

Sikafloor[®] ESD CONTROL FLOORING



BUILDING TRUST

Sikafloor[®] ESD CONTROL FLOORING A UNIQUE APPROACH TO ELECTROSTATIC CONTROL

In industries where electronic components or volatile chemicals are involved, static electricity can result in significant damage, injury and financial loss. Protect your work environment against electrostatic discharge with Sikafloor® ESD Control Flooring Systems. Each facility's flooring needs and environments vary significantly. Sika's dedication to ESD research and development allows us to offer a wide range of ESD flooring preferences to precisely match your unique facility specifications and decor.

	ANSI/ESD S 20.20 -2021 (ANSI/ESD STM97.1) <1.0 x 10 ⁹ ohms	ANSI ESD S20.20- 2021 (ANSI/ESD STM97.2) Walking Test (BVG) <100 volt	ASTM F 150-06 (18) (DIF) Surface to Surface Surface to Ground >2.5 x 10 ⁴ - <1 x 10 ⁶ ohms	ASTM F 150-06 (18) >1.0 x 10 ⁶ - <1.0 x 10 ⁹ ohms		
Ероху						
Sikafloor 200 ESD			*			
Sikafloor 200C ESD		•	•	*		
Sikafloor 260 ESD			•	*		
Sikafloor 264 ECF	-	*	-	*		
Novolac						
Sikafloor 270 ESD				*		
Urethane						
Sikafloor 340 ESD		•	*			
Meets the standard						
* Noesn't meet the standard						

* Doesn't meet the standard

Standard/Test Method	Test Method	Sikafloor System
	ANSI/ESD STM7.1	All Sikafloor ESD Systems
ANSI/ESD S20.20 - 2021	Flooring/Footwear ANSI ESD STM97.1	All Sikafloor ESD Systems
	Body Voltage ANSI ESD STM97.2	All Sikafloor ESD Systems Except Sikafloor 264 ECF
MIL DoD 4145.26/6055.9	ASTM F150-06(18)	Sikafloor 200C ESD Sikafloor 260 ESD Sikafloor 270 ESD Sikafloor 264 ECF
Airforce/Air Ops/Hangar & Fuel	ASTM F150-06(18)	Sikafloor 340 ESD
NFPA 77 Flammable LP&G	ASTM F150-06 (18)	Sikafloor 200C or Sikafloor 260 ESD

Market Segment	Standard	Test Method	Range/Value	Sikafloor System
Electronics, other than explosives - Any military or DoD/DoD contractor activity that mirrors civilian electronics covered in ANSI S20.20; including radio/ radar repair & maintenance, computers, medical instrumentation/devices, and other similar electronic equipment, network operation center (NOC) electronic devices and processes.	Formerly MIL-1686C superseded by ANSI S20.20 -2021	Refer to ANSI ESD STM7.1	See ANSI 520.20 -2021	Sikafloor 200 ESD Sikafloor 200C ESD Sikafoor 260 ESD Sikafloor 270 ESD
Military (Direct-to-Branch Mil Ops) Same as civilian DoD contractors, only directed to, for or on behalf of the direct branch, i.e. Army, Navy, Airforce, et al. Quasi-Military agencies including Missile Defense Agency (MDA). May include NASA if engaged in military based pursuits (defense satellite ops). A common example is a USAF hangar or fuel cell maintenance facility.	DoD 6055.9-STD			Sikafloor 200C ESD
Military Aviation Ops/Airforce (hangars, fuel cell maintenance) - Same as civilian DoD contractors, only directly contracted to, for or on the behalf of the direct branch, i.e. Army, Navy, Airforce. Quasi-Military Agencies including Missile Defense Agency (MDA). May include NASA if engaged in military based pursuits (satellite defense ops). A common example is a USAF hangar or fuel cell maintenance facility.	ETL 964, AFI 1065 (A6.7 & 13.4)	Cites NFPA 99, defer to ASTM F150-06(18)	1.0 x10 ⁶ to <1.0 x 10 ⁹ ohms, resistance from floor to ground must be >2.5 x 10 ⁴	Sikafloor 340 ESD
Government Agencies - NASA, NSA, DARPA, DHS, TSA & Quasi- governmental entities such as civilian operated space/orbital ops.	Depends on agency: FAA = FAA-STD019F	ASTM F150-06(18)	2.5 x 10 ⁶ to <1.0 x 10 ⁹ ohms unless other- wise specified	Sikafloor 200C ESD
DoD Civilian Contractors - Civilian controlled business entity engaged in manufacturing, assembling or storing materiel including ordinance, munitions, explosives, delivery/ deployment systems (rocket missile, projectile), propellants, and other energy producing materials	DoD 4145.26 (C6, 4.7 Conductive Floors, Tabletops, Foot- wear), ref. C6, 47.5.1 Test Criteria	ASTM F150-06(18)	Not to exceed 1 megohm, flooring and footwear combination	Sikafloor 200C ESD



