

Senerflex Adhered Mat Design

Water Drainage Class PB Exterior Insulation and Finish System incorporating an unobstructed drainage plane and air/water-resistive barrier

DESCRIPTION

Senerflex Adhered Mat Design is a water-drainage design Class PB Exterior Insulation and Finish System EIFS. The system offers design flexibility, aesthetic appeal and energy savings. Integrated system components include on air/water-resistive barrier, adhesive, EPS insulation board, reinforced base coat and 100% acrylic polymer finish.

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

Apply the system directly to the following acceptable sheathings:

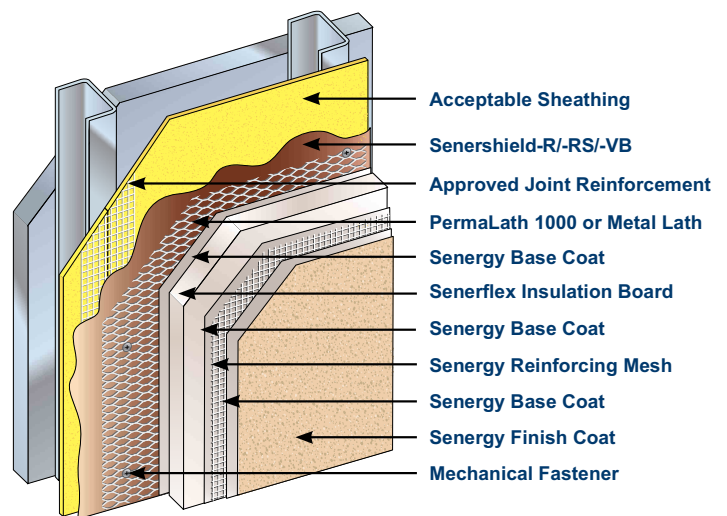
PermaBase® Cement Board and other cement boards conforming with ASTM C1325 (Type A - exterior); poured concrete/unit masonry; ASTM C1177 type sheathings, including Weather Defense™ Platinum sheathing, GreenGlass® sheathing, eXP™ sheathing, GlasRoc® sheathing, Securock™ glass-mat sheathing, and DensGlass®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

USES

For exterior walls in new and retrofit commercial, institutional and residential construction that are not suitable for direct adhesive attachment or when a water-drainage design is desired or required to satisfy code issues related to drainage, and where high wind-load capacity is a design consideration.

ADVANTAGES

- Highest wind load capacity of all EIFS choices
- Incorporates a monolithic secondary air/water-resistive barrier
- Provides a drainage plane for directing incidental moisture out of the wall assembly
- Seamless wall surface provides high resistance to potential water intrusion from rain and other environmental sources



- Seamless exterior blanket of insulation provides high R-values, lowers heating and cooling costs
- 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 finishes
- Multiple options for impact resistance improve functional design, ease of maintenance
- Wide selection of standard colors, custom colors, and finish textures

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
- Minimum expansion joint size 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, Senersshield-R/-RS/-VB air/water-resistive barrier, installed per applicable building code and manufacturer's requirements.

General

- Use Strong 15/Hi-Impact 20 mesh at ground floor and on other locations where high traffic is expected.

Sealants, Backer Rod, Flashing

- Approved sealant installed with approved 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 Adhered Mat Design.
- A mock-up of the Senerflex Adhered Mat Design system 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 eight inches above grade.
- Pail components must be kept at a minimum of 4°C (40°F) during shipping and storage. A minimum temperature of 4°C (40°F) 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.
- Expansion joints are required: where Senerflex Adhered Mat Design meets other materials; where substrate materials change; at floor lines in wood frame construction where movement or cross grain shrinkage are anticipated; and anywhere else that movement is anticipated.
- All substrates must be clean, dry and sound without planar irregularities greater than 6.3mm in 3m (1/4" in 10').

