PAREXUSA

Guide to Sealants Terms and Use with EIFS

Technical Bulletin

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Sealants provide two vital functions: (1) They effectively seal joints between adjacent 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.
- Sealant joint design shall be in accordance with ASTM C1193.
- Expansion joints between sections of Parex EIFS shall have a minimum width of ¾ in (19 mm).
- Perimeter seal joints shall be a minimum width of ½ in (12.7 mm).
- Sealant backer rod shall be closed cell or soft backer rod 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; Type M Multicomponent
Grade NS - Non-Sag

ASTM C1382 Evaluation of Sealant Performance with EIF Systems

Sealant Backer Rod Standard

ASTM C1330 Standard Specification for Cylindrical Sealant Backing for Use with Cold Liquid-Applied Sealants
Type C Closed Cell; Type B soft backer rod as allowed by the sealant manufacturer. Type O, open cell, shall not be used.

Sealant Joint Design Standard

ASTM C1193 Standard Guide for Use of Joint Sealants

Sealant Selection

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

- SikaFlex 15 LM (Sikaflex Primer 429 required).
- SikaFlex 2c NS EZ Mix and Sikaflex 2c EZ Mix +. (Not intended for EIFS to EIFS joints)
- Sikasil WS-290 and Sikasil WS-290 FPS.
- Sikasil WS-295 and Sikasil WS-295 FPS. Sikasil WS-295 is intended to be used as perimeter seals around penetrations. It is not intended to be used when sealing EIFS to EIFS.
- 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.

- MasterSeal NP 150
- MasterSeal NP 100 with MasterSeal P 179
- MasterSeal NP2/with MasterSeal P 173 (for use with Stucco and Nu Tech Stucco Systems only)
- MasterSeal NP1 with MasterSeal P 173 (for use with Stucco and Systems only)

- Other sealants whose manufacturers have determined their suitability for use in accordance with ASTM C1382. Consult sealant manufacture or Parex USA Technical Department for compatibility

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.

Sealants not listed above must have documentation from their manufacturers that the sealant(s) has (have) been tested in accordance with the procedures in ASTM C-1382 so that 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. At wall deflection joints.
5. Where Parex EIFS panels adjoin one another.
6. Where Parex EIFS adjoins other materials.
7. Where significant structural movement occurs, such as at
    a. Changes in roof line.
    b. Changes in building shape and/or structural system.
8. Where substrate changes. (For exceptions to joints at substrate changes, contact the Parex USA Technical Department.)

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 independently of each other within the limits of the design

***Perimeter Joint*:** A joint that seals the system against moisture intrusion. These joints experience less 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.

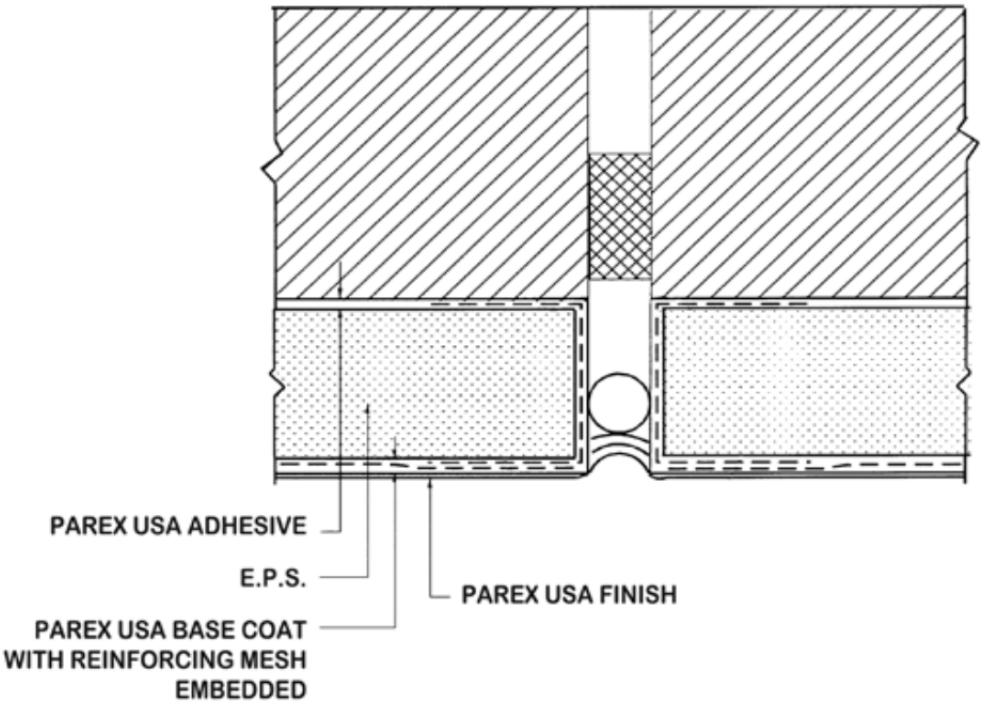

FIGURE 1

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