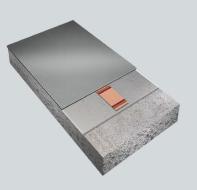
Attributes

Build Up

Sikafloor Products

Standard ESD System

- Electrostatic disipative
- Good chemical & mechnical resistance
- Easy to clean & maintain
- Low odor/low VOC system



Primer Coat: Sikafloor 161 @ 8mils

Top Coat: Sikafloor 200 ESD @ 16 mils

Standard Conductive ESD System

- Electrostatic conductive
- Good chemical & mechnical resistance
- Easy to clean & maintain
- Low odor/low VOC system



Primer Coat: Sikafloor 161 @ 8mils

Conductive Primer: Sikafloor 220 W @ 4mils

Top Coat: Sikafloor 200C ESD @ 16mils

Standard Prepigmented ESD System

- Electrostatic conductive
- Good chemical & mechnical resistance
- Easy to clean & maintain
- Low odor/low VOC system
- Available in nine standard colors



Primer Coat: Sikafloor 161 @ 8mils

Conductive Primer: Sikafloor 222 W @ 4mils

Top Coat: Sikafloor 260 ESD @ 16mils

Attributes

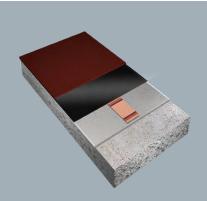
Build Up

Prepigmented, High Build ECF System

- Electrostatic conductive throughout system
- Very low body voltage generation with ESD foot wear
- Low odor/low VOC system
- Available in 18 standard colors

Chemical Resistant, Prepigmented ESD System

- Novolac epoxy system
- Excellent chemical resistance
- Very low body voltage generation with ESD foot wear



Sikafloor Products

Primer Coat: Sikafloor 161 @ 8mils

Conductive Primer: Sikafloor 222 W @ 4mils

Top Coat: Sikafloor 264 ECF @ 16mils

Primer Coat: Sikafloor 161 @ 8mils

Conductive Primer: Sikafloor 222 W @ 4mils

Top Coat: Sikafloor 270 ESD @ 16mils

Chemical Resistant, Solvent Based ESD System

- Excellent chemical & mechanical resistance
- Very low body voltage generation with ESD foot wear
- Matte finish



Primer Coat: Sikafloor 161 @ 8mils

Standard Top Coat: Sikafloor 340 ESD @ 4mils

Recommended 2nd Top Coat: Sikafloor 340 ESD @ 4mils



Sikafloor® Earthing Kit

An electrostatic charge, which occurs during materials contact and separation, has to be discharged via an earthing point. The Sikafloor[®] Earthing Kit, is a unique tool box containing all of the necessary components for up to 10 earthing points.

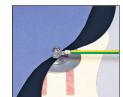
Each earthing point is able to conduct to earth 3,200 ft². Ensure the longest distance between each earthing point in each room or area is a maximum of 30 ft. apart. In larger areas with longer distances, additional earthing points must be installed in accordance with the Electrical Engineer's requirements.

If site conditions or other constraints do not allow the positioning of any additional earthing points that are required, then any longer distances (>30 ft.) must be bridged by the use of additional adhesive copper tapes in accordance with the relevant specifications. All of the earthing points have to be connected to an appropriate ring-main to ground them and this work must be carried out and approved by the responsible Electrical Engineer in accordance with all relevant local regulations.





