High Bond Cementitious Grout

PRODUCT DESCRIPTION

Magikol High Bond Cementitious Grout is a polymer based, Un-sanded cement grout for interior & exterior, floor & wall joint of width of 1mm to 3 mm.

Application

Designed for interior and exterior floor and wall joints of all types of ceramic tile, vitreous, semi-vitreous tile, glass mosaic tiles, precast terrazzo, engineered stone floors and natural stones. Recommended for Institutional and commercial general floor and wall areas. Can be mixed with water or MAGIKOL Grout admixture and used for filling the joints of width of 1mm to 3mm.

Shelf Life

Factory sealed packs of this product are guaranteed to beof first quality for 18 Months

* if stored off the ground in a dry area.

*High humidity will reduce the shelf life of product.

Application

- Institutional kitchens
- Cafeterias
- Institutional facilities
- Swimming pools
- Rest rooms
- Schools

Substrates

- Ceramic tile
- Vitrified tile
- Glass Mosaic Tiles
- Granite
- Marble
- Agglomerates (Engineered Stones)
- Precast Terrazzo tiles
- Bricks

Colour:

Choose from range of colours available. Please refer the grout colour chart for choosing the colour required.

Coverage:

Please refer the coverage chart as it dependson the tile size, joint width and depth.

Packaging:

20 kg Box Packing with 1 Kg pouch each.

Features / Benefits

- Weather resistant
- Colour fast
- Easy application and clean up.
- Easy maintenance
- Non-cracking & Non-shrink
- Complies with ANSI A 118.6, EN 13888, standards.
- Water and shock resistant.

Complianc	
ISO 13007 / EN 13888	ANSI A118.6
Member of Indian Green Building Council	Approved American National Standards ANSI

TECHNICAL DATA

Applicable Standards: MAGIKOL High Bond Cementious grout, when mixed with water: ANSI A118.6; ISO 13007 – 4(CG1) / EN 13888

ANSI Data		
Property / Test Method	Requirement	Typical Values
Linear Shrinkage after 27 days: ANSI A118.6: Clause 4.3	Max 0.30%	0.19% - 0.23%
Water Absorption after 27 days: ANSI A118.6: Clause 4.4	Max 18%	13% - 16%
Compressive Strength after 1 day: ANSI A118.6: Clause 4.5	Min 500 psi (3.43 Mpa)	520 – 870 psi (3.57 – 5.98 Mpa)
Compressive Strength after 28 days: ANSI A118.6: Clause 4.5	Min 3000 psi (20.62 Mpa)	3050 – 3200 psi (20.97 – 22.00 Mpa)
Tensile Strength after 28 days: ANSI A118.6: Clause 4.6	Min 250 psi (1.71 Mpa)	270 – 400 psi (1.85 – 2.75 Mpa)
Flexural Strength after 28 days: ANSI A118.6: Clause 4.7	Min 500 psi (3.43 Mpa)	550 – 600 psi (3.78 – 4.12 Mpa)

The grout mortar conforms to ANSI A 118.6

Property / Test	ISO / EN Data	
Method	Requirement	Typical Values
Abrasion resistance: ISO 13007 - 4: Clause 4.4; EN 12808 - 2	≤ 2000 mm³	1350 - 1700 mm³
Flexural strength under standard conditions: ISO 13007 - 4: Clause 4.1.3; EN 12808 - 3	≥ 2.5 N / mm²	3.5 - 3.9 N / mm²
Flexural strength under freeze and thaw cycles: ISO 13007 - 4: Clause 4.1.5; EN 12808 - 3	≥ 2.5 N / mm²	3.5 - 3.9 N / mm²
Compressive Strength under standard conditions: ISO 13007 - 4: Clause 4.1.4; EN 12808 - 4	≥ 15 N / mm²	21 - 22 N / mm²
Compressive Strength under freeze & thaw cycles: ISO 13007 - 4: Clause 4.1.5; EN 12808 - 4	≥ 15 N / mm²	20 - 22 N / mm²
Shrinkage: ISO 13007 - 4: Clause 4.3 : EN 12808 - 4	< 3mm / m	1.9 - 2.3 mm /m
Water Absorption after 30 Minutes: ISO 13007 - 4: Clause 4.2; EN 12808 - 5	≤5.0 g	2.5 - 3.0 g
Water Absorption after 240 Minutes: ISO 13007 - 4: Clause 4.2; EN 12808 - 5	≤10 g	4.0 - 8.0 g

The grout mortar conforms to ISO 13007 – 4 (CG1) /EN 13888.

Magikol High Bond Cementious Grout, when mixedwith MAGIKOL Grout Admixture:
ANSI A118.6; ISO 13007 – 4(CG1) / EN 13888

ANSI Data		
Property / Test Method	Requirement	Typical Values
Linear Shrinkage after 27 days: ANSI A118.6: Clause 4.3	Max 0.30%	0.19% - 0.23%
Water Absorption after 27 days: ANSI A118.6: Clause 4.4	Max 18%	10% - 13%
Compressive Strength after 1 day: ANSI A118.6: Clause 4.5	Min 500 psi (3.43 Mpa)	570 – 900 psi (3.91 – 6.18 Mpa)
Compressive Strength after 28 days: ANSI A118.6: Clause 4.5	Min 3000 psi (20.62 Mpa)	3100 – 3200 psi (21.31 – 22.00 Mpa)
Tensile Strength after 28 days: ANSI A118.6: Clause 4.6	Min 250 psi (1.71 Mpa)	350 – 400 psi (2.40 – 2.75 Mpa)
Flexural Strength after 28 days: ANSI A118.6: Clause 4.7	Min 500 psi (3.43 Mpa)	600 – 800 psi (4.12 – 5.50 Mpa)

