



Tile Adhesive – Ultima

IS 15477:2019 Type 4 'T' • EN 12004 C2TE

High-strength, all-purpose adhesive for vitrified tiles, ceramic tiles and cementitious surfaces.

Easy to apply

Strong bond

Water resistant

Fast dry

Pack Size: 20 kg

ISO 9001:2015 Certified Manufacturing

PRODUCT DESCRIPTION

A high-polymer cementitious adhesive engineered for maximum bond strength when fixing every format of tile — vitrified, ceramic and natural stone — on cementitious and other common substrates. Supplied premixed and ready to use, it is fast-drying, water resistant and formulated to prevent cracking of tiles.

SUITABLE FOR

Material & Area

- Vitrified tiles
- Ceramic tiles
- Large-format tiles and natural stone
- Internal and external floor and wall applications

Substrate

- Cementitious surfaces
- Cement mortar beds
- Cement-based plaster / concrete / screed / terrazzo
- Brick / block / concrete masonry
- Tile on tile
- Cement-based self-levelling screed

TECHNICAL DATA

Conforms to IS 15477:2019 Type 4 'T' • EN 12004 C2TE

PHYSICAL PROPERTIES @ 70°F (21°C)

Tile laying adhesive mixed with water

PARAMETERS	RESULTS
Colour	Grey / White
Mixing Ratio (Powder to Water)	3.5 : 1
Bulk Density	1.3 – 1.5 gm/cc
Mixing Density	1.7 – 1.9 gm/cc
Pot Life	> 2 hours
Open Time	~ 20 minutes
Adjustability	~ 20 minutes
Final Setting Time	24 hours
Max. Bed Thickness	15 mm
Time to Light Foot Traffic	16 – 24 hours
Ready for Grouting	24 hours
Ready for Use	14 days

PERFORMANCE PROPERTIES

Tile laying adhesive mixed with water

IS 15477:2019

PARAMETER	REQUIREMENT	RESULT	TEST METHOD
Tensile Adhesion (Dry Condition, 28 Days)	1.5 N/mm ²	2.0 – 2.2 N/mm ²	Annexure A, Clause 5.1
Tensile Adhesion (Wet Condition, 28 Days)	1 N/mm ²	1.8 – 2.0 N/mm ²	Annexure A, Clause 5.1
Shear Adhesion (Dry Condition, 28 Days)	1.5 N/mm ²	1.9 – 2.1 N/mm ²	Annexure B, Clause 5.2
Shear Adhesion (Heat Ageing Condition, 28 Days)	1 N/mm ²	1.5 – 1.7 N/mm ²	Annexure B, Clause 5.2
Shear Adhesion (Wet Condition, 28 Days)	1 N/mm ²	1.5 – 1.7 N/mm ²	Annexure B, Clause 5.2
Slip Resistance	< 0.5 mm	0.2 – 0.3 mm	Annexure E, Clause 5.5

Ultima adhesive mortar conforms to IS 15477:2019 Type 4T.

EN 12004

PARAMETER	REQUIREMENT	RESULT	TEST METHOD
E – Extended Open Time	≥ 0.5 N/mm ² after not less than 30 min	0.8 – 0.9 N/mm ²	EN 1346
T – Slip Resistance	≤ 0.5 mm	0.3 – 0.5 mm	EN 1308
Tensile Adhesion Strength (C2)	≥ 1 N/mm ²	2.0 – 2.2 N/mm ²	EN 1348, Clause 8.2
Tensile Adhesion Strength (After Water Immersion)	≥ 1 N/mm ²	1.4 – 1.6 N/mm ²	EN 1348, Clause 8.3
Tensile Adhesion Strength (Heat Ageing)	≥ 1 N/mm ²	1.4 – 1.6 N/mm ²	EN 1348, Clause 8.4
Tensile Adhesion Strength (Freeze & Thaw)	≥ 1 N/mm ²	1.4 – 1.6 N/mm ²	EN 1348, Clause 8.5

Ultima adhesive mortar conforms to EN 12004 C2TE / ISO 13007.

APPLICATION PROCEDURE

01

Surface Preparation

- All surfaces must conform to the dimensional stability requirements outlined in IS 1443-2018.
- Surfaces should be level, properly cured, undamaged, compact, rigid, resistant, dry, free from any debonding agents, and protected against damp rising.
- Pre-wet or dampen highly absorbent concrete surface with good quality fresh water.

02

Mixing

- Use 5-6 litres of potable water for every 20 kg of adhesive.
- Pour the minimum recommended amount of potable water into a clean mixing container, then gradually add dry mix product to the water (not vice versa) while continuously mixing with a low-speed electric single-paddle (spiral) mixer at a speed of <500 rpm.
- Mix thoroughly for 2-3 minutes until a uniformly coloured, smooth mixture is achieved. Allow the mixed product to mature for 4-5 minutes without stirring, then remix for 15 seconds just before using.
- Avoid over-mixing to minimise air entrainment.

03

Application

- Apply the adhesive with the flat side of the trowel using a scraping motion, then apply additional mortar with the notched edge of the trowel.
- For large-size tiles with sides greater than 2 feet, apply additional adhesive to the back of the tile with the flat side of the trowel.
- Occasionally inspect that tiles are properly stuck; if the adhesive is non-sticky, remove and replace with fresh adhesive, then tap the tile with a rubber mallet to fully bed it.
- Create elastic expansion joints: 5 mm at every 10 m² for external applications, 3 mm at every 25 m² for internal applications, and 3 mm every 8 m in long, narrow runs. Always respect structural, fractionizing and perimeter joints.

04

Cleaning

- Clean any excess adhesive from the tile surface and grout lines immediately with a damp sponge or cloth.

05

Grouting

- Carry out grouting after 24 hours of tiling, using an appropriate cementitious or epoxy grout from the Aspocrete range.

COVERAGE

55 – 60 sq.ft per 20 kg bag at 3 mm bed thickness, using a 6mm x 6mm square-notched trowel.

SHELF LIFE

12 months from date of manufacture, if stored in a cool, dry place in original unopened packaging.

LIMITATIONS

Adhesives and grouts for tiles are not replacements for waterproof membranes. Where a waterproof membrane is required, use an Aspocrete waterproofing product, or any other suitable waterproofing product available in the market.

SAFETY PRECAUTIONS

- Keep out of reach of children.
- Wear suitable protective clothing, gloves, and eye/face protection.
- After contact with the skin, wash immediately with plenty of clean water.
- In case of eye contact, rinse immediately with plenty of clean water and seek medical advice.

IMPORTANT NOTES

- Always add powder to water, not water to powder.
- Do not add excess water beyond the recommended quantity.
- Do not add extra cement or sand to the adhesive, as it can disturb the product's intended formulation and compromise performance.
- Do not use on wet screed — the surface must be fully cured (28 days).
- Do not use the adhesive to correct surface irregularities greater than 12 mm (may extend to 15 mm in limited extent).
- For heavy stone or large tiles at more than 3 m height, the applicator must evaluate an additional mechanical fastening system (such as steel hooks fastened to the substrate).
- Protect freshly laid tiles from direct rainfall and foot traffic for at least 24 hours.
- Leave a gap between tiles using spacers and fill gaps with Aspocrete tile grout.
- It is mandatory to use an appropriately sized notched trowel to achieve the required adhesive thickness.
- It is advisable to prime highly absorbent substrates or tile/stone backs with a suitable bonding primer before application.
- Do not use on deformable substrates or substrates subject to vibration.



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Specifications may be modified without prior notice. The displayed results are representative and based on the testing procedures employed. Real-world performance will be influenced by installation technique and on-site conditions.