

# FLOOR EXPER

**ADVANCED EPOXY SYSTEMS**

MAKE YOUR FLOOR A UNIQUE ARTWORK!





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## FLOOR EXPERT EP

**Combines design and function**

Floor Expert design coatings are used when high demands are placed on the optical and decorative quality of the floor surface. Being poured smoothly and seamlessly, they give each room a unique, individual touch.

Due to the different application techniques (modeling techniques), plastics granulate interspersions (chips) and the color design in RAL colors, diverse, artistically unique, decorative floors are made. There are no limits to creativity.

Floor Expert epoxy floors are used in private and commercial interior areas. Based on resin, laid seamlessly and particularly low-maintenance, they are perfect for private applications, especially because of their modern design and the comfortable walking experience, in the commercial sector because of their supreme durability and economic efficiency, which has already been proven on millions of square meters.

Discover the versatility of Floor Expert EP!





OUR SMART EPOXY FLOOR SYSTEMS ARE SPECIALIZED FOR THE PROTECTION AND DECORATION OF INDOOR CONCRETE FLOORS.

### **Fields of application:**

- › Industrial plants
- › Warehouses
- › Workshops
- › Garages
- › Showrooms
- › Shops
- › Hospitals
- › Laboratories
- › Private facilities

### **Why epoxy floor coating?**

- › fills pores and capillaries in concrete
- › withstands strong mechanical stress
- › easy to clean and repair
- › high hygiene protection: coated surfaces are compact, without joints and gaps
- › excellent mechanical and chemical resistance
- › water and moisture proof
- › a wealth of design possibilities

### **Colors and decorative techniques**

FLOOR EXPERT EP coatings are produced in all RAL shades, as well as in other stable shades at individual wishes. Coloured chips – the popular so called “terrazzo” look, or colored quartz allow an individual architecture and modern design appearance. Make your floor a unique artwork!



# FLOOR EXPERT EP

## Easy preparation

The uneven and weakly bound surface layers must be removed from the concrete surface. The surface must be clean and free of grease, rubber marks and other stains. Our experts recommend using mechanical processing: grinding with diamond burs or shot blasting. Dust and loose particles must be removed by using a vacuum cleaner or a brush. After such treatment, pores and capillaries in the substrate must be clearly visible. Then the cracks, pores and uneven sections have to be filled with epoxy mortar.

## Requirements for concrete substrate

Bond strength:  $> 1.5 \text{ N} / \text{mm}^2$

Compressive strength: min.  $25 \text{ N} / \text{mm}^2$

Humidity in concrete:  $< 4\%$  in the upper 4 cm

Temperature of the concrete:  $> 3^\circ \text{C}$  above dew point

## Application conditions

Air temperature, and substrate temperature: min.  $+10^\circ \text{C}$ ; max.  $+30^\circ \text{C}$

Relative humidity: max. 75%, with adequate ventilation

There must be no condensation (pay attention to the dew point!)





# FLOOR EXPERT EP 101

Two-component primer based on epoxy resin, solvent-free

**Purpose:**

- › Priming of concrete floors and cement glaze of moderate to strong absorbency
- › Binder for levelling mortars and mortar screeds

**Properties:**


- › Penetrates deeply into the surface
- › Blocks the moisture in the substrate up to 4%
- › High bond strength to the substrate
- › Easy application

**Consumption:**

Primer: 0.30-0.50 kg / m<sup>2</sup>  
Mortar screed thickness up to 1 mm (Floor Expert EP 1013 : Quartz sand - 1 : 0.5) : 1.2-1.4 kg / m<sup>2</sup> / 1 mm layer  
Mortar screed thickness of 2 mm (Floor Expert EP 101 : Quartz sand - 1 : 1) : 1.6 kg / m<sup>2</sup> / 1 mm layer  
Mortar screed/ Repair mortar, 15-20 mm layer thickness (Floor Expert EP 101 : Quartz sand - 1 : 10) : 2.4 kg / m<sup>2</sup> / 1 mm layer

**Packaging:**

 Component A  
16.7 kg  
Component B  
8.3 kg  
Coverage  
62.5 m<sup>2</sup> per coat

 Component A  
6.7 kg  
Component B  
3.3 kg  
Coverage  
25 m<sup>2</sup> per coat



