

Guide to Sealants Terms and Use with EIFS

Technical Bulletin

TB002

Category: EIFS

Keywords: EIFS, Sealant, Expansion, Joints

Sealants, provide two vital functions: (1) They effectively seal joints between abutting materials against the weather; and (2) they absorb thermal expansion and contraction. In general, sealant joints are constructed similar to Fig.1 below. Parex USA requires the surface of the system which will receive the sealant to be either mesh reinforced base coat or track. Do not return finish into the joints or other areas to receive sealant. Sealants are applied in strict conformance with the sealant manufacturer's recommendation.

Sealant Specification for use with EIFS:

- Sealant for expansion joints between EIFS to EIFS sections shall be ultra-low modulus designed for minimum 100% elongation and minimum 50% compression and as selected by Project Designer.
- Sealant for perimeter seals around window and door frames and other wall penetrations shall be low modulus, designed for minimum 50% elongation and minimum 25% compression, and as selected by Project Designer.
- Sealants shall conform to ASTM C920, Grade NS.
- Expansion joints between sections of Parex EIFS shall have a minimum width of $\frac{3}{4}$ in (19 mm).
- Perimeter seal joints shall be a minimum width of $\frac{1}{2}$ in (12.7 mm).
- Sealant backer rod shall be closed-cell polyethylene foam.
- Apply sealant to tracks or base coat of Parex EIFS.
- Color shall be as selected by Project Designer.
- Joint design, surface preparation, and sealant primer shall be based on sealant manufacturer's recommendations and project conditions.

Sealant Standards

ASTM C920	Elastomeric Joint Sealants Type S - Single Component Grade NS - Non-Sag
ASTM C1382	Evaluation of Sealant Performance with EIF Systems

Sealant Selection

The Following sealants have been found to be compatible with Parex USA basecoats.

- Sika: SikaFlex 15 LM (Sikaflex Primer 429 required), SikaFlex 2c NS EZ Mix, Sikasil WS- 290, or Sikasil WS- 295. The use of primer should be considered for each project depending on field conditions and bond testing performed. Sikaflex Primer 429 or Sikasil Primer 2100 may be required.
- Dow Corning 790 Silicone Building Sealant with Dow Corning No. 1200 Primer
- Dow Corning 795 Silicone Building Sealant are intended to be used as perimeter seals around penetrations. They are not intended to be used when sealing EIFS to EIFS.
- Dow Corning Contractors Weatherproofing Sealant (For Perimeter Joint & Wood Frame Floor Line Joint).
- Pecora 890 Silicone Building Sealant with Pecora No. 150 Primer
- Sonneborn 150
- Polyurethane Sealant (TT-S-00230C, Type II, Class A) (ASTM C920, Type S, Grade NS, Class 100/50) for perimeter joints (not recommended for locations where temperatures drop below freezing because cold temperatures may significantly increase the modulus of the sealant).

Because of the wide variety of surface materials and conditions, such as window and door frames, flashings, etc., check with the sealant manufacturer to ensure compatibility of the sealants to the surface(s) to which they will be applied. Special surface preparation or primers may be required.

Sealant manufacturers not on the list must provide documentation that their sealant(s) has (have) been tested in accordance with the procedures in either ASTM C-1382 and/or EIMA 300.01 so their performance, in conjunction with an EIF System, can be evaluated. Results of these tests are to be submitted to Parex USA or to the design professional to determine the suitability of the application.

Expansion Joints with EIFS

Expansion Joint placement and design is the responsibility of the project designer and or engineer, however Parex USA recommends continuous expansion joints be installed at the following locations:

1. At building expansion joints.
2. At substrate expansion joints.
3. At floor lines in wood frame construction.
4. Where Parex EIFS panels abut one another.
5. Where Parex EIFS abuts other materials.
6. Where significant structural movement occurs, such as at
 - a. Changes in roof line.
 - b. Changes in building shape and/or structural system.
7. Where substrate changes. (For exceptions to joints at substrate changes, contact the Parex USA Technical Department)
8. Joint width should be indicated on drawings for movement and expansion and contraction conditions. Consult with sealant manufacturer for joint design recommendations and with Parex USA for coordination of EIFS materials. Parex USA assumes no responsibility for joint design or selection of sealant.

