

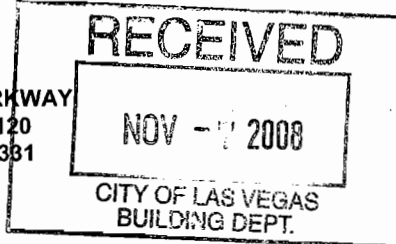
ICC Evaluation Service, Inc.
www.icc-es.org

Business/Regional Office ■ 5360 Workman Mill Road, Whittier, California 90601 ■ (562) 699-0543
 Regional Office ■ 900 Montclair Road, Suite A, Birmingham, Alabama 35213 ■ (205) 599-9800
 Regional Office ■ 4051 West Flossmoor Road, Country Club Hills, Illinois 60478 ■ (708) 799-2305

DIVISION: 07—THERMAL AND MOISTURE PROTECTION
Section: 07240—Exterior Insulation and Finish Systems

REPORT HOLDER:

STO CORP.
3800 CAMP CREEK PARKWAY
BUILDING 1400, SUITE 120
ATLANTA, GEORGIA 30381
(404) 346-3666
www.stocorp.com



EVALUATION SUBJECT:

**STOTHERM ESSENCE EIFS, STOTHERM CLASSIC EIFS,
 STOTHERM PREMIER EIFS**

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2006 *International Building Code*® (IBC)
- BOCA® *National Building Code*/1999 (BNBC)
- 1999 *Standard Building Code*® (SBC)
- 1997 *Uniform Building Code*™ (UBC)

Properties evaluated:

- Noncombustible construction
- Ignition resistance
- Surface burning characteristics
- Structural—transverse wind load resistance
- Weather resistance
- Fire-resistance-rated construction

2.0 USES

The StoTherm Essence, StoTherm Classic and StoTherm Premier EIFS are used as insulation and exterior wall finishes for combustible and noncombustible construction.

3.0 DESCRIPTION

3.1 StoTherm Essence EIFS:

3.1.1 General: StoTherm Essence EIFS is an exterior insulation and finish system (EIFS) clad wall assembly applied to wood or steel-framed exterior walls covered with gypsum sheathing or wood-based panel sheathing and concrete and masonry substrates. System components include an adhesive, a rigid expanded polystyrene (EPS) insulation board, a base coat, reinforcing mesh and a synthetic plaster finish. Specific materials used in StoTherm Essence EIFS are listed in Table 1 and described in Section 3.1.2.

The StoTherm Essence EIFS is permitted to be used on (1) buildings classified under the IBC with walls that are required to be of combustible or Type I, II, III, or IV (noncombustible) construction other than framed walls in a Group R1, R2, R3 or R4 Occupancy Group; (2) buildings classified under the BNBC with walls that are required to be of combustible or Type I, II, III, or IV (noncombustible) construction other than framed walls in Use Groups R-1, R-2, R-3 or R-4; (3) buildings classified under the SBC with walls that are required to be of combustible or Type I, II, III, or IV (noncombustible) construction other than framed walls in a R1, R2, or R3 Occupancy Group; and (4) buildings with walls that are required to be of combustible or noncombustible construction under the UBC other than framed walls in a Group R, Division 1 or Division 3, Occupancy Group.

3.1.2 Materials:

3.1.2.1 Substrates:

3.1.2.1.1 Gypsum Sheathing: Gypsum sheathing must be minimum 1/2-inch-thick (12.7 mm), water-resistant core sheathing complying with ASTM C 79 or ASTM C 1396. Sheathing may also be Dens-Glass Gold® or Dens-Glass Gold® Fireguard Type X, minimum 1/2-inch-thick (12.7 mm), water-resistant core gypsum sheathing products manufactured by G-P Gypsum Corporation and recognized in an ICC-ES evaluation report.

3.1.2.1.2 Wood-based Panel Sheathing: Wood-based panel sheathing must be minimum 3/8-inch-thick (9.5 mm) exterior-grade plywood or Exposure 1 oriented strand board (OSB) complying with U.S. DOC PS-1 or PS-2.

3.1.2.1.3 Concrete and Masonry: Concrete and masonry substrates must comply with the applicable code.

3.1.2.2 Insulation Board: Sto Insulation Board is rigid expanded polystyrene (EPS) insulation board with a nominal density of 1.0 lb/ft³ (16 kg/m³), complying with ASTM C 578 as Type I, and having a flame-spread index not greater than 25 and a smoke-developed index not greater than 450 when tested in accordance with ASTM E 84 (UBC Standard 8-1). The boards are 24 inches (610 mm) wide by 48 inches (1219 mm) long and have thicknesses ranging from 3/4 inch to 4 inches (19.1 mm to 102 mm).

A maximum thickness of 12 inches (305 mm) is permitted for noncombustible construction assemblies described in Section 4.0.

As an alternative to Sto Insulation Board, AFM Corporation's insulation board, evaluated in ICC-ES evaluation report ESR-1006, may be used.

3.1.2.3 Adhesives:

3.1.2.3.1 Sto Primer/Adhesive-B: StoTherm Primer/Adhesive-B is a factory-blended, polymer-modified, cement-based adhesive that is also used as a base coat.

ES REPORTS™ are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, Inc., express or implied, as to any finding or other matter in this report, or as to any product covered by the report.



Packaged in 60-pound (27.2 kg) bags, the product has a one-year shelf life when stored at temperatures between 40°F and 90°F (4°C and 32°C). As an adhesive for insulation board attachment, StoTherm Primer/Adhesive-B is permitted for use on gypsum sheathing, Dens-Glass Gold[®] type sheathings, and concrete and masonry surfaces.

3.1.2.3.2 Sto Primer/Adhesive: Sto Primer/Adhesive is used as an alternate to Sto Primer/Adhesive-B. Sto Primer/Adhesive is an acrylic-based adhesive, also used as a base coat, that is field-mixed with Type I portland cement. Packaged in 50-pound (22.7 kg) pails, the product has a one-year shelf life when stored at temperatures between 40°F and 90°F (4°C and 32°C). As an adhesive for insulation board attachment, Sto Primer/Adhesive is used on gypsum sheathing, Dens-Glass Gold[®] sheathings, and concrete and masonry surfaces.

3.1.2.3.3 Sto Dispersion Adhesive: Sto Dispersion Adhesive is a ready-mixed copolymer adhesive used for attachment of EPS insulation boards to wood-based and gypsum sheathing. Packaged in 5-gallon (19L) pails, the product has a one-year shelf life when stored at temperatures between 40°F and 90°F (4°C and 32°C).

3.1.2.4 Base Coat: Sto Primer/Adhesive-B and Sto Primer/Adhesive, as described in Section 3.1.2.3, are also permitted for use as base-coat materials in StoTherm Essence EIFS assemblies.

3.1.2.5 Sto Mesh: Sto Mesh is a flexible, interlaced glass-fiber fabric mesh, treated for compatibility with the other Sto materials. Sto Mesh is supplied in 38-inch-by-150-foot (965 mm by 45.7 m) rolls, weighs a nominal 4.5 ounces per square yard (153 g/m²), and has a 6-by-5 thread count per inch-width (6-by-5 thread count per 25 mm width). It has minimum 165- and 150-pound-per-lineal-inch (28.9 and 26.2 N/mm) tensile strengths in the weft and warp directions, respectively. When protected from moisture, Sto Mesh has a one-year shelf life.

3.1.2.5.1 Optional Reinforcing Mesh: Additional glass-fiber reinforcing mesh products may be used to enhance the impact resistance of the Sto EIFS and to install system terminations and details. The optional mesh products are listed in Table 2.

3.1.2.6 Sto Primer: Sto Primer is an optional latex-based primer that may be used over Sto Corp. base coats prior to finish applications. Sto Primer is packaged in 60-pound (27.3 kg) pails and has a one-year shelf life when stored at temperatures between 40°F and 90°F (4°C and 32°C).

3.1.2.7 Sto Essence Finish: The Sto Essence Finish is an acrylic latex finish material containing quartz sand and marble aggregate. Packaged in 70-pound (31.8 kg) pails, the product has a one-year shelf life when stored at temperatures between 40°F and 90°F (4°C and 32°C).

3.1.2.8 Sealants: Evidence must be submitted to the code official showing that the manufacturer-recommended sealant complies with ASTM C 920, Type M, Grade NS, minimum Class 25, and that it is compatible with the EIFS components. The sealant must have a movement capability of ±25% or greater, and must be tested in accordance with ASTM C 1382.

3.2 StoTherm Classic EIFS:

3.2.1 General: StoTherm Classic EIFS is an EIFS applied to wood or steel-framed exterior walls covered with gypsum sheathing or wood-based panel sheathing, or to exterior walls constructed of concrete or masonry. System components include an adhesive, a rigid EPS insulation board, a base coat, reinforcing mesh and a synthetic plaster finish. Specific materials used in StoTherm Classic EIFS are listed in Table 1 and described in Section 3.2.2.

The StoTherm Classic EIFS is permitted to be used on (1) buildings classified under the IBC with walls that are required to be of combustible or Type I, II, III, or IV (noncombustible) construction other than framed walls in a Group R1, R2, R3 or R4 Occupancy Group; (2) buildings classified under the NBC with walls that are required to be of combustible or Type I, II, III, or IV (noncombustible) construction other than framed walls in Use Groups R-1, R-2, R-3 or R-4; (3) buildings classified under the SBC with walls that are required to be of combustible or Type I, II, III, or IV (noncombustible) construction other than framed walls in a R1, R2, or R3 Occupancy Group; and (4) buildings with walls that are required to be of combustible or noncombustible construction under the UBC other than framed walls in a Group R, Division 1 or Division 3, Occupancy Group.

3.2.2 Materials:

3.2.2.1 Substrates: Substrates are described in Section 3.1.2.1.

3.2.2.2 Insulation Board: Insulation board is described in Section 3.1.2.2.

3.2.2.3 Adhesives:

3.2.2.3.1 Sto BTS Plus: Sto BTS Plus is a factory-blended, polymer-modified, cement-based adhesive that is also permitted for use as a base coat. Packaged in 60-pound (27.2 kg) bags, the product has a one-year shelf life when stored at temperatures between 40°F and 90°F (4°C and 32°C). As an adhesive for insulation board attachment, Sto BTS Plus is used on gypsum sheathing, Dens-Glass Gold[®] sheathings, and concrete and masonry surfaces.

3.2.2.3.2 Sto BTS Silo: Sto BTS Silo is used as an alternative to Sto BTS Plus. Sto BTS Silo is a factory-blended, polymer-modified, cement-based adhesive that is also used as a base coat. Packaged in 60-pound (27.2 kg) bags, the product has a one-year shelf life when stored at temperatures between 40°F and 90°F (4°C and 32°C). As an adhesive for insulation board attachment, Sto BTS Silo is used on gypsum sheathing, Dens-Glass Gold[®] sheathings and concrete and masonry surfaces.

3.2.2.3.3 Sto Dispersion Adhesive: This adhesive is described in Section 3.1.2.3.3.

3.2.2.4 Base Coat:

3.2.2.4.1 Sto BTS Plus and Sto BTS Silo: Sto BTS Plus and Sto BTS Silo, as described in Sections 3.2.2.3.1 and 3.2.2.3.2 of this report, respectively, are also used as base-coat materials in Sto Classic EIFS.

