

# DONCRETE – TA 03 (DIAMOND)-White

## ADHESIVE FOR VITRIFIED TILES & NATURAL STONES OF ANY SIZE

### DESCRIPTION

**DONCRETE-TA03 (DIAMOND)-White** is a highly polymer modified, thin-set tile adhesive for fixing all type of ceramic, semi-vitreous, vitrified tiles and natural stones, on a variety of surfaces, for both vertical and horizontal application, in dry as well as wet areas for indoor as well as outdoor application. It is also recommended for Tile Application also.

### STANDARD COMPLIANCE / SPECIFICATION

**DONCRETE-TA03 (DIAMOND)-White** complies to Type 2 ‘T’ as per “IS 15477:2019 – adhesive for use with ceramic, mosaic and stone tiles – specification.”

Also, **DONCRETE-TA03 (DIAMOND)-White** conforms to class C1TE as per EN 12004 : 2017/ ISO 13007 – a cementitious (C) Normal Adhesive (1) slip resistant (T) Extended Open Time (E) tile adhesive.

### AREA OF USE

Material to be fixed	On surface/ substrate	Area of application
All type of ceramic tile, terracotta, pavers, brick, vitrified tiles, large format tiles, precast terrazzo, natural stones, low thickness slabs.	Cement-based screeds/bed, gypsum & cement based plasters/renders, concrete surfaces & bricks, existing tiles & stones, waterproofing products, other cement-based surface.	Floor and walls, for internal area, floor for external area, dry & wet area like saunas, spa, fountains, domestic applications, commercial applications.

Only recommended for exterior floor application and mix with **DONCRETE-TA03 (DIAMOND)-White** for external wall application. Consult with **DONCRETE-TA03 (DIAMOND)-White** technical team.

### FEATURES AND ADVANTAGES

- Easy to use – just add water on site, ready to use.
- Highly Polymer modified – provides high adhesion, allows to bond with variety of substrates, for fixing a variety of tiles and stones.
- Sag Resistant formula – provides hassle-free application on vertical walls.
- Water & shock resistant – suitable for wet areas & commercial floor too.
- Sustains heat ageing – making it ideal for high temperature locations and for hot temperature applications, like Jacuzzi, sauna etc.
- Low VOC – for healthy living.

### LIMITATIONS

- Do not apply directly on dry wall partitions like cement, bison, gypsum, plywood boards & wood derivatives, decorative laminates, metal, plastic, highly deformable surfaces subject to vibrations. Use Master-fix as per application.
- Adhesive for ceramic tile, bricks and stone are not designed as replacement for waterproof coating. Use waterproofing coating before tiling for wet area.
- Do not use for fixing artificial/ nano/ engineered stone/ composites/ metal tile. for the same.

### TECHNICAL INFORMATION

### APPLICATION PROPERTIES

Testing Properties	Test Result
Mixing Ratio (Powder : Water )	1:0.26 (Grey)/1:0.32 (White) by wight
Mixed Density	1.65 ±0.05 kg/ litre

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Open Time	Min. 30 minutes
Adjustability	Approx. 25 minutes
Pot Life	Approx. 120 minutes
Sag/ Slip	≤0.5 mm
VOC Content (As per EPA 24 method)	<1.2 gm/ kg
Application Temperature ( Substrates and Materials)	5 °C to 35 °C
Adhesive Thickness	3 – 12 mm
Setting/ Trafficable/ Grouting Time	24 hours

### PERFORMANCE PROPERTIES AS PER ISO 13007 AND EN 12004 (CITE)

Testing Properties	Requirement	Test Results
a) Tensile Adhesion Strength, after 28 days	≥ 0.5 N/mm <sup>2</sup>	≥ 0.9 N/mm <sup>2</sup>
b) Tensile adhesion strength after water immersion	≥ 0.5 N/mm <sup>2</sup>	≥ 0.8 N/mm <sup>2</sup>
c) Tensile adhesion strength after heat ageing	≥ 0.5 N/mm <sup>2</sup>	≥ 0.9 N/mm <sup>2</sup>
d) Tensile adhesion strength after freeze-thaw cycle	≥ 0.5 N/mm <sup>2</sup>	≥ 0.8 N/mm <sup>2</sup>
e) Slip resistance	0.5 mm	≥ 0.5 mm <sup>2</sup>
f) Extended open time (at 30 minutes)	≥ 0.5 N/mm <sup>2</sup>	≥ 0.6 N/mm <sup>2</sup>

