



Sto Corp
Design No. STO/WDEIFS 30-01
Exterior Wall Systems
Exterior Insulation and Finish Systems (EIFS)
StoTherm Ci
NFPA 285 and NFPA 268
Meets the Conditions of Acceptance

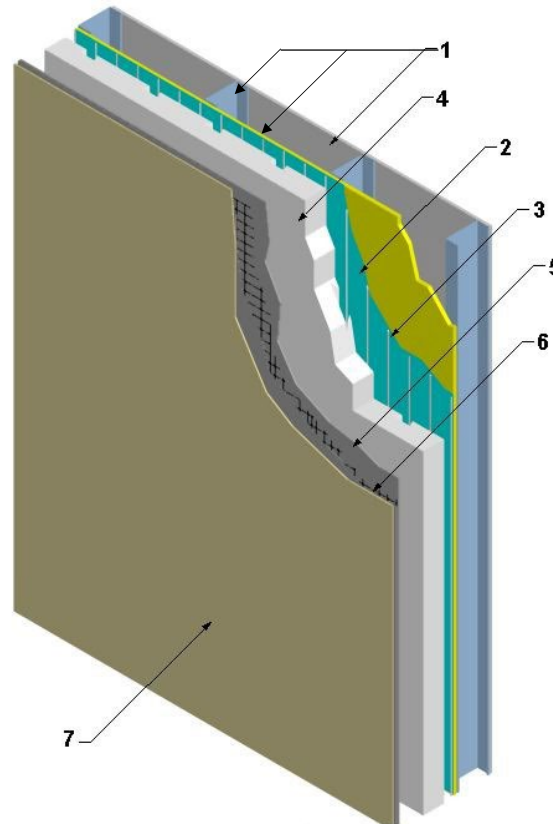


Figure 1: Construction with Steel Studs

- 1. WALL ASSEMBLY:** Construct a wall assembly that shall comply with the local Building Code or other applicable regulatory requirements as established by the local Authority Having Jurisdiction.
- 2. WATER RESISTIVE BARRIER:** Roller-apply Sto Gold Coat (81636 or 80265) at a wet film thickness of 0.25 - 0.38 mm (10-15 mils) per manufacturer's instructions.
- 3. ADHESIVE:** Apply one of the following adhesives, according to manufacturer's instructions, to the certified water resistive barrier:

Where applied over sheathing, sheathing joints to be taped with 4 in. wide StoGuard Fabric or StoGuard Conformable Membrane, centered over the joints and embedded in Sto Gold Coat.



- A. Sto Primer/Adhesive, StoPrimer/Adhesive-B, or Sto BTS Plus adhesives, applied to create vertical ribbons using a notched trowel with notches configured in one of two configurations:
 - a. 13 mm x 13 mm (nominal 1/2 in. x 1/2 in.) at 64 mm (2-1/2 in.) oc.
 - b. 16 mm x 16 mm (nominal 5/8 in. x 5/8 in.) at 32 mm (1-1/4 in.) oc.
- B. Sto TurboStick or Sto TurboStick Mini applied in foam bead ribbons, min. 127 mm (5 in.) oc, forming seven vertical ribbons over a 1220 mm (48 in.) wide insulation board.

The approximate thickness of the adhesive ribbons following installation is 2 mm (1/12 in.).

4. INSULATION BOARD: Install one of the following insulation boards:

- A. 25 mm to 165 mm (1 in. to 6-1/2 in.) thick Sto Expanded Polystyrene (EPS) compliant with ASTM C578, Type I. The nominal density of the EPS is 15 kg/m³ (0.9 pcf).
- B. 25 mm to 165 mm (1 in. to 6-1/2 in.) thick Graphite Expanded Polystyrene (GPS) compliant with ASTM C578, Type I. The nominal density of the GPS is 15 kg/m³ (0.9 pcf). Installation of GPS must use Sto TurboStick as the adhesive.
- C. For assemblies finished with Stolit, Stolit Lotusan, Stolit HDP, and Stolit X, 25 mm to 305 mm (1 in. to 12 in.) thick Sto Expanded Polystyrene (EPS) compliant with ASTM C578, Type I may be used. The nominal density of the EPS is 15 kg/m³ (0.9 pcf).