Sealant Joint Definitions

Ultra-Low Modulus: Sealant requires ultra-low force to elongate and compress and therefore puts very low stress on the bond.

Expansion Joint: A joint that separates the system to relieve movement stresses within the system or wall assembly as a whole. Expansion joints allow the isolated wall sections to move independent of each other. Expansion joints should be installed at the following locations:

At building expansion joints; at substrate expansion joints; where system panels abut one another; where the system abuts other materials; where the substrate changes; where significant structural movement occurs i.e. changes in roof line, changes in shape and/ or structural system.

Perimeter Joint: A joint that seals the system against moisture intrusion. These joints experience minimal movement from thermal changes. Typical perimeter joints include: seals around windows, doors and appliances that penetrate the system.

Sealant Application

Consult the sealant manufacturers for proper sealant application. Parex USA materials must be completely dry, clean and free of foreign materials when sealants are applied to them. Carefully follow all of the sealant manufacturer's recommendations for cleaning of substrates, application of sealant primers, and application of sealants.

Apply sealant directly to the Parex USA Base Coat as illustrated in the published Parex USA Details. Avoid application of sealants to Parex USA finish coats except as otherwise required by the design conditions.

Parex USA Base Coats and Finishes must be thoroughly dry before sealants can be applied.

Parex USA Cementitious Base Coats require a minimum drying time of three days and longer during conditions of cool temperatures or high humidity; Parex USA 100% Acrylic Base Coat and Finishes may require further drying time.

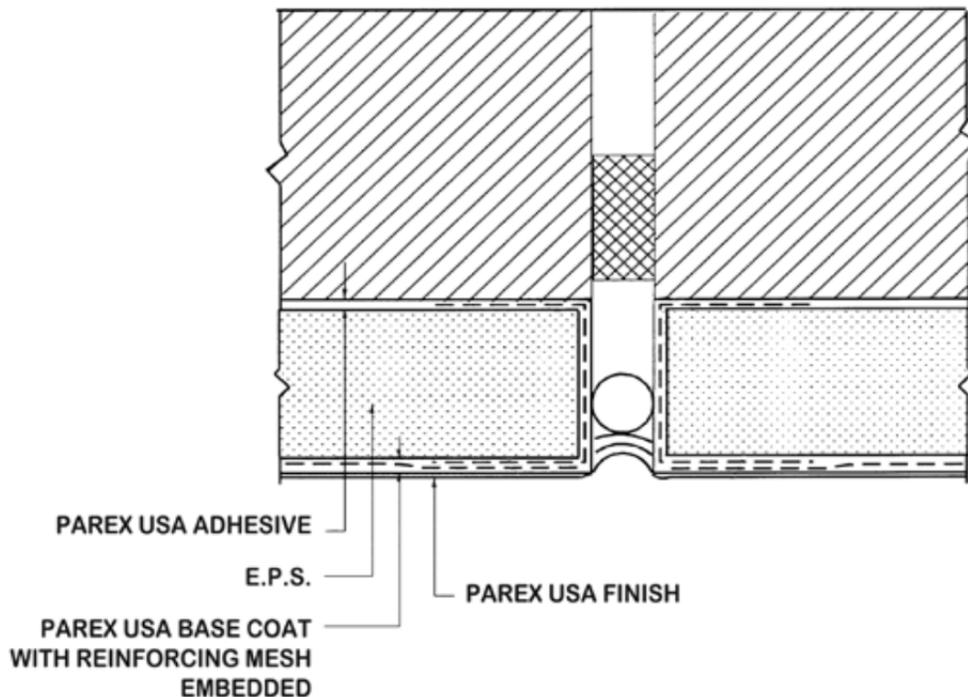


FIGURE 1



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