

X-Tech AntiStatic SLE

Conductive epoxy flooring system

Product Description

X-Tech AntiStatic SLE is a three layer system comprising an epoxy primer, a water dispersed epoxy base coat and a self smoothing epoxy top coat that produces a conductive or dissipative floor. The conductive grade (CG) provides a floor with a point to point resistance and a resistance to ground of between 5×10^4 to 1×10^6 Ohms. The dissipative grade (DG) provides a floor with a point to point resistance and a resistance to ground of between 5×10^6 to 1×10^9 Ohms.

Advantages

- Meets SCAQMD Rule 1113 & LEED VOC Limits
- Fast application
- Easy to clean finish
- Resistant to wide range of chemicals
- High impact and abrasion resistance

Typical Uses

- Electronic manufacturing and assembly plants
- Hospitals
- Clean rooms
- Chemical handling and processing areas

Laboratory Test Data

Property	Typical Results
Compressive strength (EN 196-1)	>60MPa (8700psi)
Flexural strength (EN 196-1)	>30MPa (4350psi)
Tensile strength (EN 196-1)	>20MPa (2900psi)
Bond strength (ISO 4624*)	>5MPa (725psi)

Above results were obtained after 7 days cure.

*Depends on substrate quality

Application Properties

Application thickness	1.5mm to 2mm
Application temperature range	10 to 35C (50 to 95F)
Pot life at 25C (77F)	
X-Shield SF Primer	45 mins
X-Shield MT Primer	120 mins
X-Tech AntiStatic SLE Base Coat	90 mins
X-Tech AntiStatic SLE Top Coat	45 mins

Volatile Organic Content

X-Shield SF Primer = 0 g/L Base Coat = <20 g/L
X-Shield MT Primer = 145 g/L Top Coat = <50 g/L

Specification Compliance

SCAQMD Rule 1113*	ASTM F150
LEED NC2009 IEQ 4.2*	BS 2050
IEC/BS EN 61340	BS 5958
ANSI/ESD S7.1	DoA 385-64
EFNARC Type 5A & B	FeFRA Type 5 MD/HD

* when used with X-Shield SF Primer

Chemical Resistance

X-Tech AntiStatic SLE has good resistance to the following:

10% Lactic acid	Petrol and oils
Concentrated bleach	Greases
Saturated sugar solution	10% Ammonia
Saturated urea solution	

Contact NCC X-Calibur for details of resistance to specific chemicals

Colors

RAL 7035 Light grey	RAL 1017 Saffron Yellow
RAL 7042 Traffic Grey A	RAL 6017 May Green
RAL 7043 Traffic Grey B	RAL 3002 Carmine Red
RAL 7001 Silver Grey	RAL 5017 Traffic Blue

Theoretical Coverage

X-Tech AntiStatic SLE Base Coat: 6.6m² per liter at 150 microns wft.

X-Tech AntiStatic SLE Top Coat: 1.5L per m² at 1.5mm.

Packaging

X-Tech AntiStatic SLE Base Coat: 4.5 and 18L packs

X-Tech AntiStatic SLE Top Coat: 17L packs.

Shelf Life

18 months when stored at 35C (95F) or less in a frost-free, dry and shaded area.

Installation Guidelines

Epoxy flooring should only be carried out by experienced contractors. NCC X-Calibur provides detailed method statements on all its products for use in various applications. These must be referred to prior to starting work and includes requirements for testing of electrical resistance, earthing of the system and how to deal with day and live joints. The information below is a summary intended for guidance only.

Surface Preparation

The substrate must be structurally sound. Loose or unsound concrete should be removed and made good. Surfaces must be entirely free of oil, grease, paint, corrosion deposits, dust, laitance or other surface deposits. The surface should be prepared by captive blasting to produce a lightly exposed aggregate surface i.e. a ICRI CSP 4 or 5 surface profile. Any bug holes (blow holes) should be filled with X-Shield BugFill or X-Shield Primer Filler (when using X-Shield MT Primer apply BugFill or Primer Filler after priming). If substrate is not level or is uneven, level using X-Tech LevelCem HD.

