



TA C5

Polymer Modified Tile/Stone Adhesive

Pack Size
20Kgs

TDS Technical Data Sheet



Description:

High polymer modified, white cement-based tile adhesive suitable for fixing medium format tile/stone in interior walls/floor and exterior floor situations up to 6mm bed thickness (can be extended up to 12mm in areas of limited extent). The set adhesive is water-resistant and is suitable for use in showers and totally immersed situations such as swimming pools. TA C 5 is used for fixing mosaics, vitrified and fully vitrified tiles, terrazzo, and light-colored natural stone. It is also suitable for renovation (tile-over-tile) for quick and easy installation works. Note: Not recommended for direct use onto gypsum plaster (wall finishes), paint, or metal.

Standards:

Confirms to IS 15477: 2019 Type 2T "Adhesives for use with Ceramic, Mosaic and Stone Tiles." Confirms to EN 12004: 2017 and is a normal cementitious adhesive (C1) with slip resistance (T) of class C1T.

Features:

High bond strength, easy mixing, smooth application, and better workability. The white color protects from discoloration/stains. Suitable for most common substrates and tiles. Water-resistant. Enhanced flexibility and adhesion can be obtained with the addition of Cretebond.

Suitable Background/Bases:

New substrates: Concrete walls & floor, 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. The surface should be abraded (roughened) and cleaned before installation.

Physical Properties @ 27± 2°C:

Bed Thickness:	Up to 6 mm (suitable up to 12mm in areas of limited extent).
Pot Life:	3 hours.
Setting Time:	24 hours
Temperature Resistance:	-30°C to 150°C.
VOC Content:	1.12 g/L.

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

Tensile Adhesion Strength (as per Annex A)	Dry condition: 1.00 N/mm ² (Typical Result: >1.20 N/mm ²). Wet Condition: 1.00 N/mm ² (Typical Result: >1.10 N/mm ²).
Shear Adhesion Strength (as per Annex B)	Dry condition: 1.25 N/mm ² (Typical Result: >1.30 N/mm ²). Heat Aging Condition: 1.00 N/mm ² (Typical Result: >1.10 N/mm ²). Wet Condition: 1.00 N/mm ² (Typical Result: >1.10 N/mm ²).
Open time (as per Annex C):	As per Manufacturer, 20 mins.
Adjustment time (as per Annex D):	As per Manufacturer, 15 mins.
Slip (as per Annex E):	< 0.50 mm (Typical Result: 0.35 mm).

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

Tensile Adhesion Strength (Clause 8.3)	Initial: ≥ 0.50 N/mm ² (Typical Result: > 1.10 N/mm ²). After water immersion: ≥ 0.50 N/mm ² (Typical Result: > 0.80 N/mm ²). After heat aging: ≥ 0.50 N/mm ² (Typical Result: > 0.90 N/mm ²). After freeze-thaw cycles: ≥ 0.50 N/mm ² (Typical Result: > 1.20 N/mm ²).
Open time @ 20 mins: Tensile Adhesion Strength (Clause 8.1 & 8.3):	≥ 0.50 N/mm ² (Typical Result: > 0.65 N/mm ²).
Slip (T) (Clause 8.2):	≤ 0.50 mm (Typical Result: 0.30 mm).
Coverage Estimates:	Approx. 1.35 - 1.40 kg/m ² /mm.

Square Notch Trowel Size & Consumption/m²:

6mm X 6mm: 2.8 - 2.9 Kgs.

8mm X 8mm: 3.7 - 3.8 Kgs.

12mm X 12mm: 5.6 - 5.7 Kgs.

Note: Coverage will depend on the nature and flatness of the surface and the method of application. For good coverage, it is vital that all surfaces are smooth, plumb, level, and free from defects and undulations.

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20 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. Ensure the surface is 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: Before commencing tiling, allow 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 TA C 5 to clean water. Mix thoroughly until a lump-free mortar is obtained. The adhesive is immediately 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 at the site in the ratio of 1:3 (water: powder).

Application:

Spread not more than the area which can be tiled within the open time of the adhesive. 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 and bottom of porous stones with UNDERTILE & STONE Product Data Sheet

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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 till 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 the requirement of hygiene and chemical resistance. Note: The addition of cretebond to cement-based grouts will enhance adhesion to tile/stone 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 C 5 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 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.

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**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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