

System F3

KLB CONDUCTIVE LOW-VOC EP ESD Exclusive

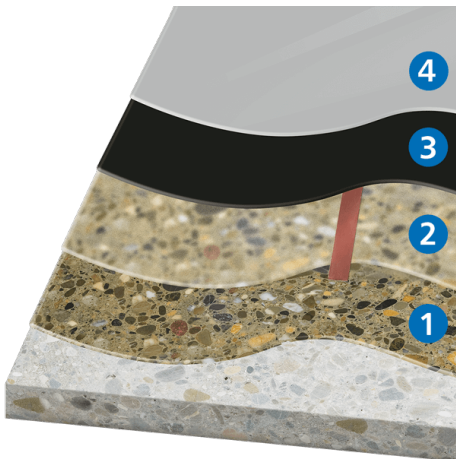


Smooth, low-emission, homogeneously conductive epoxy resin coating for requirements in ESD areas

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. Within this build-up, system F3 complies with the requirements for battery room suitability. The system components are low-emission and therefore suitable for sustainable building according to DGNB, LEED or Minergie ECO.

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 57** and mixed sand **KLB-Mischsand 2/1**
1. Primer **KLB-SYSTEM EPOXID EP 57**

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 57* with mixed sand KLB-Mischsand 2/1
Primer (1)	KLB-SYSTEM EPOXID EP 57* <small>*alternatively, EP 58, EP 53 Spezialgrund AgBB or EP 54 RAPID U 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
- Hospital

Special solutions:

- ESD coatings

Technical data

Electrical resistance to ground (EP 212 ESD)	10 ⁵ - 10 ⁹ (with EP 799), 10 ⁶ - 10 ⁹ (with EP 77)	Ohm	DIN EN 61340-5-1
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 and internal test certificates are available for the system:

- Fire behaviour classification according to DIN EN 13501-01:2019-05 in combination with **EP 50**: C_{fl}-s2
- Certified as low-emission according to Eurofins "Indoor Air Comfort Gold".
- Cleanroom-suitable materials according to ISO 14644-1; VDI 2083 Part 17: ISO 5.
- 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.

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. In addition, our "General Terms and Conditions" apply.