOCRYL	approx.
SILICONE Fine 2 mm	2 mm

Consumption

Approx. 1,8 kg/m²/mm.

Directions for use

1. Substrate

The substrate must be dry and free of dust, oily or loose materials etc. Priming follows, using the special primer SILICONE-PRIMER. Smooth or non adsorptive surfaces should be primed with PL-BOND. MARMOCRYL SILICONE Fine is applied after the primer has been dried.



MARMOCRYL SILICONE Fine

2. Application

MARMOCRYL SILICONE Fine should be thoroughly stirred before application. The stirring should be done with slow circular motions to avoid creating bubbles in the mass of the material. The plaster is applied by hand, using a smooth stainless metallic spatula, or with a plastering machine.

While still fresh (approx. after 20 minutes) the plaster is treated (pressed) by plastic spatula. Working time depends on substrate's absorptivity and ambient temperature.

Packaging

MARMOCRYL SILICONE Fine is supplied in plastic containers of 25 kg.

Shelf-life - Storage

6 months from production date if stored in original, unopened packaging, in temperature between +5°C and +35°C. Protect from direct sun exposure and frost.

Remarks

- Temperature during application should be between +5°C to +35°C.
- MARMOCRYL SILICONE Fine while it is still fresh should be protected from high temperatures, rain and frost.
- Consult the usage risks and safety advice written on the bag.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory c, type WB is 40g/l (2010) for the ready to use product. The ready to use product MARMOCRYL SILICONE Fine contains max <40 g/l VOC.

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EN 15824

External render based on organic binder

Water vapour permeability: V1 Water absorption: W3 Adhesion: 0,4 MPa Durability: NPD Thermal conductivity: $\lambda = 0, 7$ W/(m \cdot K) Reaction to fire: Euroclass C

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MARMOCRYL SILICONE Decor

Silicone, pasty, ready-to-use plaster Coarse-textured finish • White or colored • Water-repellent

Description

MARMOCRYL SILICONE Decor is ready-touse, pasty, white or colored, silicone acrylic plaster. It consists of aggregate with a special particle size granulation, to form a coarsetextured decorative surface. It offers the following benefits:

- High elasticity and excellent bonding to the substrate.
- Enables to create coarse-textured decorative surfaces with different texture according to the way of rubbing.
- Total water-repellency acc. to DIN 52617.
- Excellent vapor permeability.
- No need for facade painting.
- Resistance to alkalis according to DIN 18556.
- Cracking prevention unlike ordinary cementlime plasters.
- Simplifies and makes the application faster.
- Suitable for indoor and outdoor application.

Certified with the CE marking according to EN 15824.

Fields of application

MARMOCRYL SILICONE Decor is used as the finishing coat of plastering works, to create a white or colored, water-repellent coarse-textured finish surface (thin layer). It can be applied on all kinds of building materials like plaster, concrete, cement boards, gypsum boards etc. Suitable for outdoor and indoor applications. It replaces the final plaster coat.

Due to its high elasticity and its excellent bonding to the substrate it is also an ideal final layer for external thermo-insulated facades.

Technical data

Form: pasty Colors: white and 305 colors from the NCS color system

Density:	1,80 ± 0,03 kg/lit
Water vapour permeability: (EN ISO 7783-2, V1:	V1 High Sd<0,14m)
Water permeability: (EN 1062-3, W3: Low	
Adhesion: (EN 1542)	0,4 MPa
Thermal conductivity: (EN 1745)	λ=0,7 W/(m · K)
Reaction to fire:	Euroclass C
Drying time:	4-6 h (23°C and 50% R.H.)
Cleaning of tools:	

Tools should be cleaned after use with water.

Consumption

Approx. 1,8 kg/m²/mm.

Available Types

MARMOCRYL SILICONE Fine according to the particle size of aggregates is available in the following types:

Туре	Thickness of application
MARMOCRYL SILICONE Decor 2 mm	approx. 2 mm
MARMOCRYL SILICONE Decor 3 mm	approx. 3 mm

Directions for use

1. Substrate

The substrate must be dry and free of dust, oily or loose materials etc. Priming follows, using the special primer SILICONE-PRIMER. Smooth or non adsorptive surfaces should be primed with PL-BOND. MARMOCRYL SILICONE Decor is applied after the primer has been dried.



MARMOCRYL SILICONE Decor

2. Application

MARMOCRYL SILICONE Decor should be thoroughly stirred before application. The stirring should be done with slow circular motions to avoid creating bubbles in the mass of the material. The plaster is applied by hand, using a smooth stainless metallic spatula, or with a plastering machine.

While still fresh (approx. after 20 minutes) the plaster is treated (pressed) by plastic float, in horizontal, vertical, or circular movements depending on the desirable appearance of the surface.

Working time depends on substrate's absorptivity and ambient temperature.

Packaging

MARMOCRYL SILICONE Decor is supplied in plastic containers of 25 kg.

Shelf-life - Storage

6 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

Remarks

- Temperature during application should be between +5°C to +35°C.
- MARMOCRYL SILICONE Decor while it is still fresh should be protected from high temperatures, rain and frost.
- Consult the usage risks and safety advice written on the bag.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory c, type WB is 40g/l (2010) for the ready to use product. The ready to use product MARMOCRYL SILICONE Fine contains max <40 g/l VOC.

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EN 15824

External render based on organic binder

Water vapour permeability: V1 Water absorption: W3 Adhesion: 0,4 MPa Durability: NPD Thermal conductivity: λ = 0, 7 W/(m · K) Reaction to fire: Euroclass C





PL-PRIMER

Plaster primer - Dehydration barrier

Description

PL-PRIMER is a concentrated liquid primer for plasters, used diluted with water on surfaces to be plastered. It provides hydrophobie to the substrate, eliminating the danger of strength decrease of the plaster because of water loss. PL-PRIMER does not form a skin, therefore it does not affect the adhesion to the substrate or the vapor permeability of the structure.

Fields of application

PL-PRIMER is applied on absorptive substrates that are going to be plastered, like brick walls, lime stone, aerated or gas concrete etc., in order to prevent water loss of the plaster. Especially for MARMOCRET colored plasters, use of PL-PRIMER is necessary to achieve uniform color on the whole surface. In this case PL-PRIMER is applied on the substrate of the colored plaster (rendering, concrete etc).

red
11,5
1,03 kg/lit

Directions for use

PL-PRIMER is diluted with water 1:3 up to 1:4 by volume, depending on the absorptivity of the plaster's substrate. It is applied by brush or spray on a clean substrate.

The primer should dry before plastering.

Consumption

40-100 g/m², depending on the absorptivity of the substrate.

Packaging

PL-PRIMER is supplied in plastic containers of 5 kg and 20 kg.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between +5°C and +35°C. Protect from direct sun exposure and frost.

Remarks

- Tools used for brushing or spraying should be cleaned with water immediately after use.
- PL-PRIMER is corrosive to glass, metal or frames.
- PL-PRIMER should be thoroughly stirred before use.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory h, type WB is 30g/l (2010) for the ready to use product. The ready to use product PL-PRIMER contains max <30 g/l VOC.





PL-BOND

Plaster adhesion primer

Description

PL-BOND is an adhesion primer consisting of synthetic resins and quartz sand. It is used on smooth or non-absorptive surfaces instead of the spatterdash (rough cast) layer to increase the adhesion of the subsequent plaster. After its application it creates a coarse surface, resistant to alkaline environment.

Fields of application

PL-BOND is used as a ready-made primer to ensure adequate roughness on the substrate, so that the adhesion of the subsequent plaster is reinforced. The resultant surface is highly resistant to alkalis and therefore constitutes an ideal substrate for gypsum plasters. Suitable for indoor and outdoor use.

Technical data	
Form:	pasty
Color:	light red
Density:	1,48 kg/lit
pH:	7-9
Drying time:	1-2 h
Subsequent layer in:	4-6 h

Directions for use

1. Substrate

The surface to be primed must be dry and totally free of dust, grease, dirt etc.

2. Application

The content of the plastic container is well stirred before use until a homogeneous mixture is achieved. PL-BOND is applied on the surface by brush or roller in one layer. After drying, the plaster layer follows.

Consumption

300-350 g/m², depending on layer thickness.

Packaging

PL-BOND is supplied in plastic containers of 5 kg and 20 kg.

Shelaf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

Remarks

- The temprature during application should be between +5°C and +30°C.
- In case PL-BOND is applied in exterior areas, the addition of cement in a proportion of 20% by weight is recommended.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory h, type WB is 30g/l (2010) for the ready to use product. The ready to use product PL-BOND contains max <30 g/l VOC.





FLEX-PRIMER

High quality acrylic water-based primer

Description

Highly penetrative, polymer emulsion. It stabilizes porous substrates and ensures the proper adhesion of water-based paints, tile-adhesives, flexible mortars, brushable elastomeric coatings, acrylic plasters etc. By penetrating inside the pores of the substrate, it acts as a bonding layer between the substrate and the paint, adhesive, mortar, coating etc., to be applied.

Fields of application

Used in combination with the highly elastic waterproofing paint FLEXCOAT, it forms an ideal system for the waterproofing of walls. FLEX-PRIMER is a ready-to-use primer suitable for ensuring the adhesion of water-based paints and acrylic plasters on porous substrates made of concrete, masonry, plaster, gypsum boards, chip boards etc.

It stabilizes weak or crumbling plasters etc. It is also used for stabilizing and reducing the water absorption of surfaces like gypsum boards or chip boards, on which tile-adhesives, AQUAMAT-ELASTIC (2-component, elastic sealing slurry) or ISOMAT SL 17 (brushable, elastomeric liquid membrane for waterproofing under tiles), are going to be subsequently applied.

It is suitable for indoor and outdoor applications.

Technical data	
Form:	emulsion
Color:	white
Density:	1,00 kg/lit

Directions for use

1. Substrate

The surface to be primed must be dry and free of dust, grease, dirt etc.

2. Application

FLEX-PRIMER is thoroughly stirred and uniformly applied on the substrate by brush, roller or spraying, before painting.

Consumption

5-10 m²/kg, depending on the absorptivity of the substrate.

Packaging

FLEX-PRIMER is available in plastic containers of 1 kg, 5 kg, 10 kg and 20 kg.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between +5°C and +35°C. Protect from direct sun exposure and frost.

Remarks

• Temperature during application should be at least +5°C.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory h, type WB is 30g/l (2010) for the ready to use product. The ready to use product FLEX-PRIMER contains max <30 g/l VOC.





UNI-PRIMER

Acrylic water-based primer

Description

Polymer emulsion, which stabilizes porous substrates and ensures the proper adhesion of water-based paints, tile-adhesives, flexible mortars, brushable elastomeric coatings etc. By penetrating inside the pores of the substrate, it acts as a bonding layer between the substrate and the paint, adhesive, mortar, coating etc., to be applied.

Fields of application

UNI-PRIMER is a ready-to-use primer suitable for ensuring the adhesion of water-based paints on porous substrates made of concrete, masonry, plaster, gypsum boards, chip boards etc.

It stabilizes weak or crumbling plasters etc. It is also used for stabilizing and reducing the water absorption of surfaces formed by gypsum boards or chip boards, on which tile-adhesives, AQUAMAT-ELASTIC (2-component, elastic sealing slurry) or ISOMAT SL 17 (brushable, elastomeric liquid membrane for waterproofing under tiles), are going to be subsequently applied.

It is suitable for indoor and outdoor applications.

	Technical data
Form:	emulsion
Color:	white
Density:	1,00 kg/lit
Directions for use	

1. Substrate

The surface to be primed must be dry and free of dust, grease, dirt etc.

2. Application

UNI-PRIMER is thoroughly stirred and uniformly applied on the substrate by brush, roller or spraying, before painting.

Consumption

100-200 g/m², depending on the absorptivity of the substrate.

Packaging

UNI-PRIMER is available in plastic containers of 1 kg, 5 kg and 20 kg.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between +5°C and +35°C. Protect from direct sun exposure and frost.

Remarks

• Temperature during application should be at least +5°C.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory h, type WB is 30g/l (2010) for the ready to use product. The ready to use product UNI-PRIMER contains max <30 g/l VOC.

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SILICONE-PRIMER

Adhesion primer for silicone plasters

Description

Silicone polymer emulsion which stabilizes porous substrates and ensures the proper adhesion of silicone plasters.

By penetrating inside the pores of the substrate, it acts as a bonding layer between the substrate and the plaster, to be applied.

Fields of application

SILICONE-PRIMER is ready-to-use primer, applied on porous substrates made of concrete, masonry, plaster, gypsum boards, chip boards etc.

It stabilizes weak or crumbling plasters etc. Used in combination with MARMOCRYL SILICONE plasters, it forms an ideal system for the covering and decoration of walls.

Technical data		
Form:	emulsion	
Color:	white	
Density:	1,00 kg/lit	

Directions for use

1. Substrate

The surface to be primed must be dry and free of dust, grease, dirt etc.

2. Application

SILICONE PRIMER is thoroughly stirred and uniformly applied on the substrate by brush or roller. After has been dried, follows the application of MARMOCRYL SILICONE plaster.

Consumption

5-10 m^2/kg , depending on the absorptivity of the substrate.

Packaging

SILICONE-PRIMER is available in plastic containers of 5 kg, 10 kg and 20 kg.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between +5°C and +35°C. Protect from direct sun exposure and frost.

Remarks

Temperature during application should be at least $+5^{\circ}$ C.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory h, type WB is 30g/l (2010) for the ready to use product. The ready to use product SILICONE-PRIMER contains max <30 g/l VOC.





FIBERGLASS TAPE

Self-sticking fiberglass tape

Description

Self-sticking fiberglass tape for reinforcing of gypsum boards, cement sheets etc. Also used for crack bridging in other repairing works.

Packaging

- Rolls of 5cm x 90m.
- Rolls of 5cm x 20m.

FIBERGLASS MESH FOR PLASTER

Fiberglass mesh for plaster reinforcing

Description

High-strength fiberglass mesh for reinforcing of plasters or cement mortars susceptible to cracking.

Types - Packaging

Blue color, 90 g/m². Mesh: 10mm x 10mm. Rolls of 1m x 50m (50 m²) and 0,25m x 50m (12,5 m²) .

Blue color, 120 g/m². Mesh: 10mm x 10mm. Rolls of 1m x 50m (50 m²)

White color, 90 g/m². Mesh: 5mm x 5mm Rolls of 1m x 50m (50 m²)

White color, 160 g/m². Mesh: 4mm x 4mm. Ideal for facade thermo-insulation works. Rolls of 1m x 50m (50 m²)



6. INDUSTRIAL FLOORINGS





EXTRA-TOP

Hardening agent for industrial floors

Description

Pre-mixed mortar with quartz aggregates and special admixtures for hardening the surface of new industrial floors. It offers high resistance in abrasion and shocks.

It is classified as CT-C70-F7-AR2 according to EN 13813.

Fields of application

EXTRA-TOP is used in applications with high demands in mechanical strength. It is applied on cementitious substrates like concrete or screeds. It is appropriate for industrial floor, basements, auto repair shops, machine shops, parking lots, warehouses, loading-unloading areas, isles etc.

Technical data

Form:	cementitious powder
Colors:	grey, redbrown, ochre, light blue
Bulk density of dry mortar:	1,60 \pm 0,20 kg/lit
EXTRA-TOP grey	
Compressive strength:	$72,00\pm2,00\text{ N/mm}^2$
Flexural strength:	$8{,}00\pm1{,}00\text{ N/mm}^{2}$
EXTRA-TOP redbrown	
Compressive strength:	$83{,}00\pm5{,}00\text{ N/mm}^{2}$
Flexural strength:	$9{,}50\pm1{,}50\text{ N/mm}^{2}$
EXTRA-TOP ochre	
Compressive strength:	$83{,}00\pm5{,}00\text{ N/mm}^{2}$
Flexural strength:	$9{,}50\pm1{,}50\text{ N/mm}^{2}$
EXTRA-TOP light blue	
Compressive strength:	$83,00 \pm 5,00 \text{ N/mm}^2$
Flexural strength:	$9{,}50\pm1{,}50\text{ N/mm}^2$

Directions for use

1. Substrate

- The substrate can be:
- Reinforced concrete

• Screed at least 3 cm thick, that will have to be well adhered to the substrate (concrete) through a bonding layer with ADIPLAST, DUREBOND or FERROSEAL.