3.2.2.4.2 Sto RFP: Sto RFP is a premixed synthetic-resin base coat. Packaged in 60-pound (27.3 kg) pails, it has a shelf life of one year when stored at temperatures between 40°F and 90°F (4°C and 32°C).

3.2.2.5 Sto Mesh: Sto Mesh is described in Section 3.1.2.5.

3.2.2.6 Sto Primer: Sto Primer is described in Section 3.1.2.6.

3.2.2.7 Stolit[®] Finish: The Stolit[®] finish is an acrylic latex finish material containing marble aggregate. Packaged in 70-pound (31.8 kg) pails, the product has a one-year shelf life when stored at temperatures between 40°F and 90°F (4°C and 32°C).

3.2.2.8 Sealants: Sealants are described in Section 3.1.2.8.

3.3 StoTherm Premier EIFS:

3.3.1 General: StoTherm Premier EIFS is applied to wood or steel-framed exterior walls covered with gypsum sheathing

or wood-based panel sheathing, or to exterior walls constructed of concrete or masonry. System components include an adhesive, a rigid EPS insulation board, a base coat, reinforcing mesh and a synthetic plaster finish. Specific materials used in StoTherm Premier EIFS are presented in Table 1 and described in Section 3.3.2. StoTherm Premier EIFS is identical to StoTherm Classic EIFS except that StoSilco® Lit is used instead of Stolit™ as the finish coat.

The StoTherm Classic EIFS is permitted to be used on (1) buildings classified under the IBC with walls that are required to be of combustible or Type I, II, III, or IV (noncombustible) construction other than framed walls in a Group R1, R2, R3 or R4 Occupancy Group; (2) buildings classified under the NBC with walls that are required to be of combustible or Type I, II, III, or IV (noncombustible) construction other than framed walls in Use Groups R-1, R-2, R-3 or R-4; (3) buildings classified under the SBC with walls that are required to be of combustible or Type I, II, III, or IV (noncombustible) construction other than framed walls in a R1, R2, or R3 Occupancy Group; and (4) buildings with walls that are required to be of combustible or noncombustible construction under the UBC other than framed walls in a Group R, Division 1 or Division 3, Occupancy Group.

3.3.2 Materials:

3.3.2.1 Substrates: The substrates are described in Section 3.1.2.1.

3.3.2.2 Insulation Board: Sto Insulation Board is described in Section 3.1.2.2.

3.3.2.3 Adhesives: The adhesives are described in Section 3.2.2.3.

3.3.2.4 Base Coat: The base coats are described in Section 3.2.2.4.

3.3.2.5 Sto Mesh: Sto Mesh is described in Section 3.1.2.5.

3.3.2.6 Sto Primer: Sto Primer is described in Section 3.1.2.6.

3.3.2.7 StoSilco® Lit Finish: StoSilco® Lit finish is a silicone-enhanced, acrylic latex finish material containing marble aggregate. Packaged in 70-pound (31.8 kg) pails, the product has a one-year shelf life when stored at temperatures between 40°F and 90°F (4°C and 32°C).

3.3.2.8 Sealants: Sealants are described in Section 3.1.2.8.

4.0 INSTALLATION

Installation of StoTherm Essence EIFS, StoTherm Classic EIFS and StoTherm Premier EIFS must comply with this report and the manufacturer's published installation instructions. The manufacturer's published installation instructions must be available at the jobsite at all times during installation.

4.1 StoTherm Essence EIFS:

Steel framing members must be minimum No. 18 gage [0.0478 inch (1.214 mm) base-metal thickness], spaced a maximum of 16 inches (406 mm) on center. Wood framing members must be a minimum of nominally 2-by-4 studs spaced a maximum of 16 inches (406 mm) on center. Gypsum sheathing must be attached to steel studs using corrosion-resistant, minimum No. 6 drywall screws spaced at a maximum of 6 inches (152 mm) on center at board edges and 8 inches (203 mm) on center in the field at all studs. Wood-based panel sheathing must be attached to steel studs with minimum No. 6, flathead, corrosion-resistant screws [minimum 0.292-inch (7.4 mm) head diameter] at a maximum of 6 inches (152 mm) on center at board edges and 8 inches (203 mm) on

center in the field. The screws must have sufficient length to penetrate at least $\frac{1}{4}$ inch (6.4 mm) through the steel studs. Wood-based sheathing is attached to wood studs in accordance with the applicable code. All substrate surfaces must be structurally sound, clean, dry and smooth, with no dust or other deleterious material, prior to any adhesive application. Surface irregularities are limited to a maximum of $\frac{1}{4}$ inch (6.4 mm) for every 10 feet (3048 mm) of surface. During adhesive applications and for a 24-hour period thereafter, ambient air and substrate surface temperatures must be 40°F (4°C) or higher. Protection of the coating from moisture is also required for at least 24 hours after application.

Over gypsum sheathing, Dens-Glass Gold®, concrete or masonry substrates, the Sto Primer/Adhesive-B or Sto Primer/Adhesive must be applied uniformly to the mating surface of the insulation board with a stainless steel, notched trowel, having notches $\frac{1}{2}$ inch wide by $\frac{1}{2}$ inch deep (12.7 by 12.7 mm), spaced $2\frac{1}{2}$ inches (63.5 mm) on center. Over gypsum or wood-based sheathing, the Sto Dispersion adhesive must be applied uniformly to the surface of the insulation board with a stainless steel notched trowel having notches $\frac{3}{16}$ inch wide by $\frac{3}{8}$ inch deep (4.8 by 9.5 mm), spaced $1\frac{3}{4}$ inches (44.5 mm) on center.

The adhesive must be applied parallel to the long dimension of the insulation board to achieve horizontal ribbons when the insulation board is applied to the substrate. The insulation board must be installed over the substrate with uniform pressure in horizontal rows beginning at the base of the wall. All joints must be tightly butted and vertical joints staggered. After the adhesive has dried a minimum of twelve hours, the exterior surface of the EPS insulation board must be rasped to smooth surface irregularities.

The Sto Primer/Adhesive-B or Sto Primer/Adhesive, when used as the base coat, must be trowel-applied to the entire outer surface of the insulation board to a uniform thickness of $\frac{1}{16}$ inch (1.6 mm).

The Sto Mesh must be immediately troweled into the wet base coat, proceeding from the center toward the edges until the mesh is completely embedded in the coating. The mesh must be continued around corners at least $2\frac{1}{2}$ inches (64 mm) and overlap a minimum of $2\frac{1}{2}$ inches (64 mm) at all mesh edges. All corners must have two continuous layers of mesh.

After a minimum of eight hours drying time, the Sto Essence Finish coat must be applied after being mixed to a uniform consistency using a drill and paddle. The finish must be applied over the reinforced base coat with a stainless steel trowel, with the placement and leveling done concurrently. The finish thickness may not exceed the diameter of the largest aggregate, approximately $\frac{1}{16}$ inch (1.6 mm). This application yields a total combined base coat and finish coating thickness of approximately $\frac{1}{8}$ inch (3.2 mm).

Only Sto Corp. recommended joint sealant materials are permitted to be used in joints. Sealant joints are required at system terminations, building expansion joints, floor lines of wood-framed construction, changes in building shape or roof line, and substrate changes. Sealant joints are installed as specified by the architect, designer, builder or exterior coating manufacturer, in that order. Typical installation details are shown in Figures 1 through 25.

4.1.1 Wind Resistance: Wood framing members must be designed to resist all positive and negative transverse loads, and must comply with and be designed in accordance with the applicable code, with a deflection limitation of $\frac{1}{240}$ of the span. The StoTherm Essence EIFS, when applied in accordance with this report, can resist the following uniform transverse pressures:

- Over minimum $\frac{1}{2}$ -inch-thick (12.7 mm), gypsum-sheathed, steel-framed walls: 35 psf (1676 Pa) positive and 20 psf (958 Pa) negative.
- Over minimum $\frac{5}{8}$ -inch-thick (15.9 mm) gypsum-sheathed or minimum $\frac{3}{8}$ -inch-thick (9.5 mm) wood-based sheathed, steel-framed walls: 60 psf (2873 Pa) positive and 38 psf (1819 Pa) negative.
- Over minimum $\frac{3}{8}$ -inch-thick (9.5 mm) wood-based sheathing attached to wood studs: 60 psf (2873 Pa) positive and 38 psf (1819 Pa) negative.

4.1.2 Noncombustible Construction: The StoTherm Essence EIFS may be applied where noncombustible construction [Type I, II, III or IV (IBC and UBC); Type 1, 2, 3 or 4 (BNBC); Type I, II, III, IV or V (SBC)] is required, provided the construction is as follows:

4.1.2.1 Interior Finish: One layer of minimum $\frac{1}{2}$ -inch-thick (12.7 mm), Type X gypsum wallboard, complying with ASTM C 36 or ASTM C 1396, must be applied to minimum No. 18 gage, $\frac{3}{2}$ -inch-deep (89 mm), C-shaped steel studs spaced at 16 inches (406 mm) on center. The gypsum wallboard must be fastened to the studs with No. 8, Type S steel screws spaced 8 inches (203 mm) on center to studs at board joints and runners, and 12 inches (305 mm) on center to studs at intermediate locations. Screws must have sufficient length to penetrate into studs at least $\frac{3}{8}$ inch (9.5 mm). All board joints must be backed by framing. At floor levels, stud cavities are blocked with Thermafiber insulation, 4 lb/ft³ (64 kg/m³) density, 4 inches (102 mm) thick and 2 feet (610 mm) wide.

4.1.2.2 Exterior Finish: One layer of minimum $\frac{1}{2}$ -inch-thick (12.7 mm), Type X gypsum sheathing, complying with ASTM C 79 or ASTM C 1396, must be fastened to the studs in accordance with Section 4.1 of this report. Openings must be framed with minimum No. 18 gage [0.0478 inch (1.214 mm) base-metal thickness] steel studs and tracks. The balance of construction, including the use of a Sto adhesive recognized in this report to attach maximum 12-inch-thick (305 mm) Sto insulation board to the sheathing, and the use of a Sto base coat and finish recognized in this report; is as set forth in Section 4.1 of this report.

In accordance with the UBC, the Sto Corp. insulation board is limited to maximum thickness of 4 inches (102 mm).

4.1.3 One-hour-rated, Nonbearing, Fire-resistance-rated Assembly: The StoTherm Essence EIFS may be used as part of a one-hour fire-resistance-rated assembly, provided the construction is as follows:

4.1.3.1 Interior Finish: One layer of minimum $\frac{5}{8}$ -inch-thick (15.9 mm), Type X gypsum wallboard, complying with ASTM C 36 or ASTM C 1396, must be fastened vertically to minimum No. 18 gage, [0.0478 inch (1.214 mm)] steel studs with No. 6, $\frac{1}{4}$ -inch-long (32 mm), self-tapping, corrosion-resistant, bugle head screws spaced 8 inches (203 mm) on center at board perimeters; 12 inches (305 mm) on center at intermediate framing. All board joints must be blocked. Stud spacing must be a maximum of 16 inches (406 mm) on center. Wallboard joints must be covered with tape and joint compound, and fastener heads are covered with joint compound in accordance with ASTM C 840 or GA 216.

4.1.3.2 Exterior Finish: One layer of minimum $\frac{5}{8}$ -inch-thick (15.9 mm), Type X, water-resistant core gypsum sheathing, complying with ASTM C 79 or ASTM C 1396, must be applied vertically in accordance with Section 4.1. All board joints must be blocked. The balance of construction, including the use of a Sto Corp. adhesive recognized in this report to attach maximum 4-inch-thick (102 mm) Sto Corp. insulation board to the sheathing, and the use of a Sto Corp. base coat and finish recognized in this report, must be as set forth in Section 4.1.

