

TECHNICAL DATA SHEET



MARBILANA

(C2FT S2 TYPE 4)



Deformable cementitious, polymer fiber modified adhesive with improved characteristic, slip resistance and extended open time. High performance adhesive for installing vitrified tiles, large scale tiles, thin tiles and slabs as well as natural stones

CHARACTERISTICS:

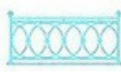
- Compliant with EN 12004 standard as per IS 15477:2019
- With visible fibres for strength and flexibility balancing substrate deformations on critical surfaces like balconies, terraces, wet rooms, bathrooms, swimming pool and external facade etc
- For ceramic, vitrified tiles (semi and fully), glass mosaic and natural stone (non-sensitive)
- Suitable for large scale and heavy duty vitrified tiles
- Suitable for natural stones on internal as well as external application
- On water proof and moisture proof layers
- No vertical slip
- Longer open time for safer application and adjustable
- Easy and excellent workability thanks to plastified consistency
- Application Up to 15mm
- Suitable for cement fibre board, gypsum board (Internal application)
- Installation of floors subjected to heavy traffic



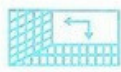
Natural Stone Heated Floors



Balconies & Patios



Wall And Floor



Large Tiles



Humid & Water Areas



Indoor & Outdoor Use



Tile On Tile



Low Dust



Difficult Substrate

SCOPE OF USE



MAPISA MARBILANA C2FTE S2 is designed for laying vitrified tiles (both semi and fully), cement and stone tiles, large-format and heavy-duty tiles, thin tiles, glass mosaics, and natural stone on deformable substrates. Its characteristics maintain an elastic connection with the substrate, allowing it to effectively handle shear stresses between the tile and the substrate. MAPISA MARBILANA C2FTE S2 is ideal for fixing tiles and stones on walls, heated floors, drywall boards, facades, terraces, balconies, swimming pools, and technological water tanks (without chemicals). With its advanced adhesion properties, it is suitable for tiles with an absorption rate of less than 0.5%, including fully vitrified and large tiles (up to 1 meter), as well as for bonding tiles and stones to challenging substrates such as existing tiles, gypsum boards, drywall, anhydrite, and cellular concrete. Applicable on both horizontal and vertical surfaces. Can be used on cement, cement-lime plaster, cement screeds, cement ground coats, concrete, and more.

SUBSTRATE PREPARATION

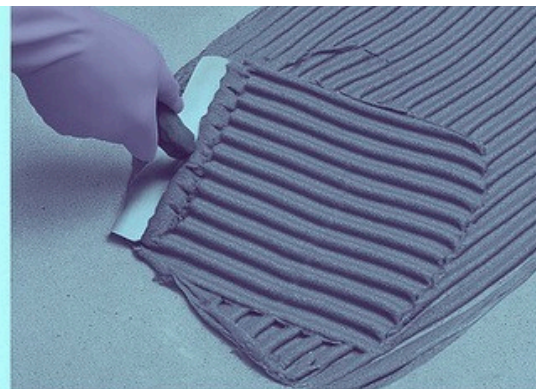
Adhesive can be applied to flat, smooth surfaces that are free from substances like grease, oil, paint, or dust that could hinder adhesion. Ensure that concrete is at least one month old, and that cement layers and plaster are completely dry. For anhydrite surfaces, moisture levels should be below 0.5%, while gypsum surfaces should remain under 1%. Both types must be roughened and free of dust. Similarly, drywall and lightweight concrete should be clean and dust-free. Adhesive can also be used on old tiles, provided they are roughened and thoroughly cleaned beforehand. The surfaces should remain dry, with any dirt, loose particles, or paint removed. Absorbent surfaces should be moistened but not saturated prior to adhesive application.

APPLICATION

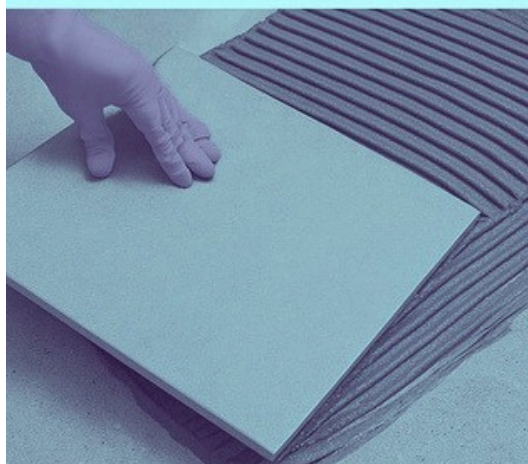
Pour Mapisa Marbilana into a container containing the precise amount of clean water. Mix thoroughly with a drill and mixer until you achieve a smooth, lump-free consistency. Let the mixture sit for 5 minutes, then stir it again. Use a suitable notched trowel to apply the mortar. Select the right size notch trowel to ensure complete bedding of the tile. The depth of the trowel's notching should match the size of the tile or stone. For larger tiles or stones, especially in outdoor applications, use the back buttering method by adding an extra thin layer of mortar to the back of the tile or stone, ensuring a contact area of over 90%. Place the tiles or stones within the adhesive's open time. Lay the mortar and press while it is still tacky. Fresh excess mortar can be cleaned up with water, but any hardened material will require mechanical removal. Grouting can only commence after 24 hours using Mapisa Grouts. Floors can handle light traffic after about 24 hours. Sealants should be applied to fill expansion joints, corners of walls and floors, and around sanitary fixtures, or they should be treated with suitable methods.



