



Area of use

CM 420 Offshore is a pumpable self-levelling compound intended for substrates of steel or sheet metal on ships, ferries, etc. Recommended application thickness is 3–30 mm.

Substrate

The substrate must be anticorrosive treated and should be clean and free of dust, cement skin, grease, oil residues and other impurities that can prevent adhesion. Adhesion and surface resistance 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, 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.

Mixing

Mix CM 420 Offshore with max 4.3 liters of water (max 29 %) per 15 kg bag. Create the mixture 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 a 300 x 300 mm plexiglas plate. With the correct water mixture, the spread should be max 145 mm. The slump test also checks that the material is well blended and that there is no separation.

Application

The mixed material is applied by hand, or pumped out onto the substrate in lengths and leveled with a toothed smoother. 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. 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.

Post-treatment

You can easily shape or cut the semi-hardened self-leveling compound material before it fully dries.

Curing

Always make sure that the material is sufficiently dry before installing the floor covering. The drying time is 1–3 days for the product to be carpetable. The guiding value assumes a curing temperature of approximately 20 °C, 40 % RH and proper air flow.

Storage time and packaging

Six months in dry areas. CM 420 Offshore is delivered in 15 kg bags, in big bags and in bulk.

Residual products and safety information

Empty, cleaned bags should be sent for incineration. 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.

Health, environment, safety and technical service documents

Current version of product information is available at www.marine.combimix.com. Previously undated and dated issues are no longer valid. For more information contact our sales organization.

Technical data as per Marine directive 96/98/EC

Release of corrosive substances	CT
Compressive strength class	C20
Compressive Strength	35 MPa
Flexural strength class	F4
Tensile Bond Strength	10 MPa
Fire resistance class	IMO FTPC Part 6 (IMO Res.A.687(17)), IMO FTPC Part 2
RWFC	550
Adhesion to steel average	> 1 MPa

Other properties

Substrate	Steel
Thickness	3–30 mm
Grain size	< 0.5 mm
Material consumption	1.1 kg/m ² /mm
Weight (dry state)	1100 kg/m ³
Flow rate	max 145 mm
Working Time	ca 60 min
Final Set	> 4 hrs
Coverable (tiles)	24 hrs
Drying time	1–3 days
pH	approx. 11
Water damage resistant	Yes
Surface Tensile Bond Strength, 28 days (polished, loaded surface)	> 1,5 MPa
Shrinkage	0.04–0.06 %
TVOC 28 days	30 µg/m ² h

Certification



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