# FLOOR EXPERT EP 1013

Two-component economical primer based on epoxy resin, solvent-free

**Purpose:**

- › Priming of concrete floors and cement glaze of moderate to strong absorbency
- › Binder for levelling mortars and mortar screeds

**Properties:**

- › Penetrates deeply into the surface
- › Blocks the moisture in the substrate up to 4%
- › High bond strength to the substrate
- › Easy application

**Consumption:**

Primer: 0.30-0.50 kg / m<sup>2</sup>  
Mortar screed thickness up to 1 mm (Floor Expert EP 1013 : Quartz sand - 1 : 0.5) : 1.7 kg / m<sup>2</sup> / 1 mm layer  
Mortar screed thickness of 2 mm (Floor Expert EP 101 : Quartz sand - 1 : 1) : 1.9 kg / m<sup>2</sup> / 1 mm layer  
Mortar screed/ Repair mortar, 15-20 mm layer thickness (Floor Expert EP 101 : Quartz sand - 1 : 8) : 2.2 kg / m<sup>2</sup> / 1 mm layer



Component A  
15.4 kg  
Component B  
4.6 kg  
Coverage  
50 m<sup>2</sup> per coat





# FLOOR EXPERT EP 310W

Two-component water-dilutable topcoat based on epoxy resin

**Purpose:**

Seal coat for protection and decoration of concrete floor surfaces exposed to moderate or medium heavy mechanical and chemical wear (warehouses, production facilities, garages, laboratories etc.).  
Protection of wall surfaces that are exposed to moisture, chemicals, and stronger mechanical loads.  
It can be used for protection and decoration of walls and floors covered with ceramic tiles.

**Properties:**


- › Can be diluted with water
- › Dry film is resistant to abrasions, water and chemicals
- › Excellent adhesion to the substrate
- › Easy cleaning and maintenance
- › Has a short curing time
- › An impenetrable barrier for CO<sub>2</sub>

**Consumption:**

Per coat 0.2-0.3 kg/m<sup>2</sup>

**Packaging:**

 Component A  
13.8 kg  
Component B  
4.2 kg  
Coverage  
72 m<sup>2</sup> per coat

 Component A  
4.6 kg  
Component B  
1.4 kg  
Coverage  
24 m<sup>2</sup> per coat



**Mixing ratio**

(by weight):

Component A : Component B  
76.9 : 23.1

# FLOOR EXPERT EP 311

Two-component topcoat based on epoxy resin, solvent-free

**Purpose:**

Thin-layer topcoat that is applied by roller or trowel for protection and decoration of concrete floor surfaces exposed to moderate or medium heavy mechanical and chemical wear (warehouses, workshops, production facilities, garages, laboratories, exhibition and sales rooms, etc.);  
The final seal coat in anti-slip systems: garages, manufacturing facilities with so-called "wet processes".

**Properties:**

- › Dry film is resistant to abrasions, water and chemicals
  - › Excellent adhesion to the substrate
  - › Has a short curing time
- › It can be applied in thicker layers and filled with sand

**Consumption:**

Roller coat: 0.2-0.3 kg / m<sup>2</sup> per coat  
Smooth layer, 1 mm thickness , trowel application: 1.0 to 1.2 kg / m<sup>2</sup>

**Packaging:**

 Component A  
20.2 kg  
Component B  
4.8 kg  
Coverage  
The roller application: 85 m<sup>2</sup> per coat;  
Application by trowel (1 mm): 20 m<sup>2</sup>.



**Mixing ratio**

(by weight):

Component A : Component B  
80.6 : 19.4

# FLOOR EXPERT EP 211

Two-component self-leveling floor based on epoxy resins

**Purpose:**

Self-leveling floor for protection and decoration of concrete floor surfaces and cement screeds exposed from medium to heavy mechanical and chemical wear (warehouses, workshops, production facilities, garages, laboratories, loading ramps, etc.);

It is possible to achieve an anti-slip floor surface in garages and production facilities with the so-called “wet processes”.


**Properties:**

- › Exceptional abrasion resistance and resistance to water and chemicals
- › Can be filled with quartz sand (economical protection in thick layers)
- › Functional layer in the systems with anti-slip surface

**Consumption:**

Approximately 2.0 kg / m<sup>2</sup> of the mixture per 1 mm thickness (1.3 kg of the mixed resin (A+B); 0.7 kg of Quartz sand).

