

BEAUTIFYING YOUR HOMES TILE BY TILE

CG-100 UNSANDED TILE GROUT

TECHNICAL DATA SHEET



High
Strength



Weather
Resistant



Shock
Resistant



Non-
Dusting



Non-toxic



Low VOC



Available in 1 kg pouch

PRODUCT DESCRIPTION

Magicrete CG-100 Unsanded Tile Grout is a pre-packed tile grout formulated with high-quality portland cement, selected pigments, and special aggregates. This single-component product is used to fill joints of various types of tiles such as ceramic, vitrified, mosaic etc. This non-shrink, colour-fast and sag-resistant tile grout is the perfect solution for both internal and external applications.

SUITABLE FOR

- Vitrified Tiles
- Ceramic Tiles
- Granite
- Marble
- Terrazzo Tile
- Agglomerates Stones
- Glass Mosaic Tiles
- Porcelain Tiles
- Natural Stones

APPLICATION AREAS

- Institutions
- Commercial
- General floor and wall
- Hospitals
- Malls

TECHNICAL DETAILS

Conforms To ANSI A118.6-2015; EN 13888; IGBC; ISO 13007

Physical Properties @ 27± 1°C

Appearance	Pigmented Freeflow Powder
Mixing Ratio	3 (CG-100): 1 (Water)
Bulk density	1300 Kg/mm ³
Mixed Density	1600±50 Kg/mm ³
Pot life	> 60 minutes
Sag Resistant	Non-sag
VOC Content	Low
Application Temperature	From +10° C to +35° C
Light Foot Traffic	24 hours
Regular Traffic	7 days
Final Curing Time	28 days
Coverage Chart	Refer Coverage Chart on Page 5
Available Shades	15+

PERFORMANCE PROPERTIES

ANSI A118.6

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

The grout mortar confirms to ANSI A118.6-2015

ISO 13007/ EN 13888

PARAMETERS	REQUIREMENTS	RESULTS	TEST METHOD
Abrasion resistance	$\leq 2000 \text{ mm}^3$	1350 - 1700 mm^3	ISO 13007 - 4: Clause 4.4; EN 12808 - 2
Flexural strength under freeze and thaw cycles	$\geq 2.5 \text{ N/mm}^2$	3.5 - 3.9 N/mm^2	ISO 13007 - 4: Clause 4.1.5; EN 12808 - 3
Flexural strength under freeze and thaw cycles	$\geq 2.5 \text{ N/mm}^2$	3.5 - 3.9 N/mm^2	ISO 13007 - 4: Clause 4.1.5; EN 12808 - 3
Compressive Strength under standard conditions	$\geq 15 \text{ N/mm}^2$	21 - 22 N/mm^2	ISO 13007 - 4: Clause 4.1.4; EN 12808 - 4
Compressive Strength under freeze & thaw cycles	$\geq 15 \text{ N/mm}^2$	20 - 22 N/mm^2	ISO 13007 - 4: Clause 4.1.5; EN 12808 - 4
Shrinkage	$< 3 \text{ mm/m}$	1.9 - 2.3 mm/m	ISO 13007 - 4: Clause 4.3 : EN 12808 - 4
Water Absorption after 30 Minutes	$\leq 5.0 \text{ g}$	2.5 - 3.0 g	ISO 13007 - 4: Clause 4.2; EN 12808 - 5
Water Absorption after 240 Minutes	$\leq 10 \text{ g}$	4.0 - 8.0 g	ISO 13007 - 4: Clause 4.2; EN 12808 - 5

The grout mortar conforms to ISO 13007 / EN 13888

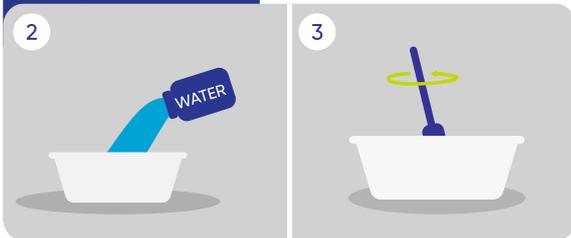
INSTALLATION

Surface Preparation



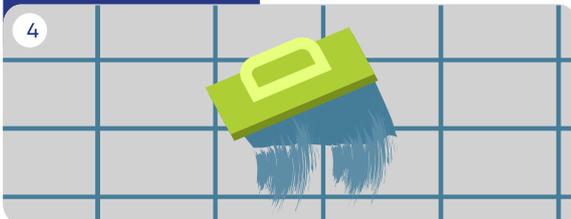
- Ensure that the surface to be grouted is clean and free from any dirt, dust, debris, or other contaminants. You can use a sponge, cloth, or vacuum to remove these impurities.
- Avoid using acid tile cleaners as they may affect the adhesion of the grout. If you have used an acid cleaner, rinse the area thoroughly with water before proceeding.
- If there is any existing grout between the tiles, it should be removed using a grout saw or a rotary tool.
- Make sure to remove all the old grout to ensure proper adhesion of the new grout.

