Floor Coatings

Industrial Flooring Systems for Every Requirement

EXPERTISE
FLOOR COATING

BE SURE. BUILD SURE.

Industrial Flooring Systems by MC

Industrial floors include all floor surfaces used for industrial or commercial purposes. This category includes floors in warehouses, workshops and production areas, as well as those in laboratories, operating rooms and more. Just as diverse as the industrial applications of buildings are the stresses they endure. Among all building areas, the floor is often subjected to the highest levels of wear.

Choosing the right flooring is critical for the efficiency, safety and durability of production areas. Modern materials and technologies allow industrial floors to be tailored to specific needs, contributing significantly to the smooth operation of production processes.

There is also a clear trend toward visually appealing flooring designs without compromising technical performance. Increasing expectations in corporate identity for representative areas demand highly decorative, variable and aesthetic flooring systems. Additionally, environmental and health considerations are increasingly incorporated into the planning and execution stages.

Customised adjustment of the functions and properties of floor coatings provides solutions for every application area. Your dedicated MC specialist is available from the planning phase through execution as your contact person. We support you worldwide with the highest technical standards. Benefit from decades of experience from a technology leader in the field of floor coating systems.

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Requirements

Mechanical Stresses

- Static loads
- Dynamic loads
- Impact loads
- Abrasion and wear

Chemical Stresses

- Acids
- Alkalis
- Solvents
- Oils and grease
- Fuels

Thermal Stresses

- Direct heat exposure
- Hot liquids
- Thermal shock stress
- Temperature fluctuations

Industrial Floor Stresses

Industrial floors must meet high demands to withstand the diverse loads and conditions of industrial environments. The types of stress on industrial floors range from mechanical, chemical or thermal to combined stresses, such as those caused by heavily loaded forklifts in combination with daily cleaning using hot steam. The degree of stress depends on the area of application and usage.

In addition to resistance to various loads, coating systems often need to meet additional requirements, such as slip-resistancy, conductivity or crack-bridging capabilities. Only specially tailored floor coatings can ensure optimal and long-lasting floor protection.

The combination of stress and requirements varies depending on specific needs and application areas. Careful design and material selection ensures the right industrial flooring solution.

Extended Property Profile

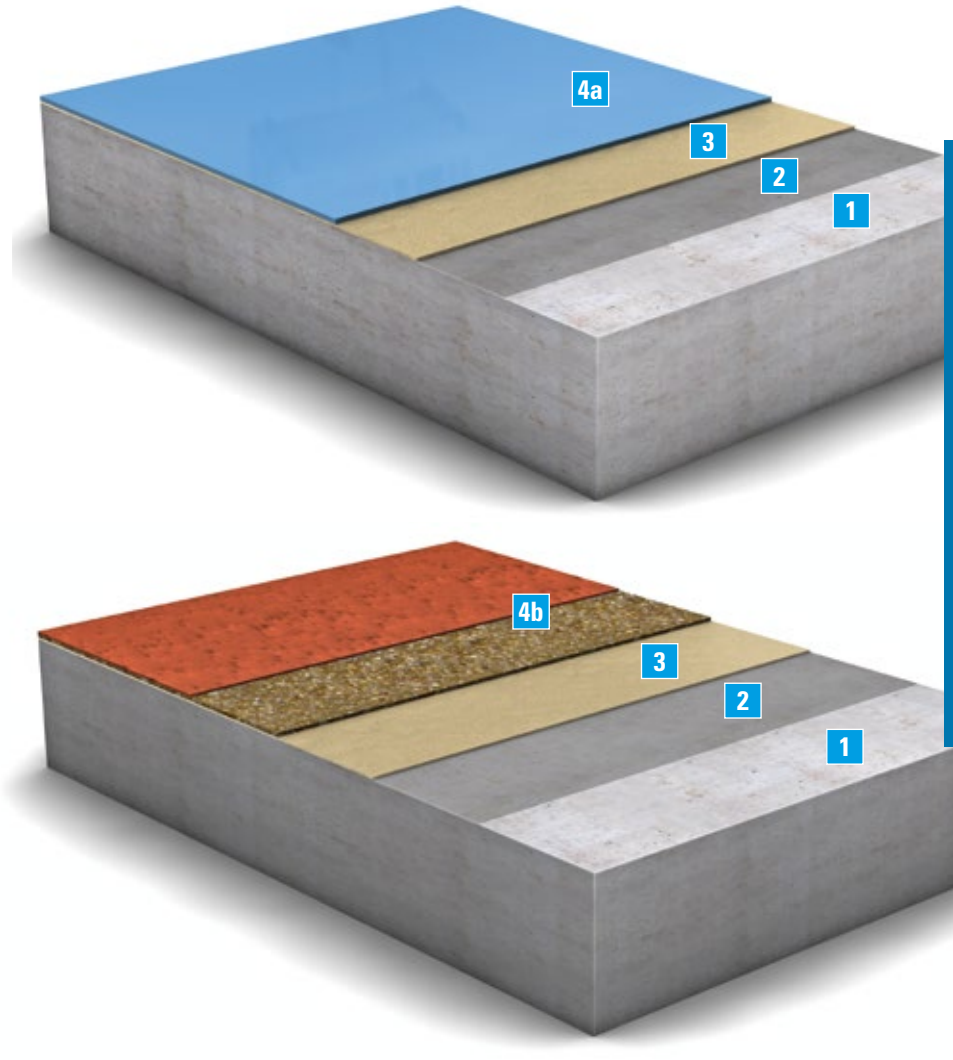
- Slip-resistant
- Crack-bridging
- Conductive or ESD-compatible
- Fast curing
- Vapour-permeable
- UV-stable
- Visually appealing
- Easy to clean
- Decontaminable
- Flame retardant
- Solvent-free
- Physiologically safe
- Indirect food-safe

Impregnation, Sealing or Coating?

The differences in products and various system configurations are reflected in distinct properties and vary significantly depending on requirements. Floor coatings are often made up of multi-layered systems, such as priming, scratch coats, self-levelling coats or additional layers. However, single-layer coatings can also be used depending on the application.

The choice of the right floor coating system depends on the specific requirements of the application area. Impregnations offer light protection and minimal aesthetic impact, making them suitable for storage rooms without special requirements.

Multi-layer systems with seals or thick coatings provide greater protection and aesthetic enhancement. Thick coatings can withstand the strongest mechanical stresses, making them ideal for high-traffic production areas or workshops.



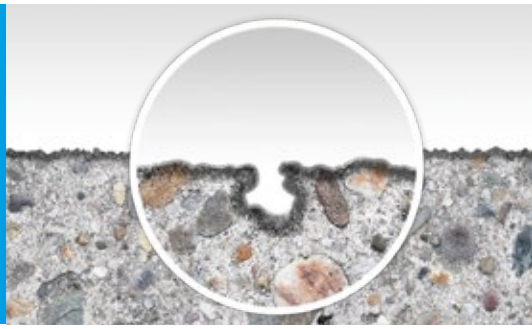
Typical System Configurations in Industry

1. Prepared and cleaned substrate
2. Primer
3. Scratch coat
4. Coating
   a: Smooth
   b: Slip-resistant

Light Protection for Industrial Floors

Impregnation

- Usually very low viscosity
- Penetrates the surface of the substrate
- Does not create a closed surface
- Surface structure remains intact



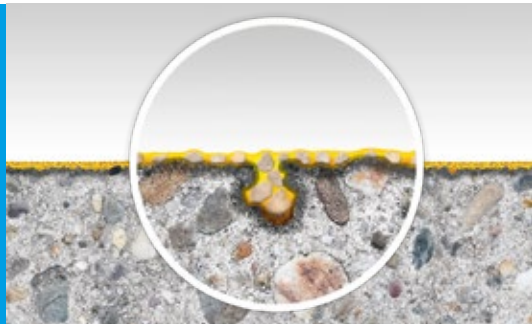
Multi-Layer Systems

Step 1:
Primer

- Ensures adhesion to the substrate
- Mechanical interlocking
- Usually low viscosity
- Penetrates the surface of the substrate

Step 2:
Scratch Coat

- Filled low-viscosity reactive resin
- Fills pores and cavities
- Prevents bubbles and defects in the subsequent layer
- Applied to the primed substrate

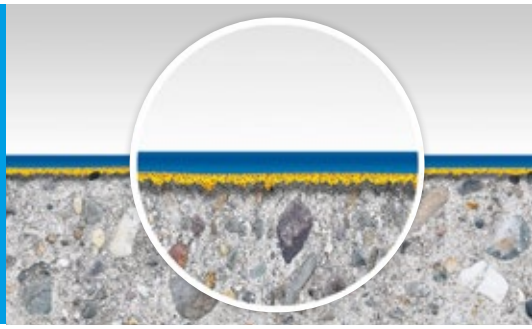


Step 3 – Variant A
Sealing

- Closed surface
- Substrate structure remains visible or customisable
- Layer thickness < 1 mm

