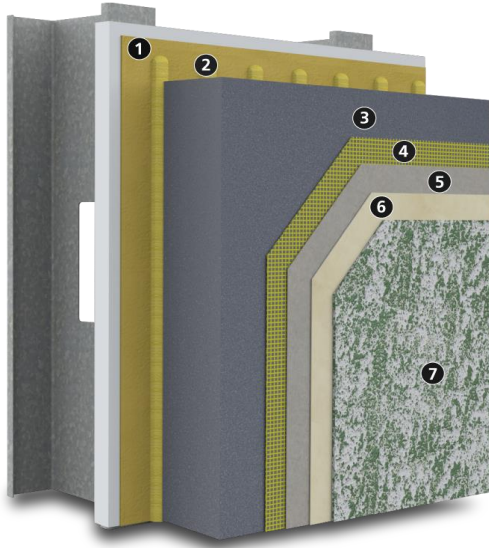


StoTherm® ci XPS

Decorative cladding with R-5 continuous insulation and StoGuard® Air and Water-resistive Barrier combined with Sto high performance finishes



Substrate: Glass Mat Gypsum sheathing in compliance with ASTM C1177, Exterior or Exposure I wood-based sheathing (plywood or OSB), cement board in compliance with ASTM C1325, or code compliant concrete, concrete masonry or portland cement plaster, existing structurally sound, uncoated brick or other masonry wall construction.

1)	Air Barrier and Water-resistive Barrier: Sto Gold Coat®
2)	Adhesive: Sto TurboStick®
3)	Insulation: XPS Type X Insulation listed by Sto Corp.: • Dupont™ Styrofoam™ Brand Panel Core ST-100
4)	Reinforcement: Sto Mesh (embedded in Sto base coat)
5)	Base Coat: Sto BTS Xtra
6)	Primer: StoPrime Sand (optional)
7)	Finish: choose among, • Sto Textured Finishes • StoCast Finishes • Sto Signature and Sto Specialty Finishes

System Accessory: StoSeal STPE Sealant for use as an exterior weather seal around wall penetrations, at dynamic joints in wall construction, and as an interior air seal for air barrier continuity

System Description

StoTherm ci XPS is a decorative and protective exterior wall cladding that combines superior air and weather tightness with excellent thermal performance and durability. It incorporates continuous exterior insulation and StoGuard Air and Water-resistive Barrier with Sto's high performance finishes in a fully tested wall cladding assembly.

Uses

StoTherm ci XPS can be used in residential or commercial wall construction where energy efficiency, superior aesthetics, and air and moisture control are essential in the climate extremes of North America.

Features	Benefits
Design versatility	Aesthetic and curb appeal easy to achieve
Continuous exterior insulation, R-5 per inch, no mechanical fasteners	Energy efficient, reduced heating and cooling costs
Quick-set adhesive, no mechanical fasteners	Fast installation, no thermal bridging
Continuous air and water-resistive barrier	Protects against mold and moisture problems
ICC-ES listed and evaluated	Fully tested building code compliant assembly

Properties

Weight (not including sheathing and frame)	< 2 psf (10 kg/m ²)
Thickness (insulation)	1 to 6 inches (25 – 152 mm)
R-value (not including sheathing and frame)	5.0 – 30 ft ² •h•°F / Btu (0.88-5.28 m ² •K / W)
Wind Load Resistance	Tested up to ± 175 psf (8.37 kPa)
Compliance	• 2021 IBC, IRC, IECC
Construction Types and Fire Resistance	• NFPA 285 for use on noncombustible construction • ASTM E119 for use on hourly rated walls • Refer to ICC ESR-1748 for listed assemblies

Warranty

10, 12, or 15 year Limited Warranty, depending on options selected

Maintenance

Requires periodic cleaning to maintain appearance, repair to cracks and impact damage if they occur, recoating to enhance appearance of weathered finish. Sealants and other façade components must be maintained to prevent water infiltration.

