Combimix Product Sheet

CM 780 Fast Fibre

INDOOR | FIBRE-REINFORCED | PUMPABLE | QUICK SETTING

CM 780 Fast Fibre is a fibre reinforced, quick setting, pumpable self-levelling underlayment.

Intended Use

The product is suitable for new construction, renovation and heated floor systems. The product is intended for indoor use on substrates of concrete, lightweight concrete, stone, ceramic tiles, wood and gypsum underlay. When applied on wood subfloor, reinforcement mesh must be used. The product is intended to be covered with a top layer, e.g. tiles, carpets or similar.

Pre-treatment

The substrate should be clean and free of dust, cement skin, grease and other impurities that can prevent adhesion. Adhesion and surface strength of the substrate should be no less than 0.5 MPa. Always prime the underlying substrate with PP 600 and allow to dry before pouring. In terms of the primer forming a film and the curing of the self-leveling, the temperature of the substrate must not fall below 10 °C. For best results, the ambient temperature in the work area should be between 10 and 25 °C. At higher or lower temperatures, the time for curing will shorten or extend. With the risk for cracks due to shrinkage or settings in the subfloor, a concrete surface should not be leveled within the first 28 days after casting. As a recommendation the RH in the concrete should have reached RH 95 % as the upper limit for pouring the CM 780. Use the Combimix form foam for edging. In order to avoid drainage pipes from getting clogged, always make sure the drains are properly sealed before pouring.

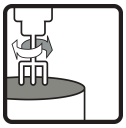
Mixing

Mix the dry powder with max 3.6 liters of water (max 18 %) per 20 kg bag. Mix with a drilling machine and a whisk, or a mixing pump intended for this purpose. The correct water mixture can be tested using a slump test with a cylinder with Ø 30 mm and a height of 50 mm on 300 x 300 mm plexiglas plate. With the correct water mixture, the spread should be max 135 mm. The slump test also checks that the material is well blended and that there is no separation.

Water requirement

3,6 l/20 kg

Mixing time



3 min

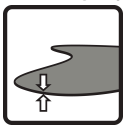
Workable

10–25 min

Working temperature

10–25 °C

Leveling layer



5–100 mm
6–20 mm on lightweight concrete

Walkable

1–3 hrs

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Execution

The mixed material is applied by hand, or pumped out onto the substrate in lengths. Each new ribbon is added to the old one as soon as possible so that the material can blend together and create an even surface. The width of the ribbons can be adjusted to the capacity of the mixing pump and the thickness of the covering. The material requires a light treatment with a toothed trowel to provide maximum smoothness. On lightweight concrete, the coating must be 6–20 mm, it is possible to add up to 100 mm if steel reinforcement is used.

Post-treatment and curing

You can easily shape or cut the semi- hardened self-leveling underlayment material before it fully dries. Always make sure that the material is sufficiently dry before it will be covered by a carpet or a foilsystem. The CM 780 may be covered by a carpet or a foilsystem after 1–3 days depending on the thickness. The guiding value assumes a curing temperature of approximately 20 °C, 50 % RH and proper air flow. Newly produced surfaces must be protected against wind, sun and rain.

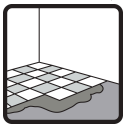
Storage time and packaging

Store in a dry environment, on an unopened plastic-coated pallet, six months from the date of production. The date of production is printed on the packaging. May be used after 6 months but properties such as flow rate, hardening and drying times will be extended. CM 780 Fast Fibre is delivered in 20 kg bags and in big bags.

Residual Products and Safety Instructions

Empty bags can be burned. Any remaining, dry powder that has been stored properly can be used again. Hardened material should be disposed of as construction waste. Do not wash the product into the sewage system. The cement in the product has a reduced level of chromate. Follow regulations in each respective country.

Coatable (tiles)



12 hrs

Weather protection

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HMS Info

For current version of product information, contact Combimix at info@combimix.se. Previously undated and dated issues are no longer valid. For more information contact our sales organization.

Disclaimer

pdf-disclaimer

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Product specification	
Environment	indoor
Substrate	concrete, gypsum underlay, lightweight concrete, wood, stone, ceramic tiles/clinker, lightweight mass, heating plates, heated floor systems, free-bearing
Slope construction	yes, no
Leveling layer	5–100 mm
Leveling layer	6–20 mm on lightweight concrete
Grain size	< 2 mm
Material consumption	1.8 kg/m²/mm
Water requirement	3,6 l/20 kg
Flowability	max 135 mm
Working temperature	10–25 °C
Mixing time	3 min
Workable	10–25 min
Drying time category	sjalvtorkande
Walkable	1–3 hrs
Coatable (tiles)	12 hrs
Ready for floor covering	1–3 days
Water damage resistant	yes
Surface tensile strength 28 days (ground loaded surface)	> 1.5 MPa
Free shrinkage	0.03–0.05 %
TVOC 28 days	< 10 µg/(m² h)
Final surface	clinker, limmade-plastmattor, loslagt-tragolv, tatskikt, limmad-parkett
Release of corrosive substances	CT (as per EN 13813)

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CM 780 Fast Fibre is a fibre reinforced, quick setting, pumpable self-levelling underlayment.

Compressive strength class	C25 (as per EN 13813)
Compressive strength, average	35 MPa (as per EN 13813)
Flexural strength class	F5 (as per EN 13813)
Flexural strength class, average	7 MPa(as per EN 13813)
Fire class / Reaction to fire	A1fl (as per EN 13813)
RWFC	550 (as per EN 13813)
Adhesion	B1.5 (as per EN 13813)