Step 3 – Variant B
Thick Coating

- Closed surface
- Surface structure is customisable
- Layer thickness approx. 1 – 3 mm

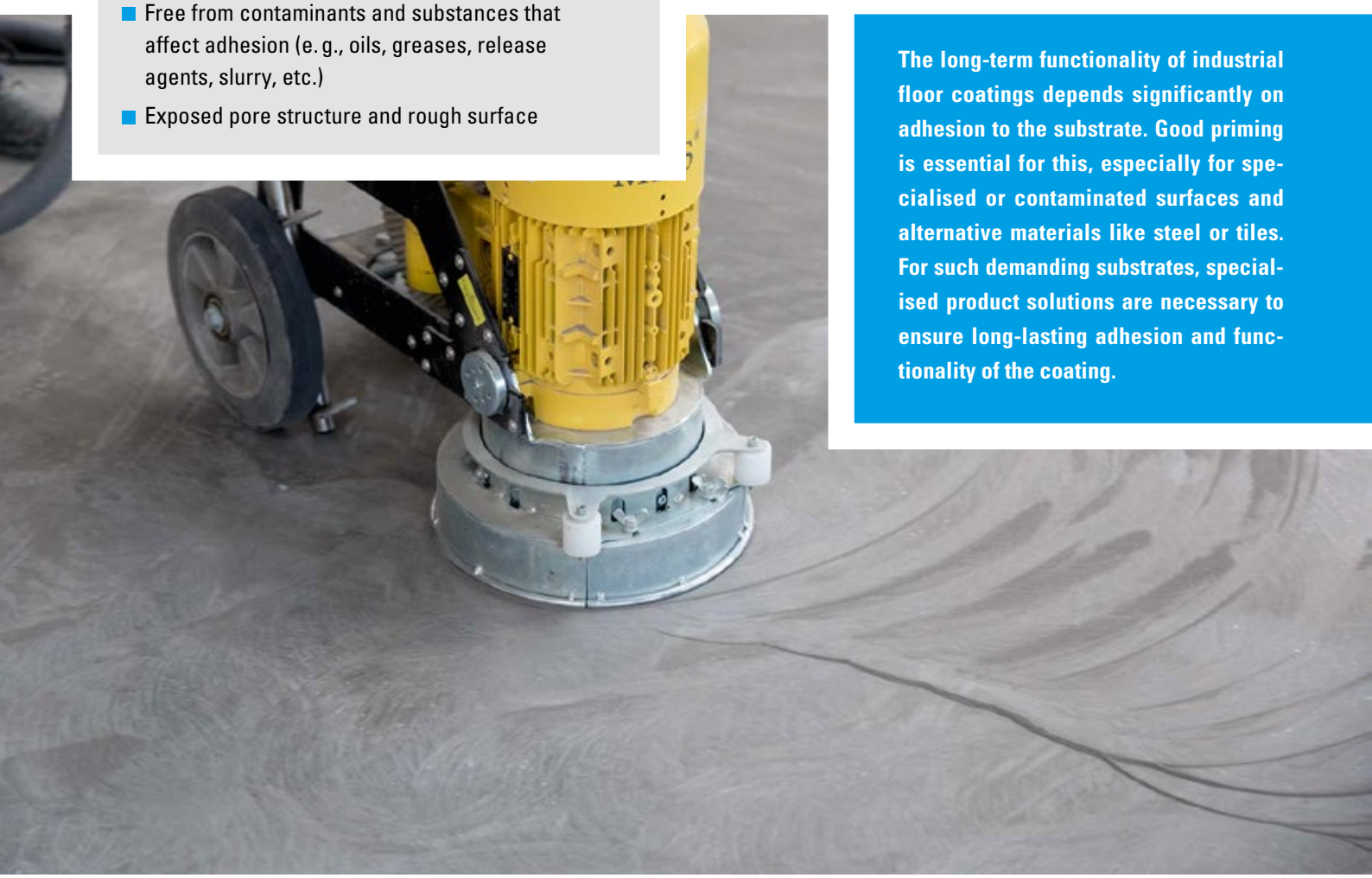


The Importance of Proper Priming

Whether for new buildings or renovations, concrete or existing coatings, the substrate to be coated has a significant impact on the visual and mechanical properties of the finished floor coating. All forces acting on the floor are transferred through the coating into the substrate and the building structure. To absorb mechanical stresses, the substrate must have sufficient strength and a fine-grained roughness to ensure mechanical interlocking and a permanent bond between the coating system and the substrate.

Substrate Requirements Before Coating Begins:

- Strength class of at least C 20/25
- Tensile strength of at least 1.5 N/mm² on average (minimum 1.0 N/mm²)
- Load-bearing capacity (no hollow areas, loose or porous spots)
- Free from contaminants and substances that affect adhesion (e. g., oils, greases, release agents, slurry, etc.)
- Exposed pore structure and rough surface



The long-term functionality of industrial floor coatings depends significantly on adhesion to the substrate. Good priming is essential for this, especially for specialised or contaminated surfaces and alternative materials like steel or tiles. For such demanding substrates, specialised product solutions are necessary to ensure long-lasting adhesion and functionality of the coating.

Substrate	Properties	Primer*
Concrete	Layer removal approx. 1 mm Removal of unusable mineral layers Minor levelling of the substrate possible Grinding dust remains in the pores	**MC-DUR 1200 VK** **MC-DUR 1320 VK** **MC-DUR 1390 VK** **MC-DUR TopSpeed SC** **MC-DUR 1177 WV-A** **MC-DUR 111 eco transparent** **MC-DUR 1101** **MC-DUR Zero VK** **MC-DUR 1365 HBF** **MC-DUR PowerCoat 200** *Depending on the substrate and system build-up
Concrete, Blasted	Layer removal 1–5 mm Fine rough surface Free of dust or contaminants No additional work step required	
Dense Substrate (e. g. Fast-Setting Screed)	High strength Very high wear resistance and good grip Dense surface Can be ground for preparation	**MC-DUR 1177 WV-A**
Asphalt	Poor adhesion of resins due to impermeability Only coat mastic asphalt in interior spaces Roughen the substrate as it is covered with a bitumen layer	**MC-DUR 2052 AM** **MC-FLEX 2099** (both only in indoor areas)
Tiles	Very dense surface Glazed ceramic tiles must be ground or blasted to remove the glaze Porcelain stoneware and clinker tiles absorb very little water Always prepare a test area	**MC-DUR 1177 WV-A** (for glazed ceramic tiles) **MC-DUR 1365 HBF** (for porcelain stoneware and clinker tiles)
Oil-Contaminated Substrate	Clean the oil-contaminated substrate with Donnitil Oil Ex	**MC-DUR 1365 HBF**

Mechanical Stresses

In the manufacturing industry industrial floors are often exposed to significant mechanical stresses. Production, assembly or storage processes, as well as internal transport of heavy loads often result in abrasive, rolling or impact stresses caused by heavy-duty wheels, moving grid boxes or falling workpieces.

Choosing the appropriate floor coating is crucial for the efficiency, safety and durability of production environments. Modern materials and technologies allow industrial floors to be optimised for specific requirements, significantly contributing to the smooth operation of production processes.

Requirements

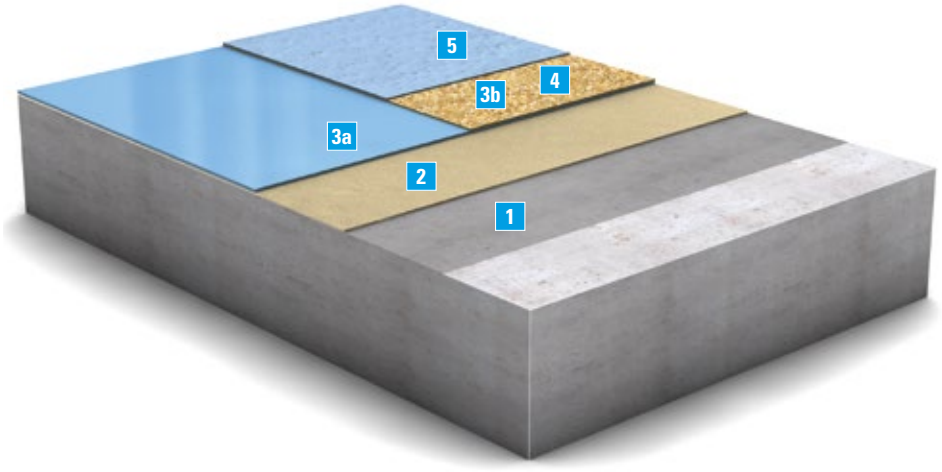
- Protection against abrasion and wear, e. g. forklift traffic
- Protection against high impact forces, e. g. falling objects
- Resistant to static loads, e. g. machines and shelves
- Resistant to dynamic loads, e. g. transport of heavy goods
- Reduction of slip hazard, especially under wet conditions