2. Application

EXTRA-TOP is applied dry by broadcasting on fresh concrete or screed right after it starts setting. The surface of fresh concrete or screed is then wetted, if necessary. Finally the material is treated with a special smoothing machine (power float).

Consumption

3-5 kg/m².

Packaging

EXTRA-TOP is supplied in 25 kg paper bags.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- The product contains cement, which reacts as alkaline with water, and is classified as irritant.
- Consult the directions for safe use and precautions written on the packaging.





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EN 13813 CT-C70-F7-AR2

Cementitious screed material for use internally in buildings

Reaction to fire: A1, Release of corrosive substances: CT Water permeability : NPD Water vapour permeability: NPD Compressive strength: C70 Flexural strength: F7 Wear resistance: AR2 Sound insulation: NPD Sound absorption: NPD Thermal resistance: NPD Chemical resistance: NPD

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MENT-BASED FLOORINGS

6.1



EXTRA-TOP CR

Hardening agent for industrial floors with corundum

Description

Pre-mixed mortar with corundum, quartz aggregates and special admixtures for hardening the surface of new industrial floors. It offers very high resistance in abrasion and impacts.

It is classified as CT-C80-F10-AR1 according to EN 13813.

Fields of application

EXTRA-TOP CR is used in applications with very high demands in mechanical strength. It is applied on cementitious substrates like concrete or screeds. It is appropriate for industrial floors, basements, auto repair shops, machine shops, parking lots, warehouses, loading-unloading areas, etc.

Technical data

Form:	cementitious powder
Color:	grey
Bulk density of dry mortar:	1,71 ± 0,10 kg/lit
Compressive strength:	$88,00\pm5,00\text{ N/mm}^{2}$
Flexural strength:	11,00 \pm 1,50 N/mm ²
Wear resistance:	AR1

Directions for use

1. Substrate

- The substrate can be:
- Reinforced concrete

• Screed at least 3 cm thick, that will have to be well adhered to the substrate (concrete) through a bonding layer with ADIPLAST, DUREBOND or FERROSEAL.

2. Application

EXTRA-TOP CR is applied dry by broadcasting on fresh concrete or screed right after it starts setting. The surface of fresh concrete or screed is then wetted, if necessary. Finally the material is treated with a special smoothing machine (power float).

Consumption

3-5 kg/m².

Packaging

EXTRA-TOP CR is supplied in 25 kg paper bags.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- The product contains cement, which reacts as alkaline with water, and is classified as irritant.
- Consult the directions for safe use and precautions written on the packaging.



EXTRA-TOP CR

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EN 13813 CT-C80-F10-AR1

Cementitious screed material for use internally in buildings

Reaction to fire: A1, Release of corrosive substances: CT Water permeability : NPD Water vapour permeability: NPD Compressive strength: C80 Flexural strength: F10 Wear resistance: AR1 Sound insulation: NPD Sound absorption: NPD Thermal resistance: NPD Chemical resistance: NPD

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the department of Research and Development of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical data sheet automatically cancels any previous one concerning the same product.



6.1



FLOWCRET 1-10

Self-leveling, polymer-modified cementitious screed

Description

FLOWCRET 1-10 is a self-leveling, polymermodified, cement-based mortar, used for flooring applications. It forms a smooth and durable surface. Suitable for layers 1-10 mm thick.

It is classified as CT-C40-F10-AR2 according to EN 13813.

Fields of application

- To prepare smooth and even concrete, mortar or mosaic floors, before laying finishing materials like ceramic tiles, carpets, parquet, vinyl tiles etc.
- As a final floor overlay in basements, attics, warehouses etc.

Technical data

Form:	cementitious powder
Color:	grey
Water demand:	5,5-6,0 I /25 kg bag
Bulk density of dry mortar:	1,40 \pm 0,10 kg/lit
Bulk density	
of fresh mortar:	2,10 \pm 0,20 kg/lit
Compressive strength: (EN 13892-2):	$40,00\pm3,50\text{ N/mm}^2$
Flexural strength: (EN 13892-2)	$10,00\pm1,00\text{ N/mm}^2$
Adhesive strength: (EN 13892-8)	>2,0 N/mm ²
Wear resistance: AR2 (EN 13892-4 (BCA))	
Setting shrinkage: (EN 13872)	0,29 \pm 0,10 mm/m
Reaction to fire: (EN 13501-1)	Euroclass A1,
Pot life:	45-60 min at +20°C

Directions for use

1. Substrate

The substrate must be dry, statically sufficient and also free of dust, grease, loose particles etc. Primarily, the surface is primed with the polymer latex ADIPLAST, diluted with 1:1 of water by volume, or with the acrylic primer UNI-PRIMER. Product application follows once the primer has completely dried out (approx. after 2 hours).

Primer consumption: 200-300 g/m².

2. Application

FLOWCRET 1-10 is gradually added into 5,5-6,0 I of water under continuous stirring, until a homogeneous, lump free, fluid mass is formed. The mixture is left about 3 minutes to settle and is then stirred again. A low speed electric mixer (approx. 300 rpm) is recommended for mixing. The mortar is poured onto the primed substrate in one layer and is spread to desired thickness with a large metal notched trowel, squeegee etc. As soon as the product has self levelled it must be rolled immediately with a suitable spiked roller to release all the air retained within its mass. For greater layer thickness up to 30mm, it is reccomended the use of FLOWCRET 3-30 EXPRESS.

Consumption

Approx. 1,65 kg /m²/mm of layer thickness.

Packaging

FLOWCRET 1-10 is supplied in 25 kg paper bags.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.



FLOWGRET 1-10

Remarks

- Application temperature should be between +5°C and +30°C.
- Mixture that has started to harden should not be used or resoftened with water.
- In hot weather FLOWCRET 1-10 should be watered after application, to be protected from water loss.
- FLOWCRET 1-10 contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on the bag.

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EN 13813 CT-C40-F10-AR2

Cementitious screed material for use internally in buildings

Reaction to fire: A1, Release of corrosive substances: CT Water permeability: NPD Water vapour permeability: NPD Compressive strength: C40 Flexural strength: F10 Wear resistance: AR2 Sound insulation: NPD Sound absorption: NPD Thermal resistance: NPD Chemical resistance: NPD 6.1







FLOWCRET 1-10 EXPRESS

Fast-setting, self-leveling, polymer modified cementitious screed

Description

Fast-setting, self-leveling cementitious mortar for leveling floor substrates, enriched with polymer components (resins). It features high mechanical strength, superb adhesion to the substrate, excellent workability, fast-hardening and slightest shrinkage. It provides a smooth, flat and durable final surface, ready to be covered in a very short time with any further finishing layer. Suitable for layers 1-10 mm thick.

It is classified as a screed material CT-C30-F7-AR4 (grey) and CT-C30-F7-AR6 (white) according to EN 13813.

Fields of application

Ideal for fast smoothening and leveling of concrete floors, cement screeds, mosaic floors etc. that are going to be covered with all kinds of tiles, carpet, parquet, vinyl tiles etc. It is proper for interior use mainly. It may be left as a final topping layer in basements, attics, home storerooms etc. Suitable for leveling floors with underfloor heating system.

Technical data

Form:	cementitious powder
Color:	grey, white
Water demand:	6,0-6,5 l/25 kg bag
Application thickness:	from 1mm to 10mm
Bulk density of dry mortar:	$1,40 \pm 0,15$ kg/l
Bulk density of fresh mortar:	$2,0\pm0,10\text{ kg/l}$

FLOWCRET 1-10 EPXPRESS Grey

Compressive strength acc. to EN 13892-2:

 24 hours: 	11,00 ± 1,00 N/mm ²
 7 days: 	23,00 ± 2,00 N/mm ²
• 28 days:	$35,00 \pm 3,00 \text{ N/mm}^2$

Flexural strength acc. to EN 13892-2:

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• 24 hours:	3,50 ± 0,50 N/mm ²
• 7 days:	6,00 ± 1,00 N/mm ²
 28 days: 	$10,00 \pm 2,00 \text{ N/mm}^2$
Bond strength acc. to EN	I 13892-8:
 28 days: 	$1,70 \pm 0,50 \text{ N/mm}^2$
Wear resistance acc. to • 28 days:	EN 13892-4 (BCA): AR4
Setting shrinkage acc. to • 28 days:	EN 13872: 0,50 ± 0,20 mm/m
Reaction to fire: (EN 13501-1)	Euroclass A1,
Walkability:	after 4 h
Successive layer (tiles):	after 24 h
Pot life:	30-40 min at +20°C

FLOWCRET 1-10 EPXPRESS White

Compressive strength ac • 24 hours: • 7 days: • 28 days:	cc. to EN 13892-2: 13,50 \pm 1,00 N/mm ² 17,50 \pm 2,00 N/mm ² 34,50 \pm 3,00 N/mm ²
Flexural strength acc. to • 24 hours: • 7 days: • 28 days:	EN 13892-2: 4,00 \pm 0,50 N/mm ² 4,50 \pm 1,00 N/mm ² 9,00 \pm 2,00 N/mm ²
Bond strength acc. to EN • 28 days:	$1,\!30\pm0,\!30~\textrm{N/mm}^{2}$
Wear resistance acc. to I 28 days:	EN 13892-4 (BCA): AR6
Setting shrinkage acc. to 28 days:	EN 13872: 0,40 ± 0,20 mm/m
Reaction to fire: (EN 13501-1)	Euroclass A1 _f
Walkability:	after 4 h
Successive layer (tiles):	after 24 h
Pot life:	30-40 min at +20 $^{\circ}$ C



FLOWGRET 1-10 EXPRESS

Directions for use

1. Substrate

The substrate must be dry, statically sufficient and also free of dust, grease, loose particles etc. Primarily, the surface is primed with the polymer latex ADIPLAST, diluted with 1:1 of water by volume, or with the acrylic primer UNI-PRIMER. Product application follows once the primer has completely dried out (approx. After 2 hours).

Primer consumption: 200-300 g/m².

2. Application

FLOWCRET 1-10 EXPRESS is gradually added into 6,0-6,5 l of water under continuous stirring, until a homogeneous, lump free, fluid mass is formed. The mixture is left about 10 minutes to settle and is then stirred again. A low speed electric mixer (approx. 300 rpm) is recommended for mixing. The mortar is poured onto the primed substrate in one layer and is spread to desired thickness with a large metal notched trowel, squeegee etc. The product seeks its own level and before it sets, it is rolled with a suitable toothed roller to release all the air retained within its mass. For greater layer thickness up to 30mm, it is necessary the addition of properly graded sand (grain size 0-4 mm) up to 30%-50% ratio by weight.

Consumption

Approx. 1,65 kg /m²/mm of layer thickness.

Packaging

FLOWCRET 1-10 EXPRESS is supplied in 25 kg paper bags.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between $+5^{\circ}$ C and $+30^{\circ}$ C.
- Mixture that has started to harden should not be used or resoftened with water.
- In hot weather FLOWCRET 1-10 EXPRESS should be watered after application, to be protected from water loss.
- FLOWCRET 1-10 EXPRESS contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on the bag.



FLOWGRET 1-10 EXPRESS



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EN 13813 CT-C30-F7-AR4

Cementitious screed material for use internally in buildings

Reaction to fire: A1, Release of corrosive substances: CT Water permeability : NPD Water vapour permeability: NPD Compressive strength: C30 Flexural strength: F7 Wear resistance: AR4 Sound insulation: NPD Sound absorption: NPD Thermal resistance: NPD Chemical resistance: NPD

FLOWCRET 1-10 EXPRESS WHITE



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EN 13813 CT-C30-F7-AR6

Cementitious screed material for use internally in buildings

Reaction to fire: A1, Release of corrosive substances: CT Water permeability : NPD Water vapour permeability: NPD Compressive strength: C30 Flexural strength: F7 Wear resistance: AR6 Sound insulation: NPD Sound absorption: NPD Thermal resistance: NPD Chemical resistance: NPD

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the department of Research and Development of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical data sheet automatically cancels any previous one concerning the same product.



6.1



FLOWCRET 3-30 EXPRESS

Fast-setting, self-leveling, polymer-modified compound

Description

FLOWCRET 3-30 EXPRESS is a fast-setting, self-leveling, polymer-modified compound, used for flooring applications. It forms a smooth and durable surface. Suitable for layers 3-30 mm thick.

It is classified as CT-C40-F10-AR2 according to EN 13813.

Fields of application

- Smoothing and leveling of surfaces from concrete, screed, mosaic, ceramic tiles before laying finishing materials like ceramic tiles, carpets, parquet, vinyl tiles, marbles, natural stones etc.
- As a final floor overlay in basements, attics, warehouses etc.
- · Suitable for floors with underfloor heating.
- Ideal for fast applications due to its fast setting property.
- · Appropriate for internal applications.

Technical data

Form:	cementitious powder			
Color:	grey			
Water demand:	5,75 – 6,0 l/25 kg bag			
Bulk density of dry mortar:	$1,26 \pm 0,20$ kg/lit			
Bulk density of fresh mortar:	2,04 ± 0,20 kg/lit			
Temperature of substrate:	+5°C up to +25°C			
Walkability:	after 4 hours			
Successive layer:	after 24 hours			
Adhesive strength: (EN 13892-8)	>2,0 N/mm ²			
Compressive strength (E • After 24 hours: • After 7 days: • After 28 days:	EN 13892-2): $17,00 \pm 2,00 \text{ N/mm}^2$ $33,00 \pm 2,00 \text{ N/mm}^2$ $45,00 \pm 2,00 \text{ N/mm}^2$			

Flexural strength (EN 13892-2):

•After 24 hours: •After 7 days: •After 28 days:	4,00 ± 1,00 N/mm ² 5,00 ± 1,00 N/mm ² 12,00 ± 2,00N/mm ²			
Wear resistance BCA: (EN 13892-4)	$165\pm30\mu m, AR2$			
Setting shrinkage: (EN 13872)	$0,35\pm0,20\text{ mm/m}$			
Initial setting time:	55-80 min			
Final setting time:	65-95 min			
Pot life:	30-45 min at +20°C			
Directions for use				

1. Substrate

The substrate must be dry, statically sufficient and also free of dust, grease, loose particles etc.

2. Priming

2.1. Absorptive surfaces such as concrete or screeds should be primed with the acrylic primer UNI-PRIMER. Product application follows once the primer has completely dried out (approx. after 2 hours). Primer consumption: 200-300 g/m².

2.2 Smooth or non-absorptive surfaces should be primed with the adhesion promoter ISOMAT AK-PRIMER. FLOWCRET 3-30 EXPRESS can be applied after an hour and while the primer is still sticky.

Primer consumption: 100-200 g/m².

3. Application

FLOWCRET 3-30 EXPRESS is gradually added into 5,75-6,0 I of water under continuous stirring, until a homogeneous, lump free, fluid mass is formed. The mixture is left about 3 minutes to settle and is then stirred again. A low speed electric mixer (approx. 300 rpm) is recommended for mixing. The mortar is poured onto the primed substrate in one layer and is spread to desired thickness with a large metal notched trowel.



FLOWGRET 3-30 EXPRESS

As soon as the product has self levelled it must be rolled immediately with a suitable spiked roller to release all the air retained within its mass.

Consumption

Approx. 1,65 kg /m²/mm of layer thickness.