Mixing



- Mix CG-100 and water in a 3:1 ratio in a clean bucket and mix either manually or with a slow-speed stirrer until a smooth mixture is achieved.
- Be careful not to introduce air into the mixture by avoiding very high mixing speeds or over-mixing.

Application



- Start filling the joints with Magicrete Unsanded Tile Grout CG-100 using a rubber float.
- Hold the rubber float perpendicular to the surface to remove excess grout before the material starts setting.
- Ensure that the entire joint is packed fully with the material.
- Every 20-40 minutes check for joints that are to be hardened.

Note: *Movement Joints should be provided in accordance with BS 5385: parts 1-5 and may be filled with the appropriate flexible sealant.*

Cleaning



- Clean excess grout from tile joints and tiles within 30-45 minutes or before the product dries.
- Begin by using a damp, rough-textured sponge to remove grout residue.
- For stubborn grout stains, use Magicrete CleanPro or an alkaline detergent that won't damage the joint finish.
- Avoid abrasive cleaners or tools that could scratch or harm the surface.
- Clean tools and containers with clean water while the grout is still fresh.

COVERAGE CHART

Tile Dimension (mm)			Theoretical Coverage in kg/m ²						
Length	Width	Thickness	Width of joint (mm)						
			2	3	4	5	6	8	10
25	25	6	1.536	2.304	3.072	3.840	4.608	6.144	7.680
25	50	6	1.152	1.728	2.304	2.880	3.456	4.608	5.760
50	50	6	0.768	1.152	1.536	1.920	2.304	3.072	3.840
100	100	6	0.384	0.576	0.768	0.960	1.152	1.536	1.920
100	100	10	0.640	0.960	1.280	1.600	1.920	2.560	3.200
300	200	6	0.160	0.240	0.320	0.400	0.480	0.640	0.800
300	300	6	0.128	0.192	0.256	0.320	0.384	0.512	0.640
450	300	6	0.107	0.160	0.213	0.267	0.320	0.427	0.533
600	300	6	0.096	0.144	0.192	0.240	0.288	0.384	0.480
600	600	8	0.085	0.128	0.171	0.213	0.256	0.341	0.427
800	800	8	0.064	0.096	0.128	0.160	0.192	0.256	0.320
1000	1000	10	0.064	0.096	0.128	0.160	0.192	0.256	0.320
1200	600	10	0.080	0.120	0.160	0.200	0.240	0.320	0.400
1200	800	10	0.067	0.100	0.133	0.167	0.200	0.267	0.333
1200	1200	12	0.064	0.096	0.128	0.160	0.192	0.256	0.320
1600	800	12	0.072	0.108	0.144	0.180	0.216	0.288	0.360
1800	1200	12	0.053	0.080	0.107	0.133	0.160	0.213	0.267

*The coverage details mentioned in the chart can vary as per the size of the tiles, joint width, and application method.

Coverage Calculation Formula

$$C = 1.6 \times H \times T \times \frac{L+W}{L \times W}$$

H - Tile Thickness (mm)

L - Tile Length (mm)

C - Coverage (mm)

W - Tile Width (mm)

T - Joint Width (mm)

COLOUR

Choose from a range of 15+ colours of CG-100 Unsanded Tile Grout.

For choosing the right colour refer to Magicrete shade card



SCAN FOR SHADE CARD

COVERAGE

For interactive coverage calculator visit us

<https://www.magicrete.in/tileadhesive>



SCAN FOR INTERACTIVE CALCULATOR



SHELF LIFE

CG-100 Unsanded Tile Grout carries a shelf life of 12 months, if stored in cool & dry place. However, as temperature, humidity, water addition & other parameters vary from site to site; the information should be treated as a general guideline.

LIMITATIONS

- Grouts for tiles are not replacements for waterproof membranes. When a waterproof membrane is required, use waterproofing products by Magicrete or any other waterproofing product available in the market.
- Do not use acidic cleaners as they can neutralize the cement-based grouts, leading to change in colour and cracking.
- Not recommended for industrial use where chemical exposure is high.
- Not recommended for soft, polished marble or delicate glazed tiles.

SAFETY PRECAUTIONS

- Keep out of reach of children.
- Wear suitable protective clothing, gloves, and eye/face protection. After contact with the skin, wash immediately with plenty of clean water. In case of eye contact, rinse immediately with plenty of clean water and seek medical advice.
- It is limited to professional use only. For more details, please refer to the relevant Material Safety Data Sheet, available on request.