5. BASE COAT: Sto Primer/Adhesive-B, Armat Classic Plus, or Sto BTS Plus.

Apply a first layer of base coat over the EPS board. Embed Sto Mesh in the base coat and

apply a second layer of the base coat. Trowel to thoroughly cover the mesh and remove excess coat. The final base coat dry thickness measures 1.6 mm (1/16 in.), or thicker where additional layers of mesh are applied.

6. REINFORCING MESH: Sto Mesh, Sto Armor Mat (15 oz.), and Sto Armor Mat XX (20 oz.).

- A. Embed Sto Mesh 152 g/m² (4.5 oz/yd²) into the applied base coat.
- B. For EPS insulation thicknesses of up to 102 mm (4 in.), mesh overlaps shall be min. 64 mm (2-1/2 in.) and increasing to 102 mm (4 in.) for EPS thicknesses up to 305 mm (12 in.).
- C. Additional layers of mesh may be installed for increased impact resistance. Where Sto Armor Mat Mesh or Sto Armor Mat Mesh XX is used, it is to be embedded in a certified base coat prior to application of base coat and Sto Mesh. Sto Mesh overlaps as noted in Item 6(b) for the installed thickness of insulation.

7. FINISH MATERIALS: Apply one of the following finish materials, according to manufacturer's instructions, over the dried certified base coat to achieve final texture.

- A. STOLIT, STOLIT X, STOLIT LOTUSAN, STO and Stolit HDP – Trowel-applied ready-mixed acrylic based finish coat. The applied thickness is governed by the aggregate size (1 mm – 3 mm).
- B. STOCASST BRICK – Trowel-apply the Sto Bonding and Pointing Mortar over the dried certified base coat. Press StoCast Brick, preformed acrylic rendered shapes which simulate brickwork or other patterns, in the Sto Bonding and Pointing Mortar per the manufacturer's instructions. The StoCast Brick thickness may be nominally 4 mm – 8 mm (1/8 in. – 5/16 in.).



- C. STOCASST WOOD – Apply StoCast Wood Adhesive to Intertek certified base coat using a 6 x 6 mm (1/4 in. x 1/4 in.) notched trowel, application weight 2.5 – 3.5 kg/m².

Apply 200 x 16 cm (78-3/4 in. – 6-5/16 in.), nominal 2 mm (1/12 in.) thick, StoCast Wood horizontally across wall, with 5 – 10 mm (approx. 1/4 in. – 1/2 in.) spacing between adjoining pieces. Press StoCast Wood into the adhesive using a rubber roller, removing excess adhesive in the joint between adjoining pieces of StoCast Wood with a spatula. Clean joints with a damp sponge. Once StoCast Wood Adhesive has dried, a first coat of StoAqua Top Stain glaze is applied over the wall with the Sto-Wide Brush M2. Once the first coat has dried, a second coat is applied.

Alternately after StoCast Wood Adhesive has dried, a single coat of StoTique is applied over the wall with the Sto-Wide Brush M2. Once dried, a single coat of Sto Clear Coat is applied.

8. **WINDOW FLASHING (Not Shown):** Apply a 6 in. wide strip of StoGuard Fabric embedded in Sto Gold Coat, centered along the edges of the opening with half of the width folded into the opening and the other half on the sheathing. Apply Sto GoldCoat to the full surface of the sheathing at a wet film thickness of 0.25 mm (10 mils). Backwrap the opening header and edge wrap the jambs and sill with a Certified Reinforcing Mesh per Item 6. Backwrap should terminate a min. of 102 mm (4 in.) onto the unexposed side of the insulation panels.

Consult the listing report on the Directory of Building Products (<https://bpdirectory.intertek.com>) for the edition of the standard(s) evaluated.

Compliance of the assembly described in this Design Listing with the referenced standard relies on verification that the assembly constructed in the field is consistent with that described herein. Intertek certified products may be verified by the approved Intertek label; other products must be verified by the Authority Having Jurisdiction as meeting the specifications stated herein.