Technical manual

MC- Floor Connect

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This document specifies the requirements for the application and processing of MC-Floor Connect.

1. Areas of application

Benefits

- ✓ Shock free and silent driven over joint profile
- ✓ Adaption to existing coatings
- ✓ Fast to apply, easy to repair

Properties

- ✓ High mechanical resistance
- ✓ Permanently free of corrosion
- ✓ Coating possible
- ✓ grind able, totally smooth transition to connecting substrates
- ✓ Permanently fluid tight *

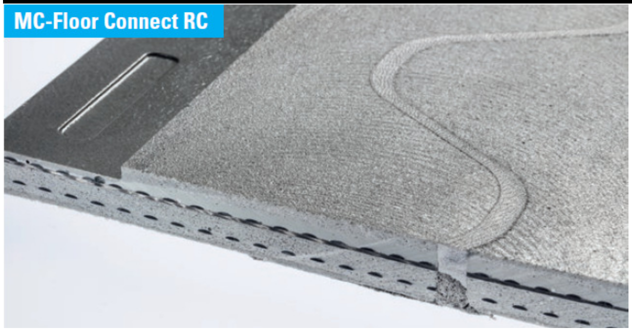
* joint deformation > 3 mm an additional joint band is required f.e. Mycoflex WW-Band

Note: The range of movement of the base plates must be known. The suitability of the selected profile must be checked by an expert planner. It should be ensured that the maximum joint width does not exceed the property for maximum joint width of the profile. Furthermore, no vertical movements must occur in the joint. If vertical movement occurs, this needs to be repaired underneath the concrete slabs by underground solidification before the joint repair.

The MC-Floor Connect systems

With three profile versions for different requirements MC Floor Connect provides the perfect, long-term solution for various scenarios. The result is a mechanical resistant joint which is driven over without vibrations or noises.

