



# MFC Final 420

Self-levelling industrial base screed  
(medium-heavy operation)

## PRODUCT DESCRIPTION

MFC Final 420 is a self-levelling flooring mixture on the basis of cement, filler and special additives and polypropylene fibres. It is delivered as an already prepared dry mixture which is mixed with water on the construction site.

## USE

MFC Final 420 is used mainly for application on old and damaged concrete bases for rough levelling and compaction of industrial floors before application of MFC Final 410 - 413 or a synthetic layer with the thickness of > 2 mm. It is applied in one 5 - 30 mm thick layer within one working action. The consumption of the mixture is 1,8 kg/mm/m<sup>2</sup>. It is not recommended as a final surface treatment.

## TECHNICAL PARAMETERS

Recommended thickness of the layer	5 - 30 mm
Workability time (depending on site conditions)	15 - 20 min.
Foot traffic	1 - 3 hours
Application of other layers (MFC Final 410 - 413)	after approximately 24 hours
Light floor loading	after approximately 7 days
pH value	11
Flow-Ring test	135 - 145 mm
Apparent density of the mixture	2000 kg.m <sup>3</sup>
Compressive strength after 28 days	min. 35 MPa
Flexural strength after 28 days	min. 7 MPa
Bond strength after 28 days	min. 2,5 MPa
Specific shrinkage	max. - 0,03 %
Maximum diameter of filler grains	1,6 mm

- parameters of material in an environment with 23°C and 50% relative air moisture
- pressure and extension strength during bending after 7 days achieves min. 60% of 28 day values

## BASE

The base must be stabilized, without released particles and grease (blasting, grinding, milling) and with subsequent removal of dust, holes and cuts. It is necessary to fix using repair binders (MFC Sanfix 200). Select the optimal thickness of the layer by surface measurement (the lowest and the highest points).

## PENETRATION

Apply MFC Primer 620 penetration to clean material with a brush or sprayer in the ratio with water of 1:5 for the first coating and 1:3 for the second coating. Apply once or twice according to the absorption capability of the base. In the case that on the surface, MFC Final 420 and an additional layer of self-levelling coating will be applied (MFC Final 410 - 413), it is necessary to penetrate the base again in the ratio of the solution mentioned above.

## MIXING

The dry mixture is to be mixed shortly before application with drinking water in the ratio 4 litres (16 %) of water per 25 kg of dry mixture in order

that the required fluidity is achieved. It is necessary to check the fluidity during the application by implementing a fluidity test (see Application Manual). The mixing is to be done in a machine with the use of an automatic mixer with pump and delivery hose and in the case of a minor scope of work it is possible to mix the material in a mixing vessel using the mixing adapter on the drilling machine.

## APPLICATION

The mixing should be completed within 15 - 20 minutes. It should be applied by proportional pouring in stages (20 - 30 cm) of the width of the field (6 - 15 m) depending on the manner of the flooring and thickness of the layer. It is necessary to ensure that the new material is applied on already applied material to ensure convergence (within 5 minutes). Smooth the freshly applied material using a tooth wiper and de-aerating roller in order to remove air bubbles and joints in the applied areas. The required temperature of the base, coating and environment during the application is stated within the range +5 to +25°C.

## TREATMENT

During the application and in the initial phase of hardening it is necessary to prevent air draughts and extreme temperatures. It is necessary to protect the surface against mechanical damage 48 hours after the application, although it is jointless, construction and expansion gaps of the base must be produced by cutting within 24 hours.

## SURFACE

MFC Final 420 is comparable with properties of compacted concrete. The resistance of the floor surface is proportional to the manner of loading by the operation.

## QUALITY

MFC Cobet 420 is permanently checked during production using laboratory tests. The basic precondition for a successful application is to follow the required technological procedures (see the Application Manual).

## STORAGE

The material is packed into 25 kg paper bags and is stored on wooden pallets (containing 40 bags). It is to be stored in a suitable environment; it must not be exposed to moisture or extremely low or high temperatures.

## WARRANTY

The warranty period is 6 months from the date of production. The date of production is indicated on the package. The producer guarantees the declared properties and parameters of the product when ensuring the required technological procedures - the producer does not provide any guarantee pursuant to improper processing and use.

## ATTENTION

The product contains cement. Cement reacts with water in an alkaline manner. Protect your eyes and prevent contact with skin. During handling of the dry mixture there is risk of inhalation of dust particles, therefore, we recommend to use a protective respirator. In the case of affection of eyes, rinse your eyes with water and consult your doctor. Keep away from children.