Application Areas

- Warehouses
- Workshops
- Production
- Logistics centres
- Retail spaces

For mechanical stresses
MC-DUR 1200
MC-DUR 1322
MC-DUR 1212 VB
MC-DUR Zero
MC-DUR TopSpeed

Example: **MC-DUR 1200**



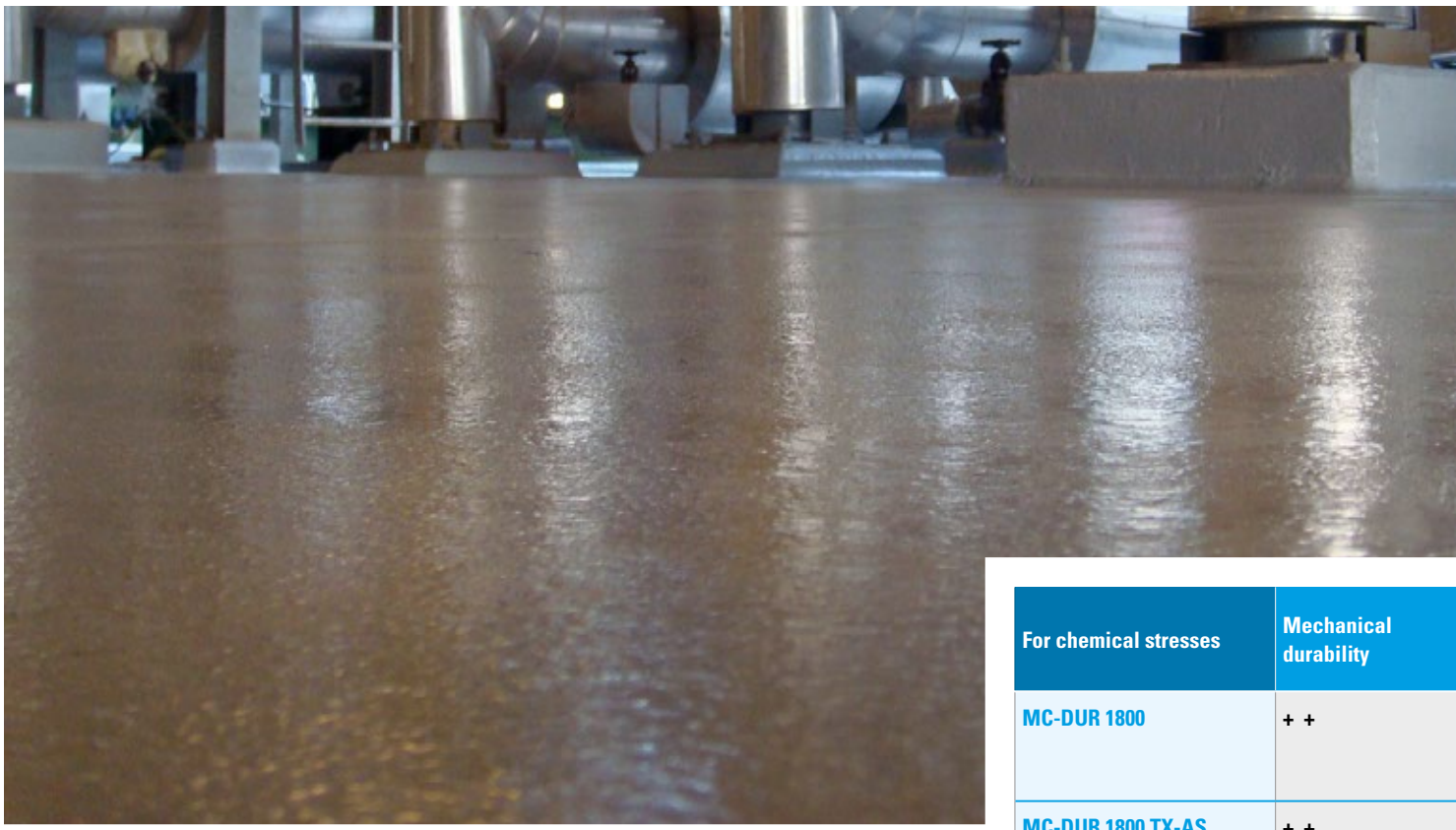
Layer	Product	Consumption
1 Primer	MC-DUR 1200 VK	approx. 300 g/m²
2 Scratch coat	MC-DUR 1200 VK quartz sand 0.1–0.3 mm	approx. 600 g/m² resin approx. 600 g/m²
3a Coating	MC-DUR 1200	approx. 2,000 g/m²
Optional anti-slip		
3b Bedding layer	MC-DUR 1200 quartz sand 0.1–0.3 mm	approx. 1,000 g/m² approx. 500 g/m²
4 Scattering	e. g. quartz sand 0.1–0.3 mm	approx. 5,000 g/m²
5 Sealing	MC-DUR 1200	approx. 600–700 g/m²

Mechanical durability	Chemical durability	UV-resistance	Binder base	Type of coating	Other characteristics
+ +	+ +	+	Epoxy resin	Self-levelling	Visually appealing, tested for indirect food contact
+ +	+ +	+	Epoxy resin	Self-levelling	AgBB approval, tested for indirect food contact
+ +	+ +	+	Epoxy resin	Self-levelling	Cleanroom certificate
+ +	+ +	+	Epoxy resin	Self-levelling	Benzyl alcohol free, AgBB approval
++	+	+ + +	Special polyurethane resin	Roller coating	AgBB approval, tested for indirect food contact

Chemical Stresses

The chemical industry includes a wide range of processes – storage and transport, reaction processes, cleaning and maintenance. These impose stringent requirements on floor coatings to ensure safety, cleanliness and functionality. Coating systems must withstand not only mechanical stresses, but also extreme conditions caused by chemicals.

Aggressive substances such as acids, alkalis, solvents, oils and fats can damage floors. Additionally, there are often requirements for conductivity to ensure the safe handling of sensitive substances. For outdoor use or cracked substrates, the floor must also possess crack-bridging properties.



Requirements

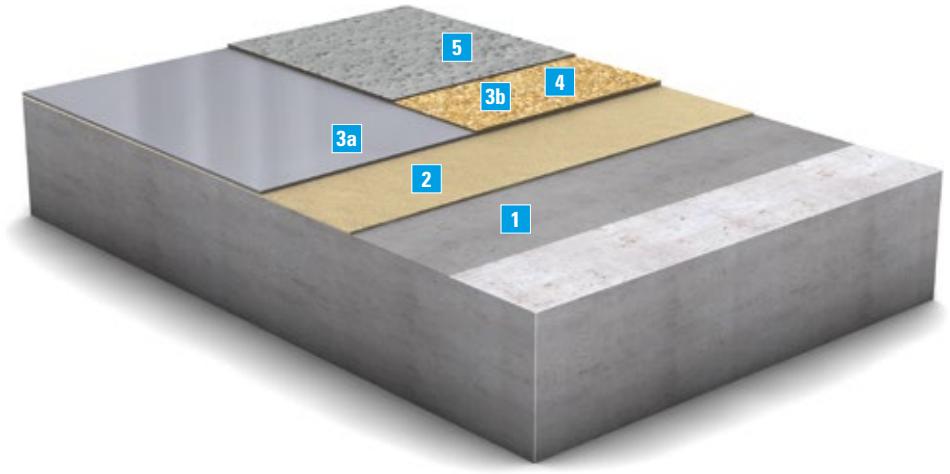
- High resistance to chemically aggressive substances, e. g. acids, alkalis, solvents, oils and greases
- Approval as water protection coatings in accordance with German standards (WHG = Water Resources Act)
- Protection against risk of explosion
- Multiple changes of use in warehouses, processing and handling of chemicals

Application Areas

- Fossil resources
- Petrochemical industry
- Pharmaceutical industry
- Pulp industry

For chemical stresses	Mechanical durability
MC-DUR 1800	+ +
MC-DUR 1800 TX-AS	+ +
MC-DUR 1900	+ +
MC-DUR 1900 plus	+ +
MC-FLEX 2099	+ +

Example: **MC-DUR 1900**



Layer	Product	Consumption
1 Primer	**MC-DUR 1200 VK**	approx. 300 g/m²
2 Scratch coat	**MC-DUR 1200 VK** quartz sand 0.1–0.3 mm	approx. 600 g/m² resin approx. 600 g/m²
3a Coating	**MC-DUR 1900**	approx. 2,000 g/m²
Optional anti-slip		
3b Bedding layer	**MC-DUR 1900** quartz sand 0.1–0.3 mm	approx. 1,000 g/m² approx. 500 g/m²
4 Scattering	e.g. quartz sand 0.3–0.8 mm	approx. 5,000 g/m²
5 Sealing	**MC-DUR 1900**	approx. 600–700 g/m²

Chemical durability	Conductivity	Crack-bridging	Binder base	Type of coating	Other characteristics
+ + +	**Yes***	+*	Epoxy resin	Self-levelling	Approval for warehouses, processing and handling of chemicals according to the German Water Resources Act (WHG)
+ + +	**Yes**		Epoxy resin	Roller coating	Nubbed structure
+ + +	**Yes***	+	Epoxy resin	Self-levelling	Approval for warehouses, processing and handling of chemicals according to the German Water Resources Act (WHG)
+ + +	**Yes***	+ +	Epoxy resin	Self-levelling	Approval for warehouses, processing and handling of chemicals according to the German Water Resources Act (WHG)
+ + +	-	+ + +	Polyurethane resin	Self-levelling	Highly crack-bridging & slip-resistant Approval for warehouses, processing and handling of chemicals according to the German Water Resources Act (WHG)

* Depending on the system build-up

Thermal Stresses

Industrial floor coatings designed to withstand thermal stress play a significant role in a variety of industries, including food, automotive, chemical and metal processing. Floors are often exposed to extreme thermal conditions or temperature fluctuations caused by hot machinery, materials, liquids or processes that generate high levels of heat. Depending on the application, these thermal stresses can be singular, cyclic, short-term, long-term or even permanent.

