

TECHNICAL DATA SHEET

S-FLEX C2TES1 GREY / WHITE

DESCRIPTION

Cement-based tile adhesive, high performance, non-slip vertically, long working time and high elasticity. Composed of quality marble sand with selected granulometry, synthetic polymers in high percentage and quality additives. The product has excellent characteristics in flexibility and workability, making this adhesive ideal for bonding all types of tiles. When mixed with water, a creamy, homogeneous and highly thixotropic mass is formed, which spreads easily with a notched trowel and enables good coverage of the back of the tile.



CLASSIFICATION ACCORDING TO STANDARD

Cement-based tile adhesive (C), with improved bonding strength (2), slip-resistant (T), extended working time (E) and deformable/elastic (S1).

Classified as C2TES1 adhesive according to EN 12004 standard.

S-FLEX has very low VOC (volatile organic compound) emissions, contributing to the protection of the environment, health and safety of applicators, in accordance with EC1 Plus requirements.

CHARACTERISTICS

1. Excellent bonding and improved performance on the most commonly used substrates in construction.
2. Pronounced whiteness for the white variant of the product.
3. Very good workability, easy spreading and full contact with the back of the tile.
4. No vertical slip, even when placing tiles on walls.
5. Long working and adjustment time for more precise application.
6. High resistance to moisture, atmospheric conditions and normal temperature changes.
7. Suitable for large-format tiles (5 – 150 cm).
8. Can be applied at a thickness of up to 15 mm.

FIELD OF APPLICATION

Suitable for bonding ceramic tiles, porcelain stoneware, marble, natural stone, mosaic and glass bricks. Applications in interior and exterior environments, facades, terraces, humid areas and areas requiring higher flexibility, floors with underfloor heating or situations where controlled thermal movement is expected. Substrates must be cement-based: concrete, cement mortar, cement plaster and suitable waterproofing coatings. Also suitable for bonding large-format tiles of 5–150 cm, respecting full coverage and the double-bonding technique for large formats, for industrial environments, for corrugated and unstable substrates (due to its high elasticity). (For bathrooms, tanks, exposed terraces or areas with high water requirements, the product must be used as part of a suitable waterproofing and application system, according to the technical project.)

SUBSTRATE PREPARATION

Mix 7–8 litres of clean water with 25 kg of S-FLEX; mix the resulting mass with an electric mixer until a homogeneous and lump-free mass is formed. Leave to rest for 10 minutes and then mix again before use. The workability time of the mixture is 2–3 hours under normal temperature conditions (23°C).

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Cement-based substrates must be stable, resistant and regular, free of oils and dirt, free of paint residues, and must have previously reached their maturation time. Traditional cement-based floors with normal hardening time must have a curing period of at least 28 days; traditional plaster bases must dry for at least 14 days. Large unevennesses or large cracks must be corrected beforehand. All types of substrates must be mechanically cleaned before applying the product and dampened with water.

APPLICATION

Initially the product is recommended to be spread with the straight edge of the trowel for a more uniform distribution, and then with the notched edge. Application is done with a suitable trowel depending on the type of tile being laid. Tiles are placed by exerting a small pressure on the tile, ensuring that the tile is covered over its entire surface with adhesive. The open time of the product under normal atmospheric conditions is 35 minutes at 20°C. Atmospheric conditions can affect the drying time of the product. Tiles are placed on the fresh adhesive by exerting sufficient pressure to ensure full contact. For large-format tiles, exterior surfaces, facades, loaded floors or areas with water presence, it is recommended to apply the adhesive also on the back of the tile for maximum coverage. Care must be taken that the adhesive does not form a film surface. Otherwise it is necessary to pass the trowel over the adhesive once more. It is not advisable to lay tiles with tight joints. Tiles are placed in a way that is appropriate to their dimensions.

CAUTION!

1. Both low and high temperatures can change the working characteristics of the product (slowing down or accelerating product drying).
2. For very large tile formats, apply double-layer adhesive on both the tile and the base.
3. Protect the base for at least 24 hours after applying the adhesive from heavy rain, frost and strong sunlight.
4. For large tile formats, grouting will be done 3–5 days after bonding only if waterproofing has been carried out.
5. Do not apply on unstable, uncured substrates with dust, oil, grease or residues that hinder bonding.
6. Do not use directly on wood, metal, PVC, rubber, linoleum or very mobile substrates without a suitable preliminary system.
7. Do not exceed the recommended water ratio and maximum application thickness.
8. For special applications, high facades, swimming pools, tanks or surfaces with high loads, technical verification and a complete application system are recommended.

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Appearance:	Powder
Packaging:	Paper bag 25 kg on pallets 1350 kg
Colour:	White / Grey
Consumption for small formats:	2-3 kg/m ²
Consumption for large formats:	4-5kg/m ²
Storage:	Store in dry places on wooden pallets
Shelf life:	12 months from date of production
Bulk density:	1.5-1.6 gr/cm ³
Reaction to fire:	Class F
Water for mixing:	7-8 litres of water per 25 kg
pH of mixture:	13
Application temperature:	+5°C to +35°C
Correction time:	35 min
Grouting walls:	After 8 to 12 hours
Grouting floors:	After 24 hours
BS* after 28 days:	≥1 N/mm ²
BS* after water immersion:	≥1 N/mm ²
BS* after heat reaction:	≥1 N/mm ²
BS* after freeze-thaw cycles:	≥1 N/mm ²
BS* after 30 min:	≥0.5 N/mm ²
Walkable:	After 24 hours
Slip resistance:	≤0.5 mm
Deformability:	≥S1