

StoQuik[®] Silver MVES

Masonry Veneer Engineered cement board stucco wall system with advanced cavity wall design, and continuous air/moisture barrier

System Description



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

1)	Air and Moisture 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 KM
6)	Masonry Veneer Adhesive: StoColl KM
7)	Masonry Veneer Grout: ANSI 118.7 compliant portland cement-based grout
8)	Masonry Veneer: thin brick, thin stone, ceramic tile, or cultured stone in conformance with applicable building code requirements

StoQuik Silver MVES is a cement board stucco wall system with Adhered Masonry Veneer (AMV) - thin brick, natural stone, ceramic tile, or cultured 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 moisture barriers. Uses StoQuik Silver MVES 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 Variety of masonry veneers – Design versatility on a single brick, stone, tile – that integrate compatible substrate seamlessly with Sto finishes Impact and puncture resistant Withstands abuse, reduced cladding maintenance Advanced cavity wall design Reduces risk of water penetration Impedes water penetration, Continuous air and moisture barrier helps reduce energy costs Fully tested, building code Peace of mind compliant wall assembly Properties < 18 lb/ft² (87.9 kg/m²) Weight (not including sheathing with nominal 9 lb/ft² and frame) (44 kg/m²) masonry veneer Nominal 1-5/8 inch (41 mm) Assembly Thickness with 5/8 inch (16mm) thick (from outside face of sheathing) masonry veneer R-value (from outside face of 0.37 ft²•h•°F / Btu sheathing) (0.065 m²•K / W) Wind Load Resistance (varies with Capable of achieving DP of: stiffness of stud wall construction and <u>+</u> 44 lb/ft² (2.10 KPa) sheathing / lath attachment) IBC, IRC, IECC (2012, 2015, Code Compliance: StoGuard AMB: ICC-ESR 1233 2018) Cement Board: UL ER 22158-01 NFPA 285 for Types • Construction Types and Fire I – IV construction Resistance UL hourly rated assemblies Warranty 10 year Limited Warranty Maintenance Requires periodic cleaning to maintain appearance, repair of cracks and impact damage if they occur. Sealants and other facade components must be maintained to prevent water infiltration.



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Design Guidance and Limitations

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: \pm 44 lb/ft2 (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/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, *Critical Detail Checklist for Wall Assemblies*, and TH 0603-BSc, *Moisture Control Principles for Design and Construction of Wall Assemblies*.

Recommended for moist and marine 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 4-stories or 50ft (15.2m) in height, whichever is less.

Not for use below grade, sloped or horizontal surfaces, or on roofs or roof-like surfaces. Refer to Sto Detail Booklet.

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 ft² (13.4m²) 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 / pointed. Open joints are not permitted.

Adhered masonry veneer units are limited in thickness, size and weight by the IBC and IRC: Maximum thickness: 5/8 inch (16mm), Maximum allowable weight: 9 lb/ft² (43.9 kg/m²), Maximum size: not to exceed 24 inches (610mm) in any face dimension and not in excess of 3 ft² (0.28m²)

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 Detail booklet.

Air and moisture barrier materials are not intended for prolonged weather exposure. Allow 180 days maximum between application of air/moisture 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 barrier joint treatments and coatings meet SCAQMD (Rule 1113) VOC standards for Building Envelope Coating: less than 50 q/L

LEED Credit Eligibility

System has high potential for LEED and other sustainability program credits based on use of continuous air and moisture barrier and VOC compliance

Regulatory Compliance and Standards Testing		
ICC ESR No. 1233	Sto Gold Coat AMB complies with 2012, 2015, 2018 IBC, IRC and IECC	
ASTM E2178, E2357	Sto Gold Coat AMB meets air leakage requirements as a material and as an assembly	
ASHRAE 90.1-2016	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.	

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