Floor coating systems often have to withstand not only prolonged thermal stress but also mechanical and chemical stress, as well as other requirements.

Requirements

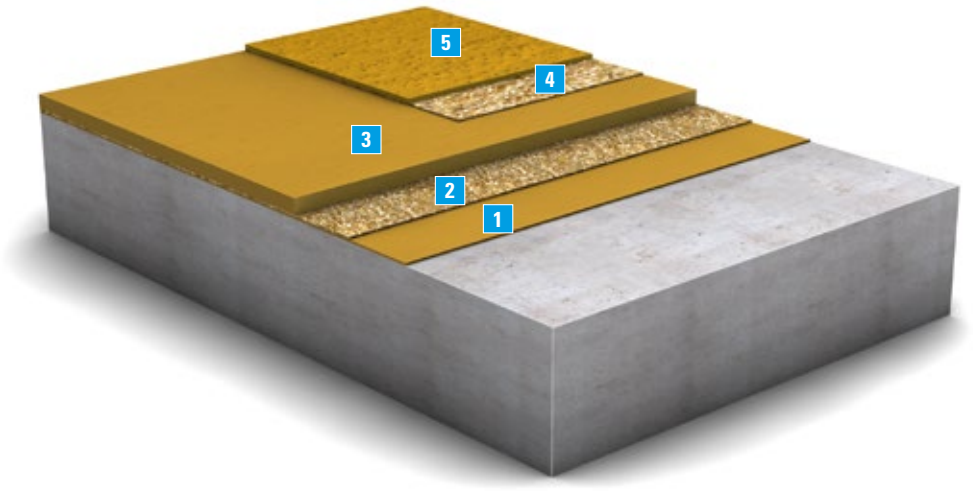
- High temperature resistance
- Durable protection of the substrate, even under combined stresses of high temperatures, organic substances and mechanical wear
- Prevention of slipping in heavy wet conditions
- Low maintenance
- Renovation of structures exposed to liquids

Application Areas

- Production
- Professional large kitchens
- Filling plants
- Washing and tank cleaning facilities

For thermal stresses
MC-DUR PowerCoat 240
MC-DUR PowerCoat 280
MC-DUR TopSpeed

Example: **MC-DUR PowerCoat 280**



Layer	Product	Consumption
1 Primer	**MC-DUR PowerCoat 200**	approx. 400 g/m²
2 Scattering	quartz sand 0.1 – 0.3 mm	approx. 1,000 – 2,000 g/m²
3 Coating	**MC-DUR PowerCoat 280**	approx. 2,100 g/m² per mm layer thickness
Optional anti-slip		
4 Scattering	e. g. quartz sand 0.5 – 1.2 mm	approx. 5,000 g/m²
5 Sealing	**MC-DUR PowerCoat 200**	approx. 600 – 800 g/m²

Mechanical durability	Chemical durability	Temperature resistance	Binder base	Type of coating	Other characteristics
+ + +	+ + +	+ +	PU/cement hybrid floor	Self-levelling	AgBB approval High impact resistance Resistant to high-pressure cleaning and suitable for light steam cleaning
+ + +	+ + +	+ + +	PU/cement hybrid floor	Squeegee coating	AgBB approval Very high impact resistance Resistant to high-pressure and steam jet cleaning
+ +	+	+ +	Special polyurethane resin	Roller coating	Fast, temperature and humidity-independent during installation AgBB approval

Coating and Lining for Chemical Plants and Containment Basins

The industrial use of facilities designed specifically for handling chemically contaminated liquids and sludges plays a major role in various industries. These facilities are engineered to safely store, contain and process hazardous substances.

The focus is particularly on internal coatings for silos and tanks that must be resistant to aggressive chemicals. Other applications include coatings for digesters and linings for process and effluent tanks. These technologies ensure the longevity of equipment and contribute significantly to the safe and environmentally friendly operation of industrial processes.

Requirements

- High temperature resistance
- Long-term protection of substrates, even under combined exposure to high temperatures, organic substances and mechanical wear
- Prevention of slipping in heavy wet conditions
- Low cleaning
- Rehabilitation of structures exposed to liquids

Application Areas

- Production
- Professional large kitchens
- Filling plants
- Washing and tank interior cleaning facilities

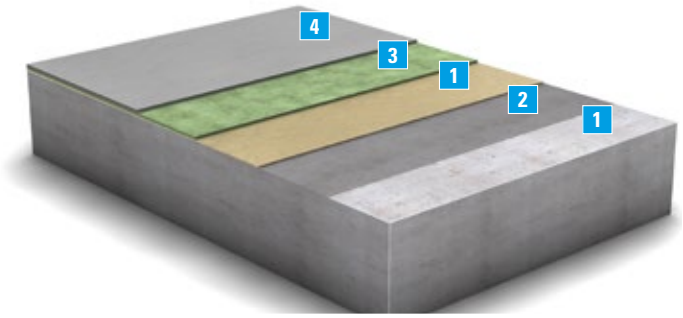
For chemical plants and containment basins

MC-FLEX 2097

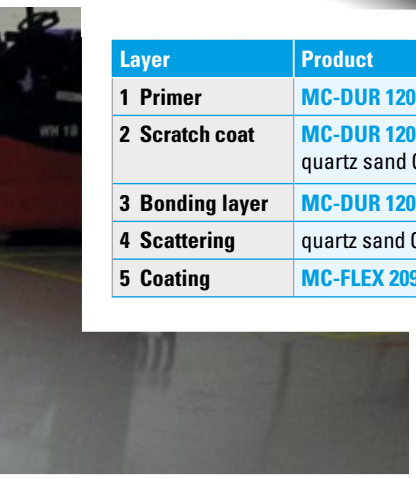
MC-FLEX 2098

MC-FLEX 2099

Example: **MC-FLEX 2099**



Layer	Product	Consumption
1 Primer	MC-DUR 1200 VK	approx. 150 – 300 g/m²
2 Scratch coat	MC-DUR 1200 VK quartz sand 0.1 – 0.3 mm	approx. 600 g/m² resin approx. 600 g/m²
3 Bonding layer	MC-DUR 1200 VK	approx. 100 g/m²
4 Scattering	quartz sand 0.3 – 0.8 mm	approx. 1,000 – 2,000 g/m²
5 Coating	MC-FLEX 2099	approx. 2,000 g/m²



MC-FLEX plus – The economical alternative instead of core refurbishment of severely damaged containment basins

Previously, severely damaged or contaminated substrates often required extensive preparation to achieve a condition suitable for coating. The MC-FLEX plus system with the geocomposite MC-FLEX Base offers an industry-proven alternative as a "basin-in-basin" lining. In many cases, extensive substrate rehabilitation is no longer required.

Mechanical durability	Chemical durability	Crack-bridging	Binder base	Type of coating	Other characteristics
+ +	+ + +	+ + +	Polyurethane resin	Sprayable coating	Highly crack-bridging Basin lining system Approval for warehouses, processing and handling of chemicals according to the German Water Resources Act (WHG)
+ +	+ + +	+ + +	Polyurethane resin	Trowel-applied coating	Very high impact resistance Resistant to high-pressure and steam cleaning Approval for warehouses, processing and handling of chemicals according to the German Water Resources Act (WHG)
+ +	+ + +	+ + +	Polyurethane resin	Self-levelling	Fast application, independent of temperature and humidity Approval for warehouses, processing and handling of chemicals according to the German Water Resources Act (WHG)

Safely Grounded and Reliably Protected
ESD and Conductivity

In industrial applications conductive floor coatings play an important role because electrostatic discharges can damage electronic components, cause production downtime and in extreme cases, trigger explosions. Conductive coatings are designed to safely dissipate static electricity, preventing electrostatic discharges. Typical areas of application include production facilities or storage areas for sensitive electronic components, laboratories, clean rooms and processing areas for explosive materials, e. g. in the chemical industry.

