

# FLAMLINE® ENCAPSULATION INSTALLATION

FOR USE WITH:  
EPOXY RESIN ON CONCRETE/METAL SURFACES

## INTRODUCTION

Use this installation technique on concrete, metal or other substrates such as slab joints and parking garage expansion joints. The process of installing the FlamLINE waterproof joint in epoxy resin is simple and does not require any specialized tools or training.

The FlamLINE joint waterproofing material is shipped to the job site in a roll. The description of the technique given is valid for all “hard” substrates, although this method of installation is used mainly on concrete substrates. Particular attention must be paid to the application on concrete, as the quality of a concrete substrate can vary significantly. The installation procedure is described as follows:

### STEP 1: SUBSTRATE EVALUATION

Ascertain the condition and suitability of the substrate. Ensure that the substrate is free of any contaminants.

#### Acceptable Condition of Concrete:

- Concrete aged minimum 4 - 6 weeks.
- Maximum allowable moisture content 3%.
- Surface to be free of dust, oil, grease and other debris.

#### Acceptable Condition of Other Substrates:

- Other surfaces such as metal must be free of dirt, rust, oils and grease.

### STEP 2: LAYING OUT

Snap a straight edge using a chalk line marking out the limit of epoxy application on each side of the building expansion joint. Epoxy should be applied 1" beyond FlamLINE.

### STEP 3: SUBSTRATE PREPARATION

This step is very critical, especially for concrete surfaces. The preparation of the substrate surface will determine the strength of the epoxy bond.

#### Preparation of Substrates:

- Remove any cement film by grinding, pointing or sandblasting loose areas. Use a grinding machine with a brush attachment. Clean the concrete surface with a vacuum. Use a guide, spend about 10 minutes cleaning per 3 feet [1 m] of concrete surface).
- Strengthen surface using a grinding tool to ensure a proper bond.
- Repair large recesses and spalled concrete using grouting mortar mix, with a rough surface finish.

**Preparation of Other Substrates:**

- a) Remove rust by either sanding or filing. Remove grease using a commercial degreasing agent such as TSP.

**STEP 4: EPOXY RESIN PREPARATION**

Prepare the epoxy resin mixture in accordance to the epoxy manufacturer’s instructions. Recommended amount of epoxy; 8.6 oz./ft. [800 g/m].

**STEP 5: APPLICATION**

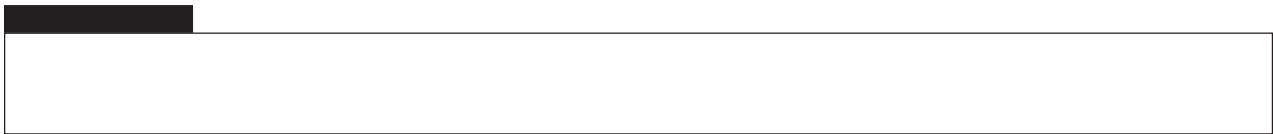
Apply a generous layer of the epoxy resin to the prepared surface, with a notched trowel. Keep the layer a uniform 1/8” [3 mm] thick. Press the FlamLINE firmly into the epoxy; do not coat the underside of the FlamLINE material with epoxy. Use a spatula tool to press the FlamLINE into the epoxy. The epoxy must wholly encapsulate the entirety of the FlamLINE flange and extend a minimum of 1” [25 mm] onto the substrate. No FlameLINE flange must be left exposed.

Apply a 1/16” [2 mm] coat of epoxy on the top side surface of the FlamLINE, making sure to completely cover the visible FlamLINE flange. Once the epoxy top coat starts to gel, sprinkle quartz sand while wet or roughen the surface by sanding it with sand paper (medium grade), when dry to touch. Recommended amount of sand; 0.6 oz./ft. [60 g/m].

TIP: Apply masking/painters tape along the gland prior to applying the epoxy. Remove tape while epoxy is still wet for a clean straight edge.

**STEP 6: TOOL CLEAN UP**

Clean epoxy tools using an epoxy cleaner.



**POINTS TO NOTE WHEN INSTALLING : FlamLINE IN 9DCLMF9G-B**

Ensure that the FlamLINE is dry before application. If by chance it is exposed to moisture, dry it out prior to application either by hot air drying or laying it out in the sun.

Ensure that the FlamLINE flange is fully encapsulated within the epoxy matrix.

Always follow the epoxy manufacturer’s recommendations.

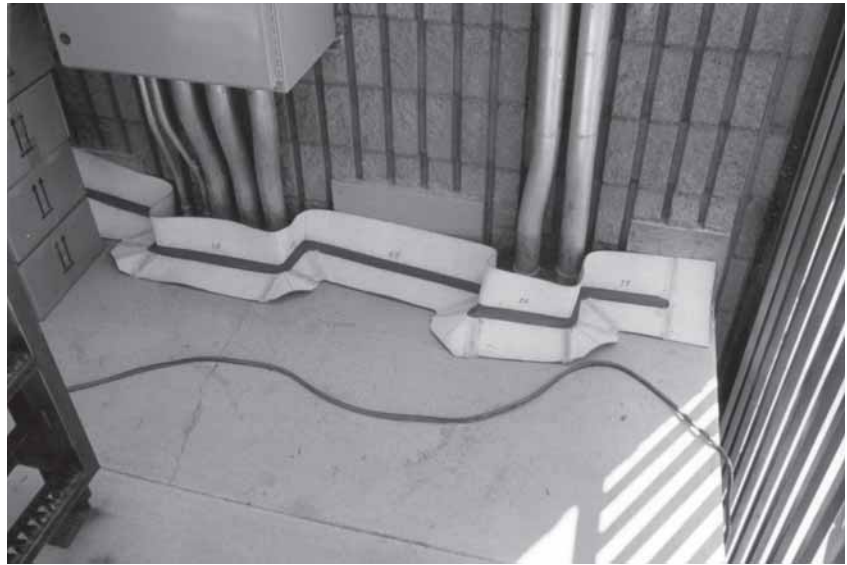
Do not allow the epoxy on either surface to dry; always apply epoxy onto a wet epoxy layer

## FlamLINE® ENCAPSULATION INSTALLATION WITH EPOXY RESIN ON CONCRETE



◀ The FlamLINE will be applied to a concrete substrate with epoxy resin.

The FlamLINE being checked for proper fit. ▶



◀ Mixing the epoxy material. The open pot time must always be observed.



▲ The FlamLINE adhered with epoxy to the substrate.



▲ The epoxy resin is applied on to the substrate with a bolt cartridge gun and the FlamLINE is laid into the bed of epoxy. The top surface of the yellow flange is similarly coated.

The completed FlamLINE installation with a protective metal flashing in place.