Packaging

FLOWCRET 3-30 EXPRESS is supplied in 25 kg paper bags.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- When applying the product, on floors with underfloor heating respect the expansioncontraction joints every 25-30 m² of surface, filled with the appropriate elastic materials.
- During application and initial setting/ hardening of FLOWCRET 3-30 EXPRESS the surface must be protected from quick water loss due to the high temperature, U.V. radiation or wind.
- Do not add cement, gypsum, lime or other binders to the FLOWCRET 3-30 EXPRESS mix.
- Before the installation of parquet or vinyl tiles is necessary to measure the moisture content with a moisture meter.
- Application temperature should be between +5°C and +30°C.
- Mixture that has started to harden should not be used.
- FLOWCRET 3-30 EXPRESS contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on the bag.

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EN 13813 CT-C40-F10-AR2

Cementitious screed material for use internally in buildings

Reaction to fire: A1, Release of corrosive substances: CT Water permeability : NPD Water vapour permeability: NPD Compressive strength: C40 Flexural strength: F10 Wear resistance BCA: AR2 Sound insulation: NPD Sound absorption: NPD Thermal resistance: NPD Chemical resistance: NPD





DUROCRET-DECO

Cement screed for surface finishing on floors and walls

Description

DUROCRET-DECO is a pre-mixed, polymermodified, fiber reinforced, cement-based mortar, without corrosive ingredients, suitable for indoor and outdoor applications, offering:

- Abrasion resistance.
- · Very good bonding to the substrate.
- Water impermeability.
- Special aesthetic.

It is classified as a PCC R2 type mortar, for concrete repairs, according to EN 1504-3.

Fields of application

DUROCRET-DECO is used as a cement screed finish over cement based substrates. It is suitable for stairs, floors, walls and also for special constructions such as built-in sanitary articles (washbasins, showers etc.). It can be applied in houses, hotels or wherever aesthetic intervention is needed.

Technical data Form: cementitious powder Colors: white, grey, light grey, light ochre, mocha, crocus Working time: 2 h at +20°C Water demand: 4,75 l/25 kg bag Bulk density of dry mortar: $1,45 \pm 0,05$ kg/l Bulk density of fresh mortar: 1,95 ± 0,05 kg/l Compressive strength: 22,00 ± 1,00 N/mm² Flexural strength: 6,00 ± 0,10 N/mm² Chloride ion content: 0.00% Adhesion strength: ≥1,3 N/mm² Thermal compatibility Part 1 (50 freeze-thaw cycles): 1,0 N/mm² Capillary absorption: $\leq 0.30 \text{ kg} \cdot \text{m}^{-2} \cdot \text{h}^{-0.5}$

Reaction to fire:
Application thickness

Euroclass A1 2-10 mm per layer

Directions for use

1. Substrate

The substrate should be clean, free of dust, oily or loose materials etc. The surface should be dampened, before the application of DUROCRET-DECO. It is recommended to apply the acrylic primer UNI-PRIMER if the substrate is highly absorptive. Non absorptive substrates such as old tile layers should be primed with ISOMAT AK-PRIMER.

2. Application

DUROCRET-DECO is gradually added into the water under continuous stirring, until a homogeneous mixture is formed. The product is applied using a notched trowel in a thickness from 2mm up to10mm per layer and then it is flattened with the smooth edge of the trowel. For floor applications exceeding 5 mm thickness, it is recommended to embed a fiberglass reinforcing mesh on the combed surface by using the smooth edge of the trowel. After a while and once the product starts to harden (usually after 20min at 23 °C) it can be slightly dampened with water and just rubbed with a spongy float, or rubbed with the spongy float and pressed again with a smooth metallic trowel depending on the final desired appearance.

After 2 days from the application, NANOPRO-C, the water-repelling nano impregnation can be applied for waterproofing the surface. In areas such as kitchens NANOPRO-L could be applied as well for protection both from water and from oils. If a glossy surface is desired, the acrylic varnish VS-1 can be applied.

Consumption

Approx. 1,5 kg/m²/mm of layer thickness.

Packaging

DUROCRET-DECO is supplied in paper bags of 25 kg.



DUROGRET-DEGO

Shelf-life - Storage

12 months from production date if the product is stored in original unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- During high ambient temperature DUROCRET-DECO should be sprayed with water after the application, to be protected from water loss.
- DUROCRET-DECO contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on the bag.

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EN 1504-3

Concrete repair product for non structural repair PCC mortar (based on hydraulic cement, polymer modified)

Compressive strength: class R2 Chloride ion content: $\leq 0,05\%$ Adhesive Bond: $\geq 0,8$ MPa Thermal compatibility part 1: $\geq 0,8$ MPa Capillary absorption: $\leq 0,5$ kg·m²·h^{0.5} Dangerous substances: comply with 5.4 Reaction to fire: Euroclass A1





SCREED-100

Floor leveling cement mortar

Description

SCREED-100 is a pre-mixed cement mortar providing:

- · Low weight.
- · Satisfactory strength.
- Excellent workability.
- · Smooth surface.

It replaces non-reinforced concrete or gasconcrete in indoor or outdoor areas. Application thickness may be up to 10 cm per layer.

It is classified as CT-C7-F3-A12 according to EN 13813.

Fields of application

- Filling and leveling of floors to be covered with tiles, marble, wood, parquet etc.
- Cement mortar grade for terraces and outdoor areas.

Technical data

Form:	cementitious powder
Color:	grey
Water demand:	3,75 l/25 kg bag
Bulk density of dry mortar:	1,74 \pm 0,10 kg/lit
Bulk density of fresh mortar:	1,60 \pm 0,20 kg/lit
Compressive strength:	$9{,}90\pm1{,}00\text{ N/mm}^{2}$
Flexural strength:	$3{,}60\pm0{,}30\text{ N/mm}^{2}$
Wear resistance:	9,24 cm ³ /50cm ²
Pot life:	4 h at +20ºC

Directions for use

1. Substrate

Substrate must be strong, free of loose materials, dust, grease or other foreign matter. Substrate surface should be watered well before application.

2. Application

Fill a clean container with 3,75 lit of water, add gradually the content of a 25 kg bag under continuous stirring until a uniform mass is formed. For mixing, a low revolution mixer or a concrete mixer may be used. Laying procedure is the same as for concrete.

Consumption

Approx. 14 kg/m²/cm of layer thickness.

Packaging

SCREED-100 is supplied in 25 kg paper bags.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- The product contains cement, which reacts as alkaline with water, and is classified as irritant.
- Consult the directions for safe use and precautions written on the packaging.



SCREED-100

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EN 13813 CT-C7-F3-A12

Cementitious screed material for use internally in buildings

Reaction to fire: A1, Release of corrosive substances: CT Water permeability : NPD Water vapour permeability: NPD Compressive strength: C7 Flexural strength: F3 Wear resistance: A12 Sound insulation: NPD Sound absorption: NPD Thermal resistance: NPD Chemical resistance: NPD



CEMENT-BASED FLOORINGS 9



SCREED-SX

Fast setting cement mortar - binder for floor screeds

Description

SCREED-SX is a fibre-reinforced, fast setting mortar that replaces cement (the binding material) in floor screeds. It consists from special fast setting cements and additives. When mixed with sand and water the cement mortar that is being produced offers the following advantages:

- Fast hardening and high early strengths.
- · Long workability time.
- Fast walkability (after approximately 6 hours*)
- Its contained moisture is reduced fast.
- It offers higher mechanical strength than a screed with normal setting cement.
- Receives covering with tiles after 24 hours, regardless of its thickness.
- It can be used and as a floating screed.
- It can be pumped for faster application.
- Ideal for areas that have to be delivered fast for use.

Fields of application

- Filling and leveling of floors to be covered with tiles, marble, wood, parquet, for floors with underfloor heating system etc. in thickness between 2 and 10 cm.
- Cement mortar grade for terraces and outdoor areas.
- Ideal for areas that have to be covered fast even with parquet, since its contained moisture is reduced faster than a screed with normal setting cement. (Approximately 2-4 days after the application depending on the mixing ratio with sand and water).
- It can be mixed also with perlite in order to produce light weight screeds.

Technical data

Form:	cementitious powder
Color:	grey
Bulk density of dry mortar (without sand):	1,16 \pm 0,05 kg/l

Required sa	and:
-------------	------

80-100 kg per 20 kg of SCREED-SX (1 part of SCREED-SX with 4-5 parts of sand by weight)

Water demand:

approximately 12 I for 20 kg of SCREED-SX + 80-100 kg of sand to produce a semidry screed

Mixing ratio with sand 1:4 b.w.

1,88 \pm 0,05 kg/l
$6,00 \pm 0,50 \text{ N/mm}^2$
$2{,}00\pm0{,}50\text{ N/mm}^2$
$18,00 \pm 0,50 \text{ N/mm}^2$
$6{,}00\pm0{,}50\text{ N/mm}^2$
$1,50 \pm 0,30 \text{ N/mm}^2$
250 mm ³
1-2 h at +20⁰C
After at least 6 hours (20°C and 50% R.H.)
3,5% 1,5% 1,1%

Mixing ratio with sand 1:5 b.w.

Bulk density of fresh mortar:	1,97 \pm 0,05 kg/l
Compressive strength 1 day:	$2{,}50\pm0{,}50\text{ N/mm}^2$



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Flexural strength 1 day:	$1,00\pm0,50~\text{N/mm}^2$
Compressive strength 28 days:	$13,50 \pm 0,50 \text{ N/mm}^2$
Flexural	
strength 28 days:	$4,00\pm0,50~\text{N/mm}^2$
Adhesion strength:	$1,00\pm0,30~\text{N/mm}^2$
Wear resistance	
Wear resistance	
(Tabert):	302 mm ³
riour roolotanoo	302 mm³ 1-2 h at +20⁰C
(Tabert):	1-2 h at +20°C After at least 6 hours
(Tabert): Pot life:	1-2 h at +20°C
(Tabert): Pot life: Walk ability:	1-2 h at +20°C After at least 6 hours

- 2 days: 3 days: 2.6%

* The values are indicative, as the final result is affected by the moisture content of the sand. The sand used for these tests contained 4,1 to 4.9 % moisture. It is always recommended to measure the moisture content of the screed before applying coatings sensitive to moisture. The technical data was measured at 23±2 °C and 50±5 % relative humidity.

Directions for use

1. Substrate

The substrate must be free of loose materials. dust, grease etc. Substrate surface should be watered well before the application of the screed. Very absorptive substrates should be primed with the acrylic primer UNI-PRIMER. The application of the screed follows after the primer has dried out (approx. after 2 hours). Primer consumption: 100-200 g/m².

2. Application

1 bag of 20 kg of SCREED-SX is mixed with 80-100 kg of sand and approximately 12 l of water.

Mixing in a screed pump:

Generally, due to the unknown moisture content of the sand, which will affect the workability of

the screed, it is recommended to add first half the quantity of sand, then the water and finally SCREED-SX. After mixing for about 2 minutes until a uniform mass is formed, add gradually more sand until the desired workability is achieved and mix for at least 2 more minutes. Depending on the moisture content of the sand more water might be required in order to prepare a screed with semi-dry or plastic consistency.

Mixing with a low revolution mixer:

For mixing small quantities a low revolution mixer can be used, following the above mixing instructions and by keeping a steady mixing ratio by weight: SCRRED-SX : Sand : Water = 1 : 4-5 :0.6.

Laying procedure is the same as for concrete, after pouring the screed on the floor.

Consumption

Approx. 2,0 - 3,5 kg/m²/cm.

Packaging

SCREED- SX is supplied in 20 kg paper bags.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Application temperature should be between +5°C and +30°C.
- In case of problem with rising moisture and application of wood/parquet floorings, it is recommended before the application of SCREED-SX to apply first the special epoxy primer DUROPRIMER-SG and broadcast guartz sand of 0,3-0,8 mm granulometry, on its fresh layer.





Respectively, in areas with rising moisture where tiles or marbles are going to be fixed it is recommended to apply first the brushable sealing slurry AQUAMAT. Consult the respective technical leaflets of these products.

- The sand that will be used must be free of lime or other impurities, as the workability of the screed and the final strengths will be affected negatively.
- Using more water than the recommended dosage will improve the workability but also will delay the setting time and the rate of reduction of the contained moisture.
- If a very smooth surface is required, the self leveling screeds FLOWCRET 1-10
 EXPRESS or FLOWCRET 3-30 EXPRESS can be used on top of SCREED-SX at least 3 days after its application. Consult the respective technical leaflets of these products.
- After the application, the fresh screed must be protected from dehydration due to high temperature and air flow.
- The product contains cement, which reacts as alkaline with water, and is classified as irritant.
- Consult the directions for safe use and precautions written on the packaging.





ISOMAT BI-100

Concrete hardening and dustproofing impregnation

Description

Water-based polymer emulsion with high penetration ability. When applied on concrete floors or cement screeds, it seals and dustproofs their surface.

ISOMAT BI-100 can also be used as a surface hardener for crumbled floorings and surfaces in order to increase their strength and wear resistance.

Moreover eliminates the permeability of floorings and makes the cleaning easier.

Fields of application

ISOMAT BI-100 is used on concrete floors or cement screeds in places such as basements, warehouses, light traffic parking lots etc. Suitable for indoor and outdoor use.

Technical data

Form:	emulsion
Color:	white (transparent after drying)
Density:	1,08 kg/lit
pH:	11,5
Walkability:	after 24 hours (+20°C)
Full hardening:	after 3-4 days (+20°C)

Cleaning of tools:

Tools are cleaned with water immediately after use.

Directions for use

1. Substrate

The surface must be dry and free of dust, grease, dirt etc.

For better impregnation of ISOMAT BI-100, the surface should be prepared by grinding and cleaning of dust.

2. Application

ISOMAT BI-100 is thoroughly stirred and uniformly applied on the substrate by spray, brush or roller until full impregnation. For very absorptive surfaces it is usually required to apply a second layer after the first one has dried.

Consumption

100-200 g/m^{2}, depending on the absorptivity of the substrate.

Packaging

ISOMAT BI-100 is available in plastic containers of 1 kg, 5 kg and 20 kg.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between +5°C and +35°C. Protect from direct sun exposure and frost.

Remarks

- During application the ambient temperature and the temperature of substrate should be between +5°C and +30°C.
- The successive layer can be placed when ISOMAT BI-100 is completely dry.
- ISOMAT BI-100 is almost transparent after drying. Usually it should be tried to the surface before the application, because it may alter the appearance of the surface.
- ISOMAT BI-100 is not suitable for permanent immersion to water. The uneven surfaces should be properly treated with a suitable repairing material. Consult the Technical Support Department.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory h, type WB is 30g/l (2010) for the ready to use product. The ready to use product ISOMAT BI-100 contains max <30 g/l VOC.





DUROFLOOR-BI

2-component, colorless epoxy impregnation

Description

DUROFLOOR-BI is a 2-component, colorless epoxy system with solvents. Due to its low viscosity and its great fluidity, it can penetrate deep into the substrate and fill pores and capillaries. The impregnated surfaces become stable and durable, resistant to abrasion, frost and chemicals, especially wastes, mineral oils and petroleum products.

It is classified as SR-B2,0 according to EN 13813.

Fields of application

DUROFLOOR-BI is used for the impregnation of cement-based substrates, e.g. old and new concrete, cement-mortar or plaster etc. It is suitable for floors in parking lots, warehouses, laboratories, industries, gas stations, car repair shops etc.

It is also used as a primer for EPOXYCOAT, EPOXYCOAT-VSF and EPOXYCOAT-S epoxy coatings.

Technical data			
Basis:	2-component epoxy resin		
Color:	transparent		
Viscosity:	45 mPas at +23°C		
Density (A+B):	0,92 kg/lit		
Mixing proportion (A:B):	100 : 29 by weight		
Pot life:	approx. 10 h at +20ºC		
Minimum hardening temperature:	+8°C		
Walkability:	after 24 h at +23°C		
Successive layer:	after 10-24 h at +23°C		
Final strength:	after 7 days at +23°C		

Adhesive strength:

> 3 N/mm² (breaking point of concrete)

Cleaning of tools: Tools should be thoroughly cleaned with SM-12 solvent immediately after use.