- Prepare and prime the substrate in accordance with the relevant Sikafloor[®] PDS.
- When primer has cured, drill a hole: diameter 1/32", depth > 2"
- Remove all dust, loose and friable material around the hole and insert a size 8 plastic plug. The plug must be flush with the floor surface.
- Screw the threaded dowel rod with a hexagonal socket into the plastic plug
- Fully bond the copper strips on both sides of the hole.
- Place large (D = 2 3/8") washer followed by the smaller (D=11/8") washer over the threaded dowel rod and secure with the nut (M6) so the washers are pressed onto the copper strips ensuring good contact.
- Push the transparent plastic hose over the threaded dowel rod so the hose fits tightly.

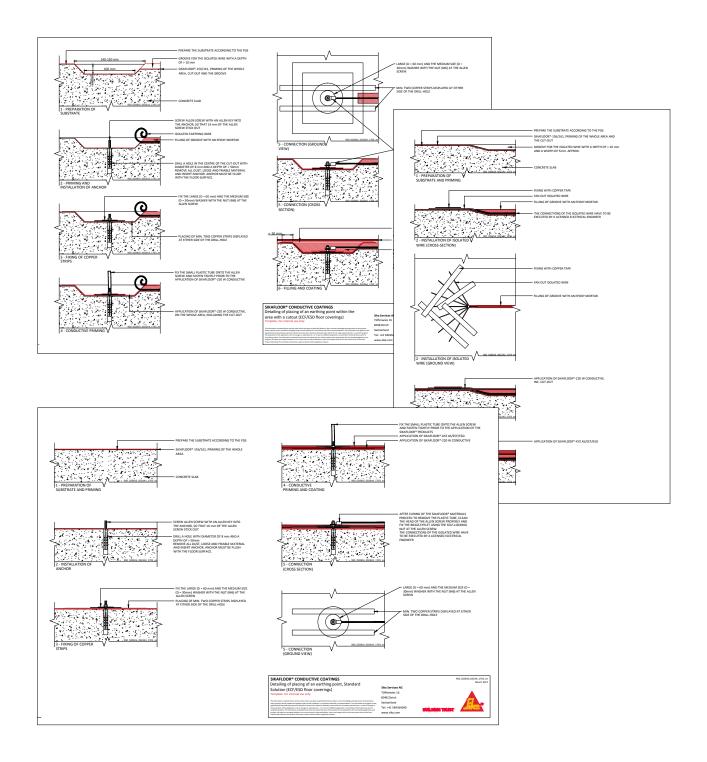


- Apply the selected Sikafloor conductive primer and conductive wearing finish ensuring all washers and copper tape are completely covered.
- After curing the Sikafloor products, remove the transparent plastic hose.
- Clean the head of the threaded dowel rod. Fix the brass eyelet using the self-locking nut (M6) onto the threaded dowel rod. Connect the grounding cable with the brass eyelet.
- Connect the earthing main cable with the brass eyelet (only by a qualified Electrical Engineer).



CAD DRAWINGS ARE AVAILABLE

For alternative situation Sika can provide detailed CAD drawings of the different possibilities to position an earthing point. Please do not hesitate to ask your local Sika Technical Services Department for these.



COLOR SELECTION GUIDE FOR SIKAFLOORS 200 ESD & 340 ESD

Stocked Colors



The above are for use with Sikafloor[®] 200 ESD and Sikafloor[®] 340 ESD only. Sikafloor[®] 340 ESD is not available in Dark Gray. Please consult Sika Industrial Flooring for further information and pricing. Because of the limitations of process color printing, the color samples contained herein are close approximations of actual colors and should not be relied upon for true color. Final color matching should be made with an actual sample of the product, color and texture to be used. Custom colors are available. Our most current local Sales Conditions shall apply. Please consult the most current local Product Data Sheet prior to any use.