4.1.4 Two-hour-rated, Nonbearing, Fire-resistance-rated Assembly: The StoTherm Essence EIFS may be used as part of a two-hour fire-resistance-rated assembly, provided the construction is as follows:

4.1.4.1 Interior Finish: Two layers of $\frac{5}{8}$ -inch-thick (15.9 mm), Type X gypsum wallboard, complying with ASTM C 36 or ASTM C 1396, must be fastened vertically to minimum No. 18 gage, [0.0478 inch (1.214 mm)] steel studs. The base ply of gypsum wallboard must be fastened with No. 6, $\frac{1}{4}$ -inch-long (32 mm), self-tapping, corrosion-resistant, bugle head screws spaced 24 inches (610 mm) on center to all framing. All board joints must be blocked. The face ply of gypsum wallboard must be fastened with $\frac{1}{8}$ -inch-long (32 mm), self-tapping, corrosion-resistant, bugle head screws spaced 8 inches (203 mm) on center to all framing. Face-ply wallboard joints are covered with tape and joint compound, and fastener heads must be covered with joint compound in accordance with ASTM C 840 or GA 216.

4.1.4.2 Exterior Finish: Two layers of $\frac{5}{8}$ -inch-thick (15.9 mm), Type X, water-resistant core gypsum sheathing, complying with ASTM C 79 or ASTM C 1396, must be applied in accordance with Section 4.1.4.1. The balance of construction, including the use of a Sto Corp. adhesive recognized in this report to attach maximum 4-inch-thick (102 mm) Sto Corp. insulation board to the sheathing, and the use of a Sto Corp. base coat and finish recognized in this report, must be as set forth in Section 4.1.

4.2 StoTherm Classic EIFS:

Application of Sto Classic EIFS is identical to application of Sto Essence EIFS, as described in Section 4.1 of this report, except that Sto BTS-Plus, Sto BTS Silo, or Sto RFP is used in place of Sto Primer/Adhesive-B or Sto Primer/Adhesive, and Stolit[®] Finish is used instead of Sto Essence Finish.

4.2.1 Wind Resistance: Wood framing members must be designed to resist all positive and negative transverse loads, and must comply with and be designed in accordance with the applicable code, with a deflection limitation of $\frac{1}{240}$ of the span.

The StoTherm Classic EIFS, when adhesively applied in accordance with this report, can resist the following uniform transverse pressures:

- Over minimum $\frac{1}{2}$ -inch-thick (12.7 mm), gypsum sheathed or Dens-Glass Gold[®]-sheathed, steel-framed walls: 36 psf (1724 Pa) positive and 20 psf (958 Pa) negative.
- Over minimum $\frac{3}{8}$ -inch-thick (9.5 mm), wood-based sheathing attached to wood studs: 36 psf (1724 Pa) positive and 20 psf (958 Pa) negative, or allowable sheathing stress values set forth in the applicable code, whichever is less.
- Over concrete or masonry substrates: 54 psf (2586 Pa) positive or negative.

4.2.2 Noncombustible Construction: The StoTherm Classic EIFS may be applied where noncombustible construction (Types I, II, III or IV) is required, provided the construction is as follows:

4.2.2.1 Interior Finish: One layer of minimum $\frac{1}{2}$ -inch-thick (12.7 mm), Type X gypsum wallboard, complying with ASTM C 36 or ASTM C 1396, must be applied to minimum No. 18 gage [0.0478 inch (1.21 mm)] base-metal thickness], $\frac{3}{8}$ -inch-deep (92 mm), C-shaped steel studs spaced at a maximum of 16 inches (406 mm) on center. The gypsum wallboard must be fastened to the studs with No. 6 by $\frac{1}{4}$ -inch-long (31.7 mm) buglehead drywall screws spaced at a maximum of 6 inches (152 mm) on center. The stud cavity must be filled with unfaced R-11 fiberglass insulation. Openings must be framed with steel having a minimum base-metal thickness of 0.0478 inch (1.21 mm).

4.2.2.2 Exterior Finish: One layer of minimum $\frac{5}{8}$ -inch-thick (15.9 mm), Type X gypsum sheathing, complying with ASTM C 79 or ASTM C 1396, must be fastened to the studs in accordance with Section 4.1. Openings must be framed with minimum No. 18 gage [0.0478 inch (1.214 mm) base-metal thickness] steel studs and tracks. The balance of construction, including the use of a Sto Corp. adhesive recognized in this report to attach maximum 12-inch-thick (305 mm) Sto Corp. insulation board to the sheathing, and the use of a Sto Corp. base coat and finish recognized in this report, must be as set forth in Section 4.2 of this report.

In accordance with the UBC the Sto Corp. insulation board is limited to maximum thickness of 4 inches (102 mm).

4.2.3 One-hour-rated, Nonbearing, Fire-resistance-rated Assembly: The StoTherm Classic EIFS may be used as part of a one-hour fire-resistance-rated assembly, provided the construction is as follows:

4.2.3.1 Interior Finish: One layer of minimum $\frac{5}{8}$ -inch-thick (15.9 mm), Type X gypsum wallboard, complying with ASTM C 36 or ASTM C 1396, must be fastened vertically to minimum No. 18 gage [0.0478 inch (1.214 mm)] steel studs with No. 6, $1\frac{1}{4}$ -inch-long (32 mm), self-tapping, corrosion-resistant, bugle head screws spaced 8 inches (203 mm) on center at board perimeters and 12 inches (305 mm) on center at intermediate framing. All board joints must be blocked. Stud spacing must be a maximum of 16 inches (406 mm) on center. Wallboard joints must be covered with tape and joint compound, and fastener heads are covered with joint compound in accordance with ASTM C 840 or GA 216.

4.2.3.2 Exterior Finish: One layer of minimum $\frac{5}{8}$ -inch-thick (15.9 mm), Type X, water-resistant core gypsum sheathing, complying with ASTM C 79 or ASTM C 1396, must be applied vertically in accordance with Section 4.1. All board joints must be blocked. The balance of construction, including the use of a Sto Corp. adhesive recognized in this report to attach maximum 4-inch-thick (102 mm) Sto Corp. insulation board to the sheathing, and the use of a Sto Corp. base coat and finish recognized in this report, must be as set forth in Section 4.2.

4.2.4 Two-hour-rated, Nonbearing, Fire-resistance-rated Assembly: The StoTherm Classic EIFS may be used as part of a two-hour fire-resistance-rated assembly, provided the construction is as follows:

4.2.4.1 Interior Finish: Two layers of $\frac{5}{8}$ -inch-thick (15.9 mm), Type X gypsum wallboard, complying with ASTM C 36 or ASTM C 1396, must be fastened vertically to minimum No. 18 gage [0.0478 inch (1.214 mm)] steel studs. The base ply of gypsum wallboard must be fastened with No. 6, $1\frac{1}{4}$ -inch-long (32 mm), self-tapping, corrosion-resistant, bugle head screws spaced 24 inches (610 mm) on center to all framing. All board joints must be blocked. The face ply of the gypsum wallboard must be fastened with $1\frac{7}{8}$ -inch-long (32 mm), self-tapping, corrosion-resistant, bugle head screws spaced 8 inches (203 mm) on center to all framing. Face-ply wallboard joints must be covered with tape and joint compound, and fastener heads are covered with joint compound in accordance with ASTM C 840 or GA 216.

4.2.4.2 Exterior Finish: Two layers of $\frac{5}{8}$ -inch-thick (15.9 mm), Type X, water-resistant core gypsum sheathing, complying with ASTM C 79 or ASTM C 1396, must be applied in accordance with Section 4.2.4.1. The balance of construction, including the use of a Sto Corp. adhesive recognized in this report to attach maximum 4-inch-thick (102 mm) Sto Corp. insulation board to the sheathing, and the use of a Sto Corp. base coat and finish recognized in this report, must be as set forth in Section 4.1.

4.3 Sto Premier EIFS:

Application of StoTherm Premier EIFS is identical to application of Sto ClassicTherm EIFS, as described in Section 4.2, except that StoSilco[®] Lit finish is used.

4.3.1 Wind Resistance: Wind design for StoTherm Premier EIFS is the same as described in Section 4.2.1, except that StoSilco Lit finish is used.

4.3.2 Noncombustible Construction: The StoTherm Premier EIFS may be applied where noncombustible construction (Types I, II, III or IV) is required, provided the construction is as described in this report. Noncombustible construction of StoTherm Premier EIFS is identical to that described in Section 4.2.2, except that StoSilco[®] Lit finish is used.

4.3.3 One-hour-rated, Nonbearing, Fire-resistance-rated Assembly: The StoTherm Premier EIFS one-hour-rated, nonbearing, fire-resistance-rated assembly is identical to that described in Section 4.2.3, except that StoSilco[®] Lit finish is used.

4.3.4 Two-hour-rated, Nonbearing, Fire-resistance-rated Assembly: The StoTherm Premier EIFS two-hour-rated, nonbearing, fire-resistance-rated assembly is identical to that described in Section 4.2.4, except that StoSilco[®] Lit finish is used.

5.0 CONDITIONS OF USE

The StoTherm Essence EIFS, StoTherm Classic EIFS and StoTherm Premier EIFS described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 Installation must comply with this report, the manufacturer's published installation instructions and the applicable code. In the event of a conflict between the manufacturer's published installation instructions and this report, this report shall govern.
- 5.2 Installation must be by applicators approved by Sto Corp.
- 5.3 The insulation board must be separated from the building interior with a 15-minute thermal barrier of an approved material or a minimum of 1-inch (25.4 mm) thickness of masonry or concrete.
- 5.4 The design wind load pressures must not exceed the capacities indicated in Sections 4.1.1 and 4.2.1.
- 5.5 The finish systems must not be used as exterior stud wall bracing. Wall bracing must be provided in accordance with IBC Section 2308.9.3, BNBC Section 2305.8.1, UBC Section 2308.11.3 and SBC Section 2308.2.2.
- 5.6 Termination of the systems must not be less than 6 inches (152 mm) above finished grade, in accordance with IBC Section 2603.8 and SBC Section 2304.1.4.
- 5.7 The systems are permitted to be installed on exterior walls of buildings of noncombustible construction (Type I, II, III or IV) and on nonbearing fire-resistance-rated wall assemblies without affecting the rating of the assembly, provided they are installed in accordance with this report.
- 5.8 Except where installed over concrete or masonry substrates, the finish systems are limited to use with the specific penetrating items and termination details of the systems which are tested for wind-driven rain resistance

in accordance with Section 1404.3, Exception, of the BNBC, or which are shown in Figures 6 through 25. Reports of testing of the specific penetrations representative of those intended for use must be submitted to the code official for approval with the application for permit. The evaluation of this system with penetrations (i.e., doors, windows, utility penetrations), other than those shown, for compliance with the exception to Section 1404.3 of the BNBC, is outside the scope of this report.

- 5.9** Except where installation is over concrete and masonry substrates, all installations of these systems are subject to special inspections, in accordance with Section 1704.12 of the IBC and Sections 1406.8 and 1705.13 of the BNBC.
- 5.10** For applications in accordance with the SBC, foam plastic insulation must be installed in accordance with Section 2304.1.4 of the SBC.
- 5.11** Installation cards similar to those shown in Figures 26 and 27 must be completed by the applicators and presented to the code official at the completion of each project.