Directions for use

1. Substrate

The flooring surface should be:

- Dry and stable.
- Free of materials that prevent bonding, e.g. dust, loose particles, grease etc.
- Protected from underneath moisture attack.

Also, it should meet the following requirements: Concrete quality: at least C20/25 Cement screed quality: cement content

Age: Moisture content: 350 kg/m³ at least 28 days less than 4%

According to the nature of the substrate, it should be prepared by brushing, grinding, cleaning with a high suction vacuum cleaner etc.

2. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. The whole quantity of component B is added into component A. Mixing of the 2 components should take place for about 5 minutes, using a low revolution mixer (300 rpm). It is important to stir the mixture thoroughly near the sides and bottom of the container, to achieve uniform dispersion of the hardener.



DUROFLOOR-BI

3. Application - Consumption

DUROFLOOR-BI is applied by roller, brush or spray in 1-2 layers, according to the substrate's absorptivity. Second layer follows 15 min after the first is applied.

Consumption: 150-250 g/m²/layer.

DUROFLOOR-BI may be applied on new concrete (approx. 3 days old) because curing is not disturbed. It may also be applied on slightly wet substrates (moisture content up to 6%). In both cases a small impregnation depth is achieved.

If a depth of impregnation of about 5 mm into concrete is required, moisture content should be less than 3%.

Packaging

DUROFLOOR-BI is supplied in packages (A+B) of 4 kg and 10 kg, with components A and B having the fixed weight proportion.

Shelf-life - Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.

Remarks

 The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.

- DUROFLOOR-BI contains solvents. In cases of applications in closed rooms, measures should be taken for good ventilation.
- Non-uniform absorptivity of the substrate may cause a non-uniform surface appearance after impregnated.
- Bonding between successive layers may be severely affected by the intervention of moisture or dirt between them.
- Epoxy layers should be protected from moisture for 4-6 hours after application.
 Moisture may whiten the surface or/and make it sticky. It may also disturb hardening. Faded or sticky layers in parts of the surface should be removed by grinding or milling and laid again.
- In case that longer time than predicted interferes between the application of successive layers or in case that old floors are going to be laid again, the surface should be thoroughly cleaned and ground before application of the new layer.
- After hardening, DUROFLOOR-BI is totally safe for health.
- Before application, study the safety advice mentioned on the product's labels.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory h, type SB is 750g/l (2010) for the ready to use product. The ready to use product DUROFLOOR-BI contains max <750 g/l VOC.



DUROFLOOR-BI

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EN 13813 SR-B2,0 Primer

Reaction to fire: NPD Release of corrosive substances: SR Water permeability : NPD Wear resistance: NPD Bond strength: B2,0 Impact resistance: NPD Sound insulation: NPD Sound absorption: NPD Thermal resistance: NPD Chemical resistance: NPD

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the department of Research and Development of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical data sheet automatically cancels any previous one concerning the same product.



6.2



DUROFLOOR-CMT

3-component, self-leveling epoxy flooring

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DUROFLOOR-CMT is a pourable, self-leveling flooring based on cement and epoxy resins, without solvents. It offers the following advantages:

- Simplified and affordable application.
- High early and final mechanical strengths.
- · Superior bonding to the substrate.
- High vapor permeability.
- · Exceptional self-leveling capacity.
- It does not have a corrosion action. (is safe for the steel reinforcement).

It is classified as a CT-C50-F10-AR0,5 screed material according to EN 13813.

Fields of application

DUROFLOOR-CMT is used for:

- · repairing,
- smoothing and
- leveling

concrete floors that will be covered with:

- epoxy floorings (DUROFLOOR)
- polyurethane floorings
- plastic floorings,
- · carpet,
- · wooden parquet etc.

It is also applied when concrete is relatively fresh, in order to create the proper substrate -of at least 2 mm thickness- for the application of epoxy layers, to avoid problems of detachment etc.

Also, it is appropriate as final flooring, at a thickness of up to 3 mm, for smoothing, leveling and increasing surface resistance to mechanical loads.

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Chemical basis (A+B):	cal basis (A+B): 2-component epoxy resin	
Chemical basis (C):	cementitious powder	
Color (A+B+C):	grey	
Density A:	1,096 kg/l	
Density B:	1,025 kg/l	
Bulk density of C:	1,39 kg/l	
Bulk density (A+B+C):	2,06 kg/l	
Mixing ratio (A:B:C):	1 : 2,6 : 16,5 by weight	
Pot life:	approx. 20 min at +20ºC	
Minimum hardening temperature:	+8°C	
Water-vapor diffusion coefficient: (EN ISO 7783-1/2)	Sd = 0,75	
Walkability:	after 15 hours at +23°C	
Successive layer:	after 48 hours at +23°C	
Final strength:	after 28 days at +23ºC	
Compressive strength: (EN 13892-2)	60 N/mm ²	
Flexural strength: (EN 13892-2)	15 N/mm²	
Wear resistance: (EN 13892-4, BCA)	16 µm, AR 0,5	
Adhesive strength:	>3 N/mm ² (breaking point of concrete)	
Elastic modulus:	22 GPa	
Maximum layer thickness:	3 mm	

6.3



DUROFLOOR-GMT

Directions for use

1. Substrate

- The surfaces to be treated must be:
- Stable and dry or slightly wet, without standing water.
- Clean, free of materials that prevent bonding, such as dust, loose particles, grease, etc.

Also, the following requirements must be met: Concrete quality: at least C20/25 Cement screed quality: cement content at least 350 kg/m²

For very absorptive or porous substrates, the surface should be first primed with the waterbased epoxy primer EPOXYPRIMER-W, as it is or diluted with 10% of water by weight. The primer is applied by brush or roller in one layer. Primer consumption: 200-300 g/m².

The application of DUROFLOOR-CMT follows after the primer can be walked on. (Approximately 6 hours later, depending on the temperature and humidity of the application area).

2. Mixing of DUROFLOOR-CMT

Components A, B, and C are packaged in predetermined mixing proportions. At first, component A must be stirred well in its container and then should be moved to a clean vessel of approx. 30 I volume. Subsequently the whole quantity of component B should be added to component A. Mixing of the two components should carry on for approx. 30 seconds, with a low-revolution mixer (300 rpm). It is important to stir the mixture thoroughly near the sides and bottom of the container, to achieve uniform dispersion of the hardener. Finally the component C is added under continuous stirring. Mixing is done with a lowrevolution mixer and is carried on until the mixture becomes completely uniform (approx. for 3 minutes). No water should be added in the mixture.

3. Application procedure

DUROFLOOR-CMT should be applied at a

thickness of up to 3 mm by using a notched trowel. Alternatively a large rubber trowel (squeegee) or a metal trowel can be used as well.

In order to release air trapped into the selfleveling layer, the surface must be rolled over with a special spiked roller. This prevents formation of bubbles and helps to achieve a uniform thickness.

Cleaning of tools:

Tools must be cleaned thoroughly with water immediately after use. Hardened material can be only mechanically removed.

Consumption

Approx. 2,1 kg/m²/mm of layer thickness.

Packaging

DUROFLOOR-CMT is available in 25 kg packaging (A+B+C) in the following proportions:

Component A:	1,24 kg.
Component B:	3,23 kg.
Component C:	20,52 kg.

Shelf-life - Storage

Self-life in sealed containers and bags is 12 months, in a cool and dry place.

Remarks

- Working time of epoxy systems decreases when ambient temperature rises.
- The surface of DUROFLOOR-CMT after the application should be protected from moisture for 24 hours. Moisture may whiten the surface or/and make it sticky. It may also disturb hardening. Faded or sticky layers in parts of the surface should be removed by grinding or milling and laid again.
- In case that longer time than predicted interferes between the application of successive layers or in case that old floors are going to be laid again, the surface should be thoroughly cleaned and ground before application of the new layer.



DUROFLOOR-GMT

- After hardening, DUROFLOOR-CMT is totally safe for health.
- Before using the material, consult the directions and safety precautions written on the product's label.

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11

EN 13813 CT-C50-F10-AR0,5

Cementitious screed material for use internally in buildings

Reaction to fire: F Release of corrosive substances: CT Water permeability : NPD Water vapour permeability: NPD Compressive strength: C50 Flexural strength: F10 Wear resistance: AR0,5 Sound insulation: NPD Sound absorption: NPD Thermal resistance: NPD Chemical resistance: NPD





approx. 40 min at

0.25% w/w after 24 h

after 24 h at +23°C

within 24 h at +23°C

after 7 days at +23°C

80,5 mg (with quartz

100,1 N/mm² (A+B)

102,3 N/mm² (with quartz sand Q35 in a proportion of 1:2 by

60,9 N/mm² (A+B)

3 N/mm² (breaking point of concrete)

sand Q35 in a

1:2 by weight)

proportion of

weight)

+20°C

E,

+8°C

80

DUROFLOOR

2-component, self-leveling epoxy flooring

Description

DUROFLOOR is a 2-component, solvent-free, colored, self-leveling epoxy system, offering high strength and abrasion resistance. It is resistant to organic and inorganic acids, alkalis, petroleum products, wastes, water, sea water and a large number of solvents. It is resistant to temperatures from -30°C to +100°C in dry loading and up to +60°C in wet loading. It is classified as SR-B2,0-AR0,5-IR4 according to EN 13813.

Fields of application

DUROFLOOR is used as a pourable, selfleveling screed on cement-based floors that require high mechanical or chemical resistance. It is suitable for industrial areas, warehouses, stores, car workshops, super markets, laboratories, hotels, garages, gas stations, areas with heavy traffic etc. It is also suitable for surfaces in direct contact with food products, according to W-347, ISO 8467.

Techn	ical data
Basis:	2-component epoxy resin
Colors:	RAL 7032 (sand grey) RAL 7035 (light grey) RAL 7040 (grey) RAL 3009 (redbrown) RAL 1015 (beige) RAL 1013 (white-beige) RAL 6021 (light green) RAL 5024 (pastel blue) other colors by special order
Viscosity:	approx. 500 mPaˈs at +23ºC
Density (A+B): Mixing	1,11 kg/lit
proportion (A:B):	100 : 48 by weight

Pot life:

Water absorption: (ASTM D 570)

Reaction to fire (EN 13501-1):

Minimum hardening temperature:

Hardness according to SHORE D:

Walkability:

Successive layer:

Final strength:

Abrasion resistance: (ASTM D 4060, TABER TEST, CS 10/1000/1000)

Compressive strength: (ASTM D 695)

Flexural strength: (DIN 1164) Adhesive strength:

Cleaning of tools:

Tools should be cleaned with SM-12 solvent immediately after use.

Directions for use

1. Substrate

The flooring surface should be:

- Dry and stable.
- Free of materials that prevent bonding, e.g. dust, loose particles, grease etc.
- Protected from underneath moisture attack.



DUROFLOOR

Also, it should meet the following requirements: Concrete quality: at least C20/25 Cement screed quality: cement content

Age: Moisture content: at least C20/25 cement content 350 kg/m³ at least 28 days less than 4%

According to the nature of the substrate, it should be prepared by brushing, grinding, sand blasting, water blasting, pellet blasting, etc. Following this, the surface should be cleaned from dust with a high suction vacuum cleaner.

2. Priming

The surface is primed with DUROFLOOR-PSF or DUROPRIMER epoxy primers. Consumption: 200-300 g/m². After the primer has dried, any existing imperfections (cracks, holes) should be filled using DUROFLOOR (A+B) mixed with quartz sand, with a particle size of 0-0,4 mm (or Q35) in proportions of 1:2 up to 1:3 by weight or using DUROFLOOR-PSF mixed with quartz sand, with a particle size of 0-0,4 mm (or Q35) in proportions of 1:2 up to 1:3 by weight.

DUROFLOOR application should take place within 24 hours after priming.

In case that DUROFLOOR will be applied beyond 24 hours after priming, quartz sand with a particle size of 0,4-0,8 mm should be spread on the surface, while the primer is still fresh, in order to assure good bonding. After hardening of the primer, any loose grains should be removed using a high suction vacuum cleaner.

Wet substrate

When the substrate contains humidity more than 4% or it's a fresh concrete substrate (3-28 days), the surface should be primed with the water-based 3-component primer DUROPRIMER-W.

3. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. The whole quantity of component B is added into component A. Mixing of the 2 components should take place for about 5 minutes, using a low revolution mixer (300 rpm). It is important to stir the mixture thoroughly near the sides and bottom of the container, to achieve uniform dispersion of the hardener. Afterwards, quartz sand with a particle size of 0-0,4 mm (or Q35) is gradually added into the mixture under continuous stirring, in a proportion of 1:2 by weight [epoxy resin (A+B):sand] until a uniform epoxy mortar is formed.

4. Application Consumption

Depending on the required form of the final surface, there are two cases of application:

<u>a) Smooth final surface</u> The epoxy mortar is poured on the floor and spread (dragged) in a thickness of 2-3 mm, using a notched trowel. Consumption of DUROFLOOR (A+B): 0,60 kg/m²/mm. Consumption of guartz sand: 1,2 kg/m²/mm.

The self-leveling layer should be rolled with a special spiked roller, to help entrapped air to escape in order to avoid bubbles.

b) Slip-resistant final surface

First, the epoxy mortar is applied in the same way as in the smooth surface case. On the still fresh layer, quartz sand with a particle size of 0,1-0,4 mm or 0,4-0,8 mm is spread, depending on the required anti-slipping effect.

Consumption of quartz sand: approx. 3 kg/m².

DUROFLOOR

After hardening of DUROFLOOR, any loose grains should be removed using a high suction vacuum cleaner.

Finally, a finishing sealing layer of DUROFLOOR (A+B) or DUROFLOOR-R is applied by roller.

Consumption: 400-600 g/m².

Packaging

DUROFLOOR is supplied in packages (A+B) of 9 kg, with components A and B having fixed pre-determined weight proportions. Q35 quartz sand is supplied in bags of 18 kg.

Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.

Remarks

 The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application. • Bonding between successive layers may be severely affected by the intervention moisture or dirt.

soma building guality

- Epoxy layers should be protected from moisture for 4-6 hours after application.
 Moisture may whiten the surface or/and make it sticky. It may also disturb hardening. Faded or sticky layers in parts of the surface should be removed by grinding or milling and laid again.
- In case that longer time than predicted interferes between the application of successive layers or in case that old floors are going to be laid again, the surface should be thoroughly cleaned and ground before application of the new layer.
- In case DUROFLOOR will be used on vertical or inclined surfaces epoxy flow regulator should be added in a percentage of 0,5% by weight.
- After hardening, DUROFLOOR is totally safe for health.
- Before application, study the safety advice mentioned on the product's labels.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory h, type SB is 750g/l (2010) for the ready to use product. The ready to use product DUROFLOOR contains max <750 g/l VOC.



CE

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80

EN 13813 SR-B2,0-AR0,5-IR4

Synthetic Resin screed material for use internally in buildings

Reaction to fire: E_n Release of corrosive substances: SR Water permeability : NPD Wear resistance: AR0,5 Bond strength: B2,0 Impact resistance: IR4 Sound insulation: NPD Sound absorption: NPD Thermal resistance: NPD Chemical resistance: NPD

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the department of Research and Development of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical data sheet automatically cancels any previous one concerning the same product.





2-component epoxy flooring

Description

DUROFLOOR 11 is a 2-component, solventfree, colored epoxy system, offering high strength and abrasion resistance. It is resistant to organic and inorganic acids, alkalis, petroleum products, wastes, water, sea water and a large number of solvents. It is resistant to temperatures from -30°C to +100°C in dry loading and up to +60°C in wet loading. It is classified as SR-B2,0-AR0,5-IR4 according to EN 13813.

