

Sentry Stucco Ultra With MaxGrip Veneer Mortar

A premium cement plaster stucco system with enhanced water management featuring Senergy air/water-resistive barriers with MaxGrip Veneer Mortar.

Description

Sentry Stucco Ultra with MaxGrip Veneer Mortar is an enhanced water management, Portland cement-based, exterior stucco wall system. It incorporates Senergy Senershield liquid applied air/water-resistive barrier to provide a premium level of protection to the sheathing and cavity against moisture and air intrusion. The system features MaxGrip Veneer Mortar - a high-strength specially formulated setting bed mortar to adhere natural and manufactured stone, ceramic tile, and thin brick veneer.

DESIGN CONSIDERATIONS

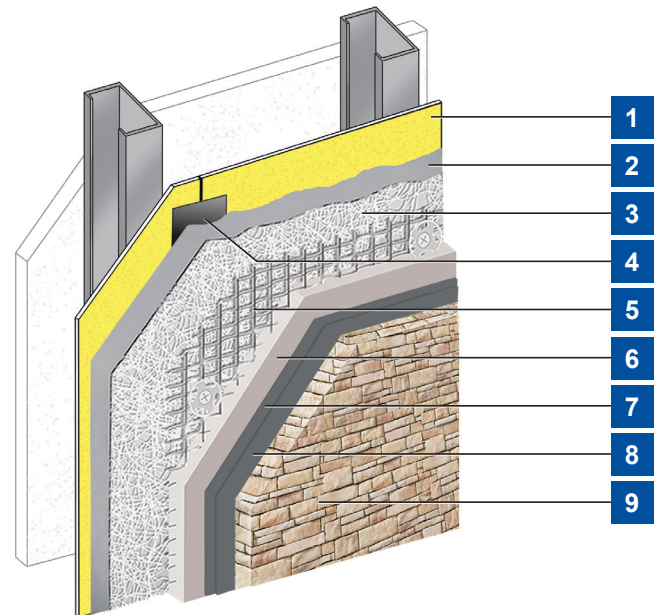
- Maximum allowable deflection $L/360$, based on stud/structural properties only.
- Expansion joints are required in the system where they exist in the substrate, where the system adjoins dissimilar construction, at changes in substrates and at floor lines in multilevel wood frame construction and where movement is anticipated, as determined by the project design team.
- Senershield-R/-RS/-VB can be used behind all claddings where more than one wall system is specified, creating one continuous AWRB system. This is appropriate whenever Senergy systems are used with other cladding types on a multi-clad building.
- The International Building Code and TMS 402/602 Building Code Requirements and Specification for Masonry Structures do not place a specific height limit on this application. However local building code may impose certain restrictions that would limit the height that the system can be placed. Consult the authority having jurisdiction (AHJ) for the project to ensure local requirements are satisfied.

Uses

New or retrofit residential, institutional and commercial construction. May be used in fire-resistance-rated construction and in any construction type, including IBC Types I through V, when installed in accordance with Master Builders Solutions Wall Systems' instructions.

Material Substitution

Material substitution will adversely affect system performance and will void all warranty coverage unless approved in writing by Master Builders Solutions Wall.



1. Acceptable Sheathing*:
Poured concrete/unit masonry; ASTM C1177 type sheathings, including DensGlass™ exterior sheathing, DensElement (sheathing only), eXP™ sheathing, GlasRoc® sheathing, Securock™ glass-mat sheathing, Weather Defense™ Platinum sheathing, GreenGlass® sheathing; cement-boards (ASTM C1325 Type A Exterior) including PermaBase™ cement-board; untreated Exposure I or exterior plywood sheathing (grade C-D or better); untreated Exposure I OSB, Huber Zip (sheathing only); Fire Treated wood sheathing: Pyro-Guard® and Dricon® plywood and FlameBlock® OSB; gypsum sheathing (ASTM C79/ASTM C1396).
2. Senershield-R/-RS/-VB
3. Drainage Mat DF
4. Approved Joint Reinforcement: Maxflash or Sheathing Fabric embedded in Senershield-R, -RS, -VB or MasterSeal AWB 970 NP
5. Permalath 1000 or Metal Plaster Base*
6. SuccoBase by Master Builders Solutions
7. Skim Coat of MaxGrip Veneer Mortar
8. MaxGrip Veneer Mortar
9. Adhered Veneer*

* By Others

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Sentry Stucco Ultra with MaxGrip Veneer Mortar System and Component Performance:

