



TILE & STONE FIXING EXPERT



# T22 TILE BONDER (RTB)

CEMENT ADMIX FOR FIXING  
FLOOR TILE



For Internal Floor



Cement Additive



High Open Time



High Adjustable Time



Economical



Low VOC



Available in 300g pack.



# TILE BONDER (RTB)

## DESCRIPTION

Roff Tile Bonder is a polymer additive which needs to be pre-mix with cement/ cement & sand and then should be mixed with water for installing tiles and natural stones using the traditional cement slurry over freshly laid leveling bed/ machan.

## STANDARD COMPLIANCE/ SPECIFICATION

Roff Tile Bonder when mixed with cement & water complies to requirements of IS 15477: 2019 Type 1 "Specification for Adhesives for use with Ceramic Tiles and Mosaics."

## AREA OF USE

Material to be fixed	On surface/ substrate	Area of application
All types of ceramic tile, terracotta, bricks, vitrified tiles, natural stones	Traditional wet on wet system - cement mortar/ machan bed, for making cement screed bed for tiling	Flooring, wall*, for internal & external area, dry & wet area, domestic applications, commercial applications

\*Note : Only recommended to fix tiles/ stone on floor. Consult with Roff technical team for wall area.

## FEATURES AND ADVANTAGES

- Easy to use - To be pre-mixed with cement and then mix with water.
- Compatible with both grey & white cement.
- Economical solution for tile fixing with less cement slurry consumption.
- Good adjustability time with high water retention even at elevated temperature.
- Greatly increases pot life, open time & workability ensuring higher speed of tiling with very less wastage.
- No hollow sound behind tile due to high spreadability & coverage.
- Improves adhesion & bond strength with self-curing property.
- Low VOC - For healthy living.

## LIMITATIONS

- Additives for cement slurry are not a substitute for tile adhesives and is to be used only as a strength enhancer where traditional method is being used.
- If waterproofing required to be done, should be done using Roff Waterproofing coating before applying the wet screed/ bed.
- Use Roff tile adhesives, over fully cured cement bed, screed, concrete or other substrates.
- Do not use for fixing artificial/ nano/ engineered stone/ composites/ metal tile. Use Master-Fix for the same.



# TILE BONDER (RTB)

## TECHNICAL INFORMATION

### APPLICATION PROPERTIES (RTM Cement Tile Grout + Water)

Testing Properties	Test Results
Appearance/ Color	White Powder
Bulk Density	0.75 g/ ml
Tentative Mixing Ratio (RTB : Cement)	300 gms for with 50 kg or 1 bag of cement (then mix with desired water)
Open Time	Approx. 20 minutes
Adjustability	Approx. 20 minutes
Application Temperature (Substrates and Materials)	5°C to 35°C
Setting Time/ Light Traffic	24 hours
Trafficable/ Grouting Time	72 hours

### PERFORMANCE PROPERTIES AS PER IS 15477 : 2019 (TYPE 1)

Testing Properties	Requirement as per IS 15477 : 2019 for Type 1	Test Results
a) Tensile Adhesion Dry Condition	$\geq 0.5 \text{ N/mm}^2$	0.5 – 0.7 N/mm <sup>2</sup>
b) Shear Adhesion Dry Condition	$\geq 1.0 \text{ N/mm}^2$	1 – 1.3 N/mm <sup>2</sup>

**Note :** Test results 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 methods and site conditions.

## TILE BONDER (RTB)

### APPLICATION INSTRUCTIONS



#### SUBSTRATE PREPARATION

- The substrate must be cured, undamaged, compact, rigid, resistant, dry and free from any debonding agents and from damp rising.
- 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.
- Don't cover expansion joints with thin set tile adhesive/ tile.
- Ideally levelling bed / Machan should be prepared using Water: Cement : Sand : Water in the ratio of 0.4 : 1 : 6 (it can vary as per requirement).

#### MIXING

- Roff Tile Bonder to be mixed with cement / cement & sand.
- For Cement- sand bedding (machan), mix 300 gms of RTB in 1 bag cement (50 Kg) and add this fortified pre-mix (mixer of cement & RTB) with sand in the ratio 1:6, or any other ratio as per industry best practices.
- Add water to saturate the mix enough and bring to the desired levels and consistency. Water dosage can be decreased / increased depending upon cement and sand available at site to achieve the desired consistency for application.
- For Tile or Stone laying over the Leveling Bed : Mix 300 gms of RTB in 1 bag cement (50 Kg) and add this fortified pre-mix (mixer of cement & RTB) with required water. Mix it thoroughly, to make a smooth, flowable, lump free slurry.
- Allow the mix to stand for 2 minutes before using it.

### APPLICATION



- Apply either cement slurry or fortified RTB+ cement slurry over the base slab.
- While the coat is still wet, evenly spread the mortar/ machan over the area to be covered by cement bedding (machan). Compact the mortar well, while levelling the bed.
- Proceed with tile laying using wet-on-wet method with RTB+ cement slurry.
- Pour the mix described above, over fresh screed, and spread the slurry to a uniform thickness of 1 to 2mm. Carefully place the tile onto wet, sticky slurry.
- Use spacers, to leave enough space between tiles. The joint width shall be as per the recommendation of architect / engineer.
- Stroke the tiles using a rubber mallet, to level the tiles, and ensure the tile is perfectly imbedded in the soft screed.
- It is good practice to lift an occasional tile after fixing, to verify that the required contact is being achieved.
- If the slurry is skinned over, remove the slurry and replace with fresh slurry.
- If necessary, tiles should be adjusted within 5- 10 minutes of installation.
- Carefully clean off any excess slurry from the tiles and joints with a damp sponge or cloth before it sets.
- Leave for at least 72 hours before grouting. Remove the spacers before grouting
- For highly absorbent natural stones which may form a wet patch when adhesive is used, it is recommended to use suitable Roff Impregnating sealer on all sides. Please refer Technical Data Sheets of product intended for use for specific instructions of useh.



## TILE BONDER (RTB)

### PRECAUTIONS & NOTE

- Always mix RTB & cement dry mix first & then add this fortified mixture in water.
- Do not add excess water after desired consistency.
- Excess dosage of RTB will increase the setting time & take more time to cure.
- Not to be used on pre-set screed.
- Protect from direct rainfall/ foot traffic for at least 24 hours. It can be extended to 72 hours as per site condition & dosage of RTB.
- Leave gap between the tile & fill gaps with Roff tile grout.

### COVERAGE

- Only 300 gm to be mixed with 50 Kg bag of cement & add this mixture in water.
- Coverage will vary depending on thickness of leveling bed and the mix proportion used to make the leveling bed.
- Slurry coverage would depend upon porosity of substrate.

### PACKAGING

300 gms Pouch

### SHELF LIFE

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

### GROUTING

Grouting should be carried out after 72 hours of tiling. Use the appropriate grouting material from Roff range of cementitious and epoxy grouts.

### 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.