Requirements

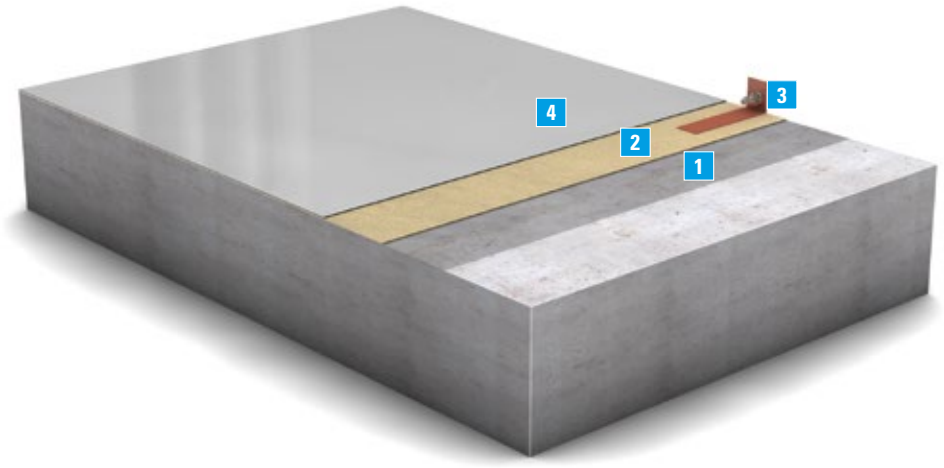
- Prevention of static buildup
- "Electrostatic Protected Areas" (EPA) to protect sensitive electronic components
- Reduction in cleaning effort
- Protection of the floor against chemical and mechanical impact

Application Areas

- Clean rooms
- Production areas for sensitive electronics
- Storage areas for explosive materials
- Hospital facilities
- Heliports
- Certain areas in multi-storey car parks, e. g. charging stations for e-cars

For conductive flooring systems
MC-DUR 1800
MC-DUR 1800 TX-AS
MC-DUR 1900
MC-DUR 1900 plus
MC-DUR 2095 ESD
MC-DUR TopSpeed ESD

Example: **MC-DUR 2095 ESD**



Layer	Product	Consumption
1 Primer	**MC-DUR 1200 VK**	approx. 150 – 300 g/m²
2 Scratch coat	**MC-DUR 1200 VK** quartz sand 0.1 – 0.3 mm	approx. 600 g/m² resin approx. 600 g/m²
3 Earthing connection	**MC-Earthing Kit**	as needed
4 Sealing	**MC-DUR 2095 ESD** (two layers)	approx. 150 – 200 g/m² per work step

Mechanical durability	Chemical durability	Conductivity	UV-resistance	Binder base	Type of coating	Other characteristics
+ +	+ + +	**Yes**	+	Epoxy resin	Self-levelling	Approval for warehouses, processing and handling of chemicals according to the German Water Resources Act (WHG)
+ +	+ + +	**Yes**	+	Epoxy resin	Roller coating	Nubbed structure
+ +	+ + +	**Yes**	+	Epoxy resin	Self-levelling	Approval for warehouses, processing and handling of chemicals according to the German Water Resources Act (WHG)
+ +	+ + +	**Yes**	+	Epoxy resin	Self-levelling	Approval for warehouses, processing and handling of chemicals according to the German Water Resources Act (WHG)
+	+	**ESD**	+ +	Aqueous polyurethane resin	Sealing	Volume conductive
+ +	+	**ESD**	+ + +	Special polyurethane resin	Roller coating	Fast, independent of temperature and humidity during installation

Soft but Durable
Foot-Friendly Coating Systems

In many industrial sectors, the use of foot-friendly floor coatings is of paramount importance. They offer excellent shock absorption, providing ergonomic benefits for people who stand or walk on these floors for long periods of time. This significantly reduces fatigue and stress on the joints. Overall, they not only provide protection against physical and chemical hazards but also contribute to the safety and efficiency of the working environment.

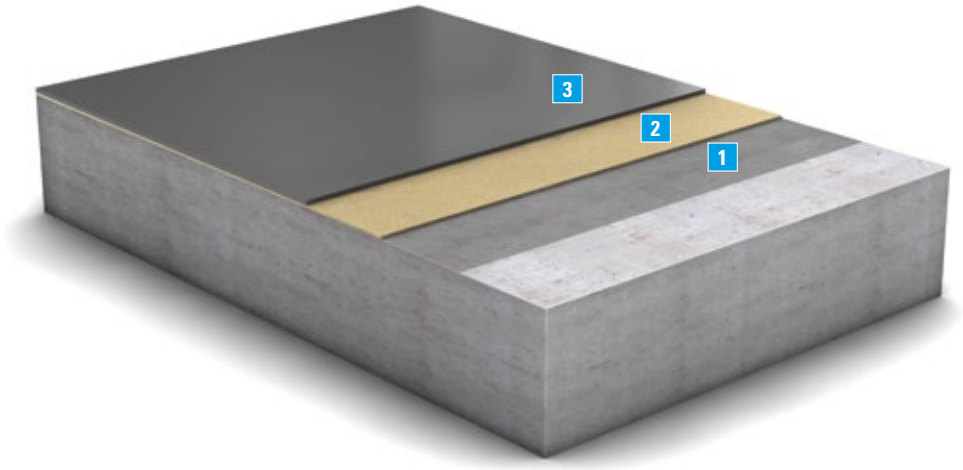
Requirements

- Tough elastic
- Flexible
- Chemical and mechanical resistance
- Easy to clean

Application Areas

- Production
- Common rooms
- Hallways
- Office spaces

Example: **MC-DUR 2052 AM**

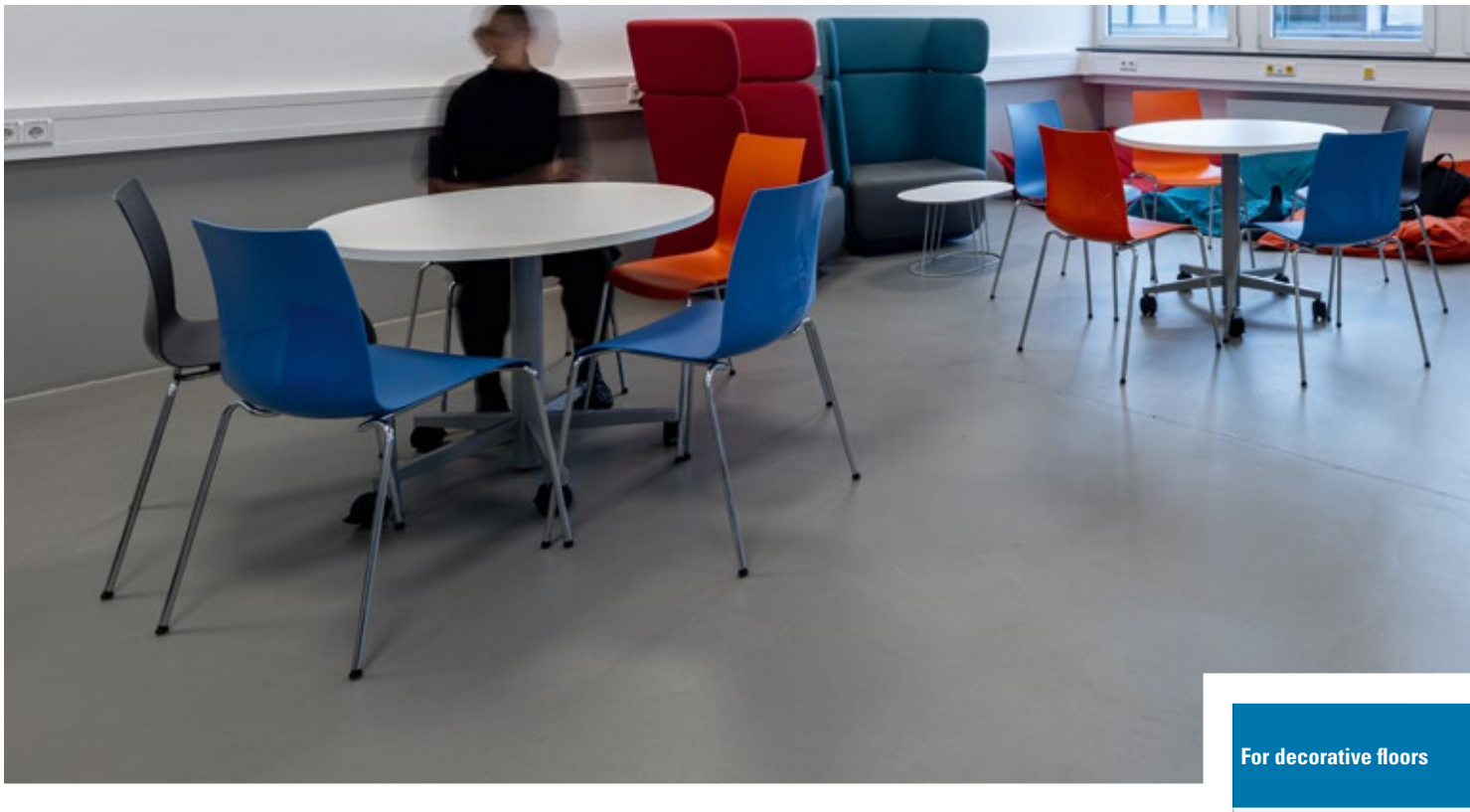


Layer	Product	Consumption
1 Primer	MC-DUR 1200 VK	approx. 150 – 300 g/m²
2 Scratch coat	MC-DUR 1200 VK quartz sand 0.1 – 0.3 mm	approx. 600 g/m² resin approx. 600 g/m²
3 Coating	MC-DUR 2052 AM	approx. 2,000 g/m²

