

# EX-5

## Gresbond High Performance Tile Adhesive

### PRODUCT DESCRIPTION:

EX-5 High Performance, Polymer Modified, Non-slip Adhesive  
EX-5 is an improved slip-resistant cementitious adhesive with extended open time, classified as C2TE according to ISO 13007 standards, Exceeds IS 15477:2019 – Type 3T Adhesive standards. This grey cementbased, high polymer-modified adhesive is designed for tile-on-tile works and the installation of vitrified tiles, natural stones, and glass mosaics on walls and floors in both interior and exterior situations up to a 6mm bed thickness, which can be averaged up to 12mm. The set adhesive is water-resistant and suitable for use in wet areas like swimming pools and water bodies.



Note: Not recommended for direct use onto gypsum plaster (wall finishes), paint, or metal

SUBSTRATES	FEATURES / BENEFITS:
Concrete & Concrete Masonry	Single component, just add water
Cement Mortar Beds	High strength, polymer modified
Cement Plaster	Economical & Easy to use
Ceramic tile, and Natural Stone	Can be used up to a maximum of 12 mm bed thickness
Glass mosaic tile	Bonds to various substrates
Brick Masonry	Complies with EN / ISO with a C2TE classification
Cement Terrazzo	Exceeds IS 15477:2019 – Type 3 T Adhesive standards
	Water and shock resistant

### CERTIFICATIONS :

- IS 15477:2019 - Type: 3 T
- EN: C2TE

### APPLICATIONS :

Designed especially for interior and exterior floor and wall installations of all types of ceramic tile, vitreous/vitrified, semi-vitreous tile, glass mosaic tiles, precast terrazzo, and natural stones over concrete and on various substrates. Good underwater shear bond allows this product to be used in wet areas like swimming pools, water bodies, and washrooms. It can also be used for tile-on-tile applications and as a slurry bond adhesive in wet-on-wet applications.

### TECHNICAL DATA :

- Performance Properties: EX-5 Adhesive mixed with Water
- Applicable Standards: ISO 13007; IS 15477:2019

PROPERTY	VALUE
Density	1.7 kg/litre Approx
Pot Life	3-4 hrs Approx
Open Time	25 minutes Approx
Adjustability	23 minutes Approx.
Setting Time	Approx. 1 Day
Full Strength	Approx. 14 Days
Tensile Strength	>1.65 N/mm <sup>2</sup>
Shear Strength	>1.60 N/mm <sup>2</sup>

## IS DATA

Property: Test Method	Requirement	Typical Values
<b>Tensile Adhesion</b>		
Dry Condition – Annex A (Clause 5.1)	Minimum 1.50 N/mm <sup>2</sup>	1.55-1.65 N/mm <sup>2</sup>
Wet Conditions – Annex A (Clause 5.1)	Minimum 1.00 N/mm <sup>2</sup>	1.10-1.20 N/mm <sup>2</sup>
<b>Shear Adhesion</b>		
Dry Condition – Annex B (Clause 5.2)	Minimum 1.50 N/mm <sup>2</sup>	1.60-1.70 N/mm <sup>2</sup>
Heat Ageing - Annex B (Clause 5.2)	Minimum 1.00 N/mm <sup>2</sup>	1.10-1.20 N/mm <sup>2</sup>
Wet Conditions - Annex B (Clause 5.2)	Minimum 1.00 N/mm <sup>2</sup>	1.15-1.25 N/mm <sup>2</sup>
<b>Slip Resistance</b>		
Slip Resistance – Annex E (Clause 5.5)	≤ 0.5 mm	0.35-0.45 mm

The Adhesive mortar conforms to IS 15477:2019 - Type 3T Adhesive

◆ **COLOUR** : Grey

◆ **PACKAGING** : 20 kg bag

### **COVERAGE :**

Approx. 55 Sft per 20 kg pack using 1/4" x 1/4" (6mm x 6mm) square notched trowel for a bed of 3mm. (Can be used up to a maximum bed thickness of 12 mm). Coverage will vary depending on trowel notch size, type and size of tile, and substrate smoothness and evenness.