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Exterior Insulation and Finish Systems (AC219), dated October 2003 (editorially revised April 2008).

7.0 IDENTIFICATION

Each container or package of material used as part of the StoTherm Essence EIFS, StoTherm Classic EIFS and StoTherm Premier EIFS assemblies must be labeled with the manufacturer's name (Sto Corp.); the product name; the batch number; shelf life, as applicable; and the evaluation report number (ESR-1720). Sto must be contacted for information on the manufacturing date.

Sto Insulation Boards must be identified by stamp or label on the edge of each board bearing the manufacturer's name (Sto Corp.); the plant identification number; the product name; the name of the inspection agency (RADCO); and the evaluation report number.

AFM Corporation's insulation board must be identified in accordance with ICC-ES report [ESR-1006](#).

TABLE 1—EIFS RECOGNIZED COMPONENTS^{1,2}

COMPONENT	SYSTEM NAME		
	StoTherm Essence EIFS	StoTherm Classic EIFS	StoTherm Premier EIFS
Adhesive	Sto Primer/Adhesive-B Sto Primer/Adhesive Sto Dispersion Adhesive ³	Sto BTS Plus Sto BTS Silo Sto Dispersion Adhesive ³	Sto BTS Plus Sto BTS Silo Sto Dispersion Adhesive ³
Insulation	Sto EPS Insulation Board	Sto EPS Insulation Board	Sto EPS Insulation Board
Base coat	Sto Primer/Adhesive-B Sto Primer/Adhesive Sto BTS Silo	Sto BTS Plus Sto BTS Silo Sto RFP	Sto BTS Plus Sto BTS Silo Sto RFP
Finish	Sto Essence Finish	Stolit ²	StoSilco ⁶ Lit

¹All base coats reinforced with appropriate Sto Mesh product as listed in Table 2.

²Sto Primer is an optional component of all three systems listed above.

³Sto Dispersion Adhesive is required for wood-based substrates.

TABLE 2—REINFORCING MESH PRODUCTS

PRODUCT NO.	PRODUCT NAME ¹	NOMINAL WEIGHT, oz/lyd ² (g/m ²)	ROLL WIDTH, inches (cm)	ROLL LENGTH, feet (m)
920 E	Sto Mesh	4.5 (153)	38 (97), 48 (122)	150 (45.7)
919	Sto Detail Mesh	4.2 (142)	9.5 (24)	150 (45.7)
985	Sto 6-oz. (170 g) Mesh	6.0 (204)	38 (97)	150 (45.7)
918	Sto Intermediate Mesh	11.0 (373)	38 (97)	75 (22.9)
921	Sto Armor Mat	15.0 (509)	38 (97)	75 (22.9)
922	Sto Armor Mat XX	20.0 (678)	38 (97)	75 (22.9)
921A	Sto Corner Mat	7.6 (258)	9.5 (24)	150 (45.7)

¹Other listed mesh products may be used for detail construction or to supplement impact resistance of the EIFS.

