

Marine A60 Sound Floor - Concrete

Non-combustible screed compound for A-60 floating floor

Product description

Marlon Marine Fire Cem 1400 is a fire-retardant cement-based, plastic-reinforced medium-weight, high-strength screed used on interior decks, as A-60 sound-absorbing floating floor in combination with Rockwool.

For use in marine and offshore installations for indoor areas and other lightly trafficked areas - mainly foot traffic, before laying carpets, vinyl, tiles etc.

Product benefits

- One component, fire retardant screed compound
- Approved as A-60 class with Rockwool
- Fire retardant
- Only to be mixed with water
- Easy to apply
- Rapid drying and fast curing.
- Low shrinkage

Areas of application

Marine Fire Cem 1400 is a screed compound that is used in combination with Rockwool to create an A-60-approved sound-reducing floating floor. Marine Fire Cem 1400 applied as a sound-reducing floating floor prior to the application of deck finishing materials such as carpets, tiles, parquet, rubber, and vinyl. There are different systems with Marine Fire Cem 1400, combined with Rockwool Marine Slab and Marlon's visco elastic systems. Marine Fire Cem 1400 can also be used to dampen structure-borne noise. For dense coverings such as polyurethane, epoxy, linoleum, vinyl, and membranes, it is important that Marine Fire 1400 is sufficiently dried. At normal conditions (20°C/68°F) and 80% relative humidity, Marlon Marine Fire Cem 1400 quickly achieves a high surface strength which is walkable after approx. 4 hours, depending on the temperature. As a guideline, the final coating can be applied after approx. 7-day curing time. Note that the curing time depends on the layer thickness, the temperature of the substrate, and the ambient air temperature in the work area as well as the relative humidity.

For indoor use only.

Surface preparation

For floating floors, the mineral wool must be sound (not damaged), clean, dry free from grease, oils, and other substances. It's a must to use re-enforcement such as wire mesh or similar for the whole area and extra re-enforcement (e.g., steel plates) wherever a higher load is expected such as in both sides of doors areas, staircases, etc. For further details on floating floors, consult the Application Manual of Marine Fire Cem 1400 and its approved combinations. Consider that before application of vinyl and carpet coverings, a thin self-leveling mortar such as Marine 900 SL must be applied to obtain an even floor. For wet areas, the surface must be treated with a water-resistant membrane (Marine Elastic 1000 Membrane).

Mixing

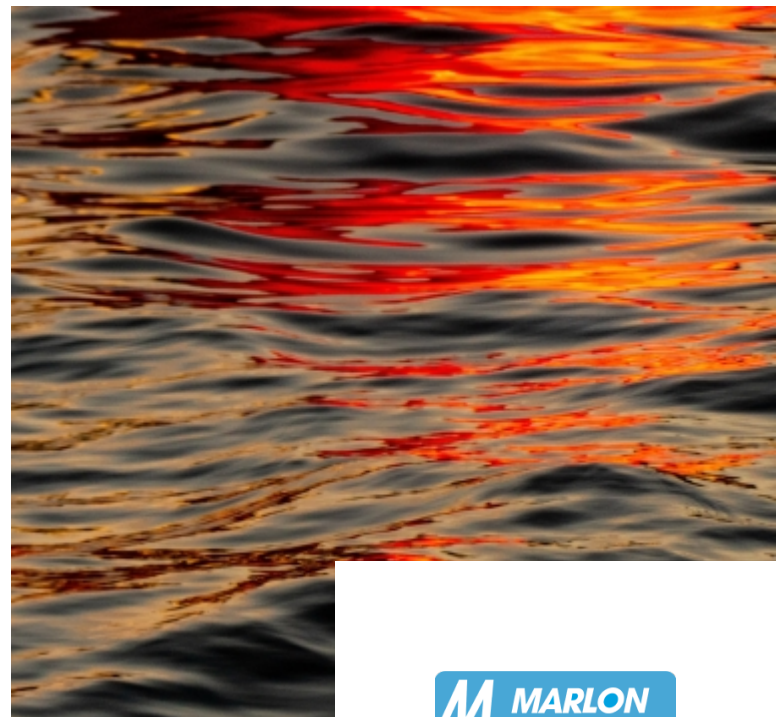
Manual mixing is done with a slow-moving drill attached to a propeller mixer. It is recommended that approx. ¾ of the amount of water is poured into the mixing bucket and then the dry powder is added and mixed thoroughly while the remaining amount of water is gradually added. Mix thoroughly until a lump-free and homogeneous mass is obtained. Make sure the powder is mixed completely (bottom and side walls of the mixing bucket). It is recommended to use a forced mixer to achieve the best possible mixing of Marine Fire Cem 1400