1. Mixing



2. Adhesive Application



3. Tile Fixing



4. Adjustment Time

GENERAL DATA

- 1.Appearance: Grey or white powder
- 2.Packaging: 20 kg and 40 kg (for Project Sale Only)
- 3.Shelf Life: 12 months in original packaging
- 4.Storage: Store in a dry, cool area away from direct sunlight and moisture
- 5.Health & Safety: Cement-based – use gloves, mask, and goggles. Take Preventive measures.

TECHNICAL DATA

PERFORMANCE PROPERTIES AS PER ISO 13007 AND EN 12004

Testing Properties	Requirements	MAPISA RESULTS
Open Time	30 min	30+ min
Adjustability	30 min	30+ min
Pot Life	120 min	120 min
Tensile adhesion at dry condition, after 28 days	$\geq 2.25 + N/mm^2$	2.25-3.25 N/mm ²
Shear Adhesion at Dry Condition	$\geq 2.85 N/mm^2$	≥ 2 To 3 N/mm ²
Slip resistance	≤ 0.5 mm	0.20 - 0.30 mm

PERFORMANCE PROPERTIES AS PER IS 15477: 2019

Test Properties	Requirements	MAPISA RESULTS
Tensile Adhesion		
Tensile Adhesion-Dry Condition after 28 days	Minimum 2.00 N/mm ²	2.5 - 3.25N/mm ²
Wet Condition	Minimum 2.00 N/mm ²	2.5 - 3.25 N/mm ²
Shear Adhesion		
Dry Condition	Minimum 2.00 N/mm ²	2.00 - 2.50 N/mm ²
Heat Ageing	Minimum 2.00 N/mm ²	2.50 N/mm ²
Wet Conditions	Minimum 1.5 N/mm ²	2.50 N/mm ²
Slip Resistance	≤ 1.00 mm	1.50-1.60 mm

MOST IMPORTANT INSTRUCTION TO FIX GRANITE, HARD STONE, ELIVATION STONE ETC...

For fixing Tiles Granite and Hard stone & other consider strictly below steps:

1. Surface preparation: Scrub or roughen the back side with a grinder to enhance bonding.
2. Primer application: Use a suitable primer like Mapisa 369 TKD (Back Tile Primer) or equivalent to improve adhesion.
3. Mechanical fixation: For installations above 10 feet in height (inside or outside), use fasteners to ensure stability and safety.
4. Ensure the substrate is clean, dry, and stable.
5. Choose the right adhesive and follow manufacturer instructions.
6. Consider consulting a professional for complex or high-risk installations.
7. 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). Dry, dusty surfaces should be dampened with water & excess water should be swept off. 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. Do not cover expansion joints with thin set tile adhesive/ tile.
8. Add 2.5 - 3 parts of powder to 1 part of water or 5 - 7 litre water for 20 Kg powder in a clean mixing vessel. Adjust the water as per desired consistency. Mix with a suitable mechanical stirrer or slow speed drills (50 - 100 rpm) until a lump free homogeneous paste is obtained. Always mix required quantity, which can be consumed within pot life. Leave mixture for 5 minutes before use. No further water should be added. Apply adhesive to the substrate with the flat side of the Trowel.



9. 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 30 minutes of adhesive being applied, depending on the porosity of the surface and atmospheric conditions.



10. Check the adhesive ribs periodically and if a skin has formed, remove the dried adhesive and apply fresh adhesive. 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 large size tiles or 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.

11. For highly absorbent natural stones which may form a wet patch when adhesive is used, it is recommended to use suitable MAPISA 369 Impregnating sealer on all sides. Please refer Technical Data Sheets of product intended for use for specific instructions of use For highly absorbent surfaces like drywalls, consult with MAPISA 369 technical team. Leave adequate joints between individual wall and floor tiles using MAPISA 369 spacers. The joint width shall be as per the recommendation of architect / engineer.

12. Clean off surplus adhesive from the tile face and between joints. Clean tools and tile work with water while adhesive is fresh.

