

Senerflex Secondary Weather Barrier Design

Class PB EIFS incorporating an air/water-resistive barrier

DESCRIPTION

Senerflex Secondary Weather Barrier Design is an enhanced Class PB EIFS that includes a secondary air/water-resistive barrier for the protection of moisture sensitive sheathings. The system offers design flexibility, aesthetic appeal and energy savings. Integrated system components include air / water-resistive barrier, adhesive, EPS insulation board, reinforced base coat and 100% acrylic polymer finish. Finishes are available in a limitless color selection and offer performance enhancement options, including increased resistance to dirt pick-up and mildew. Senerflex Secondary Weather Barrier Design complies with ASTM E 2568, and has passed rigorous tests including Full-Scale Fire, Wind-Load, Wind-Driven Rain, and Large and Small Missiles.

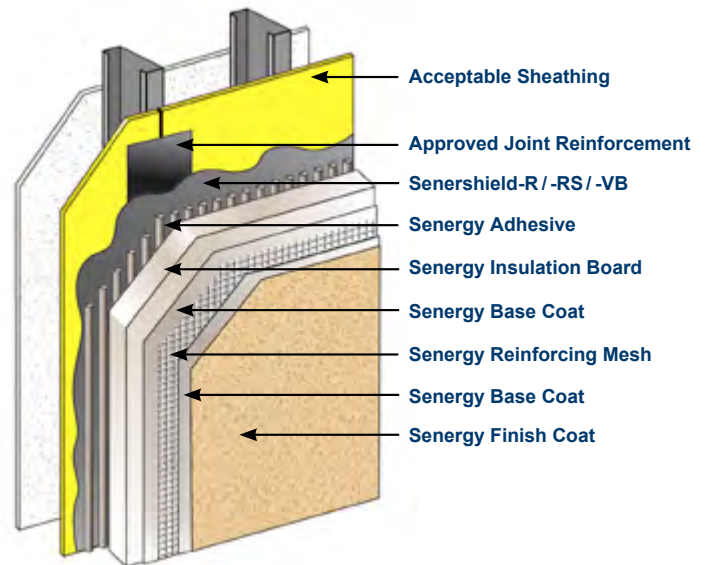
The system features easy installation, proven durability and low maintenance.

Apply the system directly to the following acceptable substrates:

PermaBase® Cement Board and other cement boards conforming with ASTM C1325 (Type A - exterior); poured concrete/unit masonry; ASTM C1177 type sheathings, including Weather Defense™ Platinum sheathing, GreenGlass® sheathing, e2XP™ sheathing, GlasRoc® sheathing, Securock™ glass-mat sheathing, and DensGlass® exterior sheathing; gypsum sheathing (ASTM C79/C1396); Exposure I or exterior plywood (Grade C/D or better); or Exposure I OSB.

USES

For exterior walls in new and retrofit commercial and institutional projects when additional moisture protection of the sheathing is desired or required.



ADVANTAGES

- Incorporates a seamless, monolithic secondary air/water-resistive barrier to protect the sheathing and to guard against incidental moisture intrusion and air infiltration
- Seamless exterior blanket of insulation provides high R values, lowers heating and cooling costs
- Cost-effective
- Potentially allows downsizing of HVAC systems
- Provides the ability to achieve any architectural style with unlimited design options
- Economical architectural detailing
- Does not require control joints; flexible
- Fade-, crack-, abrasion- and dirt-resistant
- Multiple options for impact resistance improve functional design, ease of maintenance
- Wide selection of finish textures, standard and custom colors

DESIGN CONSIDERATIONS

Expansion Joints

Required in the following locations:

- Where movement is anticipated (e.g., floor lines, canopies, carports, porte-cocheres, etc.)
- Where EIFS meets dissimilar materials (e.g., windows, doors, transitions to brick or other siding)
- Where substrate materials change
- At floor lines in wood frame construction where movement or cross grain shrinkage is anticipated
- At structural or existing expansion joints
- Expansion joint size and location per design as required for structural movement

Horizontal Applications

Minimum slope: 1:2 with maximum width of 30.5 cm (12") [e.g. 15 cm in 30.5 cm (6" in 12") width].

Substrate

- Maximum substrate design deflection is L/240.
- Consult the framing and sheathing manufacturer for design and application considerations.

Air/Water-Resistive Barrier

- Sheathing must be protected with either Senersshield-R/-RS or Senersshield-VB installed per applicable building code and manufacturer's requirements.

General

- EPS board size is limited to 2' x 4'. The minimum thickness of EPS at any point on the wall can not be less than 3/4". Consider this when designing and installing reveals.
- Use Strong 15/Hi-Impact 20 mesh at ground floor and on other locations where high traffic is expected.