Test	Method	Criteria	Results
Water penetration of exterior windows, curtain walls and doors by uniform static air pressure	ASTM E331	No water penetration on the face of the test specimen at 136.9 Pa (2.86 psf)	Pass
Freeze-thaw Resistance	Per ICC-ES acceptance criteria AC-11	No sign of deleterious effects after 10 cycles	StuccoBase passed with no visible evidence of deterioration when examined under 5x magnification
Water Vapor Transmission	ASTM E96-Wet Cup	Report value	StuccoBase 20.4 perms
Racking Load Test	ASTM E72	Report value	Maximum load resistance 5530 pounds (2500 kg)
Compressive Strength	ASTM C109	Report value	22.4 MPa (3245 psi) average for StuccoBase
Flexural Strength	ASTM C348	Report value	4.57 MPa (663 psi) average for StuccoBase
Surface Burning	ASTM E84	Report value	<25 Flame Spread <450 Smoke Developed Includes PermaLath 1000 and StuccoBase
Non-Combustibility	ASTM E136	No flaming, excess temperature rise or weight loss when exposed to 1382°F (750°C)	Pass StuccoBase with PermaLath 1000 or metal plaster base
Fire Resistance Rated Assemblies	ASTM E119	No transmission of heat greater than 250°F above ambient; no passage of flame or hot gasses; no passage of water from hose stream test; for loadbearing walls – ability to with stand load under test conditions	Hour Rated Assemblies: <ul style="list-style-type: none"> • Load bearing wood stud wall with 10.9 mm (7/16") OSB and 9.5 mm (3/8") StuccoBase • Load bearing wood stud wall with 16mm (5/8") Type X gypsum sheathing and 9.5 mm (3/8") StuccoBase • Load bearing wood stud wall with 10.9 mm (7/16") OSB, PermaLath 1000 & 12.7 mm (1/2") StuccoBase (from inside only) • Non-load bearing steel framed wall with 16 mm (5/8") Type X gypsum sheathing, PermaLath 1000 & 12.7 mm (1/2") StuccoBase
Transverse (Wind) Load	ASTM E330	Report value	+/- 40 PSF; 2" X 4" wood studs, gypsum or wood sheathing or 3 5/8", 20 ga steel studs, gypsum or wood sheathing

Reference Intertek Evaluation Reports CCRR-0230 (StuccoBase) and CCRR-0249 (PermaLath 1000).
For additional testing reference Sentry Stucco Ultra with MaxGrip Specification.

MaxGrip Veneer Mortar Testing

Test	Method	Criteria	Results
Compressive Strength	ASTM C109	N/A	4000 psi
Freeze Thaw	ASTM C666	Procedure A, cycles rapid freezing and thawing in water, 40°F - 0°F - 40°F in not less than 2 hours and not more than 5 hours; modified using full IVS composite in place of concrete beam	> 100 cycles, no failure of MaxGrip
Shear Strength	ANSI A1 18.4	28 days ≥ 200 psi After 7 day water immersion ≥ 150 psi	565 psi at 28 days 306 psi after 7 day water immersion
Shear Strength	ANSI A1 18.15	7 days ≥ 300 psi 28 days ≥ 400 psi After 7 days water immersion ≥ 200 psi	487 psi at 7 days 565 psi at 28 days 306 psi after 7 day water immersion
Shear Bond	ASTM C482	Minimum 50 psi	130 psi - Directly to molded cement mortar bed specified in ASTM C482 146 psi average to Master Builders Solutions Wall System standard and dry base coats molded cement mortar bed specified in ASTM C482

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For Best Performance

- Use only for above grade vertical walls. System must terminate a minimum of 4" (102 mm) above raw earth or 2" (51 mm) above paved surfaces.
- Additives are not permitted for any Master Builders Solutions product unless approved in writing by Master Builders Solutions.
- All products must be installed at minimum 40°F (4°C) ambient and substrate temperatures unless otherwise noted on specific Master Builders Solutions Product Bulletins. Do not apply in ambient temperature greater than 100°F (38°C) or to surface temperature above 120°F (49°C).
- Protect all work from precipitation for at least 24-hours after application or until dry.
- All substrates must be clean, dry and sound without planar irregularities greater than 1/4" per 10-feet (6 mm per 3 m).
- Per code veneer unit shall not exceed 2 5/8" (66.7 mm) in specified thickness, 36" (914 mm) in longest dimension or 5 ft² (0.46 m²) in total face area and shall not weigh more than 15 lbs/ft² (718 Pa).

Warranty Statement

Master Builders Solutions warrants this product to be free from manufacturing defects and to meet the technical properties on the current Product Bulletin, if used as directed within shelf life. Satisfactory results depend not only on quality products but also upon many factors beyond our control. MASTER BUILDERS SOLUTIONS MAKES NO OTHER WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ITS PRODUCTS. The sole and exclusive remedy of Purchaser for any claim concerning this product, including but not limited to, claims alleging breach of warranty, negligence, strict liability or otherwise, is shipment to purchaser of product equal to the amount of product that fails to meet this warranty or refund of the original purchase price of product that fails to meet this warranty, at the sole option of Master Builders Solutions. In the absence of an extended warranty issued by Master Builders Solutions, any claims concerning this product must be received in writing within one (1) year from the date of shipment and any claims not presented within that period are waived by Purchaser. MASTER BUILDERS SOLUTIONS WILL NOT BE RESPONSIBLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFITS) OR PUNITIVE DAMAGES OF ANY KIND.

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