

# MFC Level 305

# Self-levelling coating (levelling screed)

# **PRODUCT DESCRIPTION**

MFC Level 305 is a self-levelling flooring mixture on the basis of cement, filler and special additives. It is delivered as an already prepared dry mixture which is mixed with water on the construction site.

#### USE

MFC Level 305 is used for levelling of minor roughness mainly for concrete floors, declined layers, etc., as a base under floor covers in civil and flat construction. It is applied in one 5 - 30 mm thick layer within one working action. The consumption of the mixture is 1,7 kg/mm/m<sup>2</sup>. The material of MFC Level 305 is not recommended as a final surface treatment of the floor

#### **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	after approximately 24 hours
Placement of floor covers (depending on moisture of the base)	after approximately 7 days
pH value	11
Flow-Ring test	150 - 160 mm
Apparent density of the mixture	1975 kg.m³
Compressive strength after 28 days	min. 30 MPa
Flexural strength after 28 days	min. 6 MPa
Bond strength after 28 days	min. 2,5 MPa
Specific shrinkage	max 0,04 %
Maximum diameter of filler grains	1,0 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) with subsequent removal of dust. Chuck holes and cracks must be fixed using a repair binder (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 305 the additional layer of self-levelling coating will be applied, it is necessary to penetrate the base again in the ratio of solution mentioned above.

#### MIXING

The dry mixture is to be mixed shortly before application with drinking water in the ratio 4,25 litres (17%) 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 area (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, coat and environment during the application is stated to be 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 Level 305 is comparable with properties of compacted concrete. As the base, MFC Level 305 is compatible with commonly used glues and floor covers. In the case of increased requirements, further surface treatment is necessary.

## QUALITY

MFC Level 305 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 palettes (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 par-

ticles, 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.



