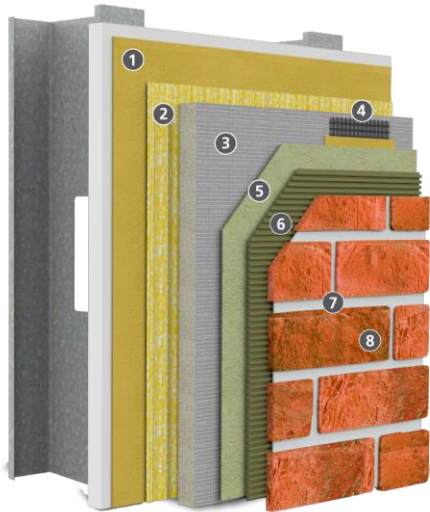


StoQuik® Silver DrainScreen® MVES

Masonry Veneer Engineered cement board wall system with advanced cavity wall design, and continuous air and water-resistive barrier



Substrate: Glass Mat Gypsum sheathing in compliance with ASTM C1177, code compliant wood-based sheathing (plywood or OSB)

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| 1) | Air & Water-resistive Barrier: Sto Gold Coat® |
| 2) | Drainage Mat: Sto DrainScreen® |
| 3) | Cement Board: ½ inch (13mm) PermaBase® Brand |
| 4) | Joint Treatment: Sto Gold Coat with StoGuard® Fabric |
| 5) | Skim Coat: StoColl Adhesive Mortar |
| 6) | Masonry Veneer Adhesive: StoColl Adhesive Mortar |
| 7) | Masonry Veneer Grout: ANSI 118.7 compliant portland cement-based grout |
| 8) | Masonry Veneer: thin brick, thin stone, ceramic tile, or manufactured stone in conformance with applicable building code requirements |

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

StoQuik Silver DrainScreen MVES is a cement board wall system with Adhered Masonry Veneer (AMV) – thin brick, natural stone, ceramic tile, or manufactured stone. It combines the speed of installation and durability of cement board with advanced cavity wall design, Sto high strength masonry veneer adhesive, and the moisture protection of StoGuard Air and Water-resistive Barriers.

Uses

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

Features

Variety of masonry veneers – brick, stone, tile – that integrate seamlessly with Sto finishes

Impact and puncture resistant cladding

Advanced cavity wall design

Continuous air and water-resistive barrier

Fully tested, building code compliant wall assembly

Benefits

Design versatility on a single compatible substrate

Withstands abuse, reduced maintenance

Reduces risk of water penetration

Impedes water penetration, helps reduce energy costs

Peace of mind

Properties

Weight (not including sheathing and frame)

< 24 lb/ft² (118 kg/m²) with nominal 15 lb/ft² (73.2 kg/m²) masonry veneer

Assembly Thickness (from outside face of sheathing)

Nominal 1-5/8 inch (41 mm) with 5/8 inch (16mm) thick masonry veneer

R-value (from outside face of sheathing)

0.37 ft²•h•°F / Btu (0.065 m²•K / W)

Wind Load Resistance (varies with stiffness of stud wall construction and sheathing / lath attachment)

Capable of achieving DP of: ± 44 lb/ft² (2.10 KPa)

Code Compliance:
StoGuard: ICC-ESR 1233
Cement Board: UL ER 22158-01

IBC, IRC, IECC (2012, 2015, 2018)