### PERFORMANCE PROPERTIES AS PER IS15477 : 2019 (TYPE 2 ‘T’)

Testing Properties	Requirement	Test Results
a) Tensile Adhesion at dry condition, after 28 days	≥ 1.0 N/mm <sup>2</sup>	≥ 1.1 N/mm <sup>2</sup>
b) Tensile Adhesion at Wet condition	≥ 1.0 N/mm <sup>2</sup>	≥ 1.0 N/mm <sup>2</sup>
c) Shear Adhesion at Dry condition	≥ 1.25 N/mm <sup>2</sup>	≥ 1.25 N/mm <sup>2</sup>
d) Shear Adhesion at Wet condition	≥ 1 N/mm <sup>2</sup>	≥ 1.1 N/mm <sup>2</sup>
e) Shear Adhesion at Heat Ageing	≥ 1 N/mm <sup>2</sup>	≥ 1.1 N/mm <sup>2</sup>

**Note :** Test are indicative as per testing method specified in standard. Test results may vary as per substrate, site condition & testing machine etc. Actual field performance will depend on installation method and site conditions.

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### **SUBSTRATE PREPARATION**

- The substrate must be level, cured, undamaged, compact, rigid resistant, dry and free from any debonding agents and from damp rising.
- All surfaces must be plumb and true to within 6 mm in 10 ft (3m).
- Dry, dusty surfaces should be dampened with water & excess water should be swept off.
- New concrete slabs shall be damp cured and 28 days old before application which will reduce the shrinkage from tile fixing surface.
- Expansion joints to be provided & filled with suitable sealant.
- Do not cover expansion joints with thin set tile adhesive/ tile.
- Use the proper sized notched trowel to ensure full bedding of the tile.
- Tiles must be fixed within 20 minutes of adhesive being applied, depending on the porosity of the surface and atmospheric conditions.
- Check the adhesive ribs periodically and if a skin has formed, remove the dried adhesive and apply fresh adhesive.
- Press the tiles firmly into position with a slight twisting action, checking periodically that good contact is maintained with the back of each tile and beat in using rubber mallet to imbed tile and adjust level.
- Leave no voids behind tiles.
- For large size tiles of irregular surfaces, adhesive can additionally be buttered on the backs of the tiles to ensure full adhesive contact.
- Use suitable support along with adhesive for fixing tiles on vertical surfaces.
- For highly absorbent natural stones which may form a wet patch when adhesive is used, it is recommended to use suitable Impregnating sealer on all sides. Please refer Technical Data Sheets of product intended for use for specific instructions of use.
- Leave adequate joints between individual wall and floor tiles using spacers. The joint width shall be as per the recommendation of architect/ engineer.
- Clean off surplus adhesive from the tile face and between joints.
- Clean tools and tile work with water while adhesive is fresh.

### **MIXING**

- Add 3 – 3.5 parts of powder to 1 part of water or 5 – 6 litrewater for 20 kg grey powder & 5.5 – 6.5 litre water for 20 kg white powder in a clean mixing vessel.
- Adjust the water as per desired consistency.
- Mix with a suitable mechanical stirrer or slow speed drills (50 - 100 rpm) until a lump free homogeneous paste is obtained.
- Always mix required quantity, which can be consumed within pot life.
- Leave mixture for 5 minutes before use.
- No further water should be added.
- Apply adhesive to the substrate with the flat side of the trowel.
- Comb on additional adhesive with the notched side.

### **PRECAUTIONS & NOTE**

- Always add powder to water.
- Do not add excess water than recommended.
- Never add sand & cement at site.
- Do not use wet screed. Surface must be fully cured.
- Do not use the adhesive to correct surface irregularities greater than 15 mm.

### **PACKAGING**

20, 30 kg bag

### **SHELF LIFE**

12 months for sealed pack when stored under cover, out of direct sunlight, dampproof conditional and protect from extremes of temperature.

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- Protect from direct rainfall/ foot traffic for at least 24 hours.
- Leave gap between the tile & fill gaps with tile grout
- Designer/ applicator must evaluate the use of an additional mechanical fastening system for extra security for high height (such as steel hooks fastened to the substrate).

### COVERAGE

- Approx 5 – 6 m<sup>2</sup> / 20 kg Bag at 6 mm thickness (using 6 mm x 6 mm notch).
- Approx 2.5 – 3 m<sup>2</sup> / 20 kg Bag at 6 mm thickness (using 12 mm x 12 mm notch).
- Approx 1.2 kg/ m<sup>2</sup> per mm of thickness.

Coverage will vary depending on trowel notch size, type, size of tile and substrate smoothness and evenness.

### GROUTING

Grouting should be carried out after 24 hours of tiling. Clothing, gloves and eyes/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. Limited to professional use only.

For more details please refer the relevant Material Safety Data Sheet, available on request.

### SAFETY PRECAUTIONS

Keep out of reach of children. Wear suitable protective clothing, gloves and eyes/ 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. Limited to professional use only.

For more details please refer the relevant Material Safety Data Sheet, available on request.

## TECHNICAL COLLABORATION WITH



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