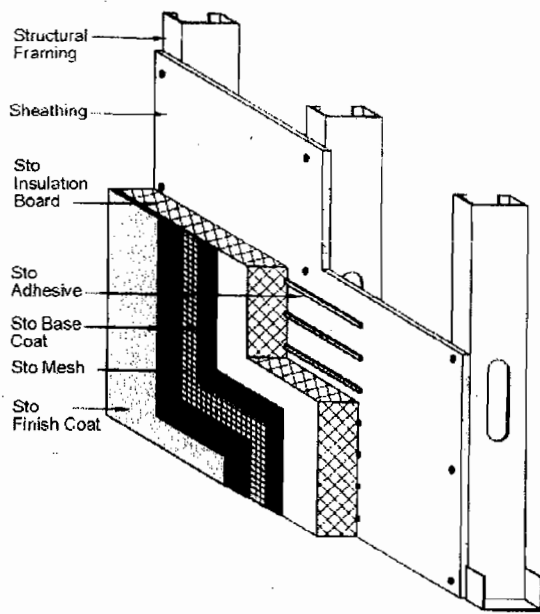


FIGURE 1—SYSTEM COMPONENTS

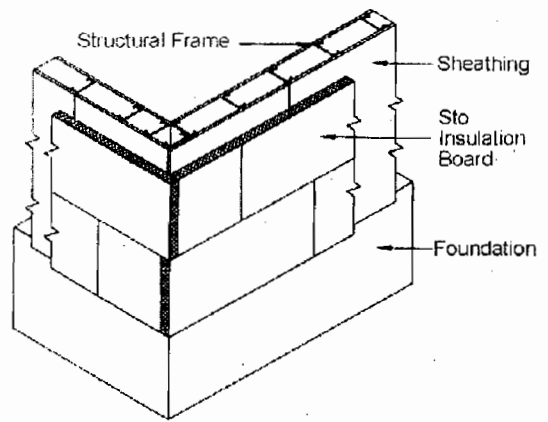


FIGURE 2—EPS BOARD LAYOUT

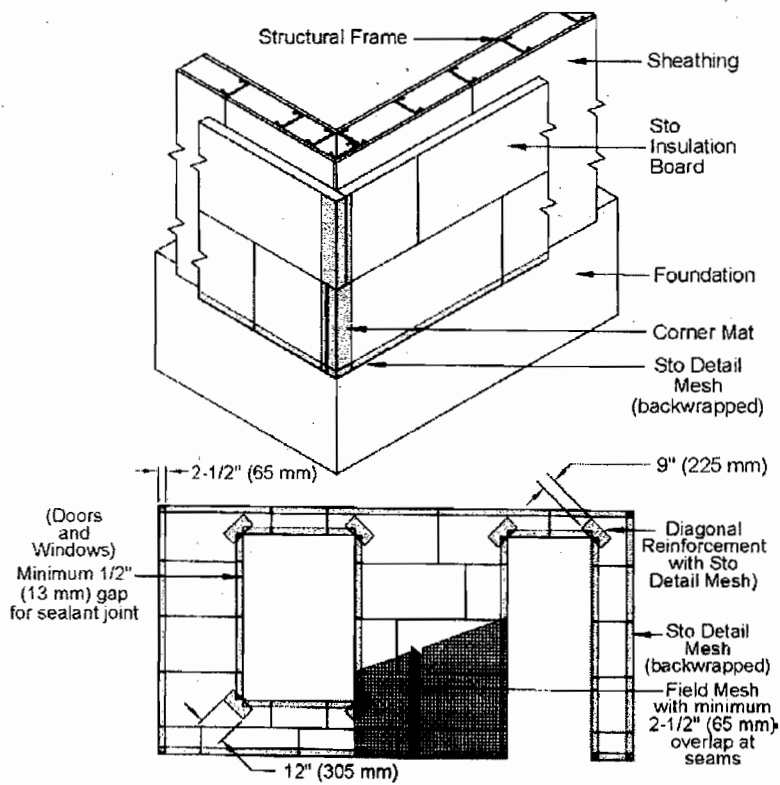


FIGURE 3—REINFORCING MESH APPLICATION

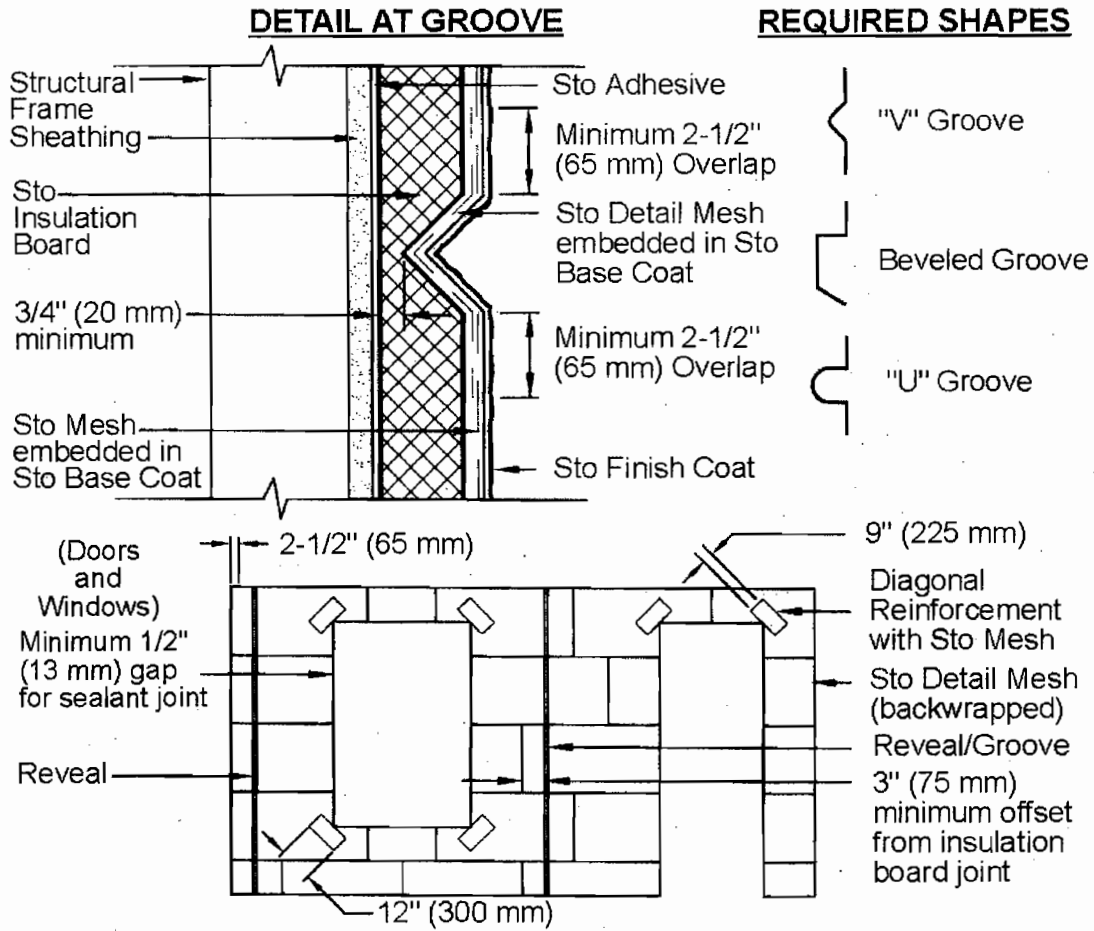


FIGURE 4—REVEALS AESTHETIC GROOVES

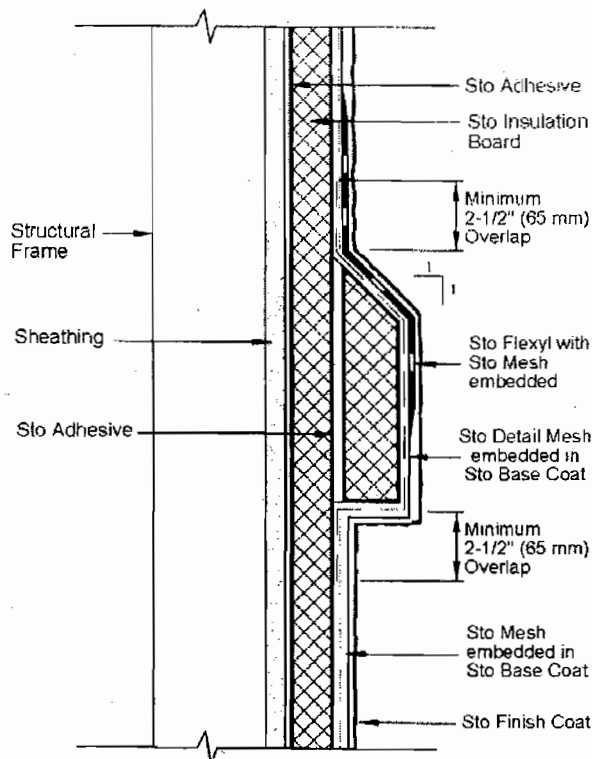


FIGURE 5—AESTHETIC BAND / PROTECTION

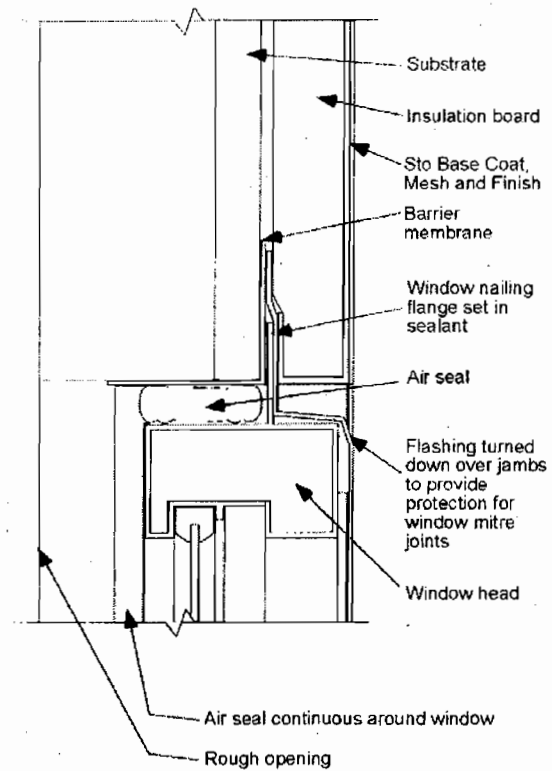


FIGURE 6—PANEL HEAD FLASHING

SEALANT TYPE	CONDITION
Dow Corning 790	EIFS to EIFS Joints
Dow Corning 795	EIFS to Metal Joints
Dow Corning 795 with 1200 Primer	EIFS to Vinyl Joints

Notes to Figure 6: Detail shows vinyl window head.

INSTALLATION:

1. Wrap the rough opening with barrier membrane lapping onto the sheathing a minimum 3 inches (75 mm).
2. Install window with a continuous bead of sealant between the nailing flange and the flexible membrane.
3. Install head flashing over window. The head flashing should be turned down over the jambs 1-inch (25 mm) min. to provide protection for the window head/jamb interface.
4. Install urethane foam air seal between window frame and barrier membrane. Ensure that the air seal is continuous around the window.

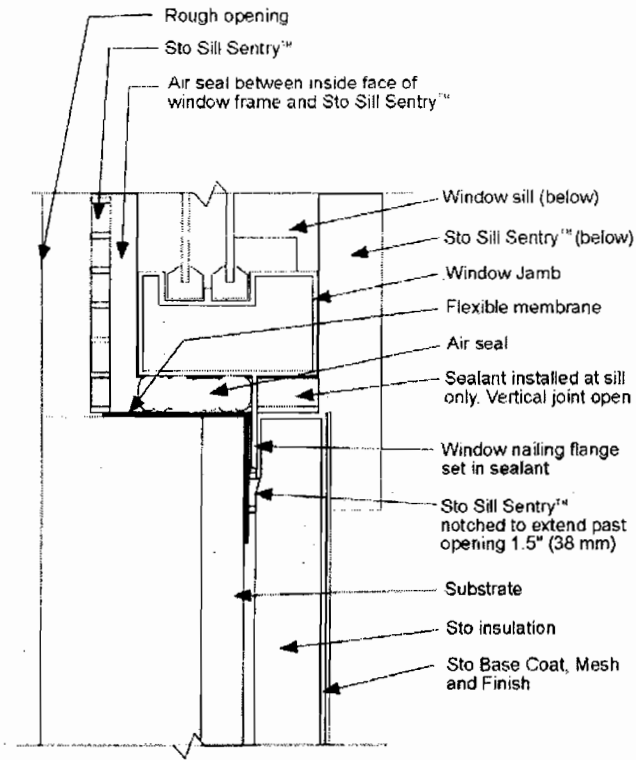


FIGURE 7—PANEL 5 JAMB FLASHING

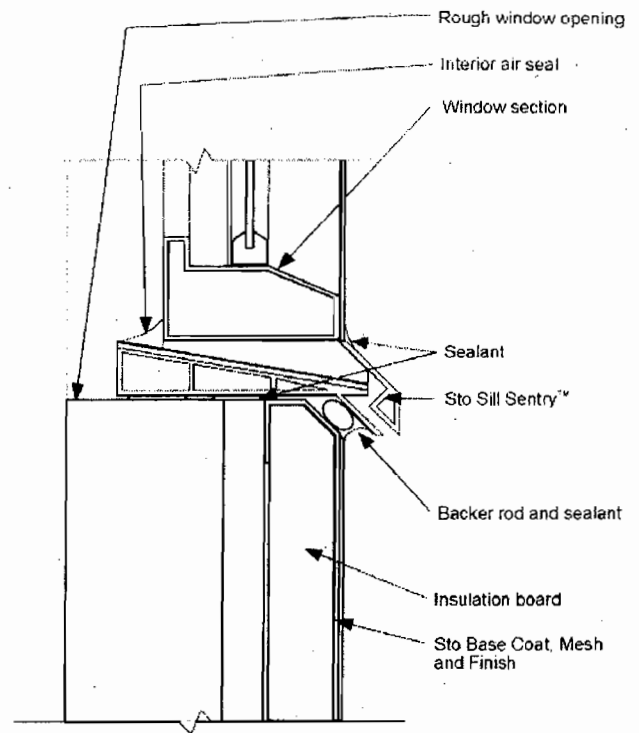


FIGURE 8—PANEL 5 SILL FLASHING

SEALANT TYPE	CONDITION
Dow Corning 790	EIFS to EIFS Joints
Dow Corning 795	EIFS to Metal Joints
Dow Corning 795 with 1200 Primer	EIFS to Vinyl Joints

Notes to Figure 7: Detail shows vinyl window jamb with Sto Sill Sentry™

INSTALLATION:

1. Wrap jamb rough opening with bituminous barrier membrane lapping it onto Sto Sill Sentry™ at the bottom and 3 inches (75 mm) onto the face of the substrate.
2. Install window with a bead of compatible sealant complying ASTM C920 between nailing flange and flexible membrane.
3. Install urethane foam air seal between window jamb and barrier membrane. Ensure that the air seal is continuous around the window.

Notes to Figure 8: Detail shows the installation of a vinyl window with Sto Sill Sentry™

1. Measure the rough window opening width and cut the Sto Sill Sentry™ as per installation instructions.
2. Install Sto Sill Sentry™ in a bed of compatible sealant complying with ASTM C920.
3. Wrap the jambs and head with a bituminous barrier membrane. The jamb membrane laps into the Sill Sentry.
4. Prepare the window by removing the sill nailing flange. Place compatible sealant complying with ASTM C920 on the inbound side of the remaining nailing flanges. Install the window so the sealant makes complete contact with the flexible membrane.
5. Seal inside face of window sill to Sto Sill Sentry™ to provide complete air seal.

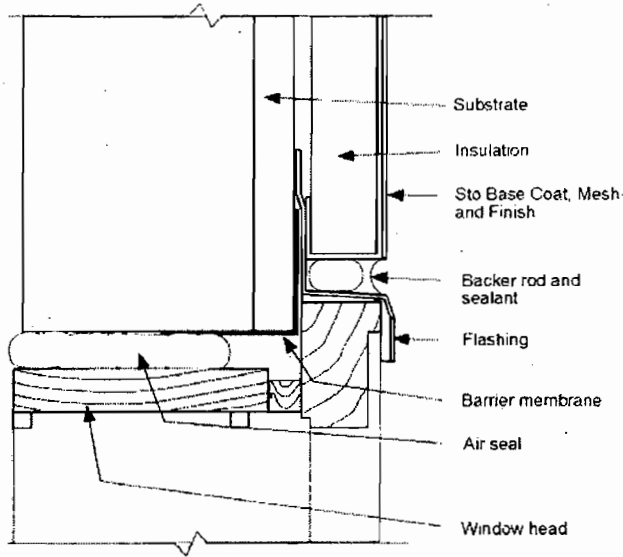


FIGURE 9—PANEL 6 HEAD FLASHING

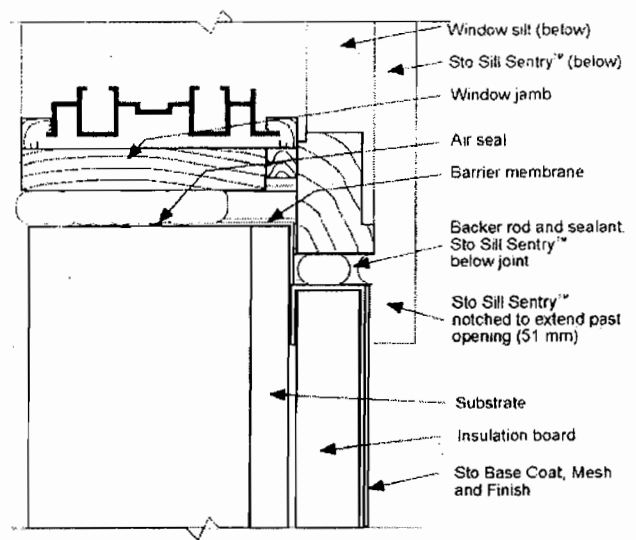


FIGURE 10—PANEL 6 JAMB FLASHING

SEALANT TYPE	CONDITION
Dow Corning 790	EIFS to EIFS Joints
Dow Corning 795	EIFS to Metal Joints
Dow Corning 795 with 1200 Primer	EIFS to Vinyl Joints

Notes to Figure 9: Detail shows wood window jamb with Sto Sill Sentry™

INSTALLATION:

1. Wrap head rough opening with bituminous barrier membrane lapping it 3 inches (75 mm) onto the face of the sheathing.
2. Install window as per manufacturer's instructions.
3. Install air seal between window head and barrier membrane. Ensure that the air seal is continuous around the window.
4. Install head flashing over window. The head flashing should be turned down over the jambs 1-inch (25 mm) min. to provide protection for the window head/jamb interface.
5. Terminate EIFS 1/2-inch (13 mm) from edge of brick mold. Install closed cell backer rod and sealant.

Notes to Figure 10: Detail shows wood window jamb with Sto Sill Sentry™

INSTALLATION:

1. Wrap jamb rough opening with barrier membrane lapping it onto Sto Sill Sentry™ at the bottom and 3 inches (75 mm) onto the face of the sheathing.
2. Install window as per manufacturer's instructions.
3. Install air seal between window jamb and barrier membrane. Ensure that the air seal is continuous around the window.
4. Terminate EIFS 1/2-inch (13 mm) from edge of brick mold. Install closed cell backer rod and sealant.

