

Conductive and dissipative breathable epoxy flooring

Product Description

TAL ANTISTATIC SLB is a three layer breathable system comprising a water dispersed primer, a water dispersed epoxy base coat and a self smoothing epoxy top coat that produces a conductive or dissipative floor. When used with TAL Conductive Base Coat the floor will have a point to point resistance and a resistance to ground of between 5×10^4 to 1×10^6 Ohms. When used with TAL Dissipative Base Coat the floor will have 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
- Formaldehyde free
- Fast application
- Easy to clean finish
- Resistant to wide range of chemicals
- High impact and abrasion resistance
- Available in a range of colors
- Control of static electricity to earth

Typical Uses

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

Laboratory Test Data

Property	Typical Results
Compressive strength	>35MPa
Flexural strength	>10MPa
Tensile strength	>5MPa
Bond strength*	>2MPa

Above results were obtained after 14 days cure.

*Depends on substrate quality

Application Properties

Application thickness	2 to 6mm
Application temperature range	10 to 35C
Pot life at 20C (68F)	
TAL WD PRIMER	120 mins
TAL Conductive or Dissipative Base Coat	120 mins
TAL ANTISTATIC SLB Top Coat	120 mins

Volatile Organic Content

Primer = 0 g/L

Base Coat = <20 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 (WVT)
FeFRA Type 5 MD/HD

Chemical Resistance

TAL ANTISTATIC SLB has good resistance to the following:

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

Colours

RAL1000 Green beige
RAL7032 Pebble grey
RAL1002 Sand yellow
RAL7038 Agate grey
RAL3002 Carmine red
RAL7042 Traffic grey

Theoretical Coverage

TAL WD PRIMER: 6.6m² per liter at 150 microns wft.
TAL Conductive or Dissipative Base Coat: 6.6m² per liter at 150 microns wft
TAL ANTISTATIC SLB Top Coat: 2L per m² at 2mm wft.

Packaging

TAL WD PRIMER: 5 and 15 liter kits
TAL Conductive or Dissipative Base Coat: 4.5 and 18L packs.
TAL ANTISTATIC SLB Top Coat: 18L pack

Shelf Life

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

Installation Guidelines

Epoxy flooring should only be carried out by experienced contractors. TAL 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 TAL BUGFILL. If substrate is not level or is uneven, level using TAL LEVELCEM HD.

Moisture Testing

The concrete slab should be tested for moisture vapor emission rate (MVER) testing using the procedure in ASTM F1869. (test kits are available for purchase from TAL). If the MVER is over 15lbs/1000ft²/24h then contact TAL for guidance.

Priming

The prepared surface should be primed with TAL WD PRIMER. The base and hardener have to mixed until homogenous. 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 TAL Conductive or Dissipative Base Coat.

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 TAL). Mix the components until homogenous. Spread the mixed product onto the tack-free primer, using the required thickness notched vee rake followed by a pin leveller set to achieve a uniform thickness of 2 to 6mm. 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 water. Once the resin has set, it can only be removed by mechanical means.

Limitations

Will change color when exposed to direct sunlight.

Do not apply below 5°C or above 35°C.

Avoid skin contact.

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.

