

## **Blome Sealant 50**

### **Urethane Asphalt Expansion Joint Sealant**

#### **PRODUCT DESCRIPTION**

Sealant 50 is a two-component, cold-applied urethane asphalt elastomeric sealant with very good chemical resistance and good elongation properties. It exhibits excellent resistance to most acids, alkalis and salts. It has excellent adhesion to a variety of substrates including concrete, tile, steel and brick. Sealant 50 is highly resilient and retains its elastomeric properties over a temperature range of -80°F to 140°F. It also has very good curing characteristics for fast turnaround.

#### **GENERAL USES**

Sealant 50 is generally used as an expansion joint sealant where good chemical resistance is also required such as for acid brick flooring, secondary containment and monolithic floor toppings. Typical expansion joint applications include:

- Dairy and meat processing plant brick floors
- Chemical processing floors
- Chemical unloading areas
- Beverage plants

#### **HANDLING CHARACTERISTICS**

Sealant 50 is available in a pour grade for relatively horizontal surfaces. It may be poured in place and pumped with a caulk gun suitable for two-component materials.

#### **TYPICAL PROPERTIES**

##### **WET**

Solids by Volume:	80%
Pot Life at 75°F:	1 ½ hour in 1-gallon units
Initial Set at 75°F:	6-8 hours
Final Cure at 75°F:	72 hours

##### **CURED**

Color:	Black
Elongation:	147%
Tensile Strength:	216 psi
Elastic Recovery:	90%
Bond Strength to Steel:	135 psi
Coefficient of Linear Expansion:	26 x 10 <sup>-5</sup> in./in./°F
Flow at 200°F:	none
Thermal Shock, Rapid Temperature Change:	No cracking or disbonding
Operating Temperature Range:	-80°F to 140°F

## **PACKAGING & STORAGE**

Sealant 50 is supplied as a two-component material, packaged in pre-measured units as a two-gallon kit or as a four-gallon kit. Store unopened components in a dry place, out of direct sunlight and protected from the elements. Storage temperature should be 60-85°F. Properly stored, Sealant 50 will have a minimum shelf life of 12 months. Refer to date of manufacture printed on the label.

## **SPECIFICATION GUIDE**

Fill all expansion joints with a two-component urethane asphalt sealant meeting the formulation and performance characteristics of Sealant 50 as manufactured by Blome International, O'Fallon, MO (800) 886-3455. Install in accordance with the latest Sealant 50 data sheet and good industry practice.

## **APPLICATION GUIDELINES**

### **ENVIRONMENTAL CONDITIONS**

It is important that the floor surface and joint be kept dry and reasonably warm. Apply only when air and surface temperatures are between 60 and 95°F and surface is at least 5°F above dew point. Do not use Sealant 50 at temperatures below 60°F. If joint surfaces are damp, not wet, or could become damp, use Blome 75 Moisture Tolerant Primer and install Sealant 50 while primer is tacky but firm.

### **JOBSITE STORAGE OF MATERIALS**

Proper storage of Blome International products is important to a successful application. Follow these general storage procedures:

1. Store components (Part A and Part B) unopened, at 60-85°F, out of direct sunlight and protected from the elements.
2. Keep away from heat and flame. For the 24 to 48 hours just prior to use, adjust the storage temperature to 70-85°F to facilitate handling.

### **FLOOR JOINT DESIGN**

For maximum sealant performance, the following design principles should be followed. A closed cell backer rod should be inserted into the joint, after surface preparation, at a depth equal to ½ of the joint width. However, minimum joint width and depth of sealant should be no less than ¼”.

### **SURFACE PREPARATION**

All surfaces must be clean and dry, void of oil, grease, rust, dirt or other contaminants that may inhibit proper adhesion. For porous surfaces such as concrete, wire brushing is recommended and for non-porous surfaces such as steel, solvent wiping may be adequate. Damp surfaces or potentially damp surfaces should be primed with Blome 75 Moisture Tolerant Epoxy Primer.

### **MASKING & PROTECTION**

Since installation of Sealant 50 should follow completion of the floor surface, it may be advisable to mask the surfaces adjacent to the joint to minimize cleanup of the finished floor surface. Avoid foot traffic for 8-12 hours and 24 hours for vehicle traffic.

## **APPLICATION EQUIPMENT**

Sealant 50 is normally installed with simple equipment. For best results, pour into joints using a pour-can with a spout that has been shaped to fit the joint. This fills the joint from the bottom up and produces a better joint with fewer air bubbles trapped within the sealant. It may also be pumped with equipment suitable for viscous, two-component materials.

## **MIXING TECHNIQUE**

We recommend using Jiffy type mixers for all mixing and stirring. While operating the mixer, avoid plunging it up and down in the bucket. This can fold air into the resin, which may result in bubbles and voids in the cured sealant. Be especially careful not to allow water to enter the mix.

## **WORKING TIME**

The working time for Sealant 50 is a very reasonable 90 minutes at 75°F. Ensure that the joints are ready for installation of the sealant before mixing. *We recommend mixing full kits.*

## **MIXING & APPLICATION**

1. Atmospheric temperature must be 60°F or above to permit proper mixing and pouring.
2. Premix each component, then add Component 2 to Component 1.
3. Using a drill motor and an agitator having a 5-inch or larger diameter blade, thoroughly mix for 3 to 5 minutes.
4. Pour into horizontal joints as soon as mixed. Sloping joints can be poured 15 minutes after mixing (when material begins to increase in viscosity).

## **TOUCH-UP & RECOATING**

Short filled joint sealant or air pockets are best repaired by full removal of the sealant in the affected area and re-installation of the sealant.

## **CLEAN-UP**

Hand tools and equipment may be cleaned with xylene or MEK after use. Cured material may be difficult to remove.

## **CAUTION**

Sealant 50 may cause skin irritation with prolonged or repeated contact. Avoid skin contact and follow the safety data sheet, which is available for each product.

## **WARRANTY**

We warrant that our goods will conform to the description contained in the order and that we have good title to all goods sold. Our material data sheets and other literature are to be considered accurate and reliable, but are used as guides only. **WE GIVE NO WARRANTY OR GUARANTEE, WHETHER OF MERCHANT ABILITY OR FITNESS OF PURPOSE OR OTHERWISE, AND WE ASSUME NO LIABILITY IN CONNECTION THEREWITH.** We are happy to give suggestions for applications; however, the user assumes all risks and liabilities in connection therewith regardless of any suggestion, we may give. We assume no liability for consequential or incidental damages. Our liability, in law and equity, shall be expressly limited to the replacement of non-conforming goods at our factory, or at our sole option, to repayment of the purchase price of the non-conforming goods.