

# TA C-3 Advanced

High polymer Modified Cementitious  
Tile or Stone Adhesive

Pack Size  
40Kgs  
25Kg  
10Kgs

## TDS Technical Data Sheet



### Description

Grey cement-based, high-performance, high-strength adhesive for fixing tiles/stones. The set adhesive is water-resistant and suitable for use in wet areas like swimming pools and water bodies. TA C3 Advanced Grey is ideal for fixing vitrified tiles, industrial-grade tiles, and natural stones on walls/floors in interior/exterior situations up to 6mm bed thickness (can be extended up to 12 mm in areas of limited extent).

### FEATURES

- Very high bond strength
- Non-slip
- Water resistant
- Easy mixing, smooth application & better workability
- Enhanced flexibility & adhesion can be obtained with the addition of ADMIX AD1 (latex additive)

### SUITABLE BACKGROUND/BASES

- New substrates:
- Concrete walls & floors
- Cement sand screed
- Cement sand render
- Renovation works on existing:
- Unglazed tiles
- Hard natural stones
- Glazed tiles (vitrified and ceramic tiles)
- Mosaic tiles and in-situ mosaic flooring

### PHYSICAL PROPERTIES @27±2°C

Bed Thickness:	2-6 mm (can be extended up to 12 mm in areas of limited extent)
Pot Life:	3 hours
Setting Time:	24 hours
Temperature Resistance:	-30°C to 150°C
VOC Content:	1.26 g/L

## Properties as per IS 15477:2019@27 ± 2°C

Property	Min. Requirements	Typical Result
Tensile Adhesion Strength (as per Annex A)- Dry Condition	1.5 N/mm <sup>2</sup>	>1.5 N/mm <sup>2</sup>
Tensile Adhesion Strength (as per Annex A)- Wet Condition	1.00 N/mm <sup>2</sup>	>1.00 N/mm <sup>2</sup>
Shear Adhesion Strength (as per Annex B)-Dry Condition	1.5 N/mm <sup>2</sup>	>1.6 N/mm <sup>2</sup>
Shear Adhesion Strength (as per Annex B)-Heat Condition	1.00 N/mm <sup>2</sup>	>1.20 N/mm <sup>2</sup>
Shear Adhesion Strength (as per Annex B)-Wet Condition	1.00 N/mm <sup>2</sup>	>1.00 N/mm <sup>2</sup>
Open time (as per Annex C):	As per Manufacturer	30 mins
Adjustment time (as per Annex D)	As per Manufacturer	20 mins
Slip (as per Annex E)	< 0.50 mm	0.30 mm

## Properties as per EN 12004: 2017 @ 23 ± 2°C

Property	Min. Requirements	Typical Result
Tensile Adhesion Strength (Clause 8.3) - Initial	≥ 1 N/mm <sup>2</sup>	> 1.30 N/mm <sup>2</sup>
Tensile Adhesion Strength (Clause 8.3) - After water immersion	≥ 1 N/mm <sup>2</sup>	> 1.10 N/mm <sup>2</sup>
Tensile Adhesion Strength (Clause 8.3) - After heat aging	≥ 1 N/mm <sup>2</sup>	> 1.10 N/mm <sup>2</sup>
Tensile Adhesion Strength (Clause 8.3) - After freeze-thaw cycles	≥ 1 N/mm <sup>2</sup>	> 1.10 N/mm <sup>2</sup>
Open time @ 20 mins - Tensile Adhesion Strength (Clause 8.1 & 8.3)	≥ 0.50 N/mm <sup>2</sup>	> 0.60 N/mm <sup>2</sup>
Slip (T) (Clause 8.2)	≤ 0.50 mm	0.30 mm

## COVERAGE ESTIMATES

Coverage: Approx. 1.30 - 1.40 kg/m<sup>2</sup>/mm

### Square Notch Trowel Size Consumption/m<sup>2</sup> @ 45° angle of trowel

4mm X 4mm	1.7 - 1.85 kgs
6mm X 6mm	2.70 - 2.80 kgs
8mm X 8mm	3.60 - 3.70 kgs
12mm X 12mm	5.35 - 5.50 kgs

## APPLICATION INSTRUCTIONS

### Substrate Preparation

Before starting any work ensure that the base is:

- Sufficiently flat to permit the specified flatness of finished tiling, bearing in mind the permissible thickness of the adhesive.
- Suitable for tiling in the service conditions to which it will be exposed.
- Surfaces to be tiled must be dry, clean, and free from loose material and contamination

### Site Work Instructions

### Surface Considerations

**New Concrete Bases:** Before commencing tiling, ensure that bases have been allowed to air dry for at least 4 weeks.

**New Cement Sand Rendering/Brick/Block Wall:** Before commencing tiling, allow the plastered surface to air dry for at least 2 weeks (3 weeks for swimming pools).