For foot-friendly flooring systems	Mechanical durability	Chemical durability	Crack-bridging	Binder base	Type of coating	Other characteristics
MC-DUR 2052 AM	+ +	+ +	**Yes**	Polyurethane resin	Self-levelling	Slip-resistant polyurethane resin coating for asphalt-bound substrates
MC-FLEX 2099	+ +	+ + +	**Yes**	Polyurethane resin	Self-levelling	Highly crack-bridging and foot-friendly Approval for warehouses, processing and handling of chemicals according to the German Water Resources Act (WHG)
MC-DUR 2210	+ +	+ +	**Yes**	Polyurethane resin	Self-levelling	With oven-dried aggregates, fillable and broadcastable

Functional and Aesthetic
Decorative Coating Systems

In the retail, commercial and service sectors, customer focus is the main priority. High-quality products are provided by modern plant technology. Attractive floor coatings that meet both aesthetic and functional requirements play a key role. Common coatings include coloured sealants, decorative chip floors and coloured sand floors, which are highly versatile and decorative.



Requirements

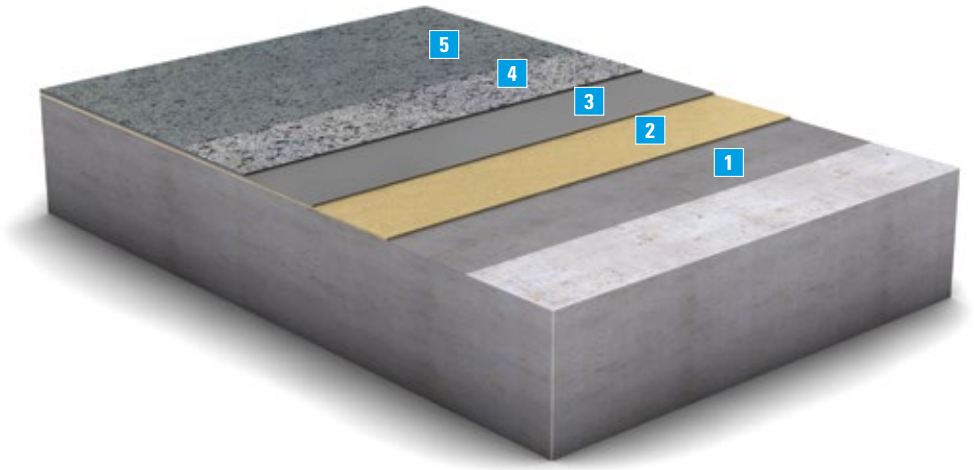
- Representative, sales-promoting floor design
- Part of an overall design concept
- Physiological safety of the materials used
- Reduction in cleaning effort
- Use of materials that meet fire safety standards
- Prevention of slips in high-traffic areas

Application Areas

- Reception desks
- Professional large kitchens
- Shops
- Common rooms
- Hallways
- Staircases
- Storages
- Office spaces
- Laboratories
- Supermarkets

For decorative floors
MC-DUR 111 eco
MC-Durofloor
MC-Duroflake
MC-DUR 2095 F
MC-DUR TopSpeed

Example: **MC-DUR TopSpeed T/M**



Layer	Product	Consumption
1 Primer	**MC-DUR TopSpeed SC**	approx. 300 g/m²
2 Scratch coat	**MC-DUR TopSpeed SC** quartz sand 0.1–0.3 mm	approx. 600 g/m² resin approx. 600 g/m²
3 Roller coat	**MC-DUR TopSpeed**	approx. 300–400 g/m²
4 Scattering fully with deco chips	**MC-Dekorchips** as needed	approx. 1,000 g/m²
5 Transparent top sealer glossy or matt	**MC-DUR TopSpeed T/M**	approx. 400 g/m²

Mechanical durability	Chemical durability	UV-resistance	Binder base	Type of coating	Other characteristics
+	+		Aqueous epoxy resin	Sealing	Vapour permeable or diffusion open EMICODE EC1^{PLUS} (This is a certification for low-emission products, particularly in the construction and flooring industries.)
+ +	+	+ + / + + +*	Epoxy resin or special polyurethane	Self-levelling	Coloured quartz coating Low yellowing
+	+	+ + / + + +*	Epoxy resin or special polyurethane	Self-levelling	Decorative chip coating Good cleanability Low yellowing
+ +	+	+ +	Aqueous polyurethane resin	Sealing	Vapour permeable Silk matte finish
+ +	+	+ + +	Special polyurethane	Roller coating	Fast, independent of temperature and humidity during installation

* Depending on the system build-up

When Time is Essential
MC-DUR TopSpeed

The installation of industrial floor coatings during ongoing operations is always associated with disruptions. Production downtimes and delivery delays can be the result. With the high performance coating MC-DUR TopSpeed, industrial floors and outdoor areas can be installed within a few hours and can be fully loaded again after just a few hours. It reliably enables what was often difficult or impossible to achieve: safe and fast application, even under critical environmental conditions such as low temperatures (processable from 2 °C), high humidity and moisture in the substrate.

Easy to Plan and Fast to Install –
Avoid Production Downtime and Delivery Delays

"TopSpeed" not only stands for high resistance but also for accelerated curing: all system components utilize the influence of moisture from the environment and convert it into an additional, accelerated curing reaction. This modified combination reaction achieves excellent adhesion to all common concrete and screed substrates. It ensures top performance in abrasion resistance, scratch resistance and UV-resistance.

Economical and Sustainable Renovation

Whether in workshops, warehouses, production areas or car parks – refreshing or renovating worn-out epoxy and polyurethane resin floors with a durable coating is often time-consuming and associated with long shutdown periods, operational interruptions or even delivery failures. MC-DUR TopSpeed offers the perfect solution: With its rapid roller application, a highly wear-resistant floor coating can be applied in the shortest time without the need to remove the worn-out old coating.

Time-saving coatings for every application area	Application	UV-resistance	Colour	Other characteristics
MC-DUR TopSpeed SC	Primer Scratch coat Reaction resin mortar	+	Transparent	Fillable with mineral aggregates
MC-DUR TopSpeed flex plus	Flexible intermediate layer Sealing	+ +	MC-grey	Highly crack-bridging
MC-DUR TopSpeed	Roller coating Broadcast layer Top sealing	+ + +	RAL colour shades	Rigid, highly scratch- and wear-resistant
MC-DUR TopSpeed flex	Roller coating Top sealing	+ + +	RAL colour shades	Crack-bridging
MC-DUR TopSpeed ESD	Roller coating Broadcast layer Top sealing	+ + +	RAL colour shades	Rigid, highly scratch- and wear-resistant, conductive
MC-DUR TopSpeed M	Top sealing	+ + +	Transparent matt	Decorative system constructions
MC-DUR TopSpeed T	Top sealing	+ + +	Transparent glossy	Decorative system constructions

Fast and Easy Application

- Short overcoating times
- Applicable from 2 °C to 35 °C
- Moisture-resistant during installation
- Rainproof after 30 minutes
- Versatile surface design options

Kinetic Boost Technology®

Economical Meets Sustainable

- Minimal operational disruption
  - Walkable after 2 hours
  - No need to remove the old coating
- Highly abrasion resistant and durable surface with low thickness and minimal material consumption
- Dirt-repellent and easy to clean

MC-DUR TopSpeed

08:00	10:00	12:00	14:00
Grinding & cleaning	Primer	1st Layer	2nd Layer

DAY 1

Complete coating system

1 Day

Conventional coating system

DAY 1	DAY 2	DAY 3	DAY 4
Remove old coating & substrate preparation	Primer	Scratch coat	Self-levelling coating

Complete coating system

4 Days

The Fast Substrate
Self-Levelling Compounds and Fast-Setting Screeds

Fast-setting screeds are indispensable in the industry when it comes to fast and efficient solutions for floor renovation or installation. These special screeds are characterised by their exceptionally fast curing and load-bearing capacity, making them ideal for industrial applications where short downtime and high mechanical loads play a central role. Whether in production halls, storage areas or workshops, fast-curing screeds enable the quick resumption of operations while providing a durable and robust flooring solution that meets the demanding requirements of the industry.

