

## TECHNICAL DATA FOR BS TILEASY HS

Technical Adhesive Mortar for exteriors use, Stone & Clay Tiles & Porous Substrates

### Description of BS Tileasy HS

BS Tileasy HS is a ready to use, cementitious polymer modified technical mortar for installing medium to large format stone & vitrified tiles for exterior and interior use.

It has the bond strength and improved inbuilt flexibility configured as per tropical weather conditions affecting movement in structures.

BS Tileasy HS provides very good adhesion for cladding use on plastered surface, precast wall, ply-board, AAC Blocks, terrazzo surface, concrete, cement blocks.

BS Tileasy HS Complies with EN / ISO with a C2TES1 classification. It is categorised as IS 15477:2019 – Type 3 TS1 Adhesive standard.

### Advantages of BS Tileasy HS

1. **Thin set or Thick-bed Application:** Mortar Bedding can be from 3mm onwards to 8mm
2. **High Grade bonding:** It is suggested even for natural material like stone tiles
3. **Waterproof Quality:** Perfect for Hotel Showers, Saunas, swimming pools & water-bodies.
4. **Anti-Slip Performance:** Designed for vertical tile fixing application on walls or facade. Excellent Vertical Anchoring for Tiles weighing up-to 40 Kg per Sqm.

### Recommended Application of BS Tileasy HS

BS Tileasy HS is the proper 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:

- Exterior Facade, vertical use with anchors.
- Wet areas such as showers, bathrooms & pools.
- Commercial food processing zones
- Podium, Pavement
- Granite fixing use for Windows and Doors

### Properties of BS Tileasy HS

Property	Typical Results
Appearance	Freely flowing grey powder with minute aggregates
Water to Powder Ratio by wt.	0.180 – 0.220
Fresh wet density	1.70 Kg / Litre
Open Time (30 Minutes at 28 days) as per ANSI A118.4 Clause –5.3	130 psi – 150 psi (0.89 – 1.03 Mpa)
Tensile Adhesion at ambient temperature as per EN 1348	: > 1.5 N/mm <sup>2</sup>
Slip Resistance as per EN 1308	0.3 to 0.4 mm
Tensile Adhesion under water as per EN 1348	: > 0.75 - 1.00 N/mm <sup>2</sup>
Heat Ageing as per EN 1348 – Clause 8.4	1.15 – 1.40 N/mm <sup>2</sup>
Transverse Deformation: EN12002	2.5 mm - 2.60 mm
Allow Foot traffic & Grouting	After 24 Hours at 25°C
Chloride content	Less than 0.2%

### APPLICATION of BS Tileasy HS

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

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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 HS mortar

**Add 3.3 to 3.5 Litres of potable water to a 20Kg bag of BS Tileasy HS.** Pour water first in a clean mixing container. Add BS Tileasy HS powder to the water, gradually stirring with a hand mixer until the mix is lump free & in a plastic state.

### Application of BS Tileasy HS

**Tool Needed:** Notched Trowel of 6mm for 3mm standard application, Ensure that BS Tileasy HS 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 HS Application.



Apply Adhesive using Plain Side of Trowel

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 20 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.

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BS Tileasy HS used for 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 HS mortar paste has to be applied also on tile also apart from the substrate to ensure 100% bond contact.

Place the tile on the BS Tileasy HS 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 HS Application**

1. If a non-absorbent surface like painted or coated surface is present, the BS Tileasy HS 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 40 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 HS mortar.
5. Do not reuse the dried / hardened mortar or mix it with fresh mortar. Once BS Tileasy HS is mixed & prepared with water the polymers are activated
6. Important : The mortar layer thickness of BS Tileasy HS should be less than 10 mm on horizontal surface and less than 8 mm on vertical surfaces.

**Consumption Average for BS Tileasy HS 20Kg Pack**

Trowel Notch Size*	Area Covered
6mm by 6mm	5 – 5.5 m <sup>2</sup>
10mm by 10mm	2.5 - 3 m <sup>2</sup>

\*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.

**Working Properties at 25° C of Adhesive Mortar**

Open Time	30 minutes
Adjustability	30 minutes
Pot Life	3.5 to 4 Hours
Time for Traffic	18 to 24 Hours

**Packaging: 20 Kg, Lined, Moisture Resistant Sacks**

**Storage & Shelf Life of BS Tileasy HS**

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

Please Note: All Specifications subject to change without notification. Results presented are typical and reflect test procedures used. Actual site performance shall depend on installation methods and site conditions.