Neofil F 8

HIGH PERFORMANCE MINERAL ADHESIVE, NO VERTICAL SLIP, EXTENDED OPEN TIME AND EASY WORKABILITY. SUITABLE FOR PROFESSIONAL LAYING OF CERAMIC TILES, CERAMIC MOSAICS ON WALLS AND FLOORS AND FOR BONDING OF THERMOACOUSTIC INSULATOR MATERIALS. FOR INDOORS AND OUTDOORS.

CE EN 12004 · C1TE EN 12004 · HIGH PERFORMANCE COLMEF SPECIALIST

TECHNICAL DATA SHEET – REV. 01/2023

DESCRIPTION

NEOFIL F 8 is a grey or white powder consisting of a mix of hydraulic binders, selected mineral fillers, synthetic resins and special additives. Mixed with water, it is transformed into a thixotropic product with easy workability and extended open time that facilitates laying operations, high adhesion to materials normally used in construction, applicable upright without the risk of sagging and free from particular shrinkage during hardening.
For thicknesses up to 10 mm.

Classification according to European standard EN 12004 – C1TE · Normal cementitious adhesive (C1), no vertical slip (T), with extended open time (E).

FIELDS OF APPLICATION

NEOFIL F 8 is used for indoor and outdoor bonding, both on walls and floors, of small and medium-sized ceramic tiles, ceramic mosaics and for spot bonding of insulating materials such as expanded polystyrene, 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 cementitious screeds, self-levelling screeds, cement plaster, cellular concrete, on gypsum or plasterboard substrates provided they are rigidly supported, or on anhydrite screeds (after applying insulating primer PRIMER A 16).
To increase adhesion to the substrates and make the adhesive deformable or highly deformable (C2/S1/S2 according to the EN 12004 standard), mix NEOFIL F 8 with ELASTOKOL polymeric elasticising latex, in replacement of the mixing water.

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 for quick-drying screeds. 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 so as to reduce the absorption of the screed and improve workability and adhesion of NEOFIL F 8.

APPLICATION

To prepare the mixture, pour a 25 kg bag of NEOFIL F 8 in a clean container with about 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 8 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 outdoor installation or in very humid environments and in environments subject to intense traffic, for floors to be polished on site or subject to heavy loads, 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 joints between tiles of at least 2-3 mm depending on the type and format of the coating. The grouting can be applied 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, depending on the environmental conditions.

YIELD

2.5-5.0 kg/m^2 depending on the type of substrate and the type of tile.

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 8 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 8 is available in 25 kg polyethylene coated paper bags on 1500 kg pallets and in 5 kg cases on 720 kg pallets (only WHITE colour). 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 sensitising 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 of all types of ceramic tiles and ceramic mosaic tiles with no vertical slip mineral adhesive and extended open time, classified as C1TE by the EN 12004 standard, such as NEOFIL F 8 of Colmef Srl. To increase adhesion to the substrates and make the adhesive highly deformable (C2/S2 according to the EN 12004 standard), mix **NEOFIL F 8** with polymeric elasticising latex, such as ELASTOKOL of Colmef Srl; the modified adhesive will be suitable for laying on walls or floors that are subjected to particular stress, for laying large-sized tiles, even on heated screeds, and for all work where high deformability of the adhesive is required.

TECHNICAL DATA

Compliant with Standard:	**EN 12004**
Class:	**C1TE**
Appearance:	powder
Colour:	grey white
Apparent specific weight (kg/m^3):	1300
Solid residue (%):	100
Mixing ratio:	~ 7 litres of water for 25 kg of powder
pH value:	13
Flammability:	no
Adjustment time:	≥ 45 min.
Pot life:	8 h
Wall grouting after:	6 h
Floor grouting:	24 h
Commissioning:	7-14 days
Allowed application temperature:	from +5 °C to +35 °C
Operating temperature:	from -30 °C to +90 °C

FINAL PERFORMANCE according to EN 12004 Class C1TE

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

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

COLMEF SRL | Z.I. Ponte d'Assi | 06024 – Gubbio (PG) ITALY | Tel. +39 075923561 | info@colmef.com | www.colmef.com