

# VX-1

## Type 2T Tile Adhesive: Technical Data Sheet

### PRODUCT DESCRIPTION:

VX-1 is a high-performance, polymer-modified, grey cement-based adhesive specifically designed for fixing low-porosity tiles (vitrified, semi-vitrified) and natural stones on interior and exterior floors, walls-interiors, and even swimming pools. It offers exceptional bond strength, water resistance, and ease of use. The adhesive is water-resistant and is suitable for use in showers, wet areas and swimming pools. Also, ideal for renovation (tile-over-tile) for quick & easy installation works. Its exceptional bond strength, flexibility, water resistance, and versatility make it the ideal choice for a wide range of applications.

Confirms to IS 15477: 2019 Type 2T "Adhesives for use with Ceramic, Mosaic and Stone Tiles"



**Note :** Not recommended for direct use onto gypsum plaster (wall finishes), paint or metal. Not suitable for external wall installations, Not suitable for tiles and stones with mesh backing.

### KEY FEATURES AND BENEFITS:

**Superior Bond Strength:** Exceeds EN & ISO C2TE classification for shear bond strength, ensuring a durable and long-lasting installation

**Versatile Application:** Suitable for most common substrates like concrete, masonry surfaces, existing tiles, and even terraces.

**Water Resistant:** Ideal for wet areas like showers, bathrooms, and swimming pools.

**Easy to Use:** Single-component formula requires only the addition of water for a smooth, trowelable

**Smooth application & Curing:** Easy mixing, smooth application & better workability and achieves full strength in approximately 14 days.

**Economical:** Cost-effective solution for various tiling projects.

### SUBSTRATES

Concrete

Concrete Masonry

Cement Mortar Beds

Existing Vitrified & Ceramic Tiles (cleaned & roughened)

Brick Masonry

Cement Terrazzo (roughened)

Existing Natural Stone (cleaned & roughened)

### APPLICATIONS

Interior and Exterior floor & wall installations -Interiors

Tile-on-tile applications

Bathroom tiling

Up to 12mm bed thickness

PROPERTY	VALUE
Density	1.7 kg/litre Approx.
Pot Life	120 Minutes Approx
Open Time	30 minutes Approx
Adjustability	30 minutes Approx
Setting Time	Approx. 1 Day
Full Strength	Approx. 14 Days
Tensile Strength	>1.20 N/mm <sup>2</sup>
Shear Strength	>1.25 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 1.00 N/mm <sup>2</sup>	1.15-1.25 N/mm <sup>2</sup>
Wet Conditions – Annex A (Clause 5.1)	Minimum 1.00 N/mm <sup>2</sup>	1.15-1.25 N/mm <sup>2</sup>
<b>Shear Adhesion</b>		
Dry Condition – Annex B (Clause 5.2)	Minimum 1.25 N/mm <sup>2</sup>	1.30-1.35 N/mm <sup>2</sup>
Heat Ageing - Annex B (Clause 5.2)	Minimum 1.00 N/mm <sup>2</sup>	1.05-1.15 N/mm <sup>2</sup>
Wet Conditions - Annex B (Clause 5.2)	Minimum 1.00 N/mm <sup>2</sup>	1.10-1.20 N/mm <sup>2</sup>
<b>Slip Resistance</b>		
Slip Resistance – Annex E (Clause 5.5)	≤0.50 mm	0.35 mm

### ◆ CERTIFICATIONS :

- Confirms to IS 15477: 2019 Type 2T "Adhesives for use with Ceramic, Mosaic and Stone Tiles"
- Confirms to EN 12004 / ISO 13007 and is a improved cementitious adhesive (C2) with slip resistance (T) and Extended Open time(E) of class C2TE

### ◆ PACKAGING : 20 kg bag (Available in Grey and White (With the name of VX-2))

### ◆ COVERAGE :

- Approx. 55-60 sq. ft. per 20 kg bag (using a 6mm x 6mm notched trowel for a 3mm bed)
- 1.2 kg/m<sup>2</sup> per mm of thickness (coverage may vary)

## INSTALLATION INSTRUCTIONS:

### SURFACE PREPARATION :

- Ensure a clean, sound substrate between 40°F (4°C) and 104°F (40°C), free from dirt, oil, grease, paint, laitance, and sealers.
- Level uneven surfaces with a screed or plaster.
- Dampen dusty or dry concrete before installation. New concrete must be cured for at least 28 days.
- Incorporate expansion joints matching substrate joints.
- Use Gresbond PUA-100 for wood substrates.

### MIXING:

- Pour clean water into a mixing bowl.
- Gradually add VX-1 powder (5 - 5.5 liters per 20 kg).
- Mix until smooth and Trowelable consistency. Let it slake for 5 minutes.
- Remix before applying with the appropriate trowel size.
- For large format tiles or exterior applications, consult Gresbond technical services.

### APPLICATION:

- Apply adhesive with the flat side of the trowel, ensuring good contact.
- Use the appropriate notched trowel to ensure full tile bedding.
- Comb additional adhesive with the notched trowel to cover the backside of the tile. Spread only enough for 10 minutes of working time.
- Back-butter large format tiles for better support.
- Firmly press tiles into the wet adhesive and adjust level.
- Check for complete adhesive coverage on the back of the tile periodically.
- Use spacers for grout joints as per recommendations. Remove spacers after the adhesive sets.
- If the adhesive skins over, remove and replace with fresh mix.
- For some natural stones, apply suitable sealers on all sides.
- Clean excess adhesive from tiles and joints while fresh.

### GROUTING:

Begin grouting after 24 hours at 70°F (21°C) using Gresbond's KE-100 series grout or unsanded grout.

### PRECAUTIONS & LIMITATIONS

- Always add powder to water. Do not add excess water.
- Do not add sand or cement on-site.
- Not recommended for wet screeds or uneven surfaces exceeding 12mm.  
Protect from rain and foot traffic for 24 hours.
- Leave gaps between tiles and fill with Gresbond tile grout.
- For installations exceeding 3 meters in height, consult a professional about additional mechanical fasteners.
- Not suitable for gypsum plaster, fiber cement boards, plywood, metal, plastics, or deformable surfaces. Use Gresbond PUA-100 for such applications.
- This adhesive is not a replacement for waterproofing coatings in wet areas. Use a suitable waterproofing membrane before tiling.
- Not recommended for artificial/engineered stone, composites, or metal tiles. Use Gresbond PUA-100 for these materials.

## ADDITIONAL NOTES

- **Trowel Selection:** The size of the notched trowel will depend on the size and type of tile you're installing. For larger tiles or uneven substrates, a bigger notch size is recommended to ensure full coverage.
- **Weather Conditions:** While VX-1 can be used for exterior applications, extreme heat or cold can affect drying times. Always check the weather forecast and adjust working practices accordingly.
- **Substrate Preparation:** Proper surface preparation is crucial for a successful tile installation. Don't underestimate the importance of a clean, sound, and level substrate.
- **Working Time:** Once mixed, VX-1 has a working time of about 15-20 minutes. It's important to work efficiently and avoid mixing large quantities at once to prevent wastage.

By following the instructions in this data sheet and considering these additional tips, you can achieve a professional and long-lasting tile installation using VX-1 Type 2 T Tile Adhesive

### Disclaimer:

This technical data sheet is provided for informational purposes only. The information contained herein is based on our technical knowledge and experience. However, due to variations in field conditions, we recommend conducting preliminary tests to ensure product suitability for a specific application.

## Customer Care

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