



TILE & STONE FIXING EXPERT



# T28

## VERTIFIX

QUICK & STRONG SPOT BONDING  
ADHESIVE FOR MULTIPLE  
APPLICATION



For Internal  
& External  
Floor & Wall



For Diverse  
Substrates



Spot  
Bonding



Quick  
Setting



High  
Strength



Low VOC



Available in 1.5 kg pack.



## VERTIFIX

### DESCRIPTION

**Roff Vertifix Adhesive** is a two component, epoxy based, high performance, multipurpose, spot bonding adhesive for fixing all types of tiles & stones including composites, metal tiles of regular size on interior and approved exterior applications on vertical / overhead diverse surfaces like metal, drywall boards, plywood & wood derivative. It can be also used as thin bed adhesive on floor application.

### STANDARD COMPLIANCE/ SPECIFICATION

Roff VertiFix Adhesive complies to Type 5 'T S2' as per "IS 15477: 2019 - Adhesives for use with ceramic, mosaic and stone tiles - Specification."

### AREA OF USE

Material to be fixed	On surface/ substrate	Area of application
All types tiles, glass mosaic tiles <sup>*</sup> , large format tiles <sup>*</sup> , precast terrazzo, all-natural stones <sup>**</sup> , composites <sup>**</sup> / artificial/ nano/ engineered stone, metal tiles glass tile <sup>**</sup> .	Cement-based surfaces (screeds, plaster, concrete), metal surfaces (iron, steel, copper, aluminum etc.). epoxy/ PU based substrate, drywall surfaces <sup>*</sup> (like bison/ gypsum / cement board), existing tiles & stones, plywood & wood derivative <sup>*</sup> , rubber, pvc, glass etc.	Floor <sup>*</sup> , walls & ceiling, internal & external area <sup>*</sup> , window/ door frame, areas where less contact area is available, quick & fast work needed area, domestic applications, commercial applications, industrial application.

<sup>\*</sup>For all exterior tile/ stone fixing, large format tile & drywall/ vibrational area tile installation, Consult with Roff technical team before installation.

<sup>\*</sup>Floor tile/ traffic area tiling should be fixed with thin bed applications.

<sup>\*\*</sup>For light color stone/ mosaic, do demo/ sampling for color staining & compatibility before using.

### FEATURES AND ADVANTAGES

- Two components; just mix and use.
- Quick setting formula with setting time of 15 -30 minutes.
- Spot bonding gives economical solution with less material consumption.
- Permanent bond with various substrates including metals, drywalls & plywood.
- Non-sag consistency: hassle free vertical application
- Ideal for fixing all types of tiles & stones including composites, metal tiles
- Chemical resistant & Resistance to Solvents, Alkalis & Oils.
- High productivity & faster installation speed of tile/ stone due to fast setting.

### LIMITATIONS

- Don't fix with spot bonding method on floor or any impact prone area (Do thin bed application on floor or impact prone area).
- Do not use Roff Vertifix to bond transparent glass materials.
- For high vibrational/ deformable area, user Roff Master-Fix Adhesive.
- For light color stone & mosaic, do demo/ sampling for color staining & compatibility before application.



## VERTIFIX

### TECHNICAL INFORMATION

#### APPLICATION PROPERTIES

Testing Properties	Test Results
Component Appearance	Part A (Base) : Off white Paste Part B (Hardener) : Yellowish Paste
Mixing Ratio (Part A: Part B)	Part A – 1.0 kg & Part B – 0.50 kg (Part A : Part B – 100 : 50 by weight)
Mixed Material Appearance	Ivory/ Yellowish Paste Consistency
Mixed Density	1.5 ± 0.05 kg/ litre
Open Time	Approx. 10 minutes
Setting Time	Approx. 30 minutes
Pot life (@ 27 ± 1°C)	Approx. 10 minutes (50g mix)
Clamping Time/ Grouting Time	3 hours
Application Temperature (Substrates and Materials)	10°C to 40°C
Trafficable/ Handling Time	3 hours
Interval before normal use/ Full cure time	3 days
Pull-Off adhesion strength after 3 hours (ASTM D 4541)	≥ 2.0 N/mm <sup>2</sup>
Pull-Off adhesion strength after 24 hours (ASTM D 4541)	≥ 3.0 N/mm <sup>2</sup>

#### Performance Properties As per IS 15477: 2019 (Type 5 'T S2')

Testing Properties	Requirement	Test Results
a) Tensile Adhesion at Dry Condition, after 28 days	≥ 2.0 N/mm <sup>2</sup>	2.0 – 3.0 N/mm <sup>2</sup>
b) Tensile Adhesion at Wet condition	-	2.0 – 3.0 N/mm <sup>2</sup>
c) Shear Adhesion at Dry Condition	≥ 6.0 N/mm <sup>2</sup>	6.0 – 8.0 N/mm <sup>2</sup>
d) Shear Adhesion at Wet condition	-	6.0 – 8.0 N/mm <sup>2</sup>
e) Shear Adhesion at Heat Ageing	≥ 3 N/mm <sup>2</sup>	6.0 – 8.0 N/mm <sup>2</sup>
f) Deformability (S2)	≥ 5 mm	≥ 5 mm