Moisture Testing

The concrete slab should be tested for moisture with the Rapid RH system following the procedure in ASTM F2170. If the humidity reading is greater than 80% then conduct moisture vapor emission rate (MVER) testing using the procedure in ASTM F1869. (Both test kits are available for purchase from NCC X-Calibur). If the MVER is under 1.36Kg/93m²/24h use X-Shield SF Primer. If the MVER is 1.36 to 2.27 Kg /93m²/24h use a single coat X-Shield MT Primer at 165 microns wft. If the MVER is 2.27 to 5.44 Kg/93m²/24h use two coats of X-Shield MT Primer at 200 microns wft per coat.

Priming

The base and hardener have to mixed using a slow speed drill and approved mixing paddle until homogeneous. The mixed primer should then be applied to the prepared substrate with a stiff brush or roller. Do not over apply or allow puddles of primer to form. If the primer is absorbed into the surface easily, it will be necessary to apply a second coat once the initial coat is tack-free. Allow the primer to become tack-free before application of the Base Coat. Apply Base Coat within 24 hours of priming.

Mixing and Application of the Base Coat

Both of the liquid components should be briefly stirred to ensure that any settlement products are fully suspended. Pour the base component into the hardener component and mix using a slow speed drill and approved mixing paddle for 2 minutes. When mixed the Base Coat should be applied to the primed concrete using a medium hair roller. Do not pour directly onto the substrate as this may result in occasional patches of thick material.

Mixing and Application of the Top Coat

Both of the liquid components should be briefly stirred to ensure that any settlement products are fully suspended. Mixing should be carried out using a forced action mixer such as a Mixit 25 (mixers are available to purchase or rent from NCC X-Calibur). Mix the base and hardener until a uniform color is achieved. Add the filler slowly during mixing and mix for a further 2 mins. Spread the mixed product onto the tack-free primer, using a 4mm notched vee rake followed by a pin leveller set at 1.5 to 2mm to achieve a uniform thickness of between 1.5 and

Immediately after spreading, roll using a spiked roller to release trapped air and remove trowel marks. Rolling should be completed within 20 minutes.

Cleaning

Tools should be cleaned immediately after use and before the resin sets, using xylene. Once the resin has set, it can only be removed by mechanical means.

Limitations

May change color when exposed to direct sunlight.
Do not use solvent to finish the surface.
Do not apply within 3C of the dewpoint or if it is within 5C of the dewpoint and dropping.
Avoid skin contact.
Do not apply below 10C.
Do not apply at thicknesses greater than those mentioned.
Maximum ambient relative humidity of 85%.
Do not expose the surface to water or cleaning solutions until fully cured.
If any dust is present during application "fish eyes" may occur.

Health and Safety

This product is for industrial use only by trained operatives. It is potentially hazardous if not used correctly. Please refer to the Material Safety Data Sheet (MSDS) prior to the purchase and use of this product. The MSDS can be obtained via our website www.ncc.com.eg

Authorized Technical Specialist

Please note that only NCC X-Calibur Authorized Technical Specialists ('ATs') are permitted to change any of the information in this data sheet or to provide written recommendations concerning the use of this product. Visit www.ncc.com.eg for a full list of NCC X-Calibur ATs.

Datasheet Validity

NCC X-Calibur makes modifications to its product datasheets on a continuous basis. Please check the datasheet update section on www.ncc.com.eg to ensure you have the latest version.

Warranties

NCC X-Calibur supplies products that comply with the properties shown on the current datasheets. In the unlikely event that products supplied are proved not to comply with these properties, then we will replace the non-compliant product or refund the purchase price. NCC X-Calibur does not warrant or guarantee the installation of the products as it does not have control over the installation or end use of the products. Any suspected defects must be reported to NCC X-Calibur in writing within five working days of being detected. NCC X-Calibur Construction Chemistry Inc. **makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other warranties express or implied.** NCC X-Calibur Construction Chemistry Inc. shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.



Quality Statement

All Products manufactured by NCC X-CALIBUR or imported from X-CALIBUR companies world-wide are manufactured to procedures certified to conform the quality, environment, systems described in the ISO 14001:2004 , ISO 9001:2000.



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