The grout mortar conforms to ANSI A 118.6

ISO / EN Data		
Property / Test Method	Requirement	Typical Values
Abrasion resistance: ISO 13007 – 4: Clause 4.4; EN 12808 - 2	≤ 2000 mm^3	1000 – 1500 mm^3
Flexural strength under standard conditions: ISO 13007 – 4: Clause 4.1.3; EN 12808 - 3	≥ 2.5 N / mm^2	4.0 – 5.5 N / mm^2
Flexural strength under freeze and thaw cycles: ISO 13007 – 4: Clause 4.1.5; EN 12808 – 3	≥ 2.5 N / mm^2	3.5 – 5.0 N / mm^2
Compressive Strength under standard conditions: ISO 13007 – 4: Clause 4.1.4; EN 12808 – 4	≥ 15 N / mm^2	21 – 22 N / mm^2
Compressive Strength under freeze & thaw cycles: ISO 13007 – 4: Clause 4.1.5; EN 12808 – 4	≥ 15 N / mm^2	20 – 22 N / mm^2
Shrinkage: ISO 13007 – 4: Clause 4.3 : EN 12808 – 4	< 3mm / m	1.9 – 2.3 mm /m
Water Absorption after 30 Minutes: ISO 13007 – 4: Clause 4.2; EN 12808 – 5	≤5.0 g	2.0 – 2.5 g
Water Absorption after 240 Minutes: ISO 13007 – 4: Clause 4.2; EN 12808 – 5	≤10 g	4.0 – 6.0 g

The grout mortar conforms to ISO 13007 – 4 (CG1) /EN 13888.

Application

Dampen tile surface with water. Spread with a sharp, firm rubber grout float. Work the grout paste into the joints until completely filled. Use diagonal strokes to pack the joints. Ensure that joint is filled and grout is not just sitting on top (i.e. "bridging the joint")

Note: For fuller flush joints sprinkle a thin layer of

dry grout powder over surface immediately after grouting. When grout darkens over joint, buff with burlap, carpet remnant or cotton rag to pack joint and clean face of tile.

Working Properties at 70° F (21° C) Working properties:

Pot life	60 minutes
Foot traffic	24 hours
Heavy traffic	72 hours

INSTALLATION

Important site Checks: Notes to the specifiers:

- It is recommended to check the colour of the grout, if it is meeting the desired colour of the client
- It is recommended to do a small area with actual tile/stone at site and check for any colour ingress into the tile/stone. Many tiles / stones have high absorption which may lead to wet patches / discoloration / colour marks.
- Plan to provide proper movement joints, peripheral joints as per TCA, EJ 171 detail to accommodate movements in tile/stone and use flexible grout / sealant to fill these movement joints.
- When water is used for mixing with grout powder, non-absorbent tiles will have lesser demand of water to be mixed. It is estimated in the range of 3.30 Litres to 3.70 Litres for 10 Kg grout powder.
- For better color retention, flexibility and water resistance, use MAGIKOL Grout Admixture completely replacing water.

Surface Preparation:

Before starting to grout, remove debris in grout joints and lightly sponge the tile surface to remove dust and dirt. Do not clean tiles with acid cleaners. In case acid cleaners were used to clean the tiles, ensure to wash the area with plenty of water to effectively remove acidic particle remains from the joints before commencing grouting. Substrate temperature must between 60°F (16°C) and 90°F (32°C).

Mixing

Stir MAGIKOL Grout Admixture thoroughly before use. Place water or MAGIKOL Grout Admixture in a clean mixing container and add grout powder slowly. Mix by hand or with a slow speed mixer to a smooth stiff consistency. Potable grade of Water should be used for mixing with grout powder for best results.

Cleaning

Grout Primary Cleaning - Remove excess grout fromthe face of the tiles with the edge of the grout float. Holdthe float at a 90° angle and pull it at a 45° angle diagonally across the joints and tile to avoid pulling outthe material.

Grout Secondary Cleaning - Remove remaining grout with a damp sponge (not wet) or a damp towel. Workdiagonally to the joints. Allow to dry. When the grout joints are firm polish the surface with a coarse nylon pad or coarse cloth and minimal water.

Note: Use caution when polishing soft glazed tiles or polished stone.

* Contact MAGIKOL technical services for large format tile or stone installations on exterior surfaces.

Limitations

- Consult with Technical Services for specific exterior grouting recommendations.
- For industrial applications exposed to high concentrations of food and mineral acids and to highheat.
- Protect from exposure to acids and strong cleaners during service periods. Acidic cleaners can neutralize the cement-based grouts which leads to change of colour,cracking and powdering
- Not recommended for soft, polished marble or delicate glazed tiles.
- Adhesives/mastics, mortars and grouts for ceramic tile, pavers, brick and stone are not replacements for waterproof membranes.

MAINTENANCE

MAGIKOL High Bond Cementious Grout require routine cleaning with neutral pH soap and water or MAGIKOL Tile Cleaner series suitable cleaners. All other MAGIKOL materials require no maintenance but proper installation as per instruction. Performance and durability may depend on properlymaintaining of Installed area.

WARRANTY

MAGIKOL INDUSTRIES LLP warrants that MAGIKOL High Bond Epoxy Grout is free from manufacturing defects and will not break down, deteriorate or disintegrate under normal usage for a period of 18 months from manufacturing of the product subject tothe terms and conditions stated in MAGIKOL Product Warranty.

Customer Care

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