COLOR SELECTION GUIDE FOR SIKAFLOORS 260 ESD & 270 ESD



The above are for use with Sikafloor[®] 260 ESD and Sikafloor[®] 270 ESD only. Please consult Sika Industrial Flooring for further information and pricing. Because of the limitations of process color printing, the color samples contained herein are close approximations of actual colors and should not be relied upon for true color. Final color matching should be made with an actual sample of the product, color and texture to be used. Custom colors are available. Our most current local Sales Conditions shall apply. Please consult the most current local Product Data Sheet prior to any use.

COLOR SELECTION GUIDE FOR SIKAFLOOR 264 ECF

SILVER GRAY	LIGHT GRAY	OXFORD GRAY
WINDOW GRAY	TRAFFIC GRAY	BEIGE ROSE
GRAY BEIGE	SIGNAL YELLOW	JET BLACK
RAFFIA BEIGE	BEIGE	TAN 251
BASALT GRAY	TRAFFIC BLUE	PALE GREEN
OXIDE RED	TRAFFIC RED	SIGNAL WHITE

The above are for use with Sikafloor[®] 264 ECF only. Please consult Sika Industrial Flooring for further information and pricing. Because of the limitations of process color printing, the color samples contained herein are close approximations of actual colors and should not be relied upon for true color. Final color matching should be made with an actual sample of the product, color and texture to be used. Custom colors are available. Our most current local Sales Conditions shall apply. Please consult the most current local Product Data Sheet prior to any use.

GLOBAL Sikafloor® ESD SOLUTIONS

SOLUTIONS FOR THE MARKETS IN EMEA

	DIN EN 1081 Resistance to Ground R _s <1 x 10 ⁸ Ω	IEC 61340-5-1 (IEC 61340-4-5) System Test: <1 x 10 ⁹ Ω	IEC 61340-5-1 (IEC 61340-4-1) Walking Test (BVG) <100 Volt	$\begin{array}{c} \textbf{IEC 61340-5-1} \\ (\text{IEC 61340-4-1}) \\ \text{Resistance to Ground} \\ \text{R}_{c} < 1 \times 10^{9} \ \Omega \end{array}$	ATEX 137/TRBS 2153 European Standard Resistance to Ground $R_c < 1 \times 10^9 \Omega$	DIN VDE 0100-410 (IEC 60364-4-1) Isolation Resistance >50k Ω
Smooth and textured hygienic ECF floors						
Sikafloor 262 AS N	-	*	*	-	-	
Sikafloor 262 AS Thixo	-	×	*	-	-	
Sikafloor 3240 ECF	-	*	*	•	•	
High chemical resistance		•		•		
Sikafloor 381 ECF	-	*	*	-	-	Any insulating,
Sikafloor 390 ECF	-	*	*	•	•	self-smoothing layers e.g.
Approved for clean rooms		•		•		Sikafloor 263 SL
Sikafloor 269 ECF CR	-	*	*	-	-	
Food and Pharma Industry						
Sikafloor 25 PurCem ECF	-	*	*	-	-	
ESD systems with very low body voltage generation						
Sikafloor 235 ESD	-	-	-	-	-	
Sikafloor 262 AS N + Sikafloor 305 W ESD	•	-	-	-	•	
Sikafloor 236 SL/326 Sikafloor 305 W ESD	•	-	-	•	•	•
Meets the requirements						
* Doesn't meet the requir	ements					

SOLUTIONS FOR THE MARKETS IN APAC

Smooth hygienic floors							
Sikafloor 262 AS N	-	*	*	*	-		
Sikafloor 239 EDF	*	•	*	-	-		
High chemical resistance	High chemical resistance						
Sikafloor 390 AS	-	*	*	*	-		
Sikafloor 381 AS	-	*	*	*	-		
ESD system with very low bo	ESD system with very low body voltage generation						
Sikafloor 235 ESD	*	*		-	-		
Sikafloor 262 AS N + Sikafloor 305 W ESD	*	*	•	•	•		
Meets the requirements							
* Doesn't meet the requirements							

A GLOBAL AND LOCAL PARTNERSHIP



WE ARE SIKA

Sika is a specialty chemicals company with a leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing and protecting in the building sector and the motor vehicle industry. Sika's product lines feature concrete admixtures, mortars, sealants and adhesives, structural strengthening systems, industrial flooring as well as roofing and waterproofing systems.



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