Fields of application

DUROFLOOR-11 is used, with the addition of quartz sand with a particle size of 0,1-0,4 mm as a self-leveling epoxy flooring on cementbased floors that require extremely high mechanical or chemical resistance. It can also be used, without the addition of quartz sand, as a brushable coating on cement-based substrates, as well as for steel or iron surfaces. It is suitable for industrial areas, warehouses, stores, car workshops, super markets, laboratories, hotels, garages, gas stations, areas with heavy traffic etc.

Technical data

Basis:	2-component epoxy resin
Color:	RAL 7032 (sand grey) RAL 7040 (grey) other colors by special order
As self-leveling enoxy flog	oring (with the addition

As self-leveling epoxy flooring (with the addition of quartz sand with a particle size of 0,1-0,4 mm in proportions 1:1 by weight)

Viscosity:	approx. 10.000 mPa's at +23°C
Density:	1,70 kg/lit
Pot life:	approx. 40 min at +20°C

Water absorption:	
(ASTM D 570)	
Reaction to fire	

(EN 13501-1): Minimum hardening

temperature: Hardness according to SHORE D:

Walkability:

Successive layer:

Final strength:

Abrasion resistance: (ASTM D 4060, TABER TEST, CS 10/1000/1000)

Compressive strength: (ASTM D 695)

Flexural strength: (DIN EN 196-1)

Adhesive strength:

As brushable coating Viscosity:

Density:

Mixing proportion (A:B): Pot life:

Water absorption: (ASTM D 570)

Minimum hardening temperature: Hardness according to SHORE D:

Walkability: Successive layer:

Final strength:

0,25% w/w after 24 h

E,

+8ºC

80 after 24 h at +23°C within 24 h at +23°C after 7 days at +23°C 79,0 mg

102,3 N/mm²

47 N/mm²

3 N/mm² (breaking point of concrete)

approx. 1.400 mPa's at +23ºC 1,35 kg/lit

100 : 29 by weight approx. 40 min at +20°C 0,28% w/w after 24 h

+8°C

80 after 24 h at +23°C within 24 h at +23°C after 7 days at +23°C 6.4



Abrasion resistance:77,0 mg(ASTM D 4060,
TABER TEST,
CS 10/1000/1000)77,0 mgCompressive strength:
(DIN EN 196-1)53 N/mm²Flexural strength:
(DIN EN 196-1)33 N/mm²Adhesive strength:
point of concrete)3 N/mm²

Cleaning of tools: Tools should be cleaned with SM-12 solvent immediately after use.

Directions for use

1. Substrate

- The flooring surface should be:
- Dry and stable.
- Free of materials that prevent bonding, e.g. dust, loose particles, grease etc.
- Protected from underneath moisture attack.

Also, it should meet the following requirements:

a) Cementitious substrates:

Concrete quality:	at least C20/25
Cement screed quality:	cement content
	350 kg/m ³
Age:	at least 28 days
Moisture content:	less than 4%

b) Iron or steel surfaces:

Should be free of rust or any corrosion that may prevent bonding.

According to the nature of the substrate, it should be prepared by brushing, grinding, sand blasting, water blasting, shot blasting, etc. Following this, the surface should be cleaned from dust with a high suction vacuum cleaner.

2. Priming

The surface is primed with DUROFLOOR-PSF or DUROPRIMER epoxy primers. Consumption: 200-300 a/m². After the primer has dried, any existing imperfections (cracks, holes) should be filled using DUROFLOOR 11 (A+B) mixed with quartz sand, with a particle size of 0,1-0,4 mm (or M32) in proportions of 1:1,5 up to 1:2 by weight or using DUROFLOOR-PSF mixed with quartz sand, with a particle size of 0-0,4 mm (or Q35) in proportions of 1:2 up to 1:3 by weight. Metallic substrates should be primed with EPOXYCOAT-AC anti-corrosive epoxy coating. The application of DUROFLOOR 11 should take place within 24 hours after priming. In case that DUROFLOOR 11 will be applied beyond 24 hours after priming, quartz sand with a particle size of 0,4-0,8 mm should be spread on the surface, while the primer is still fresh, in order to assure good bonding. After hardening of the primer, any loose grains should be removed using a high suction vacuum cleaner.

Wet substrate

When the substrate contains humidity more than 4% or it's a fresh concrete substrate (3-28 days), the surface should be primed with the water-based 3-component primer DUROPRIMER-W.



3. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. At first, component A must be stirred well and poured into a clean container. Then the whole quantity of component B is added into component A under continuous stirring. Mixing of the 2 components should take place for about 5 minutes, using a low revolution mixer (300 rpm). It is important to stir the mixture thoroughly near the sides and bottom of the container, to achieve uniform dispersion of the hardener. In case of using DUROFLOOR 11 as a self-leveling epoxy flooring, quartz sand with a particle size of 0,1-0,4 mm (or M32) is gradually added into the mixture under continuous stirring, in a proportion of 1:1 by weight [epoxy resin (A+B):sand] until a uniform epoxy mortar is formed.

4. Application Consumption

Depending on the required type of the epoxy floor and the form of the final surface, there are four cases of application:

a) Self-leveling flooring - Smooth final surface The epoxy mortar is poured on the floor and spread (dragged) in a thickness of 2-3 mm, using a notched trowel.

Consumption of DUROFLOOR 11 (A+B): 0,85 kg/m²/mm.

Consumption of quartz sand: 0,85 kg/m²/mm. The self-leveling layer should be rolled with a special spiked roller, to help entrapped air to escape in order to avoid bubbles.

b) Self-leveling flooring - Slip-resistant final surface

At first, the epoxy mortar is applied in the same way as in the smooth surface case. On the still fresh layer, quartz sand with a particle size of 0,1-0,4 mm or 0,4-0,8 mm is spread, depending on the required anti-slipping effect. Consumption of quartz sand: approx. 3 kg/m². After hardening of DUROFLOOR 11, any loose grains should be removed using a high suction vacuum cleaner.

Finally, a finishing sealing layer of DUROFLOOR-11 (A+B) is applied by roller. Consumption: 400-600 g/m².

c) Brushable coating - Smooth final surface DUROFLOOR 11 (A+B) is applied by roller in two layers. Second layer follows after the first has dried, but within 24 hours.

Consumption: Approx. 250-300 g/m²/layer.

<u>B) Brushable coating - Slip-resistant final</u> surface

DUROFLOOR 11 (A+B) is applied by roller in one layer.

Consumption: approx. 250-300 g/m². On the still fresh layer, quartz sand with particle-size 0,1-0,4 mm or 0,4-0,8 mm, depending on the desired anti-slip effect, is broadcast.

Consumption of quartz sand: approx. 3 kg/m². After hardening of DUROFLOOR 11, any loose grains should be removed using a vacuum cleaner.

Finally, a finishing layer of DUROFLOOR-11 (A+B) is brushed.

Consumption: 400-600 g/m².

Packaging

DUROFLOOR 11 is supplied in packages (A+B) of 16 kg, with components A and B having fixed pre-determined weight proportions. M32 quartz sand is supplied in bags of 25 kg.

Shelf-life - Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.



Remarks

- The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.
- Bonding between successive layers may be severely affected by the intervention moisture or dirt.
- Epoxy layers should be protected from moisture for 4-6 hours after application.
 Moisture may whiten the surface or/and make it sticky. It may also disturb hardening. Faded or sticky layers in parts of the surface should be removed by grinding or milling and laid again.
- In case that longer time than predicted interferes between the application of successive layers or in case that old floors are going to be laid again, the surface should be thoroughly cleaned and ground before application of the new layer.
- After hardening, DUROFLOOR-11 is totally safe for health.
- Before application, study the safety advice mentioned on the product's labels.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory j, type SB is 500g/I (2010) for the ready to use product. The ready to use product DUROFLOOR 11 contains max <500 g/I VOC.

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08

EN 13813 SR-B2,0-AR0,5-IR4

Synthetic Resin screed material for use internally in buildings

Reaction to fire: E_n Release of corrosive substances: SR Water permeability : NPD Wear resistance: AR0,5 Bond strength: B2,0 Impact resistance: IR4 Sound insulation: NPD Sound absorption: NPD Thermal resistance: NPD Chemical resistance: NPD

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the department of Research and Development of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore the user is responsible for confirming that the chosen product is suitable for the envised application. The present edition of this technical data sheet automatically cancels any previous one concerning the same product.





DUROFLOOR-R

2-component, brushable epoxy coating

Description

DUROFLOOR-R is a 2-component, solventfree, colored epoxy system, offering high strength and abrasion resistance. It is resistant to organic and inorganic acids, alkalis, petroleum products, wastes, water, sea water and weather conditions. It is resistant to temperatures from -30°C to +100°C in dry loading and up to +60°C in wet loading. It is classified as SR-B2,0-AR0,5-IR4 according to EN 13813.

Fields of application

DUROFLOOR-R is used as a brushable coating on floors that require high mechanical or chemical strength. It is suitable for cementbased substrates, e.g. concrete, cementmortars or asbestos cement, as well as for steel or iron surfaces in industrial areas, warehouses, laboratories, hospitals, wine factories, slaughter-houses, canned food factories, garages, car workshops etc.

It is also suitable for surfaces in direct contact with food products, according to W-347, ISO 8467.

Technical data

Basis:	2-component epoxy resin
Colors:	RAL 7032 (sand grey) RAL 7035 (light grey) RAL 7040 (grey) RAL 3009 (redbrown) RAL 1015 (beige) RAL 1013 (white-beige) RAL 6021 (light green) RAL 5024 (pastel blue) other colors by special order
Viscosity:	approx. 1.900 mPa's at +23ºC

Density (A+B):	1,46 kg/lit
Mixing proportion (A:B):	100 : 25 by weight
Pot life:	approx. 40 min at +20°C
Minimum hardening temperature:	+8°C
Water absorption: (ASTM D 570)	0,29% w/w (24 h)
Reaction to fire (EN 13501-1):	E _n
Hardness according to SHORE D:	80
Walkability:	after 24 h at +23°C
Successive layer:	after 16 h at +23°C
Final strength:	after 7 days at +23°C
Abrasion resistance: (ASTM D 4060, TABER TEST, CS 10/1000/1000)	76,6 mg
Compressive strength: (DIN EN 196-1)	51 N/mm ²
Flexural strength: (DIN EN 196-1)	32 N/mm ²
Adhesive strength:	> 3 N/mm ² (breaking point of concrete)
Cleaning of toolor	

Cleaning of tools:

Tools should be cleaned with SM-12 solvent immediately after use.

Directions for use

1. Substrate

The flooring surface should be:

- . Dry and stable.
- · Free of materials that prevent bonding, e.g. dust, loose particles, grease etc.
- · Protected from underneath moisture attack.



DUROFLOOR-R

Also, it should meet the following requirements:

a) Cementitious substrates:

Concrete quality:		
Cement screed quality:		

at least C20/25 cement content 350 kg/m³ at least 28 days less than 4%

Moisture content:

Age:

b) Iron or steel surfaces: Should be free of rust or any corrosion that may prevent bonding.

According to the nature of the substrate, it should be prepared by brushing, grinding, sand blasting, water blasting, shot blasting, etc. Following this, the surface should be cleaned from dust with a high suction vacuum cleaner.

2. Priming

Cementitious surfaces should be primed with DUROFLOOR-PSF or DUROPRIMER epoxy primers.

Consumption: 200-300 g/m².

After the primer has dried, any existing imperfections (cracks, holes) should be filled using DUROFLOOR-R mixed with quartz sand with a particle size of 0-0,4 mm (or Q35 quartz sand) in proportions of 1:1,5 up to 1:2 by weight or using DUROFLOOR-PSF mixed with quartz sand with a particle size of 0-0,4 mm (or Q35 quartz sand) in proportions of 1:2 up to 1:3 by weight.

Metallic substrates should be primed with EPOXYCOAT-AC anti-corrosive epoxy coating. DUROFLOOR-R application should take place within 24 hours after priming.

In case that DUROFLOOR-R will be applied beyond 24 hours after priming, quartz sand with a particle size of 0,4-0,8 mm should be spread on the surface, while the primer is still fresh, in order to assure good bonding. After hardening of the primer, any loose grains should be removed using a high suction vacuum cleaner.

Wet substrate

When the substrate contains humidity more than 4% or it's a fresh concrete substrate (3-28 days), the surface should be primed with the water-based 3-component primer DUROPRIMER-W.

3. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. The whole quantity of component B is added into component A. Mixing of the 2 components should take place for about 5 minutes, using a low revolution mixer (300 rpm). It is important to stir the mixture thoroughly near the sides and bottom of the container, to achieve uniform dispersion of the hardener.

4. Application - Consumption

Depending on the required form of the final surface, there are two cases of application:

a) <u>Smooth final surface</u> DUROFLOOR-R is applied by roller in two layers. Second layer follows after the first has dried, but within 24 hours. Consumption: Approx. 250-300 g/m²/layer.

b) Slip-resistant final surface DUROFLOOR-R is applied by roller in one layer.

Consumption: approx. 250-300 g/m².

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DUROFLOOR-R

On the still fresh layer, quartz sand with particle-size 0,1-0,8 mm or 0,4-0,8 mm, depending on the desired anti-slip effect, is broadcast.

Consumption of quartz sand: approx. 3 kg/m². After hardening of DUROFLOOR-R, any loose grains should be removed using a vacuum cleaner.

Finally, a finishing layer of DUROFLOOR-R is brushed.

Consumption: 400-600 g/m².

Packaging

DUROFLOOR-R is supplied in packages (A+B) of 10 kg, with components A and B having the fixed weight proportion.

Shelf-life - Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.

Remarks

 The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.

- Bonding between successive layers may be severely affected by the intervention of moisture or dirt between them.
- Epoxy layers should be protected from moisture for 4-6 hours after application.
 Moisture may whiten the surface or/and make it sticky. It may also disturb hardening. Faded or sticky layers in parts of the surface should be removed by grinding or milling and laid again.
- In case that longer time than predicted interferes between the application of successive layers or in case that old floors are going to be laid again, the surface should be thoroughly cleaned and ground before application of the new layer.
- In case DUROFLOOR-R will be used on vertical or inclined surfaces epoxy flow regulator should be added in a percentage of 2,0% by weight.
- After hardening, DUROFLOOR-R is totally safe for health.
- Before application, study the safety advice mentioned on the product's labels.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory j, type SB is 500g/I (2010) for the ready to use product. The ready to use product DUROFLOOR-R contains max <500 g/I VOC.



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P.O. BOX 1043, 570 03 Ag. Athan	asios, Greece
EN 13813 SR-B2,0-AR0,5-IR4 Synthetic Resin screed material for use internally in buildings	EN 13813 SR-B2,0 Primer
Reaction to fire: E _n Release of corrosive substances: SR Water permeability : NPD Wear resistance: AR0,5 Bond strength: B2,0 Impact resistance: IR4 Sound insulation: NPD Sound absorption: NPD	NPD SR NPD NPD B2,0 NPD NPD NPD
Thermal resistance: NPD Chemical resistance: NPD	NPD NPD

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DUROFLOOR-PU

2-component, brushable polyurethane coating for floors

Description

DUROFLOOR-PU is a 2-component, solventfree, colored polyurethane system. After its application it forms a strong and elastic membrane with excellent resistance to solar radiation (UV).

It offers abrasion resistance, it is resistant to organic and inorganic acids, alkalis, petroleum products, to specific solvents, wastes, water, sea water and weather conditions. It is resistant to temperatures from -30° C to $+100^{\circ}$ C in dry loading and up to $+60^{\circ}$ C in wet loading. It is classified as SR-B1,5-AR2-IR8 according to EN 13813.

Fields of application

DUROFLOOR-PU is used as a brushable coating on floors that require high elasticity, mechanical and chemical strength. It is suitable for:

- Cement-based substrates, e.g. concrete, cement-mortars or asbestos cement.
- Steel or iron surfaces
- Existing epoxy floors
- Refrigerator and freeze rooms, industrial areas, warehouses, laboratories, hospitals, wine factories, slaughter-houses, canned food factories, garages, car workshops etc.