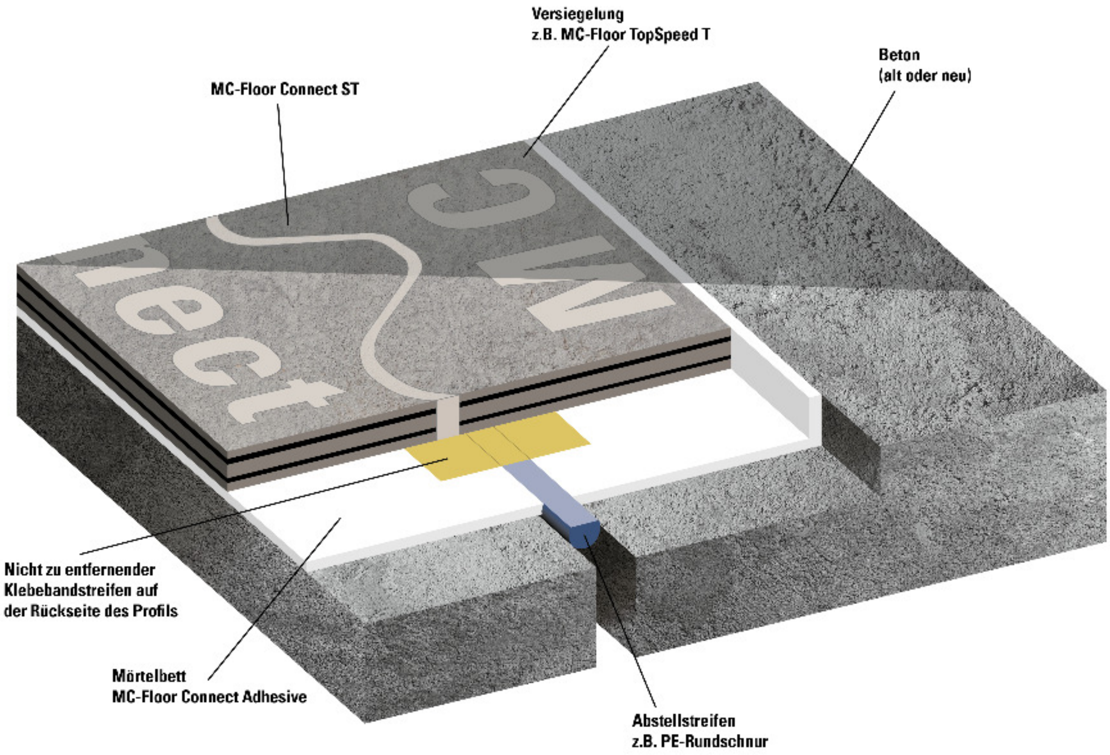
The standard profile

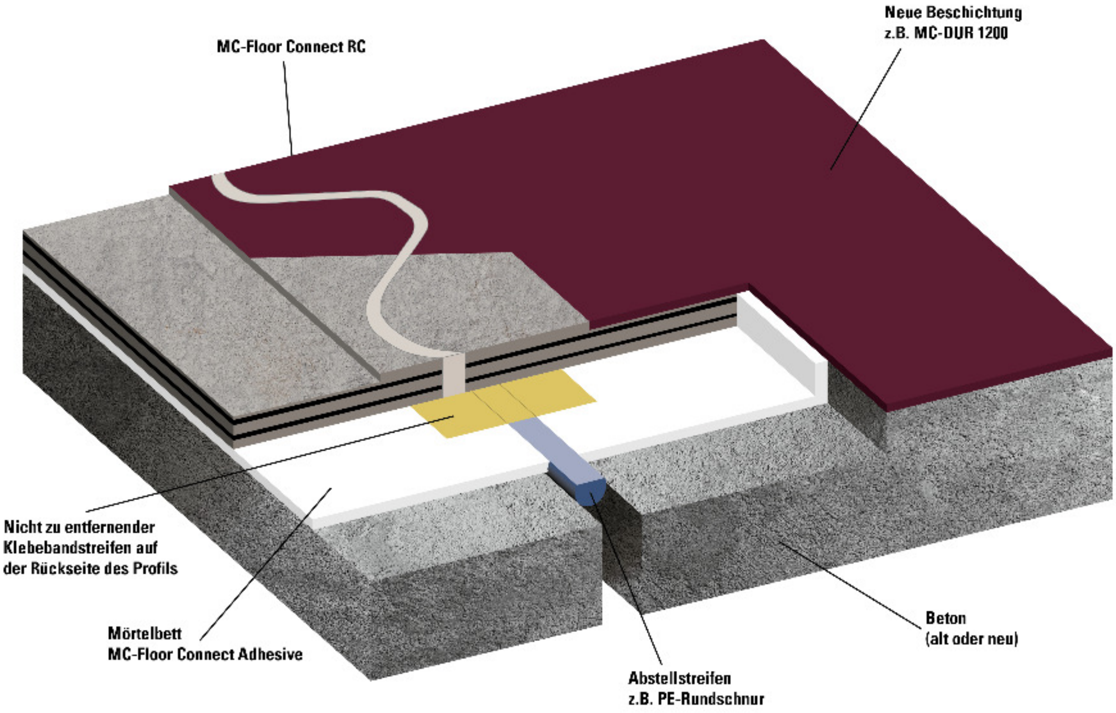


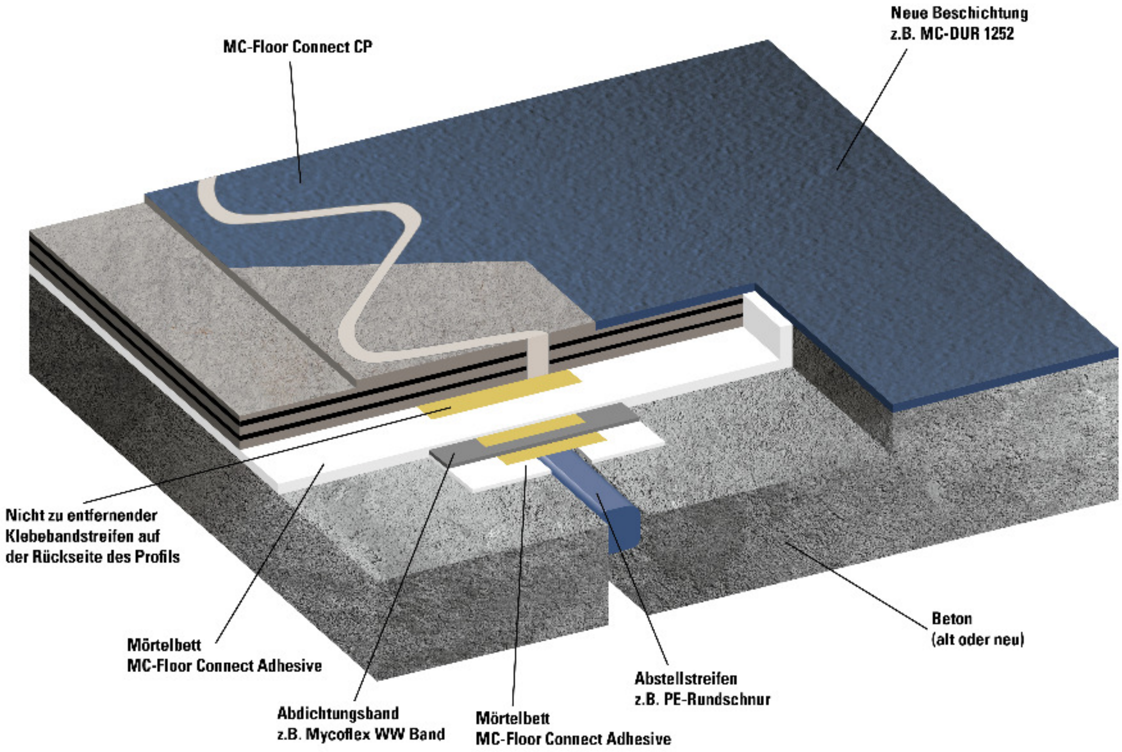
The coatable profile

The car par profile

MC-Floor Connect ST



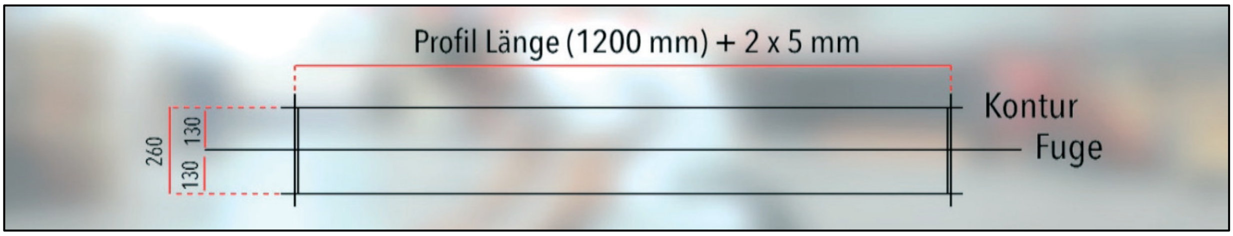

Neue Beschichtung
z.B. MC-DUR 1200
MC-Floor Connect RC
Nicht zu entfernender
Klebebandstreifen auf
der Rückseite des Profils
Mörtelbett
MC-Floor Connect Adhesive
Abstellstreifen
z.B. PE-Rundschnur
Beton
(alt oder neu)


Neue Beschichtung
z.B. MC-DUR 1252
MC-Floor Connect CP
Nicht zu entfernender
Klebebandstreifen auf
der Rückseite des Profils
Mörtelbett
MC-Floor Connect Adhesive
Abdichtungsband
z.B. Mycoflex WW Band
Mörtelbett
MC-Floor Connect Adhesive
Abstellstreifen
z.B. PE-Rundschnur
Beton
(alt oder neu)