Construction Types and Fire Resistance

- NFPA 285 for Types I – IV construction
- UL hourly rated assemblies

Warranty

15 year Limited Warranty

Maintenance

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

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| Design Guidance and Limitations | |
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| Fire resistance rated assemblies: refer to UL ER 22158-01 | |
| Wind load resistance: Design for maximum allowable deflection of L/360. Maximum allowable stud spacing / minimum stud gauge: 16 inches (406mm) on center / 18 gauge. Capable of achieving design pressures of: ± 44 lb/ft ² (2.10 KPa). Refer to UL ER 22158-01 for wind load ratings. Test assembly as needed to verify conformance with local code requirements. | |
| Moisture Control: design and detail air and water-resistive moisture barrier as a continuous assembly, incorporate flashing and coping to shed water and prevent water entry into wall construction, select compatible wall assembly components at material interfaces and to seal penetrations. For more information refer to Sto Detail Booklet, and Sto Tech Hotlines: TH-0403-BSc, <i>Critical Detail Checklist for Wall Assemblies</i> , and TH 0603-BSc, <i>Moisture Control Principles for Design and Construction of Wall Assemblies</i> , TH-1000-BSc, <i>Effects of Temporary Heating on Construction Materials in Cold Weather</i> . | |
| Recommended for all climate zones, and where a ¼ or 3/8 inch (6 or 10mm) drainage cavity is required by the applicable building code. | |
| For use on vertical above grade walls only, up to 6-stories or 72 ft (22m) in height, whichever is less, except for manufactured stone and natural stone. Refer to Sto Tech Hotline No. 0821-M, <i>Quick Reference Guide on Adhered Masonry Veneers in Exterior Wall Construction</i> , for additional information. | |
| Not for use below grade, sloped or horizontal surfaces, or on roofs or roof-like surfaces. Refer to Sto Details. | |
| Joints: provide expansion joints where they exists in the supporting wall construction, at control joints or cold joints in the supporting wall construction, at changes in support construction (e.g., masonry to frame wall), at junctures with dissimilar construction, at different substrates, at floor lines in multi-story wall construction, at changes in building height and other areas of stress concentration, and within areas of not greater than 144 ft ² (13.4m ²) with length or height not more than 12 ft (3.6m) for ceramic tile, and not more than 18 ft (5.5m) for brick or stone, with length/height or height /length ratio not greater than 2-1/2 to 1. Dark colored veneer units may require closer spacing due to increased thermal movement. Consult with design professional. Do not bridge expansion joints, control joints, or cold joints in wall construction with adhered masonry veneer. Refer to Sto Detail Booklet. | |
| Mortar Joints: must be grouted except where permitted for manufactured stone (refer to Sto Tech Hotline No. 0821-M, <i>Quick Reference Guide on Adhered Masonry Veneers in Exterior Wall Construction</i>) | |
| Adhered masonry veneer units are limited in thickness, size and weight by the IBC and IRC. Refer to Sto Tech Hotline No. 0821-M, <i>Quick Reference Guide on Adhered Masonry Veneers in Exterior Wall Construction</i> . | |
| Efflorescence is a normal occurrence in portland cement-based materials and can affect final appearance of finish products. To minimize risk of efflorescence follow best construction practices to prevent water entry into walls through proper design detailing, and the proper use of flashing, copings, and sealant. Refer to Sto Details. | |
| Air and water-resistive barrier materials are not intended for prolonged weather exposure. Allow 180 days maximum between application of air and water-resistive barrier and other wall system components. 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 | |
| Adhesive, air and water-resistive barrier joint treatments and coatings meet SCAQMD (Rule 1113) VOC standards for Building Envelope Coating: less than 50 g/L | |
| LEED Credit Eligibility | |
| System has high potential for LEED and other sustainability program credits based on use of continuous air and water-resistive barrier and VOC compliance | |
| Regulatory Compliance and Standards Testing | |
| ICC ESR No. 1233 | StoGuard complies with 2012, 2015, 2018 IBC, IRC and IECC |
| ASTM E2178, E2357 | StoGuard meets air leakage requirements as a material and as an assembly |
| ASHRAE 90.1-2019 | System complies with Section 5, Building Envelope, air barrier requirements |
| UL ER 22158 | System meets criteria for use on noncombustible construction |
| UL ER 22158 | System meets requirements for hourly rated wall assemblies. |

For complete information refer to www.stocorp.com

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| <p>Sto Corp. 3800 Camp Creek Parkway Building 1400, Suite 120 Atlanta, GA 30331</p> <p>Tel: 404-346-3666 Toll Free: 1-800-221-2397 Fax: 404 346-3119</p> <p>www.stocorp.com</p> | <p>SB-1150 Revision: 004 Date: 5/2023</p> | <p style="text-align: center;">Attention</p> <p>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.</p> |
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