### ◆ **WORKING PROPERTIES AT 70°F (21°C)**

- **Open Time:** 25 minutes
- **Adjustability Time:** 23 minutes
- **Pot Life:** 3-4 hours
- **Time to Foot Traffic:** 24 hours
- **Time to Heavy Traffic:** 28 Days

\*Specifications are subject to change without notification. The results shown are typical but reflect the test procedures used. Actual field performance will depend on installation methods and site conditions.\*

## INSTALLATION

### SURFACE PREPARATION :

- Temperature and Surface Requirements:
- Ensure surfaces are between 40°F (4°C) and 104°F (40°C).
- Surfaces must be structurally sound, clean, and free of dirt, oil, grease, loose peeling paint, laitance, concrete sealers, or curing compounds.
- Surfaces should be true to plumb, with slabs accurate to within ¼" (6mm) in 10 ft (3m).

### SURFACE SMOOTHING :

- Rough or uneven concrete surfaces should be smoothed with Screed/Plaster material to achieve a wood float (or better) finish.

### DAMPENING REQUIREMENTS :

- Dry, dusty concrete slabs or masonry should be dampened, and excess water must be swept off.
- Installation may proceed on a damp surface.

### NEW CONCRETE SLABS :

- New concrete slabs should be damp-cured and must be 28 days old before application.
- No minimum cure time is required for concrete slabs when thin-set mortar is mixed with a latex additive

### EXPANSION JOINTS :

- Expansion joints must be included in the tile work at all construction or expansion joints in the substrate.
- Do not cover expansion joints with thin set mortar
- For tile or stone installations on plywood and wood substrates, Gresbond EA-100 is recommended.
- Refer to the specific product Technical Data Sheet for detailed recommendations.

### FOR ALL STONES WITH A BACK-PROTECTION MESH :

- It is essential to remove the mesh first.
- Also, remove the epoxy layer by light grinding to ensure a perfect bond with the adhesive.

### MIXING :

- Place clean, potable water into a clean mixing bowl.
- Add Gresbond EX-5 powder into the mixing bowl.
- Use approximately 5 - 5.6 litre of water for 20 kg of powder.
- Mix with a slow-speed mixer to a smooth, trowelable consistency.
- Allow adhesive to slake for 5 minutes.
- Adjust consistency if necessary.
- Remix and apply with the proper sized notched trowel.

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

## **APPLICATION : TILE/STONE:**

- Apply adhesive to the substrate with the flat side of the trowel, pressing firmly to work into the surface.
- Comb on additional adhesive with the notched side.
- Use the proper sized notched trowel to ensure full bedding of the tile.
- Spread as much adhesive as can be covered with tile in 10 minutes.
- Back butter large format tiles (> 12" x 12") to provide full bedding and firm support.
- Place tiles into the wet, sticky adhesive and beat in using a beating block and rubber mallet to embed tile and adjust the level.
- Periodically check adhesive for complete coverage by removing a tile and inspecting bedding adhesive transfer onto the back of the tile.
- Use spacers to provide grout joints between tiles.
- The joint width shall be as per the recommendation of the architect/engineer.
- Remove the spacers when the adhesive is set firm.
- If the adhesive is skinned over (not sticky), remove and replace with fresh adhesive

## **NOTE TO THE SPECIFIER AND INSTALLER :**

- Install tile/stone on external walls and floors with joints by creating spaces between tiles/stones.
- Fill joints with Gresbond Unsanded grout mixed with Gresbond KGA-01 grout admix.
- Absence of spacer joints can lead to surface movements pushing tiles/stones away from the substrate, causing de-bonding.
- Ensure exterior tile/stone installations have joints (spaces) on the periphery.
- Prevent tile/stone from being bound by the peripheral masonry work or plaster

## **TILE & STONE INSTALLATIONS ON CEILINGS:**

- Before installing tiles or stones on concrete ceilings and cement-based substrates, it is advised to:
- Check the pull-off strength of the substrate.
- Be aware that cement-based substrates generally have weak cohesive strength.
- Understand that unless these substrates are fortified by admixtures or polymer treatment, they may not be suitable for installation.
- This check is essential for all overhead installations

## **GROUTING :**

- Grout installation should commence after a minimum of 24 hours of curing time at 70°F (21°C).
- Use Gresbond Unsanded Grout mixed with Gresbond Grout Admix- KGA-01.
- For maximum stain resistance of internal spacer joints applications, use Gresbond KE-100 Stainfree Grout.

## **Customer Care**

Kajaria Ceramics Limited

J1/B1 (Extn.), Mohan Co-op Industrial Estate (Opp. Badarpur Thermal Power Station), Mathura Road, New Delhi - 110 044

Phone: +91-11-2694 6409 Fax: +91-11-2694 6407, 2694 9544 | Email: [info@kajariagresbond.com](mailto:info@kajariagresbond.com)