

## System F1

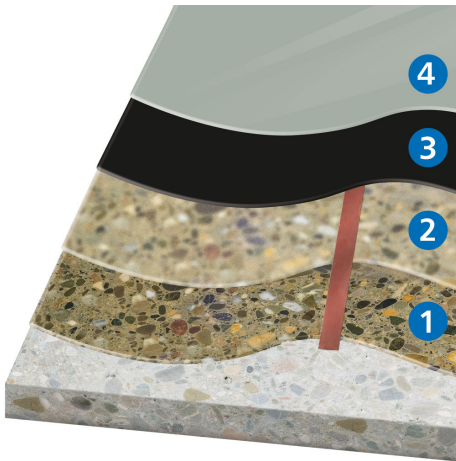
### KLB CONDUCTIVE EP EX Standard

Smooth, electrical conductive epoxy resin coating with EX protection

The coating system F1 complies with all requirements on dissipative, smooth coatings for commercial or industrial applications that require an explosion (EX) protection.

The system is mainly used in areas where flammable substances are processed, e.g. in laboratories, chemical-technical production or storage facilities as well as in the sector of electronics and electrical engineering.

**Alternative systems:** [System F3](#) for ESD requirements.



4. Top coat **KLB-SYSTEM EPOXID EP 200 EL+**
3. Conductive layer **KLB-SYSTEM EPOXID EP 799 Ableitgrund** with copper strip **KLB-Kupferband** attached underneath
2. Scratch coat with **KLB-SYSTEM EPOXID EP 50** and mixed sand **KLB-Mischsand 2/1**
1. Primer **KLB-SYSTEM EPOXID EP 50**

## System build-up

Layer	See product information for more details
Total layer thickness	approx. 2.0 - 2.5 mm
Top coat (4)	KLB-SYSTEM EPOXID EP 200 EL+
Conductive layer (3)	KLB-SYSTEM EPOXID EP 799 Ableitgrund, with copper strip KLB-Kupferband attached underneath
Scratch coat (2)	KLB-SYSTEM EPOXID EP 50* with mixed sand KLB-Mischsand 2/1
Primer (1)	KLB-SYSTEM EPOXID EP 50* <small>*alternatively, EP 52 Spezialgrund, EP 52 RAPID, etc. can be used</small>
Substrate	Requirements to the substrate according to BEB worksheets and our primer list or by consultancy from our technical sales service/application technology

## Area of application

### Industry:

- Manufacturing and production
- Laboratory
- Storage and logistics
- Conductive floors (ESD)

### Healthcare:

- Laboratory
- Pharmaceutical industry
- Clean room

### Special solutions:

- Anti static flooring

### Automotive, garages and car parks:

- Manufacturing and production

## Technical data

Bending tensile strength (EP 200 EL+)	27	N/mm <sup>2</sup>	DIN EN 196/1
Compressive strength (EP 200 EL+)	60	N/mm <sup>2</sup>	DIN EN 196/1
Shore-hardness D (EP 200 EL+)	80	-	DIN 53505 (after 7 days)
Abrasion (Taber Abraser) (EP 200 EL+)	50	mg	ASTM D4060 (CS10/1000)
Electrical resistance (EP 200 EL+)	(in combination with EP 799 Ableitgrund) approx. 10 <sup>6</sup>	Ohm	DIN EN 61340-4-1 DIN IEC 61340-5-1/2

The values established in tests are average values. Deviations from the product specification may occur.

## Tests and certifications

The following external test certificates are available for the system:

- Slip-resistance according to DIN 51130 and BGR 181: grade R9 by injection of structured granulate **Strukturgranulat RQX 9**
- Classification of the fire behaviour according DIN EN 13501-01:2018: B<sub>fl</sub>-s1.
- Declaration of performance in accordance with Annex III to Regulation (EU) No. 305/2011 (Construction Products Regulation)
- Declaration of product conformity with Environmental Product Declarations (EPD)



Please consider the latest version of this system information on our website.

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All stated information is based on our experience and technical preparation. We guarantee the correct and proper quality of our products. We do not assume any responsibility for the work not carried out by us, since we have no influence on the processing or processing conditions. We recommend on-site trials to be conducted. With appearance of this new KLB system information, all prior information loses validity. The updated version is available on our website [www.klb-koetzal.com](http://www.klb-koetzal.com). In addition, our "General Terms and Conditions" apply.