



INSTALLATION GUIDE

FRED® - CLASS A2-S1,D0 | FLAME
RETARDANT PAINT | 2025/26



1. Area of use:

Applied on concrete substrates, it reduces spalling and loss of structural integrity. FRED® Flame is certified class A2, S1, D0 FRED® intumescent coating can be used on steel, wooden, mineral, and insulation substrates and is applied by airless spray, roller, or paintbrush.

2. System:

FRED® flame retardant paint is a water-borne intumescent coating that, once dried, will stop or strongly retard the passage of fire through the substrate it is applied on. FRED® flame has inhibited the formation of toxic fumes generated by fires of insulation, plastics, spray foam etc



3. Materials and tools commonly used:

- Airless pump + accessories + extension cord.
- Paint brush or roller.
- Empty buckets, water for cleaning of tools.
- Drill mounted paddle mixer.
- Products: FRED®
- Surface temperature meter, substrate must not be below 5°C.
- Personal safety equipment: Safety glasses, gloves, helmet, overalls, and masks.



FRED



Graco ST Max II 495 airless spray machine

4. Individual protection:

Consult the Materials Safety Data Sheet prior to application. Always work in well-ventilated areas. Avoid direct skin contact when product is in wet conditions. You are advised to wear eye protection, overalls, mouth mask, gloves, and safety wear during application.



Gloves



Face fit mask



Goggles



Spray suit

5. Inspection and preparation

The successful adhesion of FRED® depends on the thorough preparation of the substrate. The following preparation instructions need to be followed.

- Remove dust, loose parts and surface pollutants.
- Dry substrates shall be moistened prior to application.
- Apply on a closed surface; fill holes and joints with a fast setting cement based product.



Clean all areas.

6. Setting up the airless spray machine

Open the tub of FRED® and mix till a smooth consistency with a handheld paddle mixer at low speed.

- Place airless spray device above pail with product.
- Prime machine.
- Pump wastewater into waste bucket until product is circulating.
- Build up pressure to 120 – 150 bar.
- Repeat for spray hose/gun until product is circulating.
- Advised spray tips 531 or 421.
- After use, clean airless spray device with water, in the way same as set up.
- Clean filters.

7. Application

- Mix the product well before use. Use a drill mounted paddle
- Do not add water or solvents
- Surface and environment temperatures during application and drying between 5-30 degrees Celsius
- Apply FRED with an airless spray machine or roller. In 1 or 2 layers at the consumption of 0.6 to 2 kg/m²
- Advised spray tips 531 or 421
- The drying time of FRED varies between 4-24 hours depending on conditions.

8. Quality control:

- Check visually to ensure complete coverage. If needed, apply an additional coat.
- Thickness is verified with a wet film thickness gauge for each layer, to ensure minimum total coverage, 0.6-2kg per m²

If required: use wet film thickness gauge to:

- Identify level and smooth patches of substrate.
- Select the appropriate side of the thickness gauge for thicknesses around 600-700 microns.



- Press the appropriate side of the gauge into the wet film immediately after application.
- Remove gauge and inspect the underside of the comb fingers. The last wetted finger indicates the wet film thickness value printed by this finger.
- Repeat the measurements to make a reasonable number of spot checks. As a rule of thumb one measurement should be taken for each 5m² of coating.
- Clean gauge with water

9. Dont's:

- Do not mix/dilute water or solvents.
- Do not mix with other products.
- Do not keep outside in cold temperature/ always store in a safe place.
- Do not leave the lid off the container for long periods, please re-seal immediately after use.
- Do not use for anything else other than its intended purpose.

10. Storage:

Store all containers in a dry frost free environment between 5°C and 30°C, avoid direct sunlight or contact with a heat source.

Seal part used containers by pushing down firmly in the center of the lid when closing to expel air, ensure lid is closed tightly.

Do not use product from damaged or broken containers.

Shelf life: product will keep for 24 months from date of manufacture if kept according to these instructions in unopened containers. See batch number for date of production: ddmmyyxx (dd:day/mm:month/y:year/xx:productcode).

11. Disposal:

Please refer to product SDS information. Please recycle all used tubs.

Precautions:

Consult the Materials Safety Data Sheet and the material compatibility sheet prior to application. Always work in well-ventilated areas. Avoid direct skin contact when product is in wet condition. You are advised to wear eye protection, face mask, gloves, and safety wear during application.

Further advice:

This advice is based on the experience of the Intelligent Membranes® for further information, please contact our head office. Product sheets, safety data sheets and independent test reports are available on request.

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