

INSTRUCTIONS FOR THE APPLICATION OF ELECTROGUARD E30 POLYURETHANE FLOOR PAINT

Preparation of the surface

This is the most important part of any floor installation, a badly prepared floor surface will adversely affect the physical and electrical properties of any coating applied to it.

Concrete

Bare concrete is not normally an adequate surface for the application of floor paints, especially Static-Dissipative floor paints where the electrical properties can be affected. Ensure that the concrete is DRY (less than 5.5 on Protimeter Screed Scale or **less than 15% Moisture Content**).

All concrete floors should be sealed with a two pack, Solvent Free/Water Based, Epoxy Sealer/Primer (Edson Electronics Ltd can offer such a primer if required) to stabilise the concrete and to insulate against excessive conductivity, a major problem to static sensitive areas.

Before sealing the concrete it is advisable to prepare the surface using Mechanical Preparation or an STR machine in order to give an open, sandpaper like surface. All oil, grease and chemicals should be removed by washing with an alkaline detergent, and the floor allowed to dry thoroughly before sealing.

Apply the sealer/primer as the instructions dictate, and allow to hard dry. Do not exceed the recommended re-coat time.

Existing Floor Paint

Electroguard E30 has excellent adhesion properties and will adhere to most painted surfaces. If, however, the underlying paint surface is not sound then it will need to be removed. Loose paint should be removed by STR machine or shot blasting and the floor surface treated as for bare concrete (see above).

Before coating the floor all grease and chemicals should be rinsed off using a detergent, and allowed to dry. To aid in adhesion the surface should then be sanded or buffed.

Earthing the Coating.

If the floor is required for grounding personnel then some means of connection to earth is necessary. Normally one grounding point is required for every 111 m² of flooring.

The most effective way of grounding is achieved by using adhesive backed copper tape. The connection to the floor is attained by fixing a length (10cm is enough) of tape to the floor surface at the edge of a wall. The tape should be applied **OVER** the existing surface, previously painted or newly primed/sealed, and **BEFORE E30 is applied**. The tape is then run up the wall to connect with a grounding point, and E30 then applied to the floor as described below.

Grounding Points:

Steel Building Structures: These must first have an area of contact sanded to ensure that it is paint, rust and dirt free, and the tape attached using a screw. The tape must be in contact with bare steel.

Connection to Mains earth: The copper tape is run up the wall and into an Earth bonding box (this requires a qualified electrician to install).

An alternative method is to connect the copper tape to an earth-bonding plug placed in an appropriate socket by means of an earthing cord.

Applying the Paint.

Before continuing with the next step ensure that all personnel handling the product are made aware of the Material Safety Data Sheet.

- 1) Ensure first of all that the uncoated floor is grease, chemical and dust-free.
- 2) **It is advised not to apply if the temperature is below 10C. Ideally the temperature will be over 15 °C**
- 3) Stir the contents of one of the BASE cans. Ensure that the contents of the can are **thoroughly mixed** and that there are no materials adhering to the bottom or sides of the can. **This is very important.**
- 4) Add the contents of the Activator can to the Base can and mix. **Ensure that the two components are thoroughly mixed and that there is an even colour dispersion.**
- 5) Apply the paint evenly using a medium pile roller (5 Litres is enough to cover approximately 45m² based on one coat). Continue until the desired area is covered. Do not try to spread the paint over a larger area than the coverage recommends.
- 6) Clean the equipment with warm soapy water.
- 7) Allow 16 hours drying time, depending on ambient temperature and humidity.
- 8) Repeat the procedure as above for the second coat. **Where Anti Slip is required add the aggregate sand provided to the paint required for second coat and mix thoroughly immediately before use. The aggregate will sink if left so please only add when about to apply. We advise no more than 1kg per 5 litre tin.**
- 9) Ideally, leave for 24-48 hours before walking over newly painted surface. This will prevent marking whilst the paint is still curing.

The coating should be suitable for walking upon after 24 hours. Full cure will be achieved after 7 days, and optimum electrical properties will be exhibited up to 14 days after application.

Edson Electronics Ltd. accepts no responsibility where these instructions have not been adhered to during application, or where extremes of temperature or humidity have impaired curing.