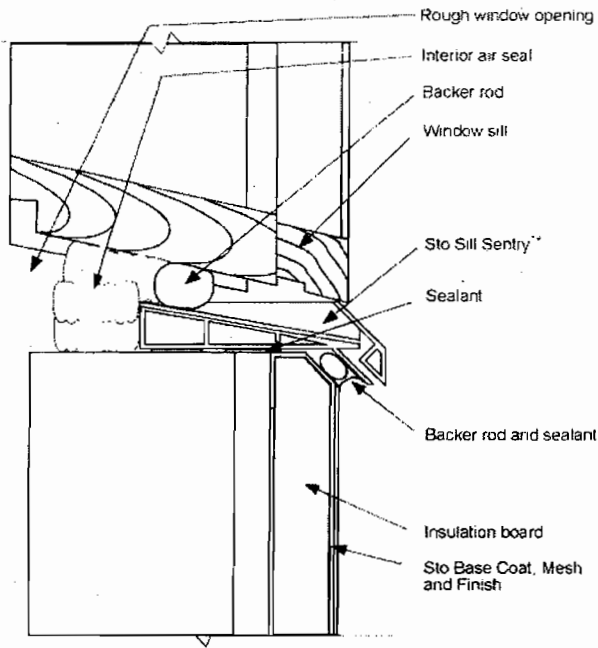


FIGURE 11—PANEL 6 SILL FLASHING

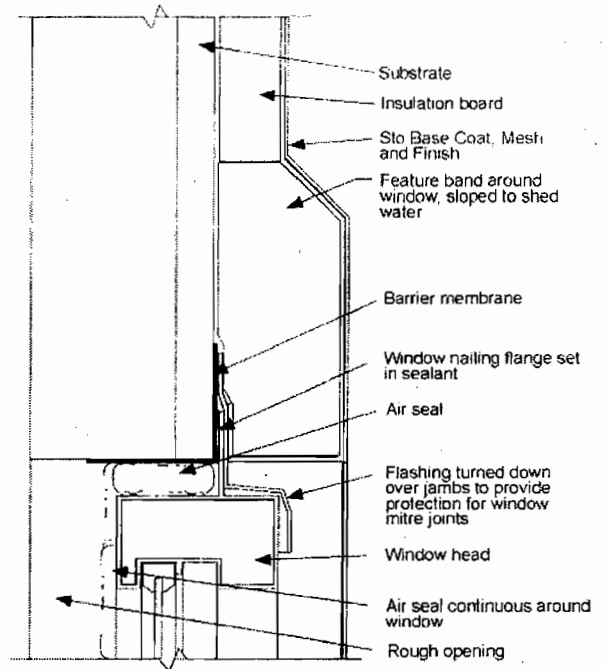


FIGURE 12—PANEL 9 HEAD FLASHING

SEALANT TYPE	CONDITION
Dow Corning 790	EIFS to EIFS Joints
Dow Corning 795	EIFS to Metal Joints
Dow Corning 795 with 1200 Primer	EIFS to Vinyl Joints

Notes to Figure 11: Detail shows the installation of a wood window with Sto Sill Sentry™

INSTALLATION:

1. Measure the rough window opening width and cut the Sto Sill Sentry™ as per installation instructions.
2. Install Sto Sill Sentry™ in a bed of sealant.
3. Wrap the jambs and head with a bituminous barrier membrane. The jamb membrane laps into the Sill Sentry.
4. Install window as per window manufacturer's instructions.
5. Install backer rod sized to fit between underside of window sill and Sto Sill Sentry™.
6. Seal inside face of window sill to Sto Sill Sentry™ to provide complete air seal.

Notes to Figure 12: Detail shows vinyl window head with feature band.

INSTALLATION:

1. Wrap the rough opening with a bituminous barrier membrane lapping onto the sheathing a minimum 3 inches (75 mm).
2. Install window with a continuous bead of compatible sealant complying with ASTM C920 between the nailing flange and the barrier membrane.
3. Install head flashing over window. The head flashing should be turned down over the jambs 1-inch (25 mm) min. to provide protection for the window head/jamb interface.
4. Install air seal between window frame and barrier membrane. Ensure that the air seal is continuous around the window.
5. Install EIFS as per Sto A100 specification.

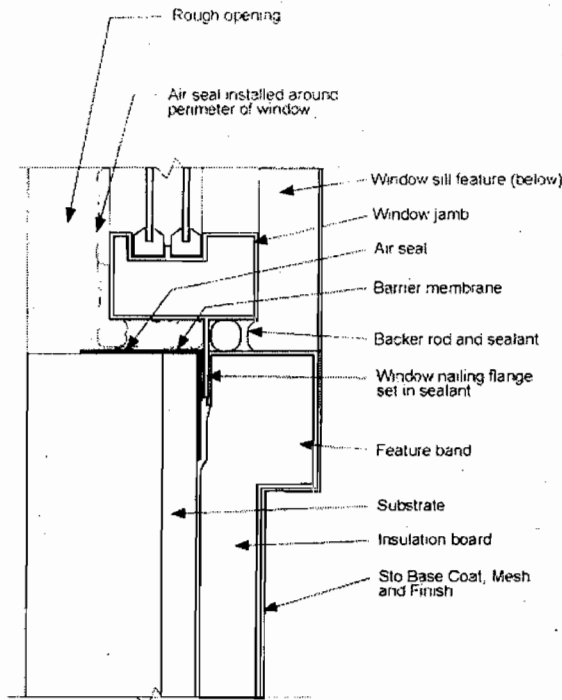


FIGURE 13—PANEL 9 JAMB FLASHING

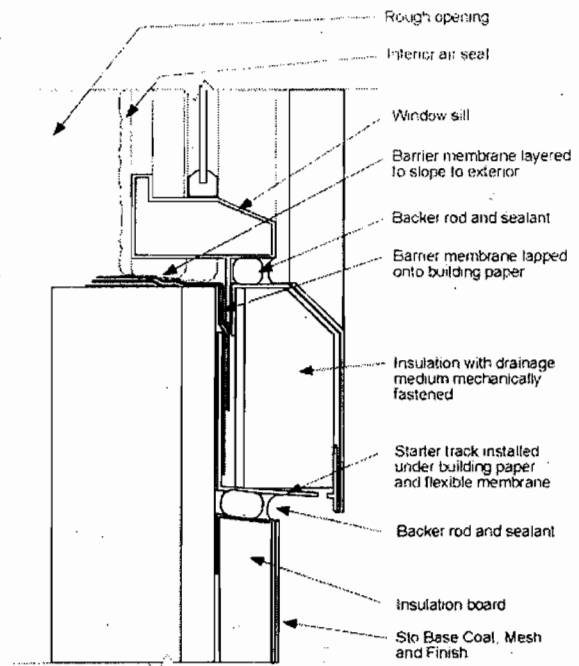


FIGURE 14—PANEL 9 SILL FLASHING

SEALANT TYPE	CONDITION
Dow Corning 790	EIFS to EIFS Joints
Dow Corning 795	EIFS to Metal Joints
Dow Corning 795 with 1200 Primer	EIFS to Vinyl Joints

Notes to Figure 13: Detail shows vinyl window jamb with feature band.

INSTALLATION:

1. Wrap jamb rough opening with a bituminous barrier membrane lapping 3 inches (75 mm) onto the face of the sheathing.
2. Install window with a bead of compatible sealant complying with ASTM C920 between nailing flange and barrier membrane.
3. Install air seal between window jamb and barrier membrane. Ensure that the air seal is continuous around the window.
4. Install Sto EIFS as per Sto A100 specification.
5. Install closed-cell backer rod and sealant, between window and EIFS base coat. Install sealant as per manufacturer's instructions.

Notes to Figure 14: Detail shows the installation of a vinyl window with a feature band around the window. Drainage is through the sill feature.

INSTALLATION:

1. Install a strip of building paper below the window opening to act as a separator sheet for the barrier membrane.
2. Wrap the opening with a bituminous barrier membrane. Build up the sill with three or four strips to provide a slope to the outside. Lap the final sill piece onto the building paper.
3. Install the window as per manufacturer's instructions. Place compatible sealant between the nailing flange and the barrier membrane at the head and jambs. **Do not place sealant at the sill.**
4. Install air seal around the interior perimeter of the window.
5. Slit the building paper, slide in the starter track behind the paper and fasten it in place.
6. Install insulation with drainage medium in the starter track and mechanically fasten in place.
7. Complete the rest of the EIFS installation as per standard Sto A100 specification.

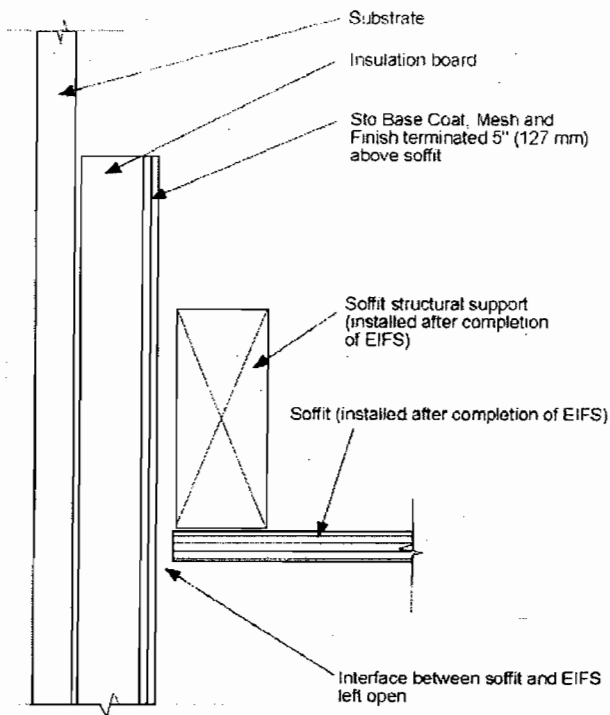


FIGURE 15—PANEL 8 SOFFIT PENETRATION

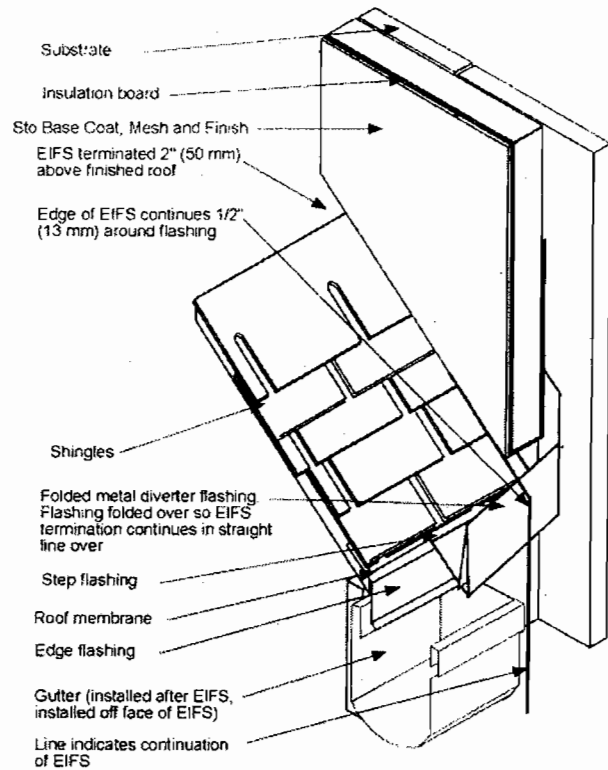


FIGURE 16—DIVERTER FLASHING

SEALANT TYPE	CONDITION
Dow Corning 790	EIFS to EIFS Joints
Dow Corning 795	EIFS to Metal Joints
Dow Corning 795 with 1200 Primer	EIFS to Vinyl Joints

Notes to Figure 15: Detail section of termination of EIFS above a soffit

INSTALLATION:

1. Install EIFS as per Sto A100 specification.
2. Terminate EIFS 5 inches (127 mm) above the position of the finished soffit.
3. Soffit and supporting structure are installed after the completion of the EIFS.