Sealants, Backer Rod, Flashing

- Acceptable sealant installed with backer rod or bond breaker tape shall be used at all transitions between EIFS and other elements such as windows, doors, vents, penetrations, transitions to dissimilar elements, etc.
- Flashing at windows, doors, chimneys, transitions between EIFS and roof and at other points specified shall be installed in accordance with component manufacturer's instructions.

BEST PRACTICES FOR INSTALLERS

General

- All flashing should be installed per codes prior to the installation of Senerflex Secondary Weather Barrier Design.
- A mock-up of the Senerflex Secondary Weather Barrier Design showing all components should be prepared using the same tools and skills that will be used in actual construction, and the sample should be kept at the jobsite during construction.
- Do not use below grade; system must terminate a minimum of 8" above grade.
- Pail components must be kept at a minimum of 4°C (40°F) (10°C/50°F for Aurora TC-100, Aurora Stone and Alumina finishes) during shipping and storage. A minimum temperature of 4°C (40°F) (10°C/50°F for Aurora TC-100, Aurora Stone and Alumina finishes) is required during application of all components and until completely dried.
- Protect dry (bagged) products from moisture. EPS insulation boards should be stored flat, out of direct sunlight.
- No additives are permitted to any components, unless approved by Master Builders Solutions Wall Systems.
- Follow the application instructions for each component.
- All substrates must be clean, dry and sound without planar irregularities greater than 1/4" in 10'.
- For Senersshield-R/-RS/-VB fluid-applied air/water-resistive barrier, refer to the product bulletin and technical bulletins for application instructions.

Insulation Boards

- All system terminations and penetrations must be back-wrapped with mesh and base coat.
- EPS board size is limited to 2' x 4'. The thickness of the board must be 3/4" to 4". The minimum thickness of EPS at any point on the wall can not be less than 3/4". Consider this when installing reveals.
- Do not break reinforcing mesh in the reveal; offset 4–6" minimum. Do not align reveals with insulation board joints; offset 4–6" minimum.
- Offset from sheathing joints by a minimum of 16". Offset from corners of doors, windows and other penetrations by a minimum of 4".
- Stagger joints in a running bond pattern offset a minimum of 6".
- Interlock corners.
- Prior to installation of the base coat, entire EPS covered wall must be completely rasped to remove high and low spots and to remove dust from the surface of the EPS.
- Use 3/8" x 3/8" x 3/8" or 1/2" x 1/2" x 1/2" trowel to apply adhesive to back of insulation boards.

- Always fill voids in insulation layer greater than 1/16" with slivers of insulation and not with base coat.

Reinforced Base Coat

- If mechanical fasteners were used to attach insulation, pre-spot each washer head with base coat.
- Flexguard 4 Reinforcing Mesh/Intermediate 6/Intermediate 12 must overlap a minimum of 2 1/2".
- Strong 15/Hi-Impact 20 mesh must not overlap; butt edges together. After Strong 15/Hi-Impact 20 mesh are embedded in base coat, a second layer of Flexguard 4/Intermediate 6/Intermediate 12 and base coat must cover that layer.
- Install "butterflies" of standard mesh at corners of all windows, doors and other penetrations.
- Install a second layer of reinforcing mesh a minimum of 4" on both sides of inside and outside corners.
- Mesh color should never be visible through the base coat.
- Special shapes must also be reinforced with base coat and reinforcing mesh.
- Protect work from precipitation for a minimum of 24 hours.

Finish

- Use only stainless steel trowels.
- Avoid working in direct sunlight.
- Finishes should be applied with adequate man power, tools and staging to keep a wet edge.
- A primer tinted to the color of the finish is recommended prior to application of rilled finishes.
- Do not run finish into sealant joints.
- Do not quit in the middle of a wall; run to natural breaks.
- Do not use different batches of finish on the same elevation.
- Protect from precipitation for a minimum of 24 hours.
- Do not apply finish over sealants.

LIMITATIONS

- Use only for above grade vertical walls.
- Do not use in one- or two-family framed residential construction, or Type V, Group R 1,2,3 or 4 framed commercial construction.

TECHNICAL SUPPORT

For answers to questions or specific recommendations about this assembly, please consult our website at senergy.master-builders-solutions.com/en or contact our Technical Services Department: Toll-free 800-589-1336.

HEALTH AND SAFETY

Follow good safety and industrial hygiene practices during handling and installing products and systems. Take necessary precautions and wear the appropriate personal protective equipment as needed. Read material safety data sheets and related literature on products before specification and/or installation.

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