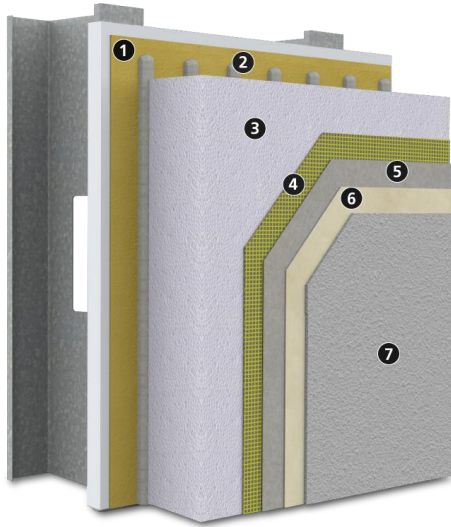


System Bulletin

StoTherm® ci

Decorative cladding with continuous insulation and StoGuard® Air and Water-resistive Barrier combined with Sto high performance finishes. Includes Sto Lamella Fireblocking where required.¹



Substrate: Glass Mat Gypsum sheathing in compliance with ASTM C 1177, 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

	Air Barrier and Water-resistive Barrier: choose among
1)	<ul style="list-style-type: none"> Sto Gold Coat® Sto GoldSeal™ STPE Sto AirSeal®
2)	Adhesive options: Sto TurboStick®, Sto BTS® Plus, Sto BTS Xtra, Sto Primer/Adhesive-B, or Sto Primer/Adhesive
3)	Insulation: Sto EPS Insulation Board
4)	Reinforcement: Sto Mesh (embedded in Sto base coat)
5)	Base Coat options: Sto BTS Plus, Sto BTS Xtra, Sto Primer/Adhesive-B, Sto Primer/Adhesive, Sto RPF, Sto Armat Classic Plus
6)	Primer: StoPrime Sand (optional)
7)	Finish: choose among, <ul style="list-style-type: none"> 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

1. Sto Lamella is a required component in StoTherm ci for compliance with the 2022 NYC Building Code, or when Sto GoldSeal STPE is used as the AWRB is StoTherm ci

System Description

StoTherm ci 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 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, no mechanical fasteners	Energy efficient, reduced heating and cooling costs
Lightweight	Reduced structural costs
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 12 inches (25 – 305 mm)
R-value (not including sheathing and frame)	3.6 – 43.2 ft ² •h•°F / Btu (0.63 – 7.60 m ² •K / W)
Wind Load Resistance	Tested to ultimate load of ± 225 psf (10.7 kPa)
Compliance	<ul style="list-style-type: none"> 2021 IBC, IRC, IECC 2022 NYC BC w Fireblocking
Construction Types and Fire Resistance	<ul style="list-style-type: none"> 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 1-in (25 mm). Maximum insulation board thickness 12-in (305mm) on noncombustible construction, 6-in (152mm) if used with StoCast Finishes on noncombustible construction, 4-in (102mm) if Sto GoldSeal STPE is the AWRB on noncombustible construction
Fire resistance rated assemblies limited to 6-in (152 mm) maximum insulation board thickness, 4-in (102mm) if StoCast Finishes are used, or if Sto GoldSeal is the AWRB. Refer to ICC ESR-1748.
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: ± 225 psf (10.7 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 below grade or 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. Sto EPS Board uses no HFC, HCFC, or CFC blowing agents and has low global warming and zero ozone depletion potential.

Regulatory Compliance and Standards Testing

ICC ESR No. 1748	StoTherm ci complies with 2021 IBC, IRC and IECC
ICC ESR No. 1233	StoTherm ci complies with 2021 IBC, IRC and IECC
2022 New York City Building Code	StoTherm ci complies with fireblocking requirements with up to 12-in (305mm) Sto EPS Insulation Board & Sto Lamella Fireblocking
ASHRAE 90.1-2019 ¹	StoTherm ci complies with Section 5, Building Envelope, air barrier and continuous insulation requirements
ASTM E 2178, ASTM E2357 ²	Sto Gold Coat, Sto AirSeal, and Sto GoldSeal STPE AWRBs meet material and assembly air leakage resistance criteria
NFPA 285 ³	StoTherm ci meets IBC criteria for use on noncombustible construction with up to 12-in (305mm) of Sto EPS Board, 6-in (152mm) when StoCast Finishes are used, or 4-in (102mm) when Sto GoldSeal is the AWRB
ASTM E 119 ⁴	StoTherm ci meets requirements for use over fire-resistance-rated wall assemblies with maximum 6-in (152mm) thick insulation board, 4-in (102mm) when StoCast Finishes are used, or 4-in (102mm) when Sto GoldSeal is the AWRB

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 Test 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-5200 Revision: 010 Date: 052025	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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