Notes to Figure 16: Detail section of roof edge and the installation of a folded metal diverter or "kick-out" flashing.

INSTALLATION:

1. Install roof assembly and step flashing as per good roofing practice.
2. Slide folded metal flashing behind step flashing and over roofing membrane.
3. Install Sto EIFS as per Sto A100 Specification.
4. Terminate EIFS by standard "back-wrap" detail a minimum of 2 inches (50 mm) above the finished roof.
5. Terminate EIFS 1/2-inch (13 mm) around the diverter flashing.
6. Install closed-cell backer rod and sealant between the flashing and the EIFS.

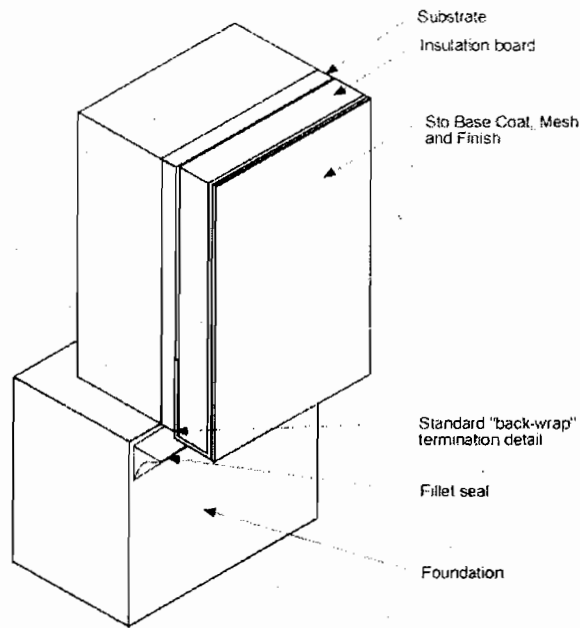


FIGURE 17—TERMINATION FOUNDATION

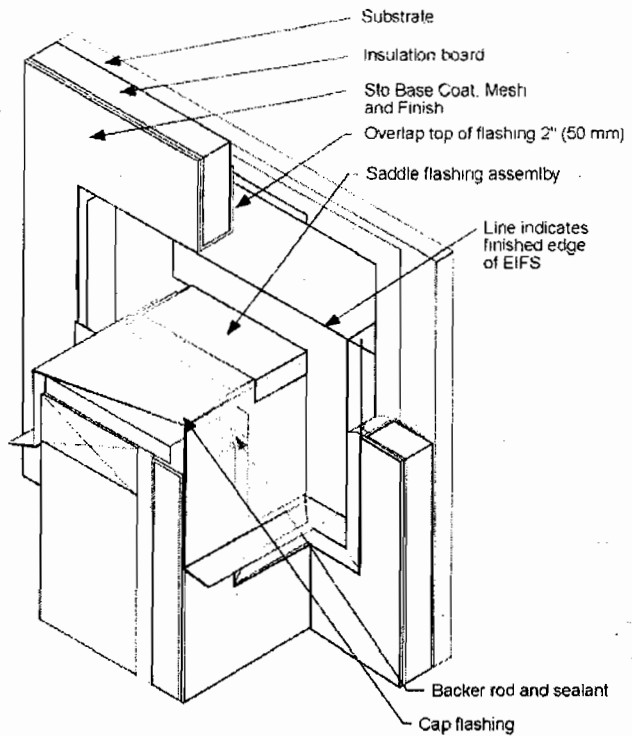


FIGURE 18—PANEL 7 SADDLE FLASHING

SEALANT TYPE	CONDITION
Dow Corning 790	EIFS to EIFS Joints
Dow Corning 795	EIFS to Metal Joints
Dow Corning 795 with 1200 Primer	EIFS to Vinyl Joints

Notes to Figure 17: Detail section of termination of EIFS at foundation.

INSTALLATION:

1. Install the EIFS as per Sto A100 specification.
2. Terminate the EIFS approximately 1/2-inch (13 mm) below the substrate using the standard "back-wrap" termination detail.
3. Install a fillet seal complying with ASTM C920 as per manufacturer's instructions.

Notes to Figure 18: Detail section of saddle flashing where a shorter wall meets a wall at right angles.

INSTALLATION:

1. Install a bituminous barrier membrane over the surfaces to be covered with the saddle flashing.
2. Set the saddle flashing into a bed of compatible sealant complying with ASTM C920 so that the intersection of the flashing components are sealed.
3. Install the EIFS as per Sto A100 specification.
4. Terminate the EIFS using standard "back-wrap" techniques 1/2-inch (13 mm) from the flanges of the flashing (sides and bottom). Overlap the flashing 2 inches (50 mm) at the top of the flashing.
5. Install a closed cell backer rod and sealant at termination locations at sides and bottom.

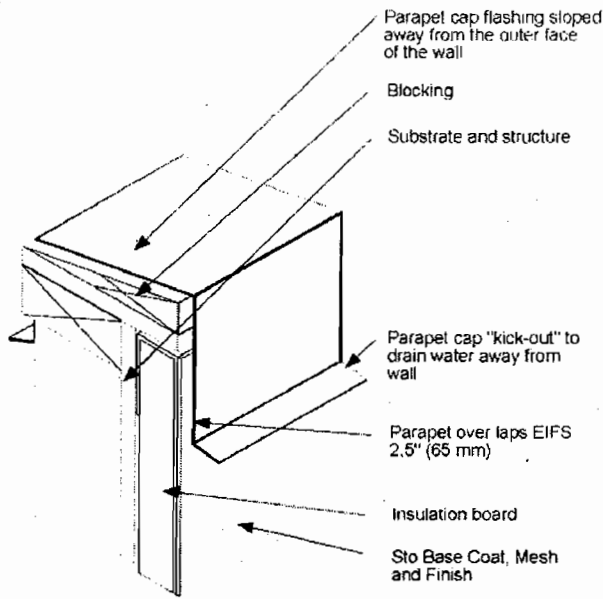


FIGURE 19—PANEL 7 CAP FLASHING

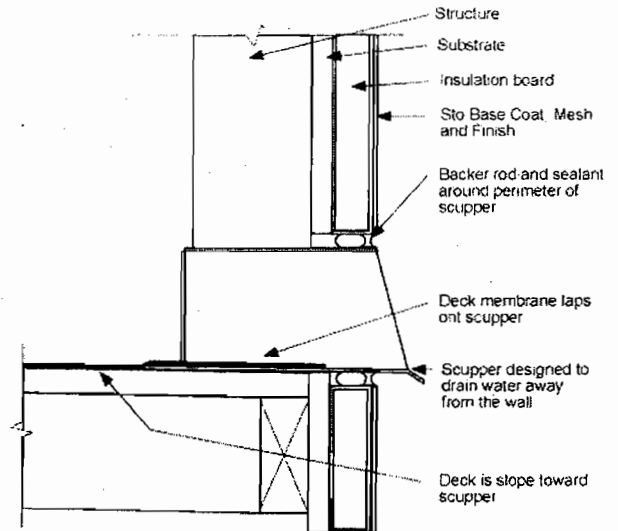


FIGURE 20—PANEL 7 SCUPPER

SEALANT TYPE	CONDITION
Dow Corning 790	EIFS to EIFS Joints
Dow Corning 795	EIFS to Metal Joints
Dow Corning 795 with 1200 Primer	EIFS to Vinyl Joints

Notes to Figure 19: Detail section of parapet cap flashing. The cap flashing should be installed as soon after the EIFS as possible to protect the wall from water entry and staining of the finish.

INSTALLATION:

1. Install the Sto EIFS as per Sto A100 specification.
2. Terminate the EIFS as per standard "back-wrap" details.
3. Install sloped blocking and cap flashing so that the flashing overlaps the EIFS by a minimum of 2.5 inches (63 mm).

Notes to Figure 20: Detail section of scupper.

INSTALLATION:

1. Construct the deck so that it drains to the scupper.
2. Install the scupper so that extends beyond the position of the finish EIFS so water will drain away from the wall surface.
3. Install at the deck waterproofing so that it laps into the scupper.
4. Install Sto EIFS as per Sto A100 specification.
5. Terminate EIFS 1/2-inch (13 mm) from the edge of the scupper using standard "back-wrap" detail.
6. Install closed-cell backer rod and sealant between the scupper and EIFS.

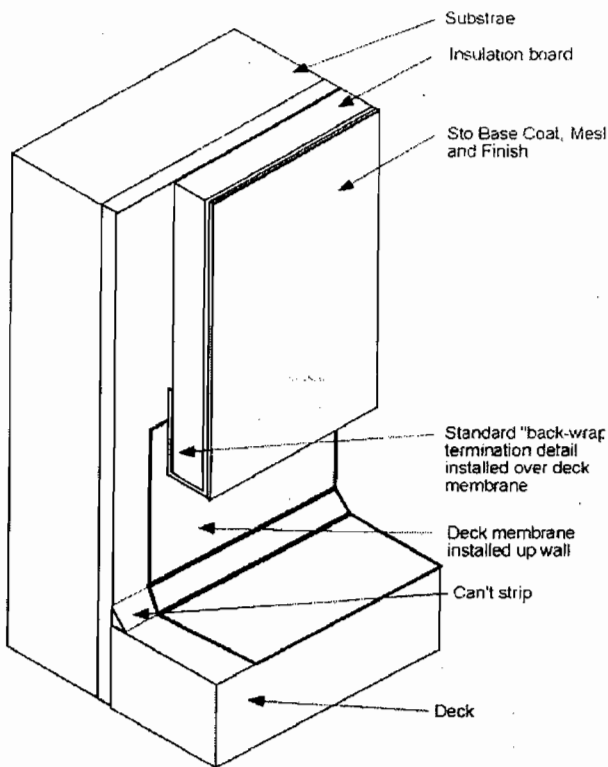


FIGURE 21—TERMINATION AT BALCONY

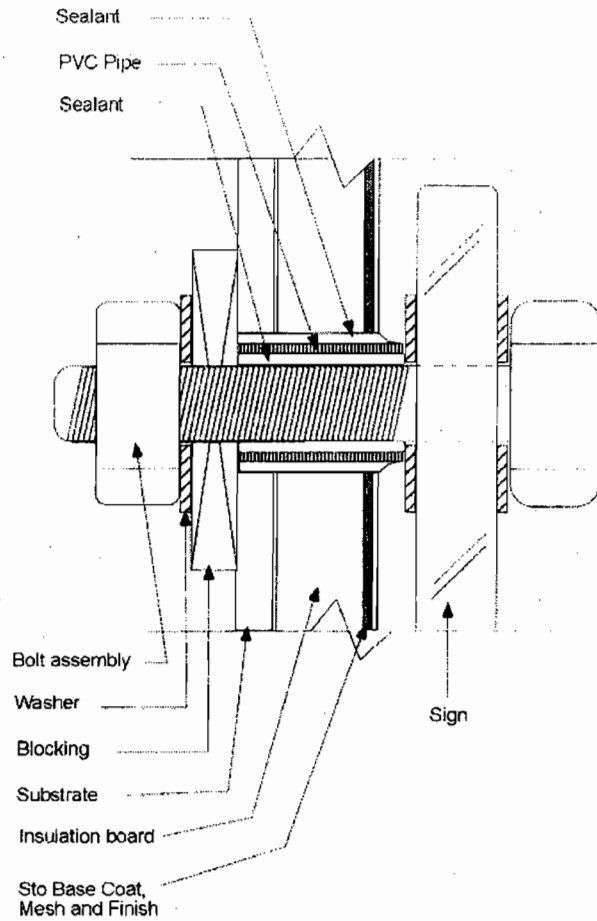


FIGURE 22—ATTACHMENT THROUGH EIFS

SEALANT TYPE	CONDITION
Dow Corning 790	EIFS to EIFS Joints
Dow Corning 795	EIFS to Metal Joints
Dow Corning 795 with 1200 Primer	EIFS to Vinyl Joints

Notes to Figure 21: Detail section of termination of EIFS at foundation.