Mineral-based Self-levelling Coating
MC-Floor Easyplan ultra

- Walkable after 3 hours
- Shrinkage- and stress-reduced curing
- High surface quality CT-C50-F7
- Ready for covering and coating after 24 hours
- High adhesion strength > 2 N/mm²
- Very low emissions according to GEV-EMICODE, Class EC1^{PLUS}

Flowable Cementitious Screed
MC-Floor Screed 10

- Walkable after 3 hours and driveable after 24 hours
- Layer thickness 10 – 50 mm
- Cures with almost no shrinkage and stress
- Can be overlaid after 24 hours
- Screed according to EN 13813 CT-C50-F10-A12

Fast-setting Cement for Earth-moist Screeds
MC-Floor TurboCem

- Long working time
- Fast and nearly deformation-free curing
- Shrinkage class SW1 – low shrinkage (< 0,2 mm/m) according to DIN 18560-1
- Quick walkability
- Quick readiness for covering & coating

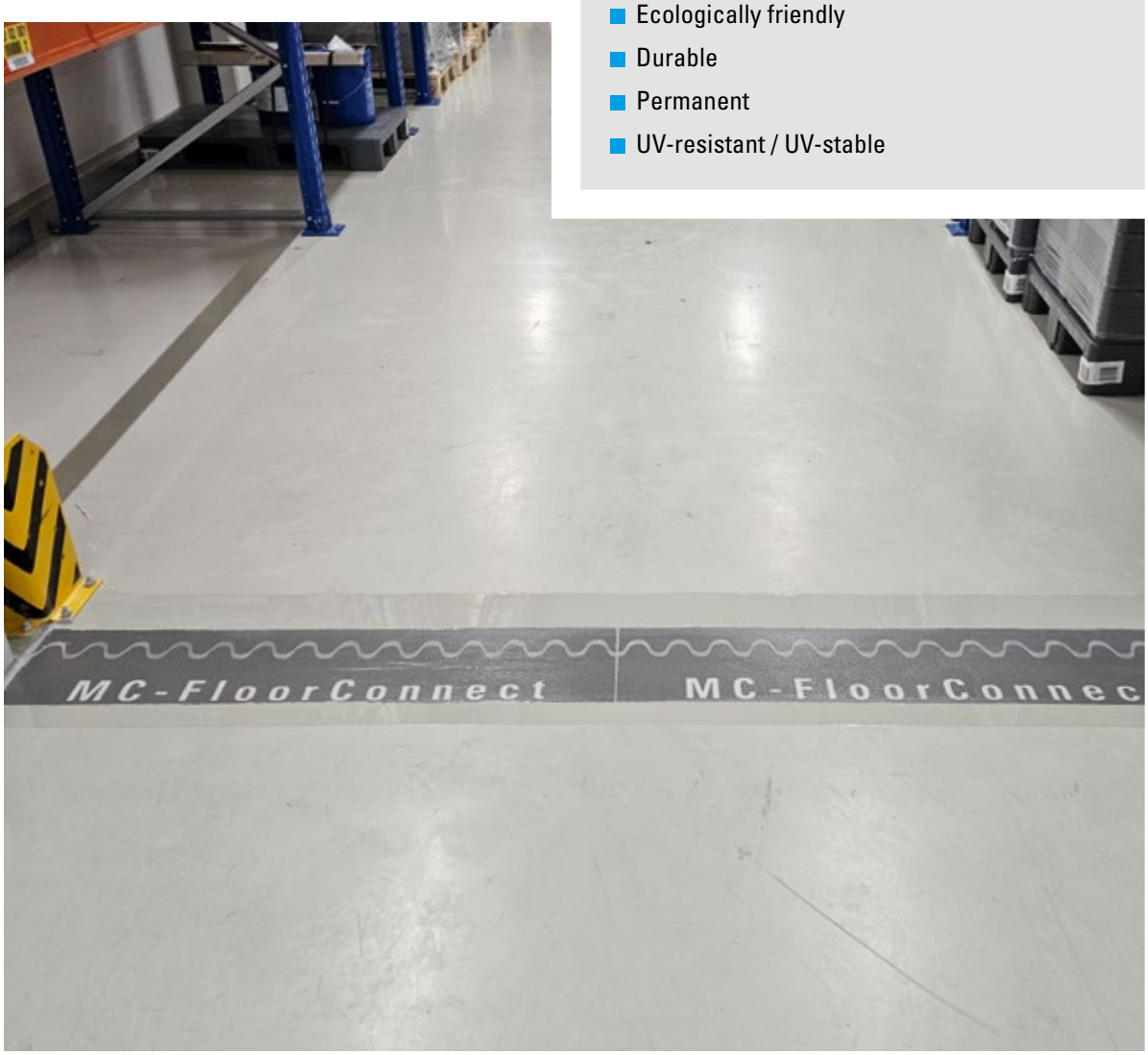
Sealing Products and Systems
Joint Solutions

Joint sealants are essential in many construction projects. They are used to seal the joints between building parts to prevent the ingress of moisture, dirt and air. The selection of the right joint sealant is crucial, as different sealants have different properties. An important selection factor is the maximum allowable total deformation, which indicates how much the sealant can move (expansion or compression) without cracking or losing its function.

In industrial applications, especially in the chemical industry, petrochemicals and food processing, joint sealants are often exposed to chemically aggressive substances. Therefore, joint sealants must also be resistant to various chemicals to maintain their function and protect the underlying structures.

Requirements

- High maximum allowable total deformation
- Chemically resistant
- Ecologically friendly
- Durable
- Permanent
- UV-resistant / UV-stable



Product
Mycoflex 488 MS
MC-FLEX PU 22 Construct
Mycoflex 450 SP / VE
Mycoflex 4000 SP / VE
Mycoflex Resyst
MC-Floor Connect INS

Max. total deformation / joint movement	Chemical durability	Type of sealant	Type of joint system	Other characteristics	Application areas
25 %	+	Single-component MS Polymer	Thixotropic	GEV-EMICODE, Class EC1PLUS Solvent-free Very good weather and aging resistance	Building construction Precast concrete construction Metal construction Balconies Car parks
25 %	+ +	Single-component Polyurethane	Thixotropic	Cures with humidity Paintable Resistant to weathering and water	Building construction Wastewater treatment plants
20 %	+ +	Polyurethane	Thixotropic / self-levelling	Good chemical resistance	Wastewater treatment plants Sewer systems Non-potable water containers Oil catch basins
15 %	+ + +	Polysulfide	Thixotropic / self-levelling	High chemical resistance	For warehouses, processing and handling facilities (refers to substances hazardous to water) Industries
Depending on the profile	+ + + +	Closed-cell polymer foam	Joint formed parts	Sealing of joints for warehouses, processing and handling of chemicals according to the German Water Resources Act (WHG)	For warehouses, processing and handling facilities (refers to substances hazardous to water)
30 mm	+ +	Carbon fibre reinforced joint profile	Joint profile elements	Short installation times and easy repair Bearing up to forklift class FL6 – axle load 170 kN (DIN 1991-1-1)	Storage halls High-bay warehouses Industrial construction Production facilities Production facilities Supermarkets, etc.

Concrete Repair
Nafufill KM 250

Polymer-modified cement-based RM (formerly PCC) and SRM (formerly SPCC) concrete replacement systems have been used for the repair of prestressed and reinforced concrete structures for over 30 years. The tasks of such concrete replacement systems include not only the corrosion protection of the reinforcement, but also the restoration of the static function as well as the constructive fire protection of the concrete load-bearing structure.

Nafufill KM 250's scope of performance and proof of performance not only meets these requirements but exceeds them. With this unique concrete replacement, you achieve a permanent repair of your concrete surfaces, full restoration of the load bearing capacity and comprehensive structural fire protection of the damaged reinforced concrete structure.

Numerous test certificates, international approvals and certifications confirm the high technical performance of Nafufill KM 250.

Whether for civil engineering, hydraulic engineering, industrial construction or residential buildings: Nafufill KM 250 offers you lasting security in the planning and execution of your maintenance measures.

Application Areas for Concrete Replacement Systems

Corrosion Protection of the reinforcement	**Bonding** of the reinforcement	**Fire Protection** of the reinforcement	**Nafufill KM 250**
●			✓
●	●		✓
●	●	●	✓
●		●	✓
Cathodic Corrosion Protection			✓
Rehabilitation according to the German Water Resources Act			✓

Surface Protection
MC-Color T 21

Surface protection systems have to meet the highest requirements in terms of brightness, gloss and light reflection. There are also high demands for low dirt susceptibility and easy cleaning. Until now, these performance characteristics could only be achieved with two-component systems based on reactive resins.