**Existing Concrete/Screed Bases:** Cut out all loose or hollow portions and make good with a 1:3 cement-sand mortar applied over a slurry bonding coat and dry and cure for 7 days.

**Ceramic/Vitrified & Fully Vitrified Tile/Terrazzo/Hard Natural Stone Bases:** Check that the existing finish is firmly adhering to the base. Remove any loose or hollow-sounding tiles and reprofile with a 1:3 cement-sand mortar over a slurry bonding coat\*. Any surface contamination should be removed with HEAVY DUTY TILE CLEANER/TILE & STONE CLEANER. Slurry bonding coat is prepared by mixing 2 parts of Portland cement to 1 part of Cretebond Brush on the base immediately before applying the adhesive.

### Mixing

Add 20 kgs of TA C3 Advanced to clean water. Mix thoroughly until a homogeneous lump-free consistency is obtained. Allow the mixed adhesive to polymerize for 2-5 minutes and mix again for 30 seconds. The adhesive is ready-for-use and has a pot life of 3 hours. No further water should be added. Where mixing by weight is not possible, volume mixing can be carried out on-site in the ratio of 1:3.5 (water: powder).

### Application

- Spread not more than the area which can be tiled within the open time of the adhesive.

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- The mixed adhesive is applied to the prepared surface with a trowel and then combed through with a suitably sized square-toothed notched trowel.
- The tiles should be fixed within the open time of the adhesive and pressed into place with a twisting and sliding action ensuring solid bed fixing is achieved. The open time is dependent on site conditions and will be extended in lower temperatures and shortened at higher temperatures.
- Check periodically that good contact is maintained with the back of each tile.
- Touch the adhesive ribs periodically and if a skin has formed, remove the adhesive and apply a new layer.
- Leave adequate joints between individual wall and floor tiles unless self-spacing tiles are used.
- Clean off surplus adhesive from the tile face and between joints.
- Note:
  - Do not use in damp conditions and temperatures less than 5°C.
  - Seal the sides & bottom of porous stones with UNDERTILE & STONE PRIMER to avoid migration of moisture.
  - Use suitable clamps along with adhesive at the time of installation of tiles/stones above 3m height as recommended by IS 15477:2019.
  - For large-span tiling works, leave movement joints at every 3m interval and fill with a flexible sealant as per BS 5385.
  - Prevent foot traffic until the adhesive has completely set.

## Spacers

Use spacers (minimum 2mm) for uniform joint width.

## Grouting

Grouting should be carried out after 24 hours. Use the appropriate grouting material from the range of cementitious and epoxy grouts. EPOXY GROUT is strongly recommended for wet areas, swimming pools, and locations with requirements for hygiene & chemical resistance. The addition of Cretebond to cement-based grouts will enhance adhesion to tile/stones edges, increase water resistance, and improve flexibility.

## Cleaning

Tools and containers may be cleaned using clean water when the adhesive is still fresh. The hardened adhesive can be removed from tools mechanically.

## Storage and Shelf Life

TA C3 Advanced has a shelf life of 12 months when stored in normal dry conditions.

## 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 contact with eyes, rinse immediately with plenty of clean water and seek medical advice. For more details, please refer to the relevant Material Safety Data Sheet.

## Conditions of Sale

Sold subject to the Company's conditions of sale which are available on request.

## Note

The information supplied in this datasheet is based upon extensive experience and is given in good faith to help you. Our Company policy is one of continuous Research and Development; we, therefore, reserve the right to update this information at any time without prior notice. We also guarantee the consistent high quality of our products; however, as we have no control over site conditions or the execution of the work, we accept no liability for any loss or damage which may arise as a result thereof.

## Pack Size

40Kgs, 25Kg & 10Kgs



## Data Reliability

All technical data provided in this document are based on laboratory tests. Actual performance may vary due to factors beyond our control.

## Regional Compliance

Product specifications may vary based on local regulations. Please refer to the local Product Data Sheet for precise information.

## Legal Disclaimer

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