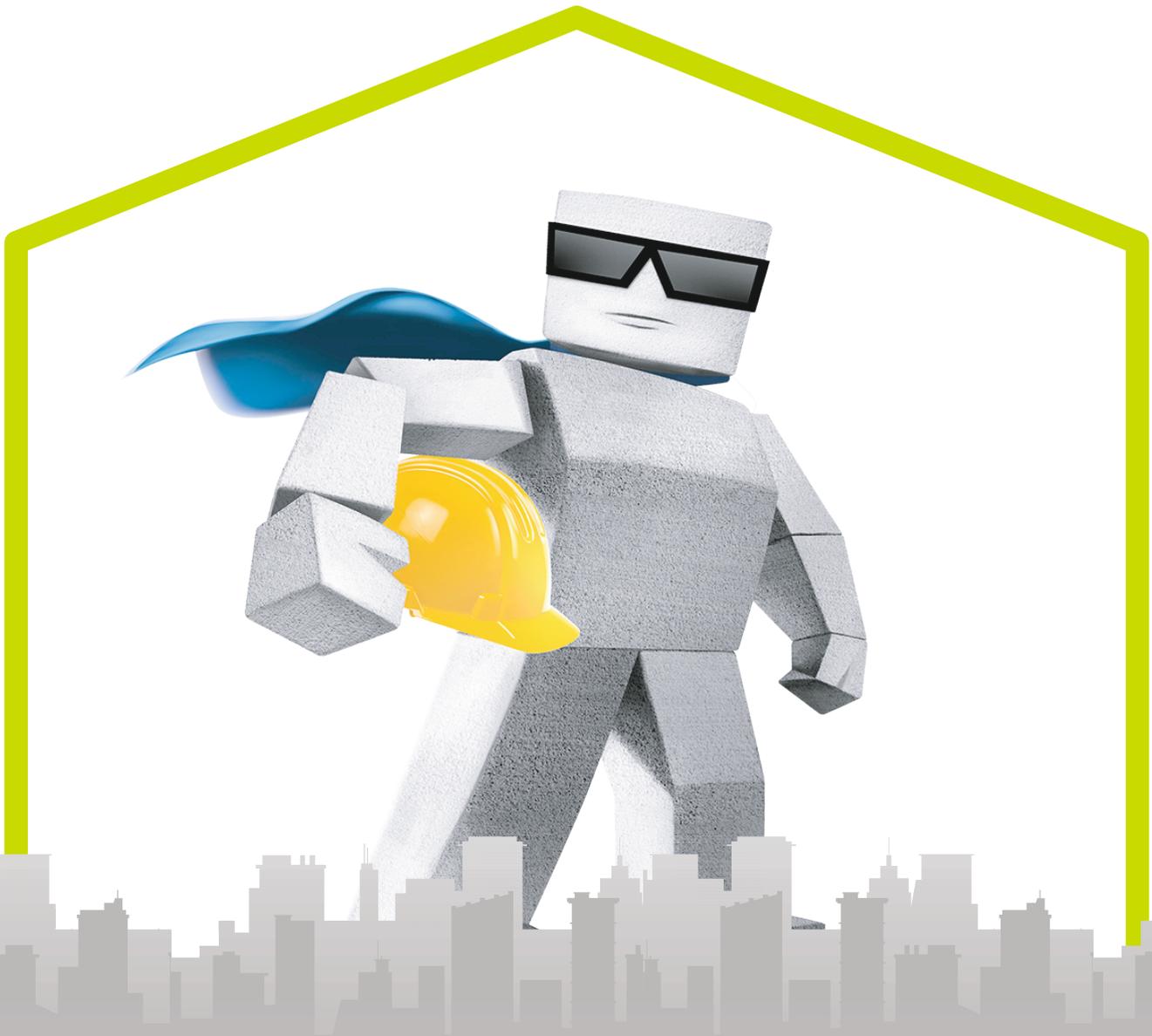
IMPORTANT NOTES

- Apply the grout to fully dry tile joints and do not lay it on moist or wet tile joints.
- Use the proper ratio of components. Any difference in the ratio may result in an inaccurate product outcome, and its performance may differ.
- Over-mixing the product can reduce its pot life.
- Use masking tape along the tile joints when working with unglazed base tiles, absorbent tiles and natural stones, and tiles with glazed or textured surfaces.
- Keep the working area protected from sunlight while applying CG-100 on open areas, and cover the entire area for 7 days.
- Cover the surface from direct rainfall and foot traffic for at least 24 hours after application.
- Clean the surface before the grout solidifies on the facade of the tile.
- When cleaning, change the water, cloth, or sponge frequently when it becomes impregnated with grout.

*While the company guarantees its products against defective materials, the use and application of these products are made without guarantee since the conditions of their application are beyond its control. It is recommended to verify with the company that the product is suitable for the intended use, and that this Data Sheet version is the latest one. The company may modify it without prior notice. Technical characteristics are listed for guidance only. For more information, please contact the company office in your location.

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Magicrete Building Solutions Pvt. Ltd.

(ISO 9001 :2015, ISO 14001 :2015 & ISO 45001 :2018 Certified co.)



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