MC-Color T 21 with 3D Technology

MC-Color T 21 achieves the performance of a two-component reactive resin through the innovative highly cross-linked 3D binder technology. In addition, the surface protection system offers all the advantages of a 1K product for environmentally friendly processing.

Innovative Binder Technology

The interaction of the binder components during the curing process produces a very hard, dirt-repellent and abrasion resistant surface that is easy to clean. It also provides a particularly high gloss and optimum light reflection.

More Safety and Environmental Protection with 1K Technology

- Easy and fast application
- Time and cost savings
- Can be reworked at any time without roughening the surface
- No mixing errors

Seal and Permanent Repair by Bonding

MC-Injekt 1264 compact

MC-Injekt 1264 compact offers you innovative advantages for crack filling. By reducing its specific surface tension, penetration capability is increased, and depth effectiveness is improved. Its excellent moisture tolerance significantly expands the application range of this duromer resin.

Better Depth Penetration through Lower Surface Tension
Special additives that reduce surface tension make MC-Injekt 1264 compact many times more fluid than standard resins with the same viscosity. This advantage is clearly evident in the spread test: the resin covers nearly 100 % more surface area compared to a reference product with equivalent viscosity but without reduced surface tension.

Comparison of Surface Tension (at 20 °C)

MC-Injekt 1264 compact	24,04 mN/m
Reference product (same viscosity)	38,97 mN/m

Reinforcement of Tension- and Compression-Loaded Concrete and Reinforced Concrete Components
By creating a strong adhesive bond between the crack flanks with MC-Injekt 1264 compact, the weakest sections of the concrete are reinforced. As a result, the structural element achieves higher load-bearing capacity.

Successful Injection
MC-Injekt 1264 compact is ideal for injection using 1K injection pumps, such as the MCI 520. Its excellent properties also make crack impregnation a simple and effective alternative method for achieving optimal crack filling. Additionally, the resin can be conveniently injected using the MC-Fastpack PowerTool in a 2K process.

Advantages

- **High Penetration Activity**
  By reducing the specific surface tension, optimal filling levels in cracks are possible.
- **Moisture Tolerance**
  MC-Injekt 1264 compact can be injected into moist cracks.
- **Fast Curing**
  MC-Injekt 1264 compact cures securely even under dynamic load conditions.
- **High Tensile and Compressive Strength**
  The high tensile and compressive strengths ensure the best possible bonding of the crack faces and optimal force transmission.
- **Standardised Performance Features**
  The performance characteristics of the resin comply with EN 1504-5 and national standards for the injection of concrete

Injection System for Subsoil Stabilisation and Lifting of Components and Buildings

MC-Montan Injekt LE

Sufficient bearing capacity of the subsoil is the basis for safe construction. With MC-Montan Injekt LE, you can compact inadequate subsoils and increase their stability. In addition, settlement of components and buildings can be controlled and permanently corrected.

Easy to Use

MC-Montan Injekt LE is injected deep into the substrate using lance systems and spreads under pump pressure until the gel time is reached. Due to the extremely short reaction time of 10 to 15 seconds, the resin quickly forms an expanding foam body.

Consolidation

During injection, MC-Montan Injekt LE penetrates cracks and cavities in the subgrade and expands there. The expansion of the resin and the resulting pressure causes the surrounding soil to be compacted.

Controlled Lifting

When the injection pressure exceeds the passive earth pressure, the desired lifting occurs. The process is stopped automatically when the injection is complete. The lifting process can be monitored and controlled using laser measurement technology.

Advantages

- Minimal invasive due to small space requirements
- No excavation necessary
- Compact pump technology
- Short construction times
- Environmentally friendly & groundwater neutral
- User-friendly with 2K injection technology
- Long-lasting, without degradation in the soil

Application Areas

- Building foundations in residential and industrial construction
- Stabilisation of dynamically stressed traffic routes
- General soil improvement

Permanent Protection of Separator Systems and Storage Tanks from Aggressive Wastewater

ombran FT

Industrial wastewaters with high concentrations of aggressive chemicals, as well as greasy commercial wastewaters, can cause massive damage to separator systems and storage tanks in the sewer system within a very short time due to their long residence times.

ombran FT hybrid silicate coating is impermeable to pollutants due to its extremely dense binder matrix. It offers permanent, superior chemical resistance that far exceeds that of typical mineral building materials. As a result, it is also resistant to extreme, often low pH values, such as those caused by fatty acids and biogenic sulphuric acid corrosion (BAC).

Mechanically and thermally highly resistant, ombran FT is permeable to natural water vapour transport through the coated structure due to its ability to diffuse water vapour, effectively counteracting osmotic blistering in areas exposed to ground and water. In addition, the electrostatic conductivity of ombran FT increases the operational safety of oil-water separators. ombran FT can be easily, flexibly and quickly applied by hand or mechanically by wet spraying or centrifugal methods (with the MRT method from HDT GmbH, Germany).

Properties

- Highest chemical resistance, even permanently at pH values < 3,5 and BAC
- Resistant to fatty acids, heating oils, automotive and aviation fuels, AdBlue, engine and transmission oils
- Highly osmotic-resistant
- Highly impact and scratch resistant
- Electrostatic conductivity
- Tested according to DIN EN 858-1 and 1825-1
- DIBt approval Z-59.12-279 for concrete containment basins in facilities

Application Areas

- Oil and grease separators
- Covered structures with BAC attack (storage tanks, pump stations, as well as shafts)
- Neutralisation and storage tanks with aggressive wastewater
- Wastewater structures requiring electrostatic conductivity of the coating
- Concrete containment basins in facilities with special requirements

Sealing and Stabilisation of Non-Walkable Sewage Pipes with CIPP Liner

Konudur 102

When a sewer pipe is damaged at various points and cannot be walked on, a complete rehabilitation using a cured-in-place pipe (CIPP) liner is recommended. A resin-saturated carrier pipe is inserted into the existing defective pipe, where it fits tightly against the walls of the old pipe without leaving any gaps. Once cured, the liner provides both sealing and structural support. Various types of damage, such as pipe breaks, leaking joints, cracks and root intrusion into the pipe cross section, can be safely and permanently repaired using this flexible rehabilitation method.

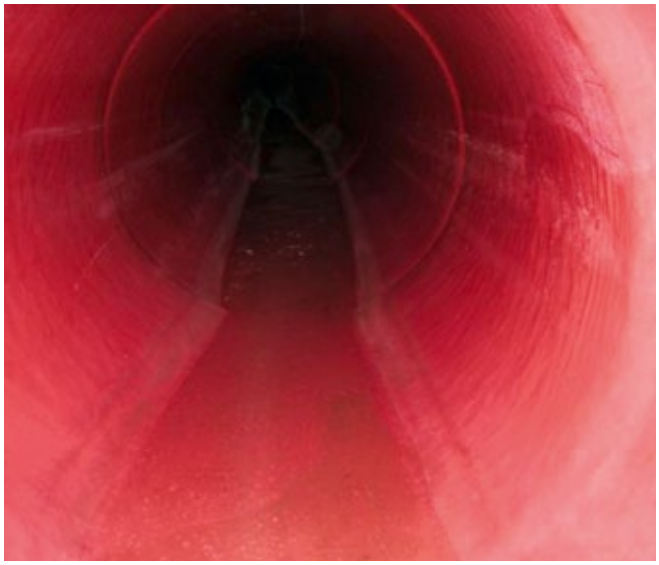
The chemically and thermally highly resistant, red coloured epoxy resin Konudur 102 in combination with the polyester needle felt liner Konudur HL 11 as a carrier material offers a perfectly tailored renovation process for the repair of industrial pipelines. The thermosetting, styrene-free resin is cured by the application of heat, which, in addition to a short curing time, allows for very long application times, thus facilitating the rehabilitation work.

Properties

- Chemically and thermally highly resistant resins
- Styrene-free epoxy resins
- Pigmented resins for monitoring saturation
- Flexibility in carrier materials for pipe bends
- No annular gap due to form-fit with the old pipe
- Site-appropriate with variable processing and curing times
- Groundwater hygienically compatible (proven)
- Approved for construction use as Konudur Homeliner with resin Konudur 160 PL-XL

Application Areas

- Non-walkable sewage pipes
- Industrial sewage pipes (Konudur 102)
- Property drainage pipes (Konudur Homeliner)
- Downpipes (Konudur Homeliner)



Floor Coatings
Industrial Flooring Systems
For Every Requirement

- Floor Coating Systems
- Levelling Compounds and Quick Floor Screeds
- Joint Solutions
- Concrete Repair
- Surface Protection
- Injection Solutions
- Wastewater Technology

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