It is suitable for interior and exterior applications.

Technical data		
Basis:	2-component polyurethane resin	
Colors:	RAL 7040 (grey) other colors by special order	
Viscosity:	approx. 4.000 mPaˈs at +23ºC	
Density (A+B):	1,40 kg/l	
Mixing proportion (A:B): Pot life:	100:42,5 by weight approx. 40 min at +20°C	

Minimum hardening temperature:	+8°C
Shore D hardness:	80
Walkability:	after 24 h at +23°C
Successive layer:	after 16 h at +23°C
Final strength:	after 7 days at +23°C
Wear resistance (EN 13892-4):	140 µm
Impact resistance (EN ISO 6272):	8 Nm
Adhesive strength: (EN 13892-8)	> 1,5 N/mm ²

Cleaning of tools: Tools should be cleaned with SM-16 solvent immediately after use.

Directions for use

1. Substrate

- The flooring surface should be:
- Dry and stable.
- Free of materials that prevent bonding, e.g. dust, loose particles, grease etc.
- Protected from underneath moisture attack.

Also, it should meet the following requirements:

a) Cementitious substrates:

Concrete quality:	at least C20/25
Cement screed quality:	cement content
	350 kg/m ³
Age:	at least 28 days
Moisture content:	less than 4%

b) Iron or steel surfaces:

Should be free of rust or any corrosion that may prevent bonding.

According to the nature of the substrate, it should be prepared by brushing, grinding, sand blasting, water blasting, shot blasting, etc. Following this, the surface should be cleaned from dust with a high suction vacuum cleaner.



DUROFLOOR-PU

2. Priming

Cementitious surfaces should be primed with the polyurethane primer PRIMER-PU or with the epoxy primers DUROFLOOR-PSF or DUROPRIMER.

Consumption: 200-300 g/m².

After the primer has dried, any existing imperfections (cracks, holes) should be filled using DUROFLOOR-PSF mixed with quartz sand with a particle size of 0-0,4 mm (or Q35 quartz sand) in proportions of 1:2 up to 1:3 by weight.

Metallic substrates should be primed with EPOXYCOAT-AC anti-corrosive epoxy coating. DUROFLOOR-PU application should take place within 24 hours after priming.

In case that DUROFLOOR-PU will be applied beyond 24 hours after priming, quartz sand with a particle size of 0,4-0,8 mm should be spread on the surface, while the primer is still fresh, in order to assure good bonding. After hardening of the primer, any loose grains should be removed using a high suction vacuum cleaner.

Wet substrate

When the substrate contains humidity more than 4% or it's a fresh concrete substrate (3-28 days), the surface should be primed with the water-based 3-component primer DUROPRIMER-W.

3. Mixing of DUROFLOOR-PU

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. The whole quantity of component B is added into component A. Mixing of the 2 components should take place for about 5 minutes, using a low revolution mixer (300 rpm). It is important to stir the mixture thoroughly near the sides and bottom of the container, to achieve uniform dispersion of the hardener.

4. Application - Consumption

Depending on the required form of the final surface, there are two cases of application:

a) Smooth final surface

DUROFLOOR-PU is applied by roller in two layers. Second layer follows after the first has dried, but within 24 hours.

Consumption: Approx. 250-300 g/m²/layer. b) Slip-resistant final surface

DUROFLOOR-PU is applied by roller in one layer.

Consumption: approx. 250-300 g/m². On the still fresh layer, quartz sand with particle-size 0,1-0,8 mm or 0,4-0,8 mm, depending on the desired anti-slip effect, is broadcast.

Consumption of quartz sand: approx. 3 kg/m². After hardening of DUROFLOOR-PU, any loose grains should be removed using a vacuum cleaner.

Finally, a finishing layer of DUROFLOOR-PU is brushed.

Consumption: 400-600 g/m².

Packaging

DUROFLOOR-PU is supplied in packages (A+B) of 10 kg, with components A and B having the fixed weight proportion.

Shelf-life - Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.

Remarks

 The workability of polyurethane materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.



DUROFLOOR-PU

- Bonding between successive layers may be severely affected by the intervention of moisture or dirt between them.
- Polyurethane layers should be protected from moisture for 4-6 hours after application. Moisture may whiten the surface or/and make it sticky. It may also disturb hardening. Faded or sticky layers in parts of the surface should be removed by grinding or milling and laid again.
- In case that longer time than predicted interferes between the application of successive layers or in case that old floors are going to be laid again, the surface should be thoroughly cleaned and ground before application of the new layer.
- After hardening, DUROFLOOR-PU is totally safe for health.
- Before application, study the safety advice mentioned on the product's labels.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory j, type SB is 500g/I (2010) for the ready to use product. The ready to use product DUROFLOOR-PU contains max <500 g/I VOC.

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EN 13813 SR-B1,5-AR2-IR8

Synthetic Resin screed material for use internally in buildings

Reaction to fire: F Release of corrosive substances: SR Water permeability : NPD Wear resistance: AR2 Bond strength: B1,5 Impact resistance: IR8 Sound insulation: NPD Sound absorption: NPD Thermal resistance: NPD Chemical resistance: NPD

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DUROFLOOR-BI

2-component, colorless epoxy impregnation

Description

DUROFLOOR-BI is a 2-component, colorless epoxy system with solvents. Due to its low viscosity and its great fluidity, it can penetrate deep into the substrate and fill pores and capillaries. The impregnated surfaces become stable and durable, resistant to abrasion, frost and chemicals, especially wastes, mineral oils and petroleum products.

It is classified as SR-B2,0 according to EN 13813.

Fields of application

DUROFLOOR-BI is used for the impregnation of cement-based substrates, e.g. old and new concrete, cement-mortar or plaster etc. It is suitable for floors in parking lots, warehouses, laboratories, industries, gas stations, car repair shops etc.

It is also used as a primer for EPOXYCOAT, EPOXYCOAT-VSF and EPOXYCOAT-S epoxy coatings.

Technical data	
Basis:	2-component epoxy resin
Color:	transparent
Viscosity:	45 mPas at +23°C
Density (A+B):	0,92 kg/lit
Mixing proportion (A:B):	100 : 29 by weight
Pot life:	approx. 10 h at +20ºC
Minimum hardening temperature:	+8ºC
Walkability:	after 24 h at +23°C
Successive layer:	after 10-24 h at +23°C
Final strength:	after 7 days at +23°C

Adhesive strength:

> 3 N/mm² (breaking point of concrete)

Cleaning of tools:

Tools should be thoroughly cleaned with SM-12 solvent immediately after use.

Directions for use

1. Substrate

- The flooring surface should be:
- Dry and stable.
- Free of materials that prevent bonding, e.g. dust, loose particles, grease etc.
- Protected from underneath moisture attack.

Also, it should meet the following requirements: Concrete quality: at least C20/25 Cement screed quality: cement content

Age: Moisture content: 350 kg/m³ at least 28 days less than 4%

According to the nature of the substrate, it should be prepared by brushing, grinding, cleaning with a high suction vacuum cleaner etc.

2. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. The whole quantity of component B is added into component A. Mixing of the 2 components should take place for about 5 minutes, using a low revolution mixer (300 rpm). It is important to stir the mixture thoroughly near the sides and bottom of the container, to achieve uniform dispersion of the hardener.

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DUROFLOOR-BI

3. Application - Consumption

DUROFLOOR-BI is applied by roller, brush or spray in 1-2 layers, according to the substrate's absorptivity. Second layer follows 15 min after the first is applied.

Consumption: 150-250 g/m²/layer.

DUROFLOOR-BI may be applied on new concrete (approx. 3 days old) because curing is not disturbed. It may also be applied on slightly wet substrates (moisture content up to 6%). In both cases a small impregnation depth is achieved.

If a depth of impregnation of about 5 mm into concrete is required, moisture content should be less than 3%.

Packaging

DUROFLOOR-BI is supplied in packages (A+B) of 4 kg and 10 kg, with components A and B having the fixed weight proportion.

Shelf-life - Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.

Remarks

 The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.

- DUROFLOOR-BI contains solvents. In cases of applications in closed rooms, measures should be taken for good ventilation.
- Non-uniform absorptivity of the substrate may cause a non-uniform surface appearance after impregnated.
- Bonding between successive layers may be severely affected by the intervention of moisture or dirt between them.
- Epoxy layers should be protected from moisture for 4-6 hours after application.
 Moisture may whiten the surface or/and make it sticky. It may also disturb hardening. Faded or sticky layers in parts of the surface should be removed by grinding or milling and laid again.
- In case that longer time than predicted interferes between the application of successive layers or in case that old floors are going to be laid again, the surface should be thoroughly cleaned and ground before application of the new layer.
- After hardening, DUROFLOOR-BI is totally safe for health.
- Before application, study the safety advice mentioned on the product's labels.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory h, type SB is 750g/l (2010) for the ready to use product. The ready to use product DUROFLOOR-BI contains max <750 g/l VOC.



DUROFLOOR-BI

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EN 13813 SR-B2,0 Primer

Reaction to fire: NPD Release of corrosive substances: SR Water permeability : NPD Wear resistance: NPD Bond strength: B2,0 Impact resistance: NPD Sound insulation: NPD Sound absorption: NPD Thermal resistance: NPD Chemical resistance: NPD

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DUROFLOOR-C

2-component, self-leveling, conductible epoxy floor

Description

DUROFLOOR-C is a 2-component, solventfree, colored epoxy system, offering permanent conductivity that prevents the appearance of static electricity charges on surfaces. It has a conductivity resistance between 10⁴ and 10⁶ Ohm. DUROFLOOR-C has high strength and abrasion resistance, it is resistant to organic and inorganic acids, alkalis, petroleum products, a number of solvents, waste, water, sea water and weather conditions. It is classified as SR-B2,0-AR0,5-IR4 according to EN 13813.

Fields of application

DUROFLOOR-C is used as a floated, selfleveling screed on cement-based floors, in cases that static electricity causes problems. It is suitable for computer rooms, laboratories, printing rooms, textile mills, hospitals, gas stations, electrical stations, ammunition storerooms etc.

Technical data	
Basis:	2-component epoxy resin
Colors:	RAL 7040 (grey) RAL 1015 (beige) other colors by special order
Viscosity:	approx. 5.700 mPa's at +23°C
Density (A+B):	1,45 kg/lit
Mixing proportion (A:B):	100 : 25 by weight
Pot life:	approx. 40 min at +20°C
Reaction to fire (EN 13501-1):	En
Minimum hardening temperature:	+8°C

80
after 24 h at +23°C
after 24 h at +23°C
after 7 days at +23 $^{\circ}$ C
43,2 N/mm ²
25,3 N/mm ²
> 3 N/mm ² (breaking point of concrete)

Cleaning of tools:

Tools should be cleaned with SM-12 solvent immediately after use.

Directions for use

1. Substrate

- The flooring surface should be:
- Dry and stable.
- Free of materials that prevent bonding, e.g. dust, loose particles, grease etc.
- Protected from underneath moisture attack.

 Also, it should meet the following requirements:

 Concrete quality:
 at least C20/25

 Cement screed quality:
 cement content

 350 kg/m³

 Age:
 at least 28 days

 Moisture content:
 less than 4%

According to the nature of the substrate, it should be prepared by brushing, grinding, sand blasting, water blasting, pellet blasting, etc. Following this, the surface should be cleaned from dust with a high suction vacuum cleaner.



DUROFLOOR-G

2. Priming

The surface is primed with DUROFLOOR-PSF or DUROPRIMER epoxy primers. Consumption: 200-300 g/m². After the primer has dried, any existing imperfections (cracks, holes) should be filled using DUROFLOOR-PSF mixed with guartz sand, with a particle size of 0-0,4 mm (or Q35), in proportions of 1:2 up to 1:3 by weight. The application of the conductible floor should take place within 24 hours after priming. In case that the conductible floor will be applied beyond 24 hours after priming guartz sand with a particle size of 0,4-0,8 mm should be spread on the surface, while the primer is still fresh, in order to assure good bonding. After hardening of DUROFLOOR-PSF, any loose grains should be removed using a high suction vacuum cleaner.

Wet substrate

When the substrate contains humidity more than 4% or it's a fresh concrete substrate (3-28 days), the surface should be primed with the water-based 3-component primer DUROPRIMER-W.

3. Conductible layer

After hardening of the primer, the special selfadhesive copper-bands (conductors) should be installed on the floor in a grid formation of at least $5m \times 5m$ and connected to the ground through a perimetrical cable.

Afterwards, the surface is coated with DUROFLOOR-CV conductible epoxy varnish, applied by roller in a thin layer. Consumption: approx. 200 g/m².

DUROFLOOR-C should be applied within the following 24 hours after DUROFLOOR-CV application, but after it has dried.

4. Application of self-leveling DUROFLOOR-C

a) Mixing of the components Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. The whole quantity of component B is added into component A. Mixing of the 2 components should take place for about 5 minutes, using a low revolution mixer (300 rpm). It is important to stir thoroughly the mixture near the sides and bottom of the container, to succeed uniform dispersion of the hardener.

b) Application - Consumption

DUROFLOOR-C is spread (dragged) on the floor using a smooth trowel, to a thickness of approx. 2mm.

Consumption: approx. 1,5 kg/m²/mm. The self-leveling layer should be rolled with a special spiked roller, to help any possibly entrapped air to escape in order to avoid bubbles.

Packaging

DUROFLOOR-C is supplied in packages (A+B) of 10 kg, with components A and B having fixed weight proportions.

Shelf-life - Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.



DUROFLOOR-C

Remarks

- The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.
- Bonding between successive layers may be severely affected by the intervention moisture or dirt.
- Epoxy layers should be protected from moisture for 4-6 hours after application.
 Moisture may whiten the surface or/and make it sticky. It may also disturb hardening. Faded or sticky layers in parts of the surface should be removed by grinding or milling and laid again.
- In case that longer time than predicted interferes between the application of successive layers or in case that old floors are going to be laid again, the surface should be thoroughly cleaned and ground before application of the new layer.
- The conductible fibers contained in DUROFLOOR-C cause a slight differentiation in its color in relation to the corresponding RAL code.
- After hardening, DUROFLOOR-C is totally safe for health.
- Before application, study the safety advice mentioned on the product's labels.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory j, type SB is 500g/l (2010) for the ready to use product. The ready to use product DUROFLOOR-C contains max <500 g/l VOC.

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08

EN 13813 SR-B2,0-AR0,5-IR4

Synthetic Resin screed material for use internally in buildings

Reaction to fire: E_n Release of corrosive substances: SR Water permeability : NPD Wear resistance: AR0,5 Bond strength: B2,0 Impact resistance: IR4 Sound insulation: NPD Sound absorption: NPD Thermal resistance: NPD Chemical resistance: NPD

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DUROFLOOR-CV

2-component, conductible epoxy varnish

Description

DUROFLOOR-CV is a 2-component, colored epoxy system with solvents, offering strong bonding to the substrate and good conductivity that prevents the accumulation of static electricity on surfaces. It has a conductivity resistance lower than 10⁴ Ohm. It is classified as SR-B2,0 according to EN 13813.

Fields of application

DUROFLOOR-CV is used as an intermediate layer of the epoxy system DUROFLOOR-C, to assure uniform conductivity on the whole floor surface.

Technical data	
Basis:	2-component epoxy resin
Color:	black
Viscosity:	2.000 mPa's at +23ºC
Density (A+B):	1,23 kg/lit
Mixing proportion (A:B):	100 : 18,2 by weight
Pot life:	approx. 8 h at+20⁰C
Minimum hardening temperature:	+8°C
Walkability:	after 24 h at +23°C
Successive layer:	after 8-24 h at +23°C
Final strength:	after 7 days at +23°C
Adhesive strength:	> 3 N/mm ² (breaking point of concrete)
Conductivity resistance:	< 10⁴ Ohm
Cleaning of tools: Tools should be cleaned with SM-12 solvent immediately after use.	