INSTALLATION:

1. Install deck membrane as per manufacturers' instructions. Return membrane up wall approximately 1/2-inch (305 mm) or as require based on local conditions.
2. Install the EIFS as per Sto A100 specification.
3. Terminate the EIFS, using standard "back-wrap" detail, approximately 6 inches (150 mm) above deck overlapping the deck membrane installed on the wall.

Notes to Figure 22: Detail covers installation of a sign installed following the installation of the EIFS. The bolt connections should be suitable for the weight of the sign.

INSTALLATION:

1. Secure suitable blocking to the interior structure.
2. Drill hole through system to blocking. Line hole with single component, neutral cure silicone sealant.
3. Insert PVC pipe through sealant to blocking. Pipe should be cut 1/4-inch (5 mm) longer than the thickness of the EIFS and sheathing. Tool the extra sealant on the surface around the PVC pipe to ensure a seal.
4. Line the PVC pipe with sealant as noted above and install the bolt and washer assembly through the sealant.

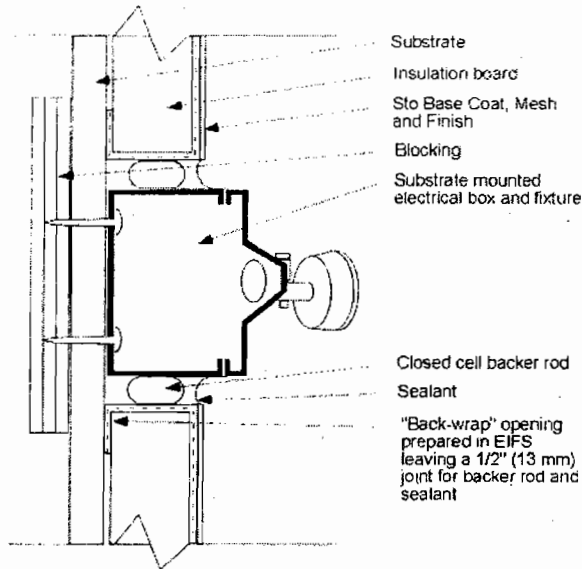


FIGURE 23—EIFS TERMINATION AT PENETRATION

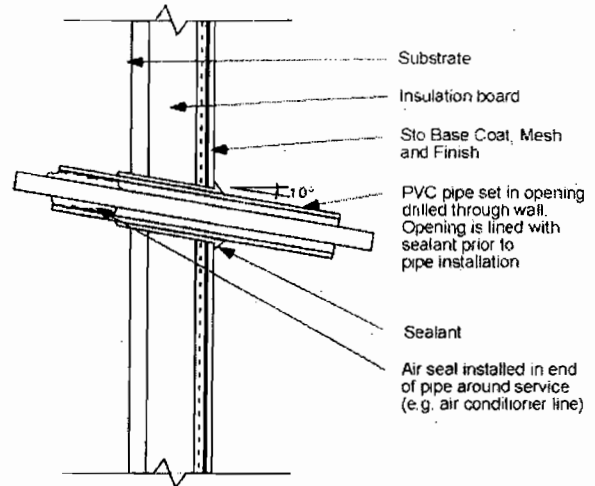


FIGURE 24—PENETRATION THROUGH EIFS

SEALANT TYPE	CONDITION
Dow Corning 790	EIFS to EIFS Joints
Dow Corning 795	EIFS to Metal Joints
Dow Corning 795 with 1200 Primer	EIFS to Vinyl Joints

Notes to Figure 23: Detail section of surface mounted electrical box installed prior to the EIFS.

INSTALLATION:

1. Install Sto Eifs as per Sto A100 specification.
2. Terminate EIFS around electrical box using standard "back-wrap" methods. Leave a 1/2-inch (13 mm) joint around perimeter of box.
3. Install a closed-cell backer rod and sealant into the joint.

Notes to Figure 24: Detail illustrates the use of a PVC pipe as a prepared opening for service connections through EIF system. The PVC pipe is installed after the EIFS installation is complete.

INSTALLATION:

1. Drill opening on a 10-inch upward incline through wall assembly.
2. Line opening with sealant complying with ASTM C920.
3. Insert PVC pipe through opening and tool sealant tightly around PVC pipe.
4. Install services (A.C. lines, phone, cable etc.) through the PVC pipe and seal with an air seal.

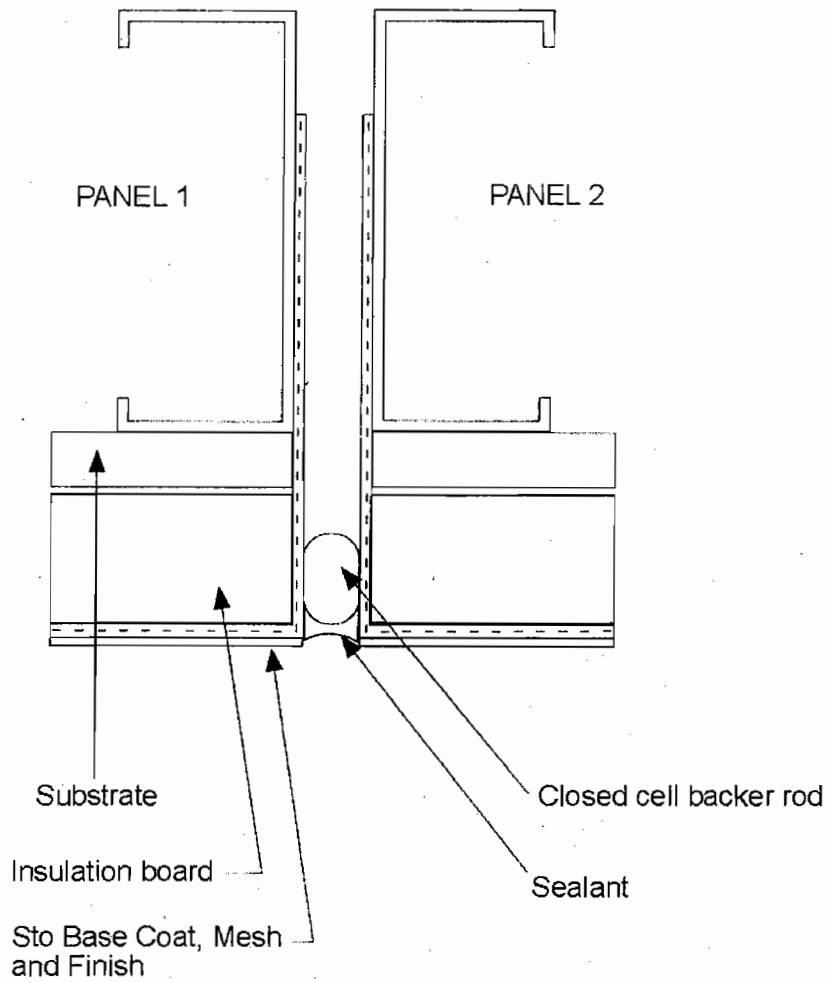


FIGURE 25—SEALANT JOINT

SEALANT TYPE	CONDITION
Dow Corning 790	EIFS to EIFS Joints
Dow Corning 795	EIFS to Metal Joints
Dow Corning 795 with 1200 Primer	EIFS to Vinyl Joints

Notes to Figure 25: Details illustrates a vertical barrier type or single stage joint.

INSTALLATION:

1. Install Sto EIFS as per Sto A100 specification.
2. Use standard edgwrap termination detail using Sto base coat and mesh. Sto primer is optional. The finish is not returned into the joint.
3. Install close-cell backer rod and sealant.

(EIFS CONTRACTOR NAME)

Completion Date: _____

THE EXTERIOR INSULATION AND FINISH SYSTEM (EIFS) INSTALLED ON THE STRUCTURE LOCATED AT THE ADDRESS INDICATED BELOW:

_____ CONFORMS

TO (EIFS MANUFACTURER'S NAME) RECOMMENDED INSTALLATION PRACTICES AND SECTION(S) _____ OF ICC-ES, INC., EVALUATION REPORT ESR-_____.

Address of Structure:

Product Component Names:

Adhesive(s) _____
Fasteners (mech) _____
Base Coat _____
Reinforcing Mesh _____
Finish Coat(s) _____

INSTALLATION

CONFORMS

- A. Substrate Type and Tolerance _____
- B. Weather-resistive Barrier _____
- C. EIFS
 - 1. Adhesive and/or Fasteners _____
 - 2. Insulation _____
 - 3. Reinforcing Mesh _____
 - 4. Base Coat _____
 - 5. Finish _____

D. The information entered above is offered in testimony that the EIFS installation conforms with the EIFS manufacturer's installation methods and procedures, and the EIFS manufacturer's ES report.

NOTE: An installation card must be received from the Sealant Installer indicating that the sealant installation conforms with the EIFS evaluation report and sealant manufacturer's installation methods and procedures must accompany this declaration.

EIFS Contractor Company Name and Address:

Signature of responsible Officer: _____

Typed Name and Title of Officer: _____

Telephone Number: (____) _____

cc: Original: Building Department (Must be submitted with sealant installer declaration.)
Copy: EIFS Manufacturer

FIGURE 26

(SEALANT INSTALLER NAME)

Completion Date: _____

THE SEALANT INSTALLED IN CONJUNCTION WITH AN EXTERIOR INSULATION AND FINISH SYSTEM (EIFS) INSTALLED ON THE STRUCTURE LOCATED AT THE ADDRESS INDICATED BELOW:

_____ CONFORMS

TO (EIFS MANUFACTURER NAME) AND (SEALANT MANUFACTURER'S NAME) RECOMMENDED INSTALLATION PRACTICES AND SECTION(S) _____ OF ICC-ES, INC., EVALUATION REPORT ESR-_____.

Address of Structure:

Product Component Names:

Primer(s) _____
Sealers _____
Bond Breakers _____
Sealant Materials _____

INSTALLATION

CONFORMS

- A. Designer's requirements, details and instructions _____
- B. Sealant manufacturer's details and requirements _____
- C. Exterior insulation manufacturer's requirements _____

D. The information entered above is offered in testimony that the Sealant installation conforms with the sealant manufacturer's installation methods and procedures, and the EIFS manufacturer's evaluation report.

Sealant Installer Company Name and Address:

Signature of Responsible Officer: _____
Typed Name and Title of Officer: _____
Telephone Number: (____) _____

cc: Original: Building Department (Must be submitted with EIFS contractor declaration.)
Copies: EIFS Manufacturer
EIFS Contractor
Sealant Manufacturer

FIGURE 27