**Packaging:**



Component A  
20.8 kg  
Component B  
4.2 kg  
Coverage  
Unfilled: approx. 1.5 kg of mixed resin / 1 mm layer thickness;  
Mixed with quartz sand (1:0.5 pbw): 1.3 kg of mixed resin (A+B) / 1 mm layer thickness.

Mixing ratio  
(by weight):  
Component A : Component B  
83.3 : 16.7



# CHOOSE YOUR PERFECT FLOOR EXPERT EP SYSTEM!

When choosing a system for the protection of floors it is important to take into account the effect of different degrees of exploitation, depending on the mechanical stress to which the floor area is exposed:

1. Low mechanical load (LD):  
Light traffic: pedestrians and vehicles with rubber wheels,
2. Medium mechanical stress (MD):  
Pedestrians and frequent passing of forklifts and vehicles with rubber wheels
3. Heavy mechanical load (HD) – smooth layer and anti-slip floor:  
The constant passing of heavy forklift trucks and vehicles with wheels made of hard rubber.

1) Low mechanical loads / private garages, basements, workshops, laboratories, hallways, shops, warehouses /			
Protection system LD1	Product	The method of application	Consumption (kg/m <sup>2</sup> )
Primer	EP 101 (1x)	short-haired roller, brush or trowel	0.3-0.5
Topcoat	EP 310 W (1-2 x)	short-haired roller	0.2-0.3 (per layer)
Protection system LD2	Product	The method of application	Consumption (kg/m <sup>2</sup> )
Primer	EP 101 (1x)	short-haired roller, brush or trowel	0.3-0.5
Topcoat	EP 311 (1-2 x)	short-haired roller	0.2-0.3 (per layer)
2) Medium mechanical loads / garages, laboratories, warehouses, industrial plants, ... /			
Protection system MD1	Product	The method of application	Consumption (kg/m <sup>2</sup> )
Primer	EP 101 (1x)	short-haired roller, brush or trowel	0.3-0.5
Self-leveling base layer of thickness 0.8-1.2 mm	EP 311 (A+B) : Floor Expert Quartz 1 : 0.2	notched trowel	1.45 kg of mixture (EP 311: 1.2 kg; FE Quartz 0.25 kg)



3) Heavy mechanical loads – smooth layer (layer thickness of 1.5 -3.0 mm) / warehouses, industrial plants ... /					
Protection system HD1	Product	The method of application	Consumption (kg/m²)		
Primer	EP 101 (1x)	short-haired roller, brush or trowel	0.3-0.5		
Self-leveling base layer of thickness 1.5- 3.0 mm	EP 211 (A+B) : Floor Expert quartz 0.1-0.6 - 1: 0.5	notched trowel	2.0 kg / m² of the mixture per 1 mm thickness (1.3 kg of the mixed resin (A+B); 0.7 kg of Floor Expert quartz 0.1-0.6.		
4) Heavy mechanical loads – an anti-slip floor surface of 4 mm thickness / industrial plants with so-called „wet processes“, public garages ... /					
Protection system HD2	Product	The method of application	Consumption (kg/m²)		
Primer	EP 101 (1x)	short-haired roller, brush or trowel	0.3-0.5		
Self-leveling base layer of thickness 1.5- 3.0 mm	EP 211 (A+B) : Floor Expert quartz 0.1-0.6 - 1: 0.5	notched trowel	2.0 kg / m² of the mixture per 1 mm thickness (1.3 kg of the mixed resin (A+B); 0.7 kg of Floor Expert quartz 0.1-0.6.		
Quartz layer	Floor Expert quartz 0.3-0.9	broadcast	6.0		
Topcoat	EP 311 (1x)	short-haired roller	0.7		
Floor Expert EP Protection Systems at a glance:					
	LD1	LD2	MD1	HD1	HD2
Thickness	0.15-0.25 mm	0.3-0.5 mm	0.8-1.2 mm	1.5 -3.0 mm	2.0-4.0 mm
Application method	Roller (2 x)	Roller (2 x)	Roller/Trowel	Roller/Trowel/ Spiked roller	Roller/Trowel/ Spiked roller
Apperiance	Light texture, high gloss	Light texture, high gloss	Smooth film, high gloss	Smooth film, high gloss	Rough surface / high gloss





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