**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.

## APPLICATION INSTRUCTIONS



### SUBSTRATE PREPARATION

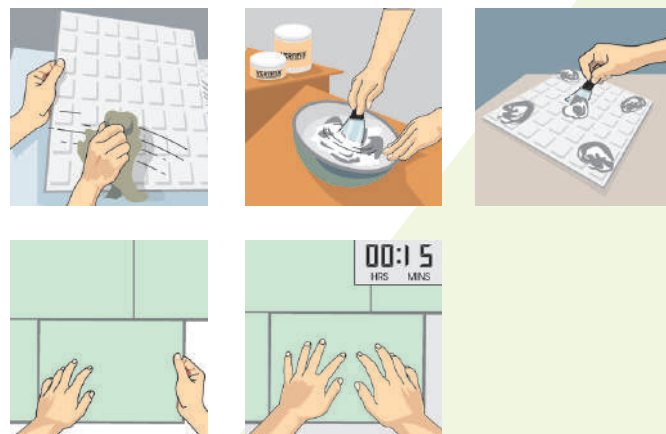
- The substrate must be level, cured, undamaged, compact, rigid, resistant, dry and free from any debonding agents and from damp rising.
- All surfaces must be plumb and true to within 6 mm in 10 ft (3m).
- Rust on iron surfaces must be removed by sandblasting & Screeds/ New concrete slabs must be cured for at least 28 days.
- Expansion joints to be provided & filled with suitable sealant.
- Do not cover expansion joints with thin set tile adhesive/ tile.

### MIXING

- The two components of Roff Vertifix are supplied in ready-to-mix packs.
- Pour the part B into part A and mix well until a uniform paste is obtained.
- Mix with a suitable slow speed drills (50 - 100 rpm) or by hand
- Always mix required quantity, which can be consumed within pot life.
- The ratio of the part A and part B is fixed, and any modification and/or inappropriate ratio could cause incorrect hardening of the product.

## VERTIFIX

### APPLICATION



- **In case of spot bonding application**, apply mixed material dabs evenly distributed on backside of the stone or tile
- Recommended is to put minimum 5 dabs per sq. ft. (4 in each corner and 1 in center). Cover at least 10% of the area of each piece. Finished dab thickness must be a minimum 3 mm.
- After applying Roff Vertifix on back of stone / tile, place it on substrate and adjust for plumb and level. Use clamps for safety & remove them after 5-6 hrs.
- **In case of thin bed application**, apply adhesive to the substrate with the flat side of the trowel.
- Comb on additional adhesive with the notched side.
- Use the proper sized notched trowel to ensure full bedding of the tile.
- Tiles must be fixed within 5-10 mins. of adhesive being applied.
- 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 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 Roff 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 Roff spacers. The joint width shall be as per the recommendation of architect / engineer.
- Clean off surplus adhesive from tile face and between joints.
- Clean tools and tile work with water while adhesive is fresh. Once cured, the adhesive can only be removed by mechanical means.



## VERTIFIX

### PRECAUTIONS & NOTE

- Correct resin/ hardener proportion & thorough mixing is the secret of consistent and optimum bond strength.
- Do not mix large quantity at a time.
- Never dilute resin-hardener mix with solvents to lower the viscosity.
- Place the respective caps of Resin & Hardener whenever they are not in use.
- Do not keep the resin/ hardener mix near heat source such as hotplate.
- Protect against direct rain/ foot traffic for at least 3 hours.
- Tiles/stones should not be installed directly on expansion joints.
- Leave gap between the tile & fill gaps with Roff tile grout.

### COVERAGE

- 100 Sq. ft. tile area / 1.5 kg pack for 3 mm dab thickness.
- 7 - 8 sq. ft/ 1.5 kg pack – 1.5 mm bed thickness (using 3 mm x 3 mm notch).
- 1.5 kg/ m<sup>2</sup> for 1 mm thickness.

\*Coverage will vary depending on adhesive thickness, size of tile and substrate smoothness and evenness..

### PACKAGING

1.5 kg Pack

### 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 24 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.



**Pidilite Industries Limited**

Construction Chemicals Division, Ramkrishna Mandir Road, Post Box No. 17411, Andheri (E) Mumbai 400059 INDIA

Tel +91-22-2835 7000 Fax +91-22-2835 7008 • Website : [www.roff.in](http://www.roff.in) • E-mail : [roff@pidilite.co.in](mailto:roff@pidilite.co.in) • Toll Free No. **1800 22 5502**

**DISCLAIMER :** While the company guarantees its products against defective materials, the use and application of these products are made without guarantee since the conditions of their application are beyond its control. It is recommended to verify with the company that the product is suitable for the intended use, and that this Data Sheet version is the latest one. The company may modify it without prior notice. Technical characteristics are listed for guidance only. For more information, please contact the company office in your location.