Application

Apply Marine Fire Cem 1400 with a wide, straight-edged trowel to the desired thickness (min. 25 mm./1.0 in) on top of the laid Rockwool. Marine Fire Cem 1400 must be applied and finished working within 30 minutes of mixing. At temperatures above 25 °C, (77°F) the opening time is reduced. Before applying e.g. vinyl or carpets, it is recommended that a thin layer of self-leveling putty such as Marlon Marine 900 SL, Marlon or Marine 1600 SL be applied to ensure a level floor surface. After application, the finished areas must be protected against direct heat, sunlight, frost and drafts during the curing process for at least 12 hours. Before covering Marine Fire Cem 1400 with dense materials such as vinyl, epoxy, polyurethane coatings, etc., ensure that the residual moisture level is below 5%. (always follow the supplier's instructions). Test procedure to determine the dryness (according to ASTM D 4263): put a PE-plastic foil 1 m x 1 m on the surface of the applied mortar floor, tape the perimeter and leave for one day. If no water condensation on the foil or a visible color difference between covered and uncovered surface, the curing is complete

Important

Do not use outdoors. Does not tolerate frost during casting and during the curing and setting time. High temperatures can affect the properties of the product by shortening the processing time and causing too rapid drying. Newly laid Marine Fire Cem 1400 must not be exposed to frost, high temperatures, sunlight, and drafts until it is completely cured.



A solid solution

Product information

Material consumption

1.4 kg/mm/m² (7.27 lb/inch/ft²)

Application temperature

Min. 5-35°C (41°F - 95°F)

Drying time before foot traffic

Approx. 4 hours

Min. thickness

25 mm. (1.0 in)

Max. thickness

50 mm. (2.0 in) per layer

Mixing ratio

3.2-3.6 liter (108-122 oz) water per bags of 20 kg.
(44.09 lb) 16-18 % of the dry weight of the material

Pot life

Ca. 30 minutes at 20°C/68°F and 80% RH

Shelf-life

Min. 18 Months in unopened packaging.

Storage

In dry conditions, do not expose to moisture and freezing temp.

Packaging

20 kg (44.09 lb) bags on plastic-wrapped pallets (54 bags per pallet).

PROPERTIES

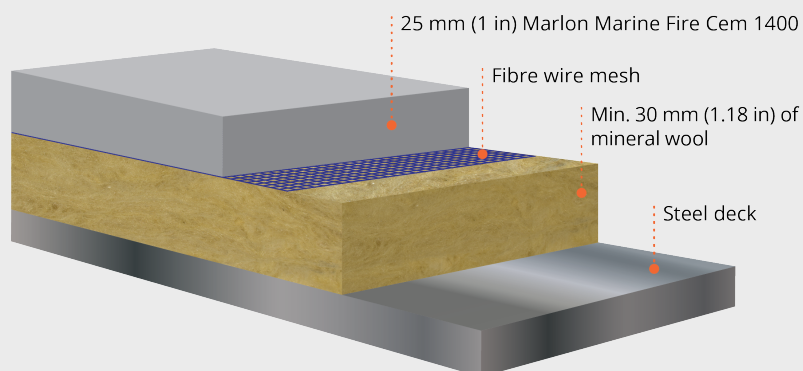
Compressive strength after 28 days

26.7 MPa (3901 psi)

Bending Tear strength after 28 days

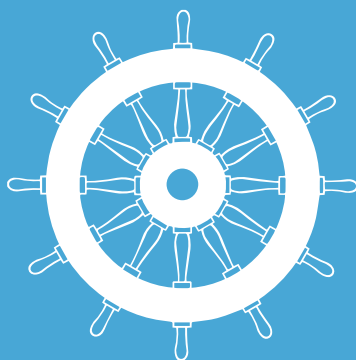
7.3 MPa (1058 psi)

Tested according to FTP Code system and approved according to the IMO Marine Equipment Directives



Notice:

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