Neofil F 60 Flow

MINERAL ADHESIVE WITH IMPROVED ADHERENCE, SELF-WETTING, FAST SETTING AND EXTENDED OPEN TIME. SUITABLE FOR PROFESSIONAL LAYING OF FULL BED, FLOOR, MEDIUM AND LARGE SIZED CERAMIC TILES AND STABLE NATURAL STONES. SUITABLE FOR SMOOTHING OR LEVELLING OF FLAT SURFACES BEFORE LAYING THE CERAMICS. FOR INDOORS AND OUTDOORS.

CE EN 12004

C2FE EN 12004

HIGH PERFORMANCE COLMEF SPECIALIST

TECHNICAL DATA SHEET – REV. 01/2022

DESCRIPTION

NEOFIL F 60 FLOW is a grey powder consisting of hydraulic binders, mineral fillers, synthetic resins and special additives. Mixed with water, it is transformed into a product of semi-fluid consistency and therefore, with easy workability and extended open time that facilitates laying operations, great efficiency and high adhesion to materials normally used in construction and free from particular shrinkage during hardening. NEOFIL F 60 FLOW ensures the back of the tiles are perfectly wet, even if large-sized, without having to exert great pressure and allows a bed of adhesive to be achieved with a thickness ranging from 3 to 20 mm with no gaps.

Conforms to European Standard EN 12004 – Class C2FE - Fast-setting cementitious adhesive (C) with improved characteristics (2), extended open time (E).

FIELDS OF APPLICATION

NEOFIL F 60 FLOW is used for indoor and outdoor bonding of all types of ceramic tiles, such as single-fired, porcelain stoneware, large formats, thin slabs, klinker, fired, stone material (provided they are stable in humidity and not subject to efflorescence), marble and reconstituted material as long as dimensionally stable and not sensitive to moisture. Thanks to its high content of synthetic resins and high flexibility, NEOFIL F 60 FLOW is particularly suitable for laying large-sized tiles on floors subject to heavy traffic. NEOFIL F 60 FLOW can also be used for bonding calibrated cement or brick blocks or for easily levelling and quick-hardening compounds, before laying the flooring.
NEOFIL F 60 Flow can be applied on all cementitious substrates normally used in construction, such as concrete, self-levelling screeds, cementitious screeds that are also subject to intense traffic and screeds made with products from the NEOCEM line. NEOFIL F 60 Flow can be used for laying floors or coverings 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.

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 special 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. 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 60 FLOW.

APPLICATION

To prepare the mixture, pour a 25-kg bag of NEOFIL F 60 FLOW in a clean container with 6 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 1 hour at a temperature of +23°C.
NEOFIL F 60 FLOW is applied to the substrate using a notched trowel, which is chosen according to the size of the tiles, the type of back and the flatness of the substrate.
Apply an amount of adhesive that ensures the back of the tiles are perfectly wet, leaving no gaps that could cause breakages or detachments due to the concentrated load pressure or frost reaction. The tiles do not need to be wet before laying; only in the case of very dusty backs is it advisable to wash them by dipping them in clean water. The tiles are laid without requiring particular pressure; a slight adjustment movement with the fingers is sufficient to ensure they are all wet. 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. Adverse weather conditions like strong sun or excessive ventilation can greatly affect the processing time, lowering them significantly. In these cases, dampen the substrate before applying the adhesive; this may be useful to extend the open time.
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 grouts can be made 6 hours after laying with the specific COLMEF mineral sealants, available in different colours.

YIELD

1.6 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 60 FLOW on the wall or sloping surfaces, on concrete subject to major shrinkage and metal, wood, 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 60 FLOW 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 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 a full bed, floor, medium and large sized ceramic tiles and stable natural stones with mineral adhesive with improved adhesion, self-wetting, fast setting and extended open time, classified as C2FE by the EN 12004 Standard, **NEOFIL F 60 FLOW** type by Colmef Srl, suitable for laying on traditional or overlapping substrates on existing floors.

TECHNICAL DATA

Compliant with Standard:	**EN 12004**
Class:	**C2FE**
Appearance:	powder
Colour:	grey
Apparent specific weight (kg/m^3):	1500
Solid residue (%):	100
Mixing ratio:	~ 6 litres of water for 25 kg of powder
pH value:	> 12
Flammability:	no
Adjustment time:	≥ 15 min.
Pot life:	1 h
Grouting:	6 h
Commissioning:	3 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 C2FE

	Results	**Test method**
Initial adhesion after 28 days (N/mm^2):	≥ 1,0	EN 1348
Initial adhesion after 6 hours (N/mm^2):	≥ 0,5	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.):	≥ 15	EN 1346

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

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