Neofil F 10 Tech S1

MINERAL ADHESIVE WITH IMPROVED ADHESION, DEFORMABLE, NO VERTICAL SLIP, EXTENDED OPEN TIME, EXCELLENT WORKABILITY, LOW DUST EMISSIONS IN THE MIXING PHASE. SUITABLE FOR PROFESSIONAL LAYING OF CERAMIC TILES, MOSAICS AND STABLE NATURAL STONES ON WALLS AND FLOORS. NEOFIL F 10 TECH S1 WHITE CAN ALSO BE USED AS GROUT FROM MOSAICS. FOR INDOORS AND OUTDOORS.

CE EN 12004 | C2TE S1 EN 12004 | HIGH PERFORMANCE COLMEF SPECIALIST

PRODOTTO A BASSISSIMA EMISSIONE DI POLVERI – LOW DUST

GREEN COMPLIANT PRODUCT GREENITOP – greenITop.com – contributes to MRC5,EQC2 credits (v4.1 BD+C) IT04-23042501

TECHNICAL DATA SHEET – REV. 01/2024

DESCRIPTION

NEOFIL F 10 TECH S1 is a grey or white powder consisting of hydraulic binders, selected mineral fillers, synthetic resins and special additives. Mixed with water, it is transformed into a thixotropic product with excellent workability, extended open time that facilitates laying operations, high performance and high adhesion to materials normally used in construction, good ability to absorb deformations of the substrate and tiles, applicable upright without the risk of sagging or tiles slipping and free from particular shrinkage during hardening. Thanks to its excellent whiteness, "WHITE" NEOFIL F 10 TECH S1 is particularly suitable for laying coloured glass mosaic and for subsequent sealing, enhancing the colours.
For thicknesses up to 15 mm.

Classification according to European standard EN 12004 – C2TE S1 · Cement adhesive (C) improved adherence (2), no vertical slip (T), with extended open time (E), deformable (S1).

FIELDS OF APPLICATION

NEOFIL F 10 TECH S1 is used for indoor and outdoor bonding, both on the wall and the floor, of all types of ceramic tiles, such as single-fired, porcelain stoneware, laminated stoneware, thin slabs, large formats, 300 x 150 cm slabs, klinker, fired, ceramic and glassy mosaic, for bonding of stone, marble and reconstituted material as long as dimensionally stable and not sensitive to moisture If the double-buttering technique is used, small or medium-sized ceramic or porcelain stoneware tiles, ceramic mosaics, glassy, natural stone, can also be glued to the ceiling without the aid of mechanical supports. NEOFIL F 10 TECH S1 is also suitable for bonding insulating materials, such as polystyrene foam, polyurethane foam, cork, glass or rock wool, Eraclit, sound-absorbing panels, etc.. It can be applied on all cementitious substrates normally used in construction, such as plaster, concrete, cellular concrete, self-levelling screed, cementitious screeds also subjected to intense traffic, screeds made with products from the NEOCEM line. NEOFIL F 10 TECH S1 can be used for laying floors or coverings on gypsum or plasterboard substrates, as long as it is supported rigidly, on anhydrite screeds (after applying the insulating PRIMER A 16), for laying floors on heating screeds, for overlapping installation on existing ceramic or marble floorings adequately prepared and for laying floors on elastomer or elastic cementitious waterproofing membranes. Furthermore, NEOFIL F 10 TECH S1 is suitable for laying

waterproofing polyethylene sheaths with dovetail inserts and coated with non-woven fabric and for the subsequent laying of a ceramic coating. For NEOFIL F 10 TECH S1 to be used for bonding ceramic coatings in pools, tubs or structures in continuous contact with water, mix the adhesive with ELASTOKOL Polymeric elasticising latex, diluted with water in a ratio of 1:1.

SUBSTRATE PREPARATION

The substrates must be sufficiently dry and seasoned, mechanically resistant, flat, solid, compact, free of crumbling or inconsistent parts, without any dust and greasy substances, oil, paint, wax and any material that could compromise perfect product adhesion.
The cementitious substrates must not be subjected to shrinkage after laying the tiles and, therefore, they must have already completed the hygrometric shrinkage that can be evaluated in one or two weeks for each cm of thickness for the plaster and in at least 28 days of total curing for cementitious screeds, unless they are made with quick-drying ready-to-use screed and NEOCEM PRONTO FIBRATO compensated shrinkage or with NEOCEM hydraulic binder. Anhydrite screeds must be perfectly hardened, clean, dry (maximum residual humidity 0.5%) and must be treated, after sanding, with insulating primer based on synthetic resins in aqueous dispersion PRIMER A 16. Always treat with PRIMER A 16 for direct applications on plaster or plasterboard. Very porous, highly absorbent and superficially crumbling surfaces must be treated with RASOTECH PRIMER CONSOLIDANTE consolidating impregnating agent to reduce the absorption of the screed and improve workability and adhesion of NEOFIL F 10 TECH S1.

