

TRUFIX 440 GREY

Flexible Adhesive for fixing large format tiles on wall & floor in interiors and exteriors

ASTRAL

TRUBUILD™

TECHNICAL DATA SHEET VER NO. N.1

TRUBUILD TRUFIX 440 (formerly known as TA 660) is a single-component, ready-to-use, polymer modified, cement based, flexible, grey. Tile Adhesive for fixing ceramic, clay, terracotta, brick, quarry tiles, vitrified/fully vitrified tiles, glass mosaic tiles, terrazzo, basalt, porcelain tiles & other stones on floors / walls in interiors and on exterior walls for more than 10 ft. height in dry & wet areas. It should be applied on fully cured and sound cementitious substrates. It is also recommended for tile on tile application.

Meets the requirement of IS **15477:2019-TYPE 4-T S2** & EN **12004:2017 C2TES2**



ADVANTAGES



COLOUR



WATER
MIXING



SET TIME



ADHESIVE



INDOOR &
OUTDOOR

- Ready-to-use and only onsite mixing with water is required
- It has excellent adhesion and slip resistant properties
- Can be used in areas subjected to vibrations and direct sunlight.
- Self-curing
- Deformable adhesive (S2)
- Extended open time

AREA OF APPLICATIONS



AVAILABLE PACKING



SURFACE APPLICABILITY	
Floor	Yes
Wall	Yes
Interiors	Yes
Exteriors	Yes (for more than 10ft. height)
Dry areas	Yes
Wet areas	Yes

Flexible adhesive for fixing large format tiles on wall & floor in interiors and exteriors.

METHOD OF APPLICATION

- Tiles should be cleaned completely to remove the dust & loose particles. The substrate must be leveled, cured, undamaged, compact, rigid, resistant, dry and free from any debonding agents and from rising dampness. Dry & dusty surfaces should be dampened with water & excess water should be swept off.
- For mixing, take required amount of water in a mixing bucket and then add Trubuild Trufix 440 slowly to the mixing tub. Continue mixing with low-speed mechanical mixture while charging powder into the water in a mixing bucket. Always maintain water to adhesive ratio of 0.22 by weight (4.2 L to 4.4 L per 20kg bag)
- Mixing time should not be more than 3 to 5 min. After mixing, wait for 1-2 minutes and then use it for application.
- Apply mixed material on the surface so as to achieve 3-5 mm bed thickness. Spread it with the help of notched trowel and do not spread in more than one sq. m. of area at a time. Press the tile firmly and hammer gently with soft mallet to ensure perfect bond. Clean the excessive adhesive from the joints.

- For large format tiles or irregular surfaces, adhesive can additionally be buttered on the backs of the tiles to ensure full adhesive contact.
- Adhesive should cover minimum ninety-five percent surface area of the tile.
- For best results, use Trubuild Stylo Cem / 3K / Duo of required shade to fill the gaps between the tiles but same should be strictly done after 24 hrs. of tile application.
- Leave the tile applied area untouched for minimum 24 hrs.
- Clean the tools & equipments with clean water immediately after use.

TECHNICAL DETAILS

S.NO.	PROPERTIES	RESULTS
1.	Appearance	Grey
2.	Mixing ratio (water : powder), by weight	w/p=0.22, by weight & 4.2-4.4 L per 20 kg bag
3.	Coverage	Approx. 50-65 sqft./ 20 Kg at 3 mm thickness (will depend upon the surface)
4.	Initial setting/ trafficable/ grouting time	Min. 24 hr.
5.	Open Time	Min. 30 minutes
6.	Adjustment Time	Approx. 35 minutes
7.	Pot life	Approx. 120 minutes
8.	Bed Thickness	Max. 12mm

PERFORMANCE PROPERTIES AS PER EN 12004:2017 (C2TES2)

