

TECHNICAL DATA FOR BS TILEASY 400

Technical Mortar Adhesive for exteriors use and heavy duty performance

Description of BS Tileasy 400

BS Tileasy 400 is a High Performance, Polymer Modified Cementitious White Coloured Tile Adhesive with Extended Open Time & Reduced Slip. It has the bond strength and high inbuilt flexibility required for tropical weather conditions affecting movement in structures.

BS Tileasy 400 provides high duty adhesion specially for cladding use on plastered surface, precast wall, ply-board, AAC Blocks, terrazzo surface, concrete, cement blocks.

Advantages of BS Tileasy 400

1. **High Performance(C2)** – May be used for Nonporous ceramic tiles with minimal water absorption
2. **Non-slip & Excellent grab(T)** – Versatile can be used for horizontal and vertical applications
3. **Extended Open Time(E)** – Allows longer working time and Faster progress
4. **Waterproof Property** – immersion will not affect adhesion
5. **Thin or Thick bed** - multi-purpose High adhesive bond strength –suitable for large tiles.

Recommended Application of BS Tileasy 400

BS Tileasy 400 is a high performance adhesive for fixing small to large tiles even on difficult substrates and less-porous tiles (<3% and > 0.08%) and can be used with confidence in all wet process applications. Typical Applications are:

- Suitable for Ceramic tiles, Semi Vitrified tiles, Vitrified tiles, stones conforming to IS13712 (2006) type Ia, Ib, IIa ,IIb tiles
- Wet areas including kitchen, bathrooms & Showers in domestic, institutional, commercial and industrial spaces
- Tile on tile application
- For external or internal applications
- For Floors, Walls, Podium decks, roofs including large format tiles and stones
- For laying non-moisture sensitive natural stone
- For Laying Ceramic, Porcelain Mosaic, Fully vitrified tiles and brick tiles.

- For Swimming pools, pool surrounds, wet rooms and cold storage depots
- For substrates such as cement screeds, precast concrete elements, aerated concrete, heated screeds, plaster and existing floors and walls
- For fixing tiles on liquid waterproofing membranes such as BS MoistureZero series and such waterproofing coatings

Properties of BS Tileasy 400

Appearance	Freely flowing white powder with minute aggregates
Water to Powder Ratio by wt.	0.240 – 0.250
Fresh wet density	1.70 Kg / Litre
Open Time as per EN 1346	: > 0.5 N/mm ² (For 45 mins)
Tensile Adhesion at ambient temperature as per EN 1348	: > 1.0 N/mm ²
Slip Resistance as per EN 1308	: ≤ 0.5 mm
Tensile Adhesion under water as per EN 1348	: >1.0 N/mm ²
After Heat Ageing as per EN 1348	1.0 N/mm ²
Allow Foot traffic & Grouting	After 24 Hours at 25°C
Chloride content	Less than 0.2%
* The water powder ratio can be reduced (to approx. 0.23 to increase the non-sag properties of large-format slabs on the wall.*Open times will vary as per site temperature so do a trial first.	

APPLICATION of BS Tileasy 400

Ensure that the surface is stable, clear from any loose particles and is solid enough to take load. Any kind of material such as dried paint spots or grease / Oily exposure that act as bond barriers should be removed / grind off/ chiselled from the surface.

Removing Unevenness in Plaster/ Brick Wall / Block Wall:

BS Tileasy 400 does not require broom finish on wall plaster. It is recommended to be applied on plain, smooth & levelled plaster to achieve recommended coverage results.

In case site has rough finish plastered surface, then it may be made level by using a levelling skim coat prepared by using cementitious polymer plaster made by admixing 4% BS Smartbond 100 of cement quantity in

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the sand cement plaster mix. Allow this levelled surface to cure for 48 hours before starting application.

If the surface is highly absorbent as may be in case of AAC blocks or uncured cement substrate it should be sealed with BS SmartBond 100 in one or two coats by brush with an interval of 4 hours between each coat. Allow it to dry for 8 to 12 hours.

If the concrete screed is newly cast, then it should be allowed to cure properly so that most of the shrinkage movement is complete.

Preparation of BS Tileasy 400 mortar

Add 4.5 to 5 Litres of potable water to a 20Kg bag of BS Tileasy 400. Pour water first in a clean mixing container. Add BS Tileasy 400 powder to the water, gradually stirring with a hand mixer until the mix is lump free & in a plastic state.

Application of BS Tileasy 400

Tool Needed: Notched Trowel of 6mm for 3mm standard application, Ensure that BS Tileasy 400 application is done using notched trowel that is specially made of tile mortar installation.

Start by applying a layer of about 6 mm thick prepared material on the substrate using the plain side of the trowel as shown in the image below.



Notched Trowel for BS Tileasy 400 Application.

When the applied paste is still wet, softly comb down the applied layer of mortar with the notched side of the trowel, as shown in the image.



Use the Notch sized to control adhesive application as needed.

Prepare only that much mortar paste that can be used within the suggested open time of 45 minutes.

Applicators should check the condition of mortar open time by touching. If mortar feels dry/hard and is not OK to be used do not add water to make it workable again.

Apply the paste in 90 Degrees to the direction of grooves at the back of tile or opposite to the groove direction.



BS Tileasy 400 used for Large Stone tiles application on Facade Wall.

Important: Please note if the tile size is larger than 4 Sq.Ft, the tile has to be back buttered or the BS Tileasy 400 mortar paste has to be applied also on tile also apart from the substrate to ensure 100% bond contact.

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Place the tile on the BS Tileasy 400 mortar layer and set by gently pushing it in place, so that the tile base comes in complete contact with the mortar bed.

Tiles can be adjusted within 20 minutes after application. Clean out the extra adhesive from the tiles using a damp cotton cloth or sponge pad and clear the tile joints for installing grout before the mortar hard sets.

Ensure that the ceramic tiles have a minimum space of 2mm around tiles and should not be butt jointed. Use spacers as a good practice. Grouting of tile joints should start after 1 day of tiles being fixed.

Suggestion for BS Tileasy 400 Application

1. If a non-absorbent surface like painted or coated surface is present, the BS Tileasy 400 can be modified with BS Smartbond 100 @2% by volume. Do a trial first or check with our technical department.
2. Movement joints should be provided as per recommendation of local standards or BS 5385.
3. Do not apply at temperatures below 5 degree & above 35 degrees Celsius
4. Start tiling work early in summers to apply mortar in temperature below 35 degrees Celsius or use ice to cool the mixing water to maintain the open time of BS Tileasy 400 mortar.
5. Do not reuse the dried / hardened mortar or mix it with fresh mortar. Once BS Tileasy 400 is mixed & prepared with water the polymers are activated
6. Important : The mortar layer thickness of BS Tileasy 400 should be less than 10 mm on horizontal surface and less than 8 mm on vertical surfaces.

Consumption Average for BS Tileasy 400 20Kg Pack

Trowel Notch Size*	Area Covered
6mm by 6mm	7 – 8 m ²
10mm by 10 mm	4.5 – 5.5 m ²

*Consumption rates may vary due to variance in surface roughness, the surface profile behind the tile, if the tiles are back buttered & skill of the applicator.

Packaging: 20 Kg White, 20 Kg Grey, Lined, Moisture Resistant Sacks

Storage & Shelf Life of BS Tileasy 400

The product is to be stored under shade, proper cover, stacked not more than 12 on a pallet, free from moisture & sunlight. Expected shelf life of 12 months