APPLICATION

To prepare the mixture, pour a 25 kg bag of NEOFIL F 10 TECH S1 in a clean container with 6.5-7 litres of clean water and mix until smooth and free of lumps. Let the mixture rest for a few minutes, remixing quickly before use. This mixture remains workable for about 6 hours at a temperature of +23 °C.
Apply a zero layer of adhesive on the substrate with a smooth spatula, to ensure better adhesion and lengthen the open and adjustment time. Immediately afterwards, use a suitable toothed spatula to apply the required amount of mixture to ensure the back of the tiles are perfectly wet. Tiles are laid by applying firm pressure to ensure contact with the adhesive. Make sure that the adhesive spread on the surface is always fresh and has not formed a superficial film; in which case, refresh the adhesive by spreading it again with the notched spatula. For large format tiles or with irregular backs, for outdoor installation or in very humid environments and in environments subject to intense traffic, apply the adhesive also on its back (double coating technique), to avoid any gaps remaining which could cause breakage or separation due to the pressure of concentrated loads or the effect of frost. Provide perimeter joints and flexible connectors every 20-25 m^2 inside, every 10-15 m^2 outside and every 8 linear metres along the corridors. In any case, always observe the structural expansion joints and any string-course joints. Make sure there are grouts between tiles of at least 2-3 mm depending on the type and format of the coating. The grouts can be made 6 hours after laying coatings and 24 hours after applying floors with the specific COLMEF mineral sealants, available in different colours. The surfaces can be used 7-14 days after, whereas pools and tubs after 21 days, depending on the environmental conditions.

YIELD

1.2 kg/m^2 per mm of thickness.

RECOMMENDATIONS

- High or low temperatures may affect the final curing time, shortening or extending them considerably. In these conditions, it may be useful to dampen cementitious substrates before applying the adhesive to extend the open time.
- Do not use NEOFIL F 10 TECH S1 on non-cured cementitious concrete substrates subject to major shrinkage and metal, wood, fibre cement, plastic and resilient material surfaces.
- Do not remix or add water to the product that has already started to set.
- Protect the covering from rain, wash-out, direct sunlight and frost for at least 24 hours or in any case until the product is fully hardened.
- Wash all the equipment used for preparation and application of the product with water before it hardens. After setting, the mortar can only be removed mechanically.

PACKAGING

NEOFIL F 10 TECH S1 is available in 25 kg polyethylene coated paper bags on 1500 kg pallets. Store the product in a dry place and in its original packaging, well closed. In these conditions, its stability is of at least 12 months.

SAFETY INSTRUCTIONS

The product contains cement that on contact with body perspiration produces an irritant alkaline and sensitizing reaction for the skin. Use suitable clothing, gloves and protective glasses. Consult the Safety Data Sheet for more information to use the product safely.

SPECIFICATIONS

Laying ceramic tiles, mosaics and stable natural stones with mineral adhesive with improved, deformable adhesion, no vertical slip, extended open time and excellent workability, classified as C2TE S1 by the EN 12004 Standard, **NEOFIL F 10 TECH S1** type by Colmef Srl, suitable for laying on traditional or overlapping substrates on existing floors.

TECHNICAL DATA

Compliant with Standard:	**EN 12004**
Class:	**C2TE S1**
Appearance:	powder
Colour:	grey white
Apparent specific weight (kg/m^3):	1200
Solid residue (%):	100
Mixing ratio:	6.5-7 litres of water for 25 kg of powder
pH value:	> 12
Flammability:	no
Adjustment time:	≥ 45 min.
Pot life:	6 h
Wall grouting after:	6 h
Floor grouting:	24 h
Commissioning:	7-14 days
Allowed application temperature:	+5 °C to +35 °C
Operating temperature:	-30 °C to +90 °C

FINAL PERFORMANCE according to EN 12004 Class C2TE S1

	Results	**Test method**
Initial adhesion after 28 days (N/mm^2):	≥ 1,0	EN 1348
Adhesion after heat action: (N/mm^2):	≥ 1,0	EN 1348
Adhesion after immersion in water (N/mm^2):	≥ 1,0	EN 1348
Adhesion after freeze-thaw cycles (N/mm^2):	≥ 1,0	EN 1348
Open time: traction adhesion (min.):	≥ 30	EN 1346
Vertical slip (mm):	≤ 0,5	EN 1308
Transverse deformation (mm):	≥ 2.5	EN 12002

DATA DETECTION AT +23°C - 50% R.H. AND IN ABSENCE OF VENTILATION

FOR MORE INFORMATION OR PARTICULAR USES, CONTACT THE COLMEF TECHNICAL SUPPORT DEPARTMENT.

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