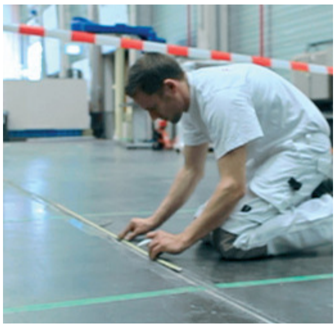
2. Application

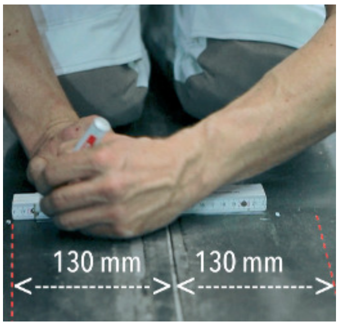
2.1. Suitable application

Depending on the unevenness of the surrounding areas, the profile has to be installed on a slightly lower or even height to be able to grind the areas to achieve a smooth surface. During this process max. 3 mm of *MC-Floor Connect ST* and max. 2 mm of the *RC*- and *CP*-Profile can be removed in the grinding process.
If the concrete tends to curve, those areas need to be grinded previously to achieve the correct heights. As *MC-Floor Connect* must only be grinded up to max. 2 mm it is mandatory to apply the profile as even to the surface as possible.
Therefore, 3 important markings are set: width, length and joint cuts.



Mark width: *MC-Floor Connect ST* and *RC* need a width of 130 mm on each side oft the joints center, the Version *CP* needs 135 mm (in total 270 mm).
Mark length: On each end of the joint 5mm are to be added to the cutted joint molding, Therefore the molding is slightly longer then the applied profile.





In the longitudinal direction of the surface a kerf should be drawn every 2 cm, in order to facilitate the later removal of the concrete.

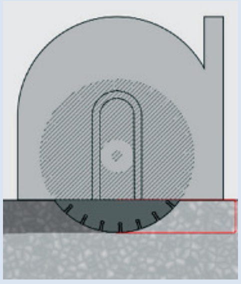
2.2. Cutting the substrate

Cutting the substrate along the marked linings. To achieve the planned depth along the whole cut, the cut has to go slightly beyond the marked edges of the linings. **The planned depth for *MC-Floor Connect ST* is approx. 23 mm, for the *RC*- and *CP*-Profile approx. 20 mm. If an additional sealing with Mycoflex WW-Band ist planned 3mm have to be added to the figures above.**

MC-Floor Connect ST:
approx. 23 mm

MC-Floor Connect RC and CP:
approx. 20 mm

Mycoflex WW-Band:
+ approx. 3 mm



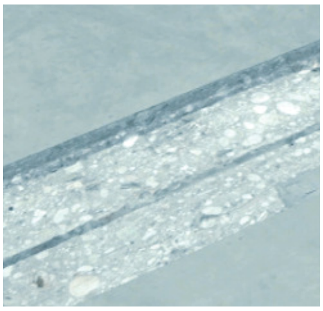
Subsequently, the substrate is mechanically broken. This can be done with a jackhammer.

When removing the concrete substrate with a jackhammer, it must be ensured that adjacent or existing concrete outer edges are not damaged.

The depth must be checked on the complete length and mustn't fall belwo the min. value. This can be done for example with a height-adjustable scraper.

Possibly built metal profiles must be removed up to at least 25 mm away in the depths.