Insulation Boards

- All system terminations and penetrations must be back-wrapped with mesh and base coat.
- EPS board size is limited to 610mm x 1220 (2' x 4'). The minimum thickness of EPS at any point on the wall can not be less than 19mm (3/4"). Consider this when installing reveals.
- Do not break reinforcing mesh in the reveal; offset 100mm–152mm (4–6") minimum. Do not align reveals with insulation board joints; offset 100mm–152mm (4–6") minimum.
- Offset insulation board joints from sheathing joints by a minimum of 406mm (16"). Offset from corners of doors, windows and other penetrations by a minimum of 100mm (4").
- Insulation boards must be a single piece around corners of penetrations.
- Stagger joints in a running bond pattern offset a minimum of 152mm (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 a 13mm x 13mm x 50mm (1/2" x 1/2" x 2") notched trowel to apply adhesive to back of insulation boards.
- If using mechanical fasteners, use only those specified by Master Builders Solutions Wall Systems and install according to specifications. Do not overdrive mechanical fasteners. They should recess only 1.6mm (1/16") from surface.
- Always fill voids in insulation layer greater than 1.6mm (1/16") with slivers of insulation and not with base coat or other materials.

Reinforced Base Coat

- Flexguard 4/Intermediate 6/Intermediate 12 mesh must overlap a minimum of 2 1/2”.
- Use Strong 15/Hi-Impact 20 at ground floor and on other locations where high traffic is expected. Strong 15/Hi-Impact 20 must not overlap; butt edges together. After Strong 15/Hi-Impact 20 are embedded in base coat, that layer must be covered by a second layer of Reinforcing Mesh 4 and base coat.
- Install “butterflies” of Reinforcing Mesh at corners of all windows, doors and other penetrations.
- Install a second layer of Reinforcing Mesh a minimum of 100mm (4”) on both sides of inside and outside corners.
- Mesh color or prominent mesh pattern 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 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.
- Use only sealants that are acceptable for use with this system. Acceptable sealants and backer rods or bond breakers must be installed at all transitions between this system and other wall assembly elements such as windows, doors, vents, transitions to dissimilar materials, A/C cases, and other penetrations.
- Do not apply finish over sealants.

SYSTEM SPECIFICATIONS

The contents of this system overview are intended to provide the design professional information required to evaluate this assembly against specific project requirements. Further useful information to support the creation of a project manual such as a guide specification, product bulletins, and assembly details are available on the Senergy website at senergy.master-builders-solutions.com/en.

LIMITATIONS

Use only for above grade vertical walls.

KEY UPGRADES AVAILABLE

System upgrades can include the addition of high-impact resistant reinforcing mesh, specialty finishes, silicone enhanced textured finishes to improve dirt pick up and mildew resistance, and tinted primers to enhance final aesthetics.

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.

Master Builders Solutions
Constructions Systems US, LLC
889 Valley Park Drive
Shakopee, MN 55379 USA

Customer Service (800) 433-9517
Technical Service (800) 589-1336
senergy.master-builders-solutions.com/en



® registered trademark of a Group member
in many countries of the world
© 2021 MBCC Group, rev 05/2021

LIMITED WARRANTY NOTICE: Master Builders Solutions Construction Systems US, LLC (“Master Builders”) warrants this product to be free from manufacturing defects and to meet the technical properties on the current Technical Data Guide, 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 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. 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 WILL NOT BE RESPONSIBLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFITS) OR PUNITIVE DAMAGES OF ANY KIND.

Purchaser must determine the suitability of the products for the intended use and assumes all risks and liabilities in connection therewith. This information and all further technical advice are based on Master Builders present knowledge and experience. However, Master Builders assumes no liability for providing such information and advice including the extent to which such information and advice may relate to existing third party intellectual property rights, especially patent rights, nor shall any legal relationship be created by or arise from the provision of such information and advice. Master Builders reserves the right to make any changes according to technological progress or further developments. The Purchaser of the Product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with a full application of the product(s). Performance of the product described herein should be verified by testing and carried out by qualified experts.