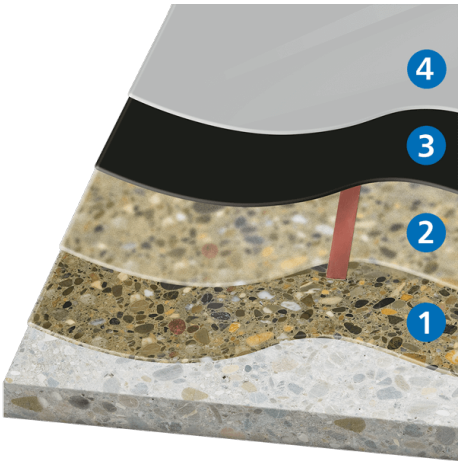
System F3
KLB CONDUCTIVE EP ESD Exclusive

Smooth, light-coloured, homogeneously conductive epoxy resin coating for requirements in ESD areas

The system F3 provides many properties for light-coloured smooth coatings in industrial areas with increased demands on ESD protection (EPA zones).

It can be used in the sector of electronics or electrical engineering as well as for commercial areas with special requirements on electrically conductive coatings, while complying to the site transfer resistance.

Alternative systems: System F4 complies with demands on ESD coatings with adjusted slip-resistance, System F1 for EX protection.



4. Top coat with **KLB-SYSTEM EPOXID EP 212 ESD**
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. 1.5 - 2.0 mm
Top coat (4)	**KLB-SYSTEM EPOXID EP 212 ESD**
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*** *alternatively, EP 52 Spezialgrund, EP 52 RAPID, etc. can be used
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
- Hospital

Special solutions:

- ESD coatings (conductive)

System features

- impervious to fluids
- resistant to industrial trucks
- resistant to mechanical load
- rigid
- glossy
- smooth
- conductive (ESD)

Technical data

Bending tensile strength (EP 212 ESD)	35	N/ mm²	DIN EN 196/1
Compressive strength (EP 212 ESD)	55	N/ mm²	DIN EN 196/1
Shore-hardness D (EP 212 ESD)	78	-	DIN 53505 (after 7 days)
Abrasion (Taber Abraser) (EP 212 ESD)	45	mg	ASTM D4060 (CS10/1000)
Walking Body Model (EP 212 ESD)	< 100	V	DIN EN 61340-5-1
Person/footwear/flooring system (EP 212 ESD)	< 10^9	Ohm	DIN EN 61340-5-1
Resistance to ground (EP 212 ESD)	> 50 (measured with 1 electrode/ tripod, combined with EP 799 Ableitgrund or EP 77)	kOhm	DIN VDE 0100-600 (2008)

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:

- Fire behaviour classification according to DIN EN 13501-01:2010-01: C_{fl}-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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