

## TECHNICAL DATA SHEETS

### PERMOFIX XTRA

<b>DESCRIPTION</b>	<b>PERMOFIX XTRA</b> is a C2E class cementitious (C), (2) improved, extended open time (E) tile adhesive. It is a high-performance cementitious tile adhesive ideal for bonding several low and high absorption tiles for interior and exterior wall and floor applications	
<b>WHERE TO USE</b>	<p><b>Tiles</b></p> <ul style="list-style-type: none"> <li>• <b>PERMOFIX XTRA</b> has high adhesive strength and flexibility, it can thus be used in situations where traditional tiles are not suitable due to limitations from the type of tiles or nature of substrates.</li> <li>• <b>PERMOFIX XTRA</b> is suitable to bond several types of high and low absorption tiles such as ceramic, porcelain, earthenware tiles and slates.</li> <li>• Ideal to fix of mosaic, stone brick and cement tiles to cement based plasters.</li> </ul> <p><b>Substrates</b></p> <ul style="list-style-type: none"> <li>• Concrete and mortar</li> <li>• Walls with natural finish render or cementitious</li> <li>• Interior and exterior newly prepared walls and floors</li> <li>• Swimming Pool tiling</li> </ul>	
<b>CHARACTERISTICS</b>	<ul style="list-style-type: none"> <li>• C2E Class tile Adhesive</li> <li>• High Performance</li> <li>• Recommended for various low and high absorption tiles</li> <li>• Flexible and suitable for use on façades</li> <li>• Thixotropic effect and low slip tendency</li> <li>• Good workability</li> <li>• Supplied ready to use with addition of water</li> <li>• Perfect adhesion to substrates (concrete, cementitious mortar and stone bricks)</li> <li>• Easy to use</li> </ul>	
<b>COMPOSITION</b>	<b>PERMOFIX XTRA</b> is a grey coloured powder made from cement, selected graded sand, synthetic resin and special additives	
<b>TECHNICAL DATA</b>	<b>Powder (supplied form)</b>	
	Grading	0.6 mm(max)
	<b>Paste (Powder+Water)</b>	
	Dilution	33.0%
	Density of Paste	1.74
	PH	12-13
	Pot life of mixture	2-3 hours
	Open time	±30 minutes
	Rectification Time	±20 minutes
	Application Temperature	5 ° C to 35 ° C
	Substrate Temperature	5 ° C to 35 ° C
	Shelf Life	±6 months

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<b>TECHNICAL DATA</b>	<b>Cured Product</b>	
	Thickness of cured adhesive	
	Waiting time before grouting works	Minimum 24 hours
	Waiting time before opening to light foot traffic	Minimum 24 hours
	Waiting time before opening to full traffic	Minimum 7 days
<b>Tensile Adhesion Strength</b>	<b>C2E Classified Tile Adhesive as per tests done by CSTB as per NF-EN 12004-2.</b>	
	Initial tensile adhesion strength	≥ 1.0 N/mm <sup>2</sup> (according to EN 1348:1997)
	Tensile adhesion strength after water immersion	≥ 1.0 N/mm <sup>2</sup> (according to EN 1348:1997)
	Tensile adhesion strength after heat ageing	≥ 1.0 N/mm <sup>2</sup> (according to EN 1348:1997)
	Tensile adhesion strength after freeze thaw cycles	≥ 1.0 N/mm <sup>2</sup> (according to EN 1348:1997)
	Open Time	≥ 0.5 N/mm <sup>2</sup> at 30 minutes (EN 1346:1997)
<b>Spreading Rate</b>	The consumption will depend on the surface profile and roughness of the substrate, size of tiles and the placing technique (simple placing or back buttering)	
	<b>Nature of Tiles</b>	<b>Spreading Rate</b>
	Mosaics and small tiles	2-3 Kg/m <sup>2</sup>
	Normal Size Tiles (< 200 x 200)	3-4 Kg/m <sup>2</sup>
	Large tiles and on external floors	4-7 Kg/m <sup>2</sup>
<b>SURFACE PREPARATION</b>	Substrates on which <b>PERMOFIX XTRA</b> is to be applied must be flat, strong, have no crumbling areas and have no traces of grease, oil, varnish, dirt and wax.	
	<b>WALLS</b>	
	<ul style="list-style-type: none"> <li>New brick walls must be allowed to cure for a minimum of ± 4 weeks before plastering, rendering is undertaken. This plaster must then be allowed to dry for at least ± 2 weeks before any tiles can be applied.</li> <li>Off shutter concrete must cure for at least ± 8 weeks prior to tiling. For previously coated walls, the surface must be prepared to ensure that the painted wall will be able to carry the additional weight of the tiles.</li> </ul>	

