

Impact resistant decorative and protective cladding with advanced cavity wall design, and fluid applied air and moisture barrier



Substrate: Glass mat gypsum sheathing in compliance with ASTM C 1177, Exterior or Exposure 1 wood-based sheathing (plywood or OSB).

1)	Substrate
2)	StoGuard <sup>®</sup> Air and Moisture Barrier
3)	Sto DrainScreen™ Drainage Mat
4)	PermaBase <sup>®</sup> Brand Cement Board
5)	StoGuard Mesh Joint Reinforcement (skim coated with Sto base coat)
6)	Sto Mesh (embedded in Sto Base Coat)
7)	Two base coat options:Sto Primer/Adhesive-B or Sto BTS <sup>®</sup> Xtra
8)	Sto Primer Sand (optional)
9)	Three textured finish options: Stolit <sup>®</sup> Lotusan <sup>®</sup> , Stolit <sup>®</sup> , or Sto Essence DPR

## **System Description**

StoQuik Silver DrainScreen is a decorative and protective wall cladding assembly with advanced cavity wall design and fluid applied air and moisture barrier for superior moisture protection. Sto's high performance finishes applied over cement board provide handsome aesthetics and a durable exterior skin.

## Uses

StoQuik Silver DrainScreen can be used in residential or commercial wall construction where energy efficiency, superior aesthetics, and air and moisture control are essential in the climatic extremes of North America.

Features	Benefits		
Hard surfaced exterior skin	Resist damage from Impact and abuse		
Installs quickly	Reduced down time, early occupancy		
Cavity wall design with air/moisture barrier	Protects against mold and moisture problems		
Wide range of finish colors and textures	Aesthetic and curb appeal easy to achieve		
Fully tested, building code compliant	Peace of mind		
Properties			
Cladding Weight	< 4 psf (20 kg/m <sup>2</sup> )		
Assembly Thickness (from exterior sheathing face)	Nominal 7/8 inches (22 mm)		
R-value	Based on stud cavity insulation		
Cladding Wind Load Resistance	Tested to: + 166, -94 psf (+7.94, - 4.50 kPA)		
Air Leakage (air barrier component)	< 0.004 cfm/ft <sup>2</sup> at 1.57 psf		
Construction Types, Fire- Resistance	<ul> <li>NFPA 285 for types I         <ul> <li>IV construction</li> </ul> </li> <li>ASTM E119 for         <ul> <li>hourly ratings</li> </ul> </li> </ul>		

10 year Limited Warranty on Sto products

## 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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Damer					
Limitations					
Minor surface cracking at joints can become visible in the finished exterior surface.					
Wind load resistance: +7.94, - 4.5 kPA (+ 166, -94 psf) ultimate loads achieved. Ultimate wind load resistance also depends on sheathing, sheathing attachment, and stiffness of supporting construction. Design for maximum allowable deflection of L/360.					
The system is generally recommended for low-rise residential and commercial wall construction (4 stories or less). In some cases such as balcony infill walls the system may be used on taller buildings. See wind load data and verify conformance with project design wind pressure requirements. Always construct a mock-up to verify design details, aesthetics, and test to verify performance as deemed by design professional.					
Fire-Resistance-Rated Construction: where an hourly fire-resistance rating is required consult ICC ESR 1510 and provide analysis of the final proposed wall assembly to verify rating is met.					
Planar irregularities/waviness may be visible in finished wall surface if supporting frame work is out of plane. Heavy texture finishes (> 1.5 mm) and/or two coats of base coat will minimize these effects.					
For use on vertical above grade walls only. Do not use below grade or on roofs or roof-like surfaces.					
Joints are required, including at intervals in the field of the wall to accommodate thermal movement.					
Light finish colors (LRV $\geq$ 30) are recommended to minimize thermal stress.					
Air Barrier, insulation board, and drainage mat are not intended for prolonged weather exposure. Refer to Product Bulletins.					
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, air barrier joint treatments and coatings meet US EPA (40 CFR 59) and SCAQMD (Rule 1113) emission standards for architectural coatings.					
LEED Credit Eligibility					
<ul> <li>Energy and Atmosphere (EA)</li> <li>Materials and Resources (MR)</li> <li>Innovation in Design (IA)</li> </ul>					
Regulatory Compliance and Standards Testing					
ICC ESR No. 2536 covering StoQuik Silver Systems	Complies with 2006 and 2009 IBC and IRC				
ICC ESR No. 1233 covering StoGuard Air & Moisture Barrier	Complies with 2006, 2009, 2012 IBC, IRC and IECC				
ASHRAE 90.1-2010 <sup>1</sup>	Complies with Section 5, Building Envelope, air barrier requirements				
	Air/Moisture barrier meets air leakage resistance criteria of $\leq$ 0.04 cfm/ft <sup>2</sup> at 1.57 psf (0.2 L/s•m <sup>2</sup> at 75 Pa)				
	Meets flame propagation criteria for use on Types I, II, III, IV construction				
	Capable of meeting requirements for 1 or 2 hour rating over non load-bearing steel frame construction				
<ol> <li>Energy Standard for Buildings Except</li> <li>Standard Test Method for Determinit</li> </ol>	ot Low-Rise Residential Buildings ing Air Leakage of Air Barrier Assemblies				

2. Standard Test Method for Determining Air Leakage 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

For fullest and most complete information refer to Sto guide Specifications and Details at <u>www.stocorp.com</u>

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.	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-QS200D Revision: 002 Date: 05/2018	
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