Directions for use

1. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. The whole quantity of component B is added into component A. Mixing of the 2 components should take place for about 5 minutes, using a low revolution mixer (300 rpm). It is important to stir the mixture thoroughly near the sides and bottom of the container, to achieve uniform dispersion of the hardener.

2. Application - Consumption

DUROFLOOR-CV is applied within 24 hours after priming with DUROFLOOR-PSF or DUROPRIMER epoxy primer and after the primer has hardened.

First, the special self-adhesive copper-bands (conductors) should be installed on the floor in a grid formation of at most 5m x 5m mesh and connected to the ground through a perimetrical cable.

Afterwards, DUROFLOOR-CV is brushed by roller in a thin layer.

Consumption: approx. 200 g/m².

DUROFLOOR-C should be applied within the following 24 hours.

Packaging

DUROFLOOR-CV is supplied in packages (A+B) of 8 kg, with components A and B having fixed weight proportions.

Shelf-life - Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.



DUROFLOOR-CV

Remarks

- The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.
- Bonding between successive layers may be severely affected by the intervention moisture or dirt.
- Epoxy layers should be protected from moisture for 4-6 hours after application. Moisture may whiten the surface or/and make it sticky. It may also disturb hardening. Faded or sticky layers in parts of the surface should be removed by grinding or milling and laid again.
- In case that longer time than predicted interferes between the application of successive layers or in case that old floors are going to be laid again, the surface should be thoroughly cleaned and ground before application of the new layer.
- After hardening, DUROFLOOR-CV is totally safe for health.
- Before application, study the safety advice mentioned on the product's labels.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory j, type SB is 500g/l (2010) for the ready to use product. The ready to use product DUROFLOOR-CV contains max <500 g/l VOC.

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EN 13813 SR-B2,0

Primer

Reaction to fire: E_n Release of corrosive substances: SR Water permeability : NPD Wear resistance: AR0,5 Bond strength: B2,0 Impact resistance: IR4 Sound insulation: NPD Sound absorption: NPD Thermal resistance: NPD Chemical resistance: NPD

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DUROFLOOR-PSF

2-component, solvent-free epoxy primer

Description

DUROFLOOR-PSF is a 2-component, solventfree, colorless epoxy system, offering high hardness and abrasion resistance. It is resistant to acids, alkalis, petroleum products and salt solutions.

It is classified as SR-B2,0-AR0,5-IR4 according to EN 13813.

Fields of application

- Priming of cementitious surfaces that will be covered with DUROFLOOR products.
- Sealing coatings on cement-based floors, in industrial areas, warehouses etc.
- · Preparation of flooring resin-mortars.
- Preparation of material for repairing cracks or smoothing substrates before applying flooring layers.

Technical data

Basis:	2-component epoxy resin
Color:	transparent
Viscosity:	490 mPa's at +23°C
Density (A+B):	1,07 kg/lit
Mixing proportion (A:B):	100 : 55 by weight
Pot life:	approx. 40 min at +20ºC
Reaction to fire (EN 13501-1):	E_n (with quartz sand M32 (Ø 0,1-0,4 mm) in a proportion of 1:2 by weight)
Minimum hardening temperature:	+8°C
Hardness according to SHORE D:	76

Walkability:	after 20 h at +23°C
Successive layer:	after 20 h at +23°C
Final strength:	after 7 days at +23ºC
Compressive strength: (DIN EN 196-1)	55 N/mm ²
Flexural strength: (DIN EN 196-1)	> 35 N/mm ²
Adhesive strength:	> 3 N/mm ² (breaking point of concrete)

Cleaning of tools:

Tools should be cleaned with SM-12 solvent immediately after use.

Directions for use

1. Substrate

The flooring surface should be:

- Dry and stable.
- Free of materials that prevent bonding, e.g. dust, loose particles, grease etc.
- Protected from underneath moisture attack.

Also, it should meet the following requirements: Concrete quality: at least C20/25 Cement screed quality: cement content 250 kc/m³

	550 Kg/III
Age:	at least 28 days
Moisture content:	less than 4%

According to the nature of the substrate, it should be prepared by brushing, grinding, sand blasting, water blasting, pellet blasting, etc. Following this, the surface should be cleaned from dust with a high suction vacuum cleaner.

2. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. The whole quantity of component B is added into component A. Mixing of the 2 components should take place for about 5 minutes, using a low revolution mixer (300 rpm).



DUROFLOOR-PSF

It is important to stir thoroughly the mixture near the sides and bottom of the container, to succeed uniform dispersion of the hardener.

3. Application - Consumption

According to the kind of application of DUROFLOOR-PSF, the following cases are sorted out:

a) Priming

DUROFLOOR-PSF is applied by roller, brush or spray in one layer.

Consumption: 200-300 g/m².

The application of the qualified DUROFLOOR system follows within 24 hours.

In case that the DUROFLOOR system is going to be applied beyond 24 hours since priming, quartz sand with a particle size of 0,4-0,8 mm should be spread on the surface, while the primer is still fresh, in order to assure good bonding.

After hardening of DUROFLOOR-PSF, any loose grains should be removed using a high suction vacuum cleaner.

b) Sealing of cementitious surfaces

DUROFLOOR-PSF is brushed on the prepared surface in two layers.

Consumption: approx. 200-250 g/m²/layer. To prepare slip-resistant surfaces, quartz sand with particle-size 0,6-1,2 mm or 0,4-0,8 mm is broadcast on the still fresh first layer of DUROFLOOR-PSF. After hardening of DUROFLOOR-PSF, any loose grains should be removed using a vacuum cleaner. Finally, the second layer of DUROFLOOR-PSF follows. Consumption of guartz sand: 2-3 kg/m².

c) Resin-mortar

The surface should be primed with DUROFLOOR-PSF.

Consumption: approx. 200-300 g/m². The mortar is prepared with proportions:

DUROFLOOR-PSF: 1 part by weight Quartz sand: 8-15 parts by weight Quartz sand should have particle-size 0-0,4 mm (or Q35) or 0-0,8 mm, depending on layer thickness.

Mixing should take place using a heavy-duty concrete mixer, adding the quartz sand first and following with the already mixed DUROFLOOR-PSF resin (components A+B). It is important that sand and resin are thoroughly mixed. The epoxy mortar is applied at a minimum thickness of 8 mm with the help of guides and compacted using a smoothing machine. Resin-mortar consumption:

approx. 2,0 kg/m²/mm of layer thickness.

d) Repairing - Smoothing

Priming with DUROFLOOR-PSF should take place first.

Consumption: approx. 200-300 g/m². The repairing material is prepared with proportions:

DUROFLOOR-PSF: Quartz sand: 1 part by weight 2-3 parts by weight

Quartz sand should have particle-size 0-0,4 mm (or Q35) or 0-0,8 mm, depending on the layer thickness, and should be added into the already mixed resin (components A+B). It is important that sand and resin are thoroughly mixed.

The repairing material is applied on the surface in one layer.

Consumption: approx. 1,8 kg/m²/mm.

Packaging

DUROFLOOR-PSF is supplied in packages (A+B) of 5 kg and 10 kg, with components A and B having the fixed weight proportion.

Shelf-life - Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.



DUROFLOOR-PSF

Remarks

- The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.
- Bonding between successive layers may be severely affected by the intervention moisture or dirt.
- Epoxy layers should be protected from moisture for 4-6 hours after application.
 Moisture may whiten the surface or/and make it sticky. It may also disturb hardening. Faded or sticky layers in parts of the surface should be removed by grinding or milling and laid again.
- In case that longer time than predicted interferes between the application of successive layers or in case that old floors are going to be laid again, the surface should be thoroughly cleaned and ground before application of the new layer.
- After hardening, DUROFLOOR-PSF is totally safe for health.
- Before application, study the safety advice mentioned on the product's label.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory h, type SB is 750g/l (2010) for the ready to use product. The ready to use product DUROFLOOR-PSF contains max <750 g/l VOC.

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EN 13813 SR-B2,0-AR0,5-IR4 Synthetic Resin screed material for use internally in buildings	EN 13813 SR-B2,0 Primer
Reaction to fire: E _n Release of corrosive substances: SR Water permeability : NPD Wear resistance: AR0,5 Bond strength: B2,0 Impact resistance: IR4 Sound insulation: NPD Sound absorption: NPD Thermal resistance: NPD	NPD SR NPD NPD B2,0 NPD NPD NPD
Chemical resistance: NPD	NPD

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6.4

6.4



DUROPRIMER

2-component epoxy primer

Description

DUROPRIMER is a 2-component, colorless epoxy system with solvents, offering high hardness and abrasion resistance. It is resistant to water, acids, alkalis, petroleum products etc. It is classified as SR-B2,0 according to EN 13813.

Fields of application

DUROPRIMER is used as a primer on cementbased substrates, e.g. concrete, cement-screed etc., that are going to be covered with epoxy resins of DUROFLOOR system.

Technical data

Basis:	2-component epoxy resin
Colors:	transparent
Viscosity:	120 mPas at +23°C
Density:	0,98 kg/lit
Mixing proportion (A:B):	100 : 33,3 by weight
Pot life:	approx. 7 h at +20°C
Minimum hardening temperature:	+8°C
Walkability:	after 24 h at +23ºC
Successive layer:	after 10-24 h at +23ºC
Final strength:	after 7 days at +23°C
Adhesive strength:	> 3 N/mm ² (breaking point of concrete)
Cleaning of tools: Tools should be cleaned with SM-12 solvent	

immediately after use.

Directions for use

1. Substrate

- The flooring surface should be:
- Dry and stable.
- Free of materials that prevent bonding, e.g. dust, loose particles, grease etc.
- Protected from underneath moisture attack.

 Also, it should meet the following requirements:

 Concrete quality:
 at least C20/25

 Cement screed quality:
 cement content

 350 kg/m³
 350 kg/m³

 Age:
 at least 28 days

 Moisture content:
 less than 4%

According to the nature of the substrate, it should be prepared by brushing, grinding, milling, sand blasting, water blasting, shot blasting etc. Following this, the surface should be well cleaned from dust with a high suction vacuum cleaner.

2. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. The whole quantity of component B is added into component A. Mixing of the 2 components should take place for about 5 minutes, using a low revolution mixer (300 rpm). It is important to stir the mixture thoroughly near the sides and bottom of the container, to achieve uniform dispersion of the hardener.

3. Application - Consumption

DUROPRIMER is applied by roller, brush or spray in one layer. Consumption: 200-300 g/m².

The application of the qualified DUROFLOOR system follows within 24 hours.



DUROPRIMER

In case that the DUROFLOOR system is going to be applied beyond 24 hours since priming, quartz sand with a particle size of 0,4-0,8 mm should be spread on the surface, while the primer is still fresh, in order to assure good bonding.

After hardening of DUROPRIMER, any loose grains should be removed using a high suction vacuum cleaner.

Packaging

DUROPRIMER is supplied in packages (A+B) of 3 kg and 9 kg, with components A and B having the fixed weight proportion.

Shelf-life - Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.

Remarks

 The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.

- DUROPRIMER contains solvents. In cases of application in closed rooms measures should be taken for good ventilation.
- Bonding between successive layers may be severely affected by the intervention moisture or dirt.
- In case that longer time than predicted interferes between the application of successive layers or in case that old floors are going to be laid again, the surface should be thoroughly cleaned and ground before application of the new layer.
- Epoxy layers should be protected from moisture for 4-6 hours after application.
 Moisture may whiten the surface or/and make it sticky. It may also disturb hardening. Faded or sticky layers in parts of the surface should be removed by grinding or milling and laid again.
- After hardening, DUROPRIMER is totally safe for health.
- Before application, study the safety advice mentioned on the product's labels.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory h, type SB is 750g/l (2010) for the ready to use product. The ready to use product DUROPRIMER contains max <750 g/l VOC.



DUROPRIMER

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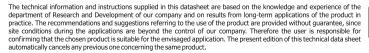
80

EN 13813 SR-B2,0

Primer

Reaction to fire: NPD Release of corrosive substances: SR Water permeability : NPD Wear resistance: NPD Bond strength: B2,0 Impact resistance: NPD Sound insulation: NPD Sound absorption: NPD Thermal resistance: NPD Chemical resistance: NPD

EPOXY-BASED & POLYURETHANE-BASED FLOORINGS







DUROPRIMER-PSF

2-component, solvent-free epoxy primer

Description

DUROPRIMER-PSF is a 2-component, solventfree epoxy primer, offering high hardness and abrasion resistance. It is resistant to acids, alkalis, petroleum products and salt solutions. It is classified as SR-B2,0-AR0,5-IR4 according to EN13813.

Fields of application

- Priming of cementitious surfaces that will be covered with DUROFLOOR products.
- · Preparation of flooring resin-mortars.
- Preparation of material for repairing cracks or smoothing substrates before applying flooring layers.

Technical data

Basis:	2-component epoxy resin
Color:	light yellow
Viscosity:	560 mPas at +23°C
Density (A+B):	1,05 kg/lit
Mixing proportion (A:B):	100:45 by weight
Pot life:	approx. 40 min at +20ºC
Reaction to fire: (EN 13501-1)	F
Minimum hardening temperature:	+8°C
Hardness according to SHORE 80	
Walkability:	after 20 h at +23°C
Successive layer:	after 20 h at +23°C
Final strength:	after 7 days at +23°C
Compressive strength: (DIN EN 196-1)	80 N/mm ²
Flexural strength: (DIN EN 196-1)	> 35 N/mm ²

Adhesive strength:

> 3 N/mm² (breaking point of concrete)

Cleaning of tools: Tools should be cleaned with SM-12 solvent immediately after use.

Directions for use

1. Substrate

Aae:

- The flooring surface should be:
- Dry and stable.

Moisture content:

- Free of materials that prevent bonding, e.g. dust, loose particles, grease etc.
- Protected from underneath moisture attack.

Also, it should meet the following requirements: Concrete quality: at least C20/25 Cement screed quality: cement content 250 lr/m³

ity: cement content 350 kg/m³ at least 28 days less than 4%

According to the nature of the substrate, it should be prepared by brushing, grinding, sand blasting, water blasting, pellet blasting, etc. Following this, the surface should be cleaned from dust with a high suction vacuum cleaner.

2. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. The whole quantity of component B is added into component A. Mixing of the 2 components should take place for about 5 minutes, using a low revolution mixer (300 rpm). It is important to stir thoroughly the mixture near the sides and bottom of the container, to succeed uniform dispersion of the hardener.

3. Application - Consumption

According to the kind of application of DUROPRIMER-PSF, the following cases are sorted out:

6.4



DUROPRIMER-PSF

a) Priming

DUROPRIMER-PSF is applied by roller or brush in one layer.

Consumption: 200-300 g/m².

The application of the qualified DUROFLOOR system follows within 24 hours and after the primer has hardened.

In case that the DUROFLOOR system is going to be applied beyond 24 hours since priming, quartz sand with a particle size of 0-0,4 mm or 0,4-0,8 mm should be spread on the surface, while the primer is still fresh, in order to assure good bonding.

After hardening of DUROPRIMER-PSF, any loose grains should be removed using a high suction vacuum cleaner.

b) Resin-mortar

The surface should be primed with DUROPRIMER-PSF.

Consumption: approx. 200-300 g/m². The mortar is prepared with proportions:

DUROPRIMER-PSF: 1 part by weight Quartz sand: 8-15 parts by weight

Quartz sand should have particle-size

0,1-0,4 mm (or M32) or 0,4-0,8 mm, depending on layer thickness.

Mixing should take place using a heavy-duty concrete mixer, adding the quartz sand first and following with the already mixed

DUROPRIMER-PSF resin (components A+B). It is important that sand and resin are thoroughly mixed.

