ADHERE BONDS
The Versatile Construction Chemicals

ADHEREX ESD

Antistatic Epoxy Flooring

Description

ADHEREX ESD is an ultra-high solids bis-A epoxy floor coating designed to provide electrostatic control properties to various surfaces including concrete or other nonconductive substrates. The use of a conductive primer will transmit conductive readings through ESD (Electrostatic Dissipative) Epoxy Coating. It provides excellent bond to concrete as well as high impact and wear.

Uses

To provide a hard wearing, seamless, antistatic floor with an electrical resistance in the range 1 x 106-7ohms. Specific applications include:

- Electronics manufacture and assembly
- Clean Rooms, Process Area, and Solvent handling/process areas in pharmaceuticals units
- Computer rooms
- Hazardous dust and chemical environments
- Hospital operating theater
- Nuclear plants, computer and control panel rooms Properties

Advantages

Easy Application
- Available in Static Dissipative Range of 1,000,000 to 10,000,000 ohms per EOS/ESD Standards.
- Electrostatic Dissipative (ESD) / Conductive Epoxy Floor Coating
- Consistent Electrical Resistance Ratings When Tested at 10-500 Volts.
- Good Abrasion Resistance.
- Easy to Clean.

Technical Properties

Solvent free epoxy based conductive epoxy floor coating kit for 1 mm thickness

- Colour	: Range
- Gloss	: Glossy
- Recommended DFT/ Coat	: 1 mm
- Surface Resistance (ASTM F150)	: 1 x 106-7 ohms
- Theoretical Covering Capacity	: 1.25 kg/m2 @ 1 mm DFT
- Drying Time Surface Dry	: 6 hours
- Hard Dry	: 24 hours
- Full Cure	: 7 days
- Mixing Ratio	: Pre weighed Kit
- Pot life	: 30 minutes

Mechanical Properties

• Compressive Strength (ASTM C 579)	: 41 Mpa
• Flexural strength (ASTM C 580)	: 9.5 MPa
• Tensile Strength (ASTM C 307)	: 7.5 Mpa

Substrate Requirements:

- Relative Humidity (RH) should be between 30% and 85%.
- Substrate must be clean and free of Dirt, waxes, Curing agents and any other foreign material that will interfere with bonding.

Surface preparation:

The long-term durability of the applied **ADHEREX ESD** is dependent on the adhesive bond achieved between the flooring material and substrate. It is most important therefore, that substrate surfaces are correctly prepared prior to application.

New concrete or cementitious substrates should have been placed at least 28 days and have a moisture content of less than 5% before topping with **ADHEREX ESD**

Before application, the surface to be coated, should be free from loose particles, rust, oils, grease, or earlier coatings and should be thoroughly dry.

Priming

Mix Part A and Part B of **ADHEREX EP** with Electric Stirrer. Once parts A & B have been thoroughly mixed,. Apply the primer coat by brush. Allow a drying time of at least 6 hours before applying basecoat.

Basecoat

The base coat used is usually ADHEREX ULM. Mix Part A and Part B of the ADHEREX ULM in a clean bucket with Electric Stirrer according to the instructions on the technical data sheet. Starting at the far corner, apply the basecoat by trowel and roller.

Copper Tape Grid

Copper Tape is an electrically conductive copper foil tape backed with adhesive Clean the substrate to remove dirt, oil. Mark the area where the grid will be required. Remove the liner from the tape and press it down on the substrate. For optimum conductivity center punch the tape if it crosses another run.

Conductive Primer

ADHEREX ESD is a solvent free black two- pack low viscosity conductive primer. It is used prior to application of Antistatic Epoxy Floor Topcoat **ADHEREX ESD**

Mixing and Application:

1. Pack components are pre-weighed for optimum performance. Never split packs.

2. Empty contents of Base into a mixing container and pre-mix to assure the suspension of solids.

3. Add Pigment, Filler, Curing Agent respectively and continue to mix to a uniform consistency for 1-2 minutes.

4. Mix with slow speed drill and helical spinner head for 2 minutes.

5. Spread the mixture on the floor immediately to the required thickness by means of rollers and serrated trowels. The floor should be rolled by a spike roller to remove trapped air

Storage and Shelf Life

The product should kept in a cool, well-ventilated area, away from heat, direct sunlight.

Packaging

A maximum shelf life of 12 months in the un-opened containers.