

#### **INSTRUCTIONS FOR THE APPLICATION OF A40 ACRYLIC ESD FLOOR PAINT**

#### Preparation of the surface

This is a key stage prior to applying the A40 Acrylic ESD Floor Paint. The physical and electrical properties of any painted coating applied will be adversely affected if the base flooring is of poor quality.

## **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).

All concrete floors should be sealed with a **Water Based Sealer/Primer** to stabilize the concrete and to insulate against excessive conductivity, a major problem to static sensitive areas.

#### **Recommended Sealer / Primers for bare concrete**

Primer / Sealers are standard products. Water based products, either single or two pack may be used prior to the A40 paint.

Typical brands are:

- Blackfriars Multi Surface Primer / Sealer
- Bullseye 123 Primer Sealer
- Johnstone's Primer

Before sealing the concrete any oil, grease and chemicals should be removed by washing with a detergent, and the floor allowed to dry thoroughly before sealing. Rinse the floor after cleaning with a detergent as any soap film left on the surface could create an insulative film.

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

#### **Existing Floor Paint**

The A40 Acrylic floor paint has excellent adhesion properties and will adhere to most painted surfaces. If though the underlying paint surface is not sound then it will need to be removed. Loose paint should be removed 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.

#### 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 1000 ft2 (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 (approximately 10cm) of tape to the unpainted floor surface at the edge of a wall. The tape is then run up the wall to connect with a grounding point, and A40 paint then applied to the floor.

# **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.

*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).

*Alternative simple method:* An alternative method is to connect the copper tape to an Earth-bonding plug placed in an appropriate socket by means of an ESD Grounding cord.

## Applying the Paint.

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

- 1. Ensure first of all that the uncoated floor is grease, chemical and dust-free.
- 2. Do not apply if the temperature is below 10C
- 3. Mark out areas that can be easily completed without stopping, i.e. 50 m2 for a 5 litre unit. If the floor is to be completed over a number of sections mark off these areas with adhesive tape to ensure that they are straight edged.
- 4. Stir the contents **THOROUGHLY** (it is recommended that a drill paddle be used for this). Ensure that there are no materials adhering to the bottom or sides of the can and that the colour is even.
- 5. Apply the paint evenly using a medium pile roller (5 Litres is enough to cover approximately 50m2 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 8 hours drying time, depending on ambient temperature and humidity.
- 8. Repeat the procedure as above for the second coat
- 9. Any remaining paint can be used at a future date. Please re-seal tin lid tightly.

#### After Application is Complete

*General Maintenance*: Sweep or vacuum off any dirt from the surface. Cleaning can be done with a wet mop, a mild detergent may be used for stubborn stains. If a detergent is used the floor must be rinsed as any soap film left on the surface could create an insulative film.

*Operator Usage*: For complete protection personnel should be grounded to the floor by means of ESD Shoes or Heel Grounders.

The coating should be suitable for walking upon after 24 hours. Full cure will be achieved after 3 days, and optimum electrical properties will be exhibited up to 7 days after application.

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