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Limitations

Minimum insulation board thickness is 1-in (25 mm). Maximum insulation board thickness is 6-in (305 mm) if used on noncombustible construction, 3-in (76mm) if used with StoCast Finishes on noncombustible construction.
Fire resistance rated assemblies limited to 4-in (76mm) maximum insulation board thickness, 3-in if StoCast finishes are used
Do not use on interior walls. A thermal barrier is required (typically minimum ½-in [13mm] gypsum wallboard) to separate the insulation board from the interior
Structural back-up wall must be level to ¼-in 10-ft (6mm in 3.0m)
Wind load resistance: ±175 (8.37 kPa) ultimate loads achieved. Ultimate wind load resistance depends on sheathing, sheathing attachment, and stiffness of supporting construction. Design for maximum allowable deflection of L/240. Apply appropriate safety factor as required by applicable building code.
Impact resistance: supplemental reinforcing mesh layers, or other design adjustments are recommended for areas adjacent to heavy pedestrian traffic or other areas of high impact or abuse. Refer to Sto Guide Details.
For use on vertical above grade walls only. Do not use on roofs or roof-like surfaces, on surfaces subject to in-service water immersion, or below grade. Maintain clearance of minimum 6-in(152mm) above grade.
Insulation material is flammable. Keep away from flame, ignition sources, high heat, and temperatures in excess of 165°F [74° C]).
Dark finish colors with LRV (Light Reflectance Value) < 20 are not recommended.
Air Barrier, insulation board, and base coat materials are not intended for prolonged weather exposure. Refer to individual AWRB product bulletins for allowable exposure period.
Refer to specific component product bulletins and packaging for other limitations that may apply involving use, handling, and storage of component materials.

Sustainable Design

Air Quality and VOC Compliance

All finish coatings, adhesives, air barrier detail components and coatings meet US EPA (40 CFR 59) and South Coats AQMD (Rule 1113) emission standards for Building Envelope Coatings: VOC less than 50 g/L.

Sustainability

The system has high potential for LEED and other sustainability program credits based on efficient and effective use of a continuous air barrier and continuous exterior insulation and the resulting reductions in energy use and greenhouse gas emissions. The use of light weight metal studs and light weight finishes has positive impacts on life cycle energy use by reducing dead loads and structural support requirements when compared to mass wall and full thickness/weight veneer units. Insulation boards are available with reduced HFC blowing agent and GWP, depending on State regulatory requirements. Refer to [Dupont](#) for more information.

Regulatory Compliance and Standards Testing

ICC ESR No. 1748	StoTherm ci XPS complies with 2021 IBC, IRC and IECC
ICC ESR No. 1233	Sto Gold Coat complies with 2021 IBC, IRC and IECC as an air and water-resistive barrier (AWRB)
ASHRAE 90.1-2022 ¹	StoTherm ci XPS complies with Section 5, Building Envelope, air barrier and continuous insulation requirements
ASTM E2178, ASTM E2357 ²	Sto Gold Coat meets material and assembly air leakage resistance criteria
NFPA 285 ³	StoTherm ci XPS meets IBC criteria for use on noncombustible construction with up to 6-in (152mm) of XPS Board, 3-in (76mm) when StoCast Finishes are used
ASTM E 119 ⁴	StoTherm ci XPS meets requirements for use over load bearing concrete or CMU and non-load bearing steel frame fire-resistance-rated wall assemblies with up to 4-in (102mm) of XPS Board, 3-in (76mm) when StoCast finishes are used.

1. Energy Standard for Buildings Except Low-Rise Residential Buildings, 2. Standard Test Method for Determining Air Leakage Rate of Air Barrier Assemblies, 3. Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components, 4. Standard Test Methods for Fire Tests of Building Construction and Materials

Sto Corp. 3800 Camp Creek Parkway Building 1400, Suite 120 Atlanta, GA 30331 Tel: 404-346-3666 Toll Free: 1-800-221-2397 Fax: 404 346-3119 www.stocorp.com	SB-5300 Revision: 015 Date: 05/2025	Attention Sto products are intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. They should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, or for other construction activities beyond Sto's control. Improper use of Sto products or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to this product, and to the structure of the building or its components. STO CORP. DISCLAIMS ALL WARRANTIES EXPRESS OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME. For the fullest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclaimers, please refer to the Sto Corp. website, www.stocorp.com .
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