

Sentry Stucco Plus Wall System

A premium cement plaster stucco system featuring Senersshield-R/-RS/-VB air/water-resistive barrier.

System Description

Senergy Sentry Stucco Plus is an enhanced water management stucco system that offers design flexibility and aesthetic appeal. It utilizes Senergy liquid applied air/water-resistive barriers providing a premium level of protection of the sheathing and cavity against moisture and air intrusion. Optional Senergy base coat and reinforcing mesh and/or elastomeric finish are available for superior crack suppression.

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. * For insulated version reference Senergy Platinum CI Stucco Plus wall system.

Code Compliance

Document	Code Description
CCRR-0230 - System Report	2015, 2018 & 2021 IBC and IRC 2020 Florida Building Code
CCRR-0249 - PermaLath®1000 Report	2015, 2018 & 2021 IBC and IRC 2020 Florida Building Code
ICC-ESR 2986 (Senersshield-R/-RS)	Air/water-resistive barrier*
Air Barrier Association of America recognized (Senersshield-R/-VB)	Can be used on projects where ABAA recognized air barriers are specified

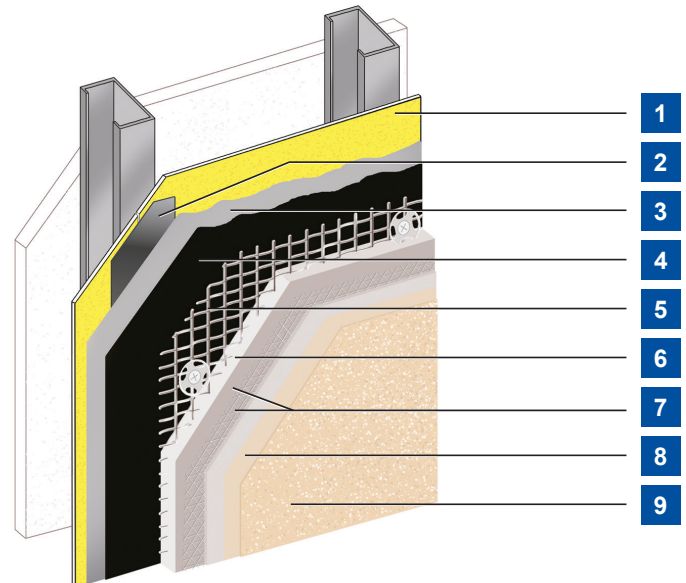
*Senersshield-R/-RS/-VB can be used behind all claddings where more than one wall system is specified, creating one continuous AWRB system. This is appropriate whenever Senergy Sentry Stucco Plus is used with other cladding types on a multi-clad building.

Enhanced Crack Resistance Options

Good: Maxlastic Elastomeric Finish
 Better: SRT Mesh with Senergy base coat or Stucco Level Coat
 Best: SRT Mesh with Senergy base coat or Stucco Level Coat and Maxlastic Elastomeric Finish

Material Substitution

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



1. Acceptable Substrate*
 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. Approved Joint Reinforcement: MaxFlash, Sheathing Fabric embedded in Senersshield-R/-RS/-VB or MasterSeal AWB 970 NP
3. Senersshield-R/-RS/-VB
4. Grade D Paper (Bond Breaker)*
5. PermaLath 1000 or Metal Plaster Base
6. StuccoBase by Master Builders Solutions
7. Senergy Reinforcing Mesh Embedded in Senergy Base Coat (Optional)
8. Stucco Primer by Master Builders Solutions (Optional)
9. Senergy Finish

*By Others

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System and Component Performance			
Test	Method	Criteria	Results
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 530 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, StuccoBase, and Senergy Finishes
Non-Combustibility	ASTM E136	No flaming, excess temperature rise or weight loss when exposed to 750°C (1382°F).	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 load bearing walls – ability to withstand load under test conditions.	1 Hour Rated Assemblies ¹ : <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 16 mm (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

Reference Intertek Evaluation Reports CCRR-0230 and CCRR-0249.
For additional testing reference Sentry Stucco Ultra Specification.

Advantages

- Fluid applied air/water-resistive barrier provides a durable, seamless secondary moisture protection.
- PermaLath 1000 self-furred glass fiber reinforcing lath that will not rust.
- Factory prepared StuccoBase minimizes potential site mixing errors; improves quality control.
- Senergy acrylic modified base coat over StuccoBase enhances water resistance performance and finish coat aesthetics.
- Elastomeric finish coat bridges hairline cracks and reinforcing mesh option further increases crack resistance.
- Resistant to impact and punctures; good for high traffic areas.
- Wide selection of finish textures, standard colors and unlimited custom color provides design flexibility with numerous design options.

Limitations / Design Considerations

For use on above grade vertical walls only. System must terminate a minimum of 4" (102 mm) above raw earth and 2" (51 mm) above paved surfaces.

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). When specifying smooth finishes, use of Senergy acrylic base coat is recommended to level stucco surface imperfections. Allow stucco base to cure a minimum of 6 days prior to application of EPS board shapes, Senergy base coat, Stuccoprime or Senergy finish.