PROPERTIES	REQUIREMENT	RESULTS
High initial tensile adhesion strength	$\geq 1.0 \text{ N/mm}^2$	$\geq 1.4 \text{ N/mm}^2$
High tensile adhesion strength after immersion	$\geq 1.0 \text{ N/mm}^2$	$\geq 1.0 \text{ N/mm}^2$
High tensile adhesion strength after heat ageing	$\geq 1.0 \text{ N/mm}^2$	$\geq 1.0 \text{ N/mm}^2$
High tensile adhesion strength after freeze-thaw cycles	$\geq 1.0 \text{ N/mm}^2$	$\geq 1.0 \text{ N/mm}^2$
Slip Resistance (T)	$\leq 0.5 \text{ mm}$	$\leq 0.35 \text{ mm}$
Extended open time(E): tensile adhesion strength	$\geq 0.5 \text{ N/mm}^2$	$\geq 0.6 \text{ N/mm}^2$
Transverse deformation (S2)	$\geq 5 \text{ mm}$	$\geq 5 \text{ mm}$

PERFORMANCE PROPERTIES AS PER IS 15477:2019 (TYPE 4 T S2)

PROPERTIES	REQUIREMENT	RESULTS
Tensile Adhesion: Dry Condition	Minimum 1.5 N/mm^2	$\geq 1.7 \text{ N/mm}^2$
Tensile Adhesion: Wet Condition	Minimum 1.0 N/mm^2	$\geq 1.0 \text{ N/mm}^2$
Shear Adhesion: Dry Condition	Minimum 1.5 N/mm^2	$\geq 1.5 \text{ N/mm}^2$
Shear Adhesion: Heat Ageing	Minimum 1.0 N/mm^2	$\geq 1.6 \text{ N/mm}^2$
Shear Adhesion: Wet Condition	Minimum 1.0 N/mm^2	$\geq 1.0 \text{ N/mm}^2$
Slip Resistance (T)	$\leq 0.5 \text{ mm}$	$\leq 0.28 \text{ mm}$
Slip Resistance (S2)	$\geq 5 \text{ mm}$	$\geq 7 \text{ mm}$

LIMITATIONS & PRECAUTIONS

- It is a ready-to-use Tile Adhesive so do not add sand or cement further and always add the recommended percentage of water.
- To avoid lump formation, always add the powder to water and not water to powder.
- Can be used for surfaces subjected to vibrations and direct sunlight.
- Do not use for fixing artificial/ nanoengineered stone/ composites/ metal tiles. For the said purpose you can use our Trubuild Trufix 550.
- Do not add more water than recommended.
- Surface to be cleaned and roughened before installation of tiles or stones.
- Not to be used as an adhesive on paint, wood, metal & gypsum plaster.
- Do not use on wet screed.
- Substrate undulation should be repaired with polymer modified mortar/ screed /plaster prior application of Tile Adhesive.
- Designer/ applicator must evaluate the use of an additional mechanical fastening system for extra security for a high height (such as steel hooks fastened to the substrate).
- Substrate should be fully cured as per standard construction practice .Setting time will depend on thickness, weather & humidity.

SHELF LIFE

12 months in its unopened sealed original packaging in a strictly dry and cool storage place.

HANDLING & STORAGE

HANDLING: Provide adequate ventilation in the application area. Use rubber hand gloves & safety goggles. In case of contact with skin, wash with plenty of water. If irritation occurs then consult with doctor immediately. Keep it out of reach from children.

STORAGE: Product should be unopened, sealed and undamaged. It should be stored in cool and dry conditions at temperatures between +5°C to +35°C. Protect from direct sunlight and humidity.

DISCLAIMER: This technical data sheet replaces all previous versions of it from the immediate effect. The information, and, in particular, the recommendations relating to the application and end-use of Astral Ltd, construction chemical products, are given in good faith based on our knowledge and experience of the products when properly stored, handled and applied under suitable favourable conditions in accordance with application instructions recommended in product technical data sheet. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. For the products on which company is offering warranty, please refer to warranty document to know entire terms and conditions. The same can be availed on request or from company website. The values mentioned in the above tables in technical data sheet are obtained in controlled lab conditions when tested properly by competent laboratory. Tolerance up to five to ten percentage on the lower side from the above values are allowable. Astral Ltd. reserves the right to change the properties of its products without notice. The end user of the product must test the product's suitability for the intended application and purpose. Astral Ltd will not bear any responsibilities on the product failure if it is wrongly positioned or if improper application methodology is adopted by the user or the applicator. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local product technical data sheet for the product concerned, copies of which will be supplied on request. No freedom from any patent owned by Seller or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, customer is responsible for determining whether products and the information in this document are appropriate for the customer's use and for ensuring that the customer's workplace, and disposal practices are in compliance with applicable laws and other governmental enactments.