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#### FLOORS

- New concrete floors must be allowed to cure for at least  $\pm 8$  weeks before tiles are laid. If a screed is needed, the base concrete should be allowed to cure for at least  $\pm 4$  weeks before the screed can be laid. After application, the tiles can only be laid on top of this screed when the screed has cured for  $\pm 4$  weeks.
- For an existing floor covering, the surface must be prepared to ensure that the tiles bond well to the surface.

#### APPLICATION INSTRUCTIONS

##### Mixing

- Approximately 6.6 Litres of water per 20Kg bag

##### Mixing Time

- Mix thoroughly with clean water for a minimum 3 mins
- Leave the material for at least 5 mins to stand.
- Then remix for 15 secs.
- The creamy, lump free and homogenous paste product is now ready for use.

##### Mixing Tools

- **PERMOFIX XTRA** must be mechanically mixed using a drill and mixing paddle (<500 rpm) in a clean container.

#### APPLICATION METHOD

- Spread **PERMOFIX XTRA** with a notched trowel. The right notched trowel must be selected in order to get the right coverage underneath the tile.

Nature of Tiles	Tiles dimensions	Application Tools
Mosaics	5 x 5 cm	3 mm notched trowel
Normal Ceramic tiles	< 200 x 200	6 mm notched trowel
Large tiles	> 200 x 200 but < 300 x 300	9 mm notched trowel
Larger tiles or for highest performance requirements	> 300 x 300	Use back buttering technique

- Apply a uniform layer of **PERMOFIX XTRA** by the notched trowel at the recommended thickness in small areas.
- Then, immediately adjust the thickness if required using the trowel.
- Finally place the tile pressing it firmly on the adhesive.
- Remove excess **PERMOFIX XTRA** from the joints before drying has occurred.
- Ensure there are no voids between the tiles and the substrate.

#### CLEANING

Clean the application tools with water immediately after use to avoid hardening of residual material. The hardened material can only be removed mechanically.

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<b>PACKAGING</b>	Available in 20 kilos
<b>STORAGE</b>	Store in a cool and dry place, away from dampness
<b>SAFETY, HEALTH &amp; ENVIRONMENT INFORMATION</b>	<ul style="list-style-type: none"><li>• Handle with care</li><li>• Ensure good ventilation during application.</li><li>• In case of insufficient ventilation during painting, wear suitable respiratory equipment.</li><li>• Avoid contact with skin and eyes.</li><li>• If contact with skin occurs, wash well with soap and water.</li><li>• In case of contact with eyes, rinse immediately with plenty of clean water and seek medical attention.</li><li>• Keep out of reach of children.</li><li>• Do not throw paint containers or contents in the waterways or environment.</li><li>• Contains no added <b>Lead/Mercury/Nickel/Cadmium</b>.</li></ul>

For further information, kindly contact our **Technical Information Service**.

**Note:** This Technical Data Sheet is subject to change without prior notice.

#### DISCLAIMER

This data sheet is based on extensive lab tests and field use. However, if used under unspecified conditions, the performance of the product may differ. We can only guarantee the quality of the product as supplied in its original closed container.