2.3. Cleaning and preparation of the substrate

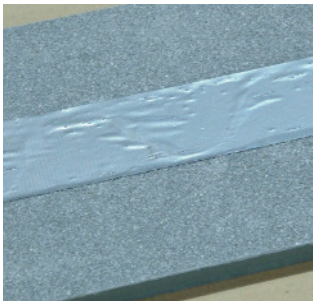


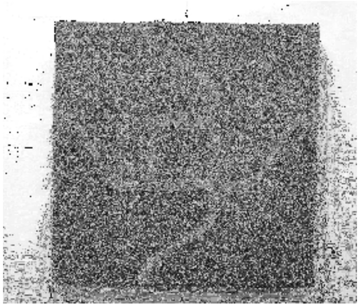
The substrate needs to be dry (max. 6% moisture content), free debonding agents like dust, oil, etc.
If the concrete base has broken too deep in the joint area (> 10 mm), the area must first be reprofiled in a separate operation.
The tensile strength of the substrate must be at least 1.5 N / mm^2.
The substrate and ambient temperature should be at least + 8 ° C and max. + 30 ° C exhibit (Attention: w - note watch the due point - condensation!).

2.4. Cutting

With an angle grinder the profile length is cut. At the back of the joint profile in the field of MC-Floor Connect curve a lubricating strip is attached to prevent the penetration of the adhesive in the joint and to achieve an optimum gliding of the joint.
The strip must not be removed.
In order to check the crop all joint profiles transported in the area and laid out for trail.
It should be ensured that the curve of the lined-up joint profiles has an ongoing connection**.**

Profiles are removed again and stored next to their place of installation.
Corner profiles and solutions for T- and intersections must for all MC-Floor Connect - be purchased separately**.**





2.5. Backfiller

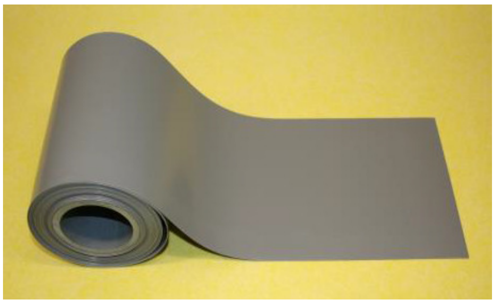
To make sure the movement between the two base plates, a foam backfiller needs to be used. Standover height should be approximately 2 mm. The mortar, which is then used, must not filling the existing concrete joints. The height is to be control continuously with a hight adjustable float.

2.6. Preparing of the mortar

MC-Floor Connect Adhesive is two-component and is delivered in pre weight buckets. First, the base component is stirred carefully. Afterwards, the hardener is added. The two components are mixed for at least 3 minutes to achieve a homogenous mixture. We advise to use slow stirring mixers (max. 300 RPM). The ingress of air has to be prevented by careful mixing. After the mixing is done the material is to be

repotted and mixed once more. The material can now be spread, used a float or comparable tools.

2.7. Mycoflex- WW-Band


MC WW-Band

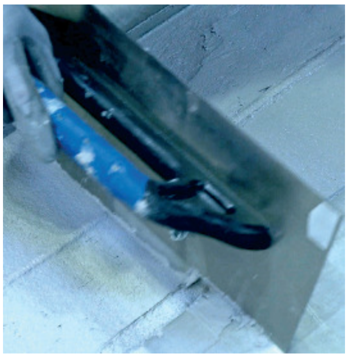
When delivered MC-Floor Connect is already sealed. This maintenance joint serves for better cleanability of the profile and is only liquid tight for joint movement of less than 3mm. With a larger joint movement and at the same time the required tightness, a seal with Mycoflex WW-band and MC Floor Connect Adhesive must be prepared underneath the MC-Floor profile Connect. *Mycoflex WW-Band* a width of 150 mm. Overlapping joint tapes are connected by hot welding.

The Mycoflex WW-Band must be taped in the middle with a wide adhesive tape, with of minimum 5 cm width, before fitting front and back, so that between 33% and 50% remain free of Mycoflex adhesive. The tape works as a separating strip. MC-Floor Adhesive Connect will be applied on the concrete base and the concrete facing side of the Mycoflex WW-band.