The epoxy mortar is applied at a minimum thickness of 8 mm with the help of guides and compacted using a smoothing machine. Resin-mortar consumption:

approx. 2,0 kg/m²/mm of layer thickness.

c) Repairing – Smoothing

Priming with DUROPRIMER-PSF should take place first.

Consumption: approx. 200-300 g/m². The repairing material is prepared with proportions:

DUROPRIMER-PSF: Quartz sand: 1 part by weight 2-3 parts by weight Quartz sand should have particle-size 0-0,4 mm (or Q35) or 0-0,8 mm, depending on the layer thickness, and should be added into the already mixed resin (components A+B). It is important that sand and resin are thoroughly mixed.

The repairing material is applied on the surface in one layer.

Consumption: approx. 1,8 kg/m²/mm.

Packaging

DUROPRIMER-PSF is supplied in packages (A+B) of 10 kg, with components A and B having the fixed weight proportion.

Shelf-life - Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.

Remarks

- The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.
- Bonding between successive layers may be severely affected by the intervention moisture or dirt.
- Epoxy layers should be protected from moisture for 4-6 hours after application.
 Moisture may whiten the surface or/and make it sticky. It may also disturb hardening. Faded or sticky layers in parts of the surface should be removed by grinding or milling and laid again.



DUROPRIMER-PSF

- In case that longer time than predicted interferes between the application of successive layers or in case that old floors are going to be laid again, the surface should be thoroughly cleaned and ground before application of the new layer.
- After hardening, DUROPRIMER-PSF is totally safe for health.
- Before application, study the safety advice mentioned on the product's label.

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P.O. BOX 1043, 570 03 Ag. Athanasios, Greece0808EN 13813 SR-B2,0-AR0,5-IR4
Synthetic Resin screed
material for use internally
in buildingsEN 13813
SR-B2,0
Primer

in buildings	
Reaction to fire: E _n Release of corrosive	NPD
substances: SR	SR
Water permeability : NPD	NPD
Wear resistance: AR0,5	NPD
Bond strength: B2,0	B2,0
Impact resistance: IR4	NPD
Sound insulation: NPD	NPD
Sound absorption: NPD	NPD
Thermal resistance: NPD	NPD
Chemical resistance: NPD	NPD

EPOXY-BASED & POLYURETHANE-BASED FLOORINGS

6.4

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EPOXYPRIMER-W

2-component, water-based epoxy primer

Description

EPOXYPRIMER-W is a 2-component waterbased epoxy system. It offers high hardness and abrasion resistance. It is resistant to water. acids, alkalis, petroleum products etc. It can be applied on dry or slightly wet substrates without standing water. It is classified as SR-B2.0 according to EN 13813.

Fields of application

EPOXYPRIMER-W is used as a primer as well as for preparing - with the addition of quartz sand - a repairing (filling) material for cementbased substrates, e.g. concrete or cementscreeds, that will be covered with DUROFLOOR system products. It can also be used as a primer of ISOFLEX-PU when applied over non-absorptive substrates or over old waterproofing layers.

Technical data

Basis:	2-component epoxy resin
Color:	light yellow
Viscosity (A):	100 mPas at +23°C
Viscosity (B):	2.000 mPas at +23°C
Viscosity (A+B):	600 mPas at +23°C
Density (A):	1,02 kg/lit
Density (B):	1,13 kg/lit
Density (A+B):	1,04 kg/lit
Mixing proportion (A:B):	100 : 40 by weight
Pot life:	approx. 60 min at +20ºC
Minimum hardening temperature:	+8°C
Walkability:	after 18 h at +23°C
Successive layer:	after 24 hours at +23°C

Final strength: Adhesive strength: after 7 days at +23°C > 3 N/mm² (breaking point of concrete)

Cleaning of tools: Tools should be cleaned with water immediately after use.

Directions for use

1. Substrate

The flooring surface should be:

- Stable.
- Free of materials that prevent bonding, e.g. dust, loose particles, grease etc.
- Protected from underneath moisture attack.

In case of applying epoxy resins of DUROFLOOR system it should meet the following requirements: Concrete quality: Cement screed quality:

at least C20/25 cement content 350 ka/m³

Also, according to the nature of the substrate, it should be prepared by brushing, grinding, milling, sand blasting, water blasting, shot blasting etc. Following this, the surface should be well cleaned from dust with a high suction vacuum cleaner.

2. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. The whole quantity of component B is added into component A. Mixing of the 2 components should take place for about 5 minutes, using a low revolution mixer (300 rpm). It is important to stir the mixture thoroughly near the sides and bottom of the container, to achieve uniform dispersion of the hardener.



EPOXYPRIMER-W

3. Application - Consumption

According to the kind of application of EPOXYPRIMER-W, the following cases are sorted out:

a) Primer of epoxy resins

EPOXYPRIMER-W is applied on the substrate, as it is or diluted up to with 10% with water, in 1 layer . It can be applied with a brush or roller. After the primer has dried, any existing imperfections (cracks, holes) should be filled using EPOXYPRIMER-W mixed with quartz sand, with a particle size of 0-0,4 mm (or Q35) in proportions of 1:2 up to 1:3 by weight.

The application of the qualified system DUROFLOOR follows within 24-48 hours and just when the moisture content of the EPOXYPRIMER-W layer is less than 4%. In case that after 48 hours the moisture content of the EPOXYPRIMER-W layer is more than 4%, then the same procedure should be followed.

In case that DUROFLOOR will be applied beyond the previous time limits after priming, quartz sand with a particle size of 0,4-0,8 mm should be spread on the surface, while the primer is still fresh, in order to assure good bonding. After hardening of the primer, any loose grains should be removed using a high suction vacuum cleaner.

b) Primer of ISOFLEX-PU

EPOXYPRIMER-W is applied on the substrate, as it is or diluted up to 10% with water, in 1 layer. It can be applied with a brush or roller. Consumption: 200-300 g/m². After 12-24 hours and while EPOXYPRIMER-W

is still tacky, ISOFLEX-PU is applied.

Packaging

EPOXYPRIMER-W is supplied in packages (A+B) of 10 kg, with components A and B having the fixed weight proportion.

Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in temperature between $+5^{\circ}$ C and $+35^{\circ}$ C. Protect from direct sun exposure and frost.

Remarks

- The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.
- In case that longer time than predicted interferes between the application of successive layers or in case that old floors are going to be laid again, the surface should be thoroughly cleaned and ground before application of the new layer.
- After hardening, EPOXYPRIMER-W is totally safe for health.
- Before application, study the safety advice mentioned on the product's labels.



EPOXYPRIMER-W

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory j, type WB is 140g/l (2010) for the ready to use product. The ready to use product EPOXYPRIMER-W contains max <140 g/l VOC.

CE

ISOMAT S.A. 17th km Thessaloniki - Ag. Athanasios, P.O. BOX 1043, 570 03 Ag. Athanasios, Greece

08

EN 13813 SR-B2,0 Primer

Reaction to fire: NPD Release of corrosive substances: SR Water permeability : NPD Wear resistance: NPD Bond strength: B2,0 Impact resistance: NPD Sound insulation: NPD Sound absorption: NPD Thermal resistance: NPD Chemical resistance: NPD

EPOXY-BASED & POLYURETHANE-BASED FLOORINGS

6.4

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the department of Research and Development of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical data sheet automatically cancels any previous one concerning the same product.





DUROPRIMER-W

3-component, water-based epoxy primer

Description

DUROPRIMER-W is a 3-component waterbased epoxy system. It provides superior bonding to the substrate on wet floors. It is classified as SR-B2,0 according to EN 13813.

Fields of application

It is used as a primer on wet or new concrete (age less than 28 days) that are going to be covered with an epoxy layer of the DUROFLOOR system.

Technical data

Chemical basis:	2-component epoxy resin, aggregates
Color:	light yellow
Viscosity (A):	21.500 mPa.s
Viscosity (B):	19.500 mPa.s
Viscosity (A+B+C):	75.000 mPa.s
Density (A):	1,05 kg/lit
Density (B):	1,01 kg/lit
Bulk density (C):	1,05 kg/lit
Density (A+B+C):	1,24 kg/lit
Mixing ratio (A:B:C):	60:40:50
Pot life:	approx. 90 min at +20°C
Minimum hardening temperature:	+8°C
Walkability:	after 18 hours at +23°C
Successive layer:	after 24 hours at +23°C
Final strength:	after 7 days at +23°C
Adhesive strength:	> 3 N/mm ² (breaking point of concrete)

Cleaning of tools: Tools must be cleaned thoroughly with water or SM-12 solvent, immediately after use.

Directions for use

1. Substrate

The surfaces to be treated must be:

- Stable and free of standing water.
- Free of materials that could prevent bonding, such as dust, loose particles, grease, etc.

Also the following requirements must be met: Concrete quality: at least C20/25 Cement screed quality: cement content 350 kg/m³

Furthermore, depending on the nature of the substrate, proper preparation must be carried out, such as grinding, milling, shot blasting etc. Subsequently, the surface must be cleaned thoroughly with a high-suction vacuum cleaner.

2. Mixing of the components

Components A (resin), B (hardener), and C (aggregates) are packaged in predetermined mixing proportions.

First, the whole quantity of component B is added to component A. Mixing of the 2 components should carry on for approx. 5 minutes with a low-revolution mixer (300 rpm). It is important to stir the mixture thoroughly near the sides and bottom of the container, to achieve uniform dispersion of the hardener. Then, the mixture (A+B) is poured into a clean container, and component C is added under continuous stirring. Mixing is done with a lowrevolution mixer and carries on until the mixture becomes completely uniform.

3. Application - Consumption

At first, any cracks and imperfections are filled in with DUROPRIMER-W (A+B+C). Once the filling material has set, DUROPRIMER-W is applied with a brush or roller on the substrate, diluted 5-20% with water, in 2 layers.



ROPRIMER-W

Consumption: 250-300 g/m²/laver. After 48 hours and provided that the moisture content of the DUROPRIMER-W laver is less than 4%, the application of a DUROFLOOR epoxy system may follow.

Packaging

DUROPRIMER-W is available in packages (A+B+C) of 21 kg in the following proportions: Component A: 8.40 ka. Component B: 5,60 kg. Component C: 7,00 kg.

Shelf-life - Storage

24 months from production date if stored in original, unopened packaging, in temperature between +5°C and +35°C. Protect from direct sun exposure and frost.

Remarks

- · The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.
- In case that longer time than predicted interferes between the application of successive layers or in case that old floors are going to be laid again, the surface should be thoroughly cleaned and ground before application of the new layer.
- After hardening, DUROPRIMER-W is totally safe for health.
- · Before application, study the safety advice mentioned on the product's labels.

Volatile organic compounds (VOCs)

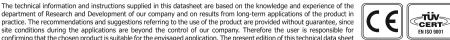
According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory j, type WB is 140g/l (2010) for the ready to use product. The ready to use product DUROPRIMER-W contains max <140 g/l VOC.

ISOMAT S.A. 17th km Thessaloniki - Aq. Athanasios, P.O. BOX 1043, 570 03 Ag. Athanasios, Greece

08

EN 13813 SR-B2,0 Primer

Reaction to fire: NPD Release of corrosive substances: SR Water permeability : NPD Wear resistance: NPD Bond strength: B2,0 Impact resistance: NPD Sound insulation: NPD Sound absorption: NPD Thermal resistance: NPD Chemical resistance: NPD





DUROPRIMER-SG

Epoxy primer for oil contaminated concrete floors and vapour barrier

Description

DUROPRIMER-SG is a 2-component, solventfree epoxy system, suitable for wet substrates. Due to its high density DUROPRIMER-SG displaces the water from the capillaries of concrete floors and acts like a protection against capillar rising oil and other chemical substances.

DUROPRIMER-SG is resistant to chemicals rising from the soil with an excellent bonding on wet concrete surfaces.

It is classified as SR-B2,0 according to EN 13813.

Fields of application

It is used as a primer for oil contaminated, but cleaned concrete surfaces that will be covered with epoxy layers of DUROFLOOR system. Also it is suitable for substrates that are still damp or having problems with rising moisture.

Technical data

Basis:	2-component epoxy resin
Color:	light beige
Viscosity:	approx. 700 mPa's at +23°C
Density:	1,75 kg/lit
Mixing	
proportion (A:B):	100 : 20 by weight
Pot life:	approx. 60 min at +23°C
Walkability:	after 24 h at +23°C
Successive layer:	after 24 h at +23°C
Final strength:	after 7 days at +23ºC

Water-vapour permeability • EN 12086: • EN ISO 7783-2:

Minimum hardening temperature: Adhesive strength: Sd > 1100 m Class III (low)

+8°C 3 N/mm² (breaking point of concrete)

Cleaning of tools: Tools should be cleaned w

Tools should be cleaned with SM-12 solvent immediately after use.

Directions for use

1. Substrate

Oil contaminated surfaces should first be cleaned with an emulsifying cleaning agent (e.g. FD-CLEAN) in accordance with the application instructions. Subsequently the surfaces should be cleaned with a high pressure water jet pump. Then the generated wastes should be collected and removed.

DUROPRIMER-SG should be apllied on a surface that it is still wet but its pores aren't fully saturated with water. This can be verified if, by slightly dampening the surface, the new quantity of water is fully absorbed by the substrate in short time. Should the surface get dry after the cleaning step, the oil rises up and prevents the bonding of DUROPRIMER-SG to the surface.

<u>Note:</u> Oil contaminated surfaces are particularly problematical. For more information we recommend that you consult our Technical Department.

Application of DUROPRIMER-SG on wet substrates or on substrates with rising moisture is possible only if the pores of the surface aren't fully saturated with water.

6.4



DUROPRIMER-SG

2. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. The whole quantity of component B is added into component A.

Mixing of the 2 components should take place for about 5 minutes, using a low revolution mixer (300 rpm). It is important to stir the mixture thoroughly near the sides and bottom of the container, to achieve uniform dispersion of the hardener.

3. Application

DUROPRIMER-SG is poured on the floor and is brushed thoroughly in order to penetrate into the substrate. Then it is rolled in order to distribute the material evenly on the surface of the floor.

The application of the qualified DUROFLOOR system follows within 24 hours and after the primer has hardened.

4. Consumption

Depending on the substrate and the way of application the consumption of DUROPRIMER-SG is between 600-1000 g/m². The consumption of the quartz sand (\emptyset 0,3-0,8 mm) for spreading is approx. 1,5 kg/m².

Packaging

DUROPRIMER-SG is supplied in packages (A+B) of 10 kg, with components A and B having the fixed weight proportion.

Shelf-life - Storage

12 months from date of production if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.

Remarks

- The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.
- Epoxy layers should be protected from moisture for 4-6 hours after application. Moisture may whiten the surface or/and make it sticky. It may also disturb hardening. Faded or sticky layers in parts of the surface should be removed by grinding or milling and laid again.
- In case that longer time than predicted interferes between the application of successive layers or in case that old floors are going to be laid again, the surface should be thoroughly cleaned and ground before application of the new layer.
- After hardening, DUROPRIMER-SG is totally safe for health.
- Before application, study the safety advice mentioned on the product's labels.

Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory h, type SB is 750g/l (2010) for the ready to use product. The ready to use product DUROPRIMER-SG contains max <750 g/l VOC.



DUROPRIMER-SG

CE

ISOMAT S.A. 17th km Thessaloniki - Ag. Athanasios, P.O. BOX 1043, 570 03 Ag. Athanasios, Greece

80

EN 13813 SR-B2,0 Primer

Reaction to fire: NPD Release of corrosive substances: SR Water permeability : NPD Wear resistance: NPD Bond strength: B2,0 Impact resistance: NPD Sound insulation: NPD Sound absorption: NPD Thermal resistance: NPD Chemical resistance: NPD

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the department of Research and Development of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical data sheet automatically cancels any previous one concerning the same product.



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NOTES







NOTES



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	CERTIFIC	ATE	
<i>.</i>	Management system as per EN ISO 9001 : 2008		Concine
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