Then the Mycoflex WW-tape must be glued in avoiding any pores. The adhesive tape must not be removed.

2.8. Laying down mortar

Install the prepared mortar evenly and homogeneously in the left and right halves of the cavity. Smooth the composite adhesive in the required layer thickness with a height-adjustable spatula. It is very important that you maintain the separation between the left and right side of the joint.



2.9. Installing the MC-Floor Connect profile

Before MC-Floor Connect is applied in the fresh mortar bed, the installation mortar must be applied on the complete backside of the joint profile.

It is to make sure that underneath the joint profile no voids or pores remain in the mortar bed. This can be achieved by pressing the profile into the adhesive bed. The excess mortar must come out on the sides. If tools are used, a rubber hammer in combination with a squared timber is recommended to ensure a proper distribution of force.

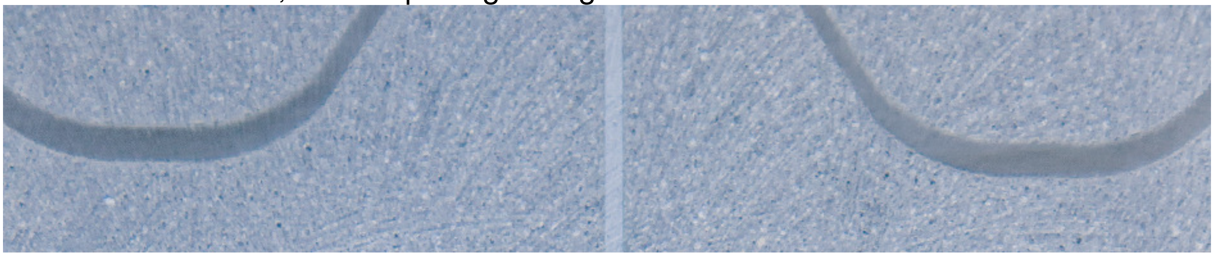
The sides must then be filled in excess with the installation mortar to avoid any pores or cavities.

It must be ensured that the curve of MC-Floor Connect is ongoing and is not glued with the mortar. An elastic joint selaer, like Mycoflex 488 MS, is to be used as a filler in this areas.

3. Following work steps

3.1. Grinding

Using MC-Floor Connect Adhesive at 20 ° C, MC Floor Connect can be driven already 24 hours after installation. In order to ensure the even transition between MC-Floor Connect and the surrounding areas, everything is grinded plan, for example with a hand grinder. The grinding can only be initiated when the adhesive has cured. *MC-Floor Connect* ST is grinded up to a max. removal of **3 mm,** the *RC* as well as the *CP*-Profile to a max. of **2 mm**. The formation of holes or grinding marks can be avoided by working in large circular movements. Thus, a smooth surface is achieved, an adequate grinding wheel is to be used.



Grinded profile connection

3.2. Sealer or coating

MC-Floor Connect can be visually adjusted to the surrounding floor covering by a pigmented top coat.

After grinding, the grinded area should at least be sealed with a transparent sealer such as MC Floor TopSpeed T to minimize the dirt and liquid entry.

While applying the coating onto the profile it is generally to ensure that the sealant of the profile is not coated or is freed of the coating immediately afterwards.

Sealing

remove sealer

4. Equipment for the installation of MC Floor Connect joint profiles

Scale

Spirit level: Length of 200 cm and 50 cm

Pencil / Marker

Chalkline

Tape

Cover foil

Mixer

Weight scale

EP cleaner

Brush

Groove cutter with suction (Recommendation: Hilti DCG 230)

Concrete mill (if needed)

Hoover (Recommendation: Hilti VC 40-U)

Jackhammer

Crowbar

Mason hammer

plasterer trowels and various trowels

rubber hammer

wooden plate 5 x 8 cm, length approx. 40 cm

Angle grinder with suction and diamond plates (Recommendation: Reca diamop Basic)

short pile roller

Silicone Joint Sealant

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