

TECHNICAL BULLETIN

Senerflex Vulcan NC Installation Guide

SURFACE PREPARATION:

Ensure Senergy Senershield air/water-resistive barrier is installed per published product bulletin and details prior to the installation on insulation board. Senershield shall be clean and within 180-day exposure limit.

MECHANICAL FASTENERS:

ULP-302 by Wind-Lock Corp high density plastic washers, 1 ¾ inches (44 mm) in diameter, used in combination with corrosion resistant screws that are suitable for the substrate.

MINERAL WOOL INSULATION

Mono Density: minimum thickness 1.5", maximum 4". Dual Density: minimum thickness 2.5", maximum 4".

REVEALS:

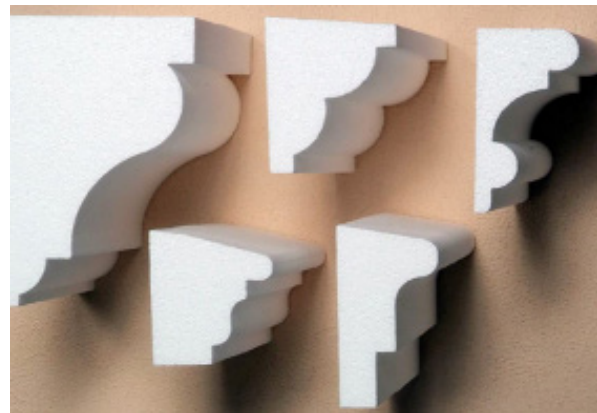
Preplan location of reveals so that they do not coincide with fastener locations or insulation board joints. Maintain a minimum 1" (25 mm) thickness of insulation board at the back of the reveal; bottom of reveal should have 6:12 slope. Reveals can be achieved by a serrated insulation knife.



DECORATIVE INSULATION ELEMENTS:

Mineral wool feature bands are applied over the base layer of mineral wool insulation and attached with Senergy adhesive and Wind-Lock ULP-302 plates and fasteners, into supporting structure. Reinforced base coat shall be applied continuously across the feature band. Thickness of the bands will be limited by available fastener lengths.

Features with complicated profiles such as cornices are typically manufactured from EPS insulation – these shapes must be pre-wrapped with Senergy base coat and reinforcing mesh. Cornice features are limited to 12" (305 mm) thickness and attached with Senergy adhesive to the mineral wool insulation. Supplemental mechanical attachment may be required based on the shape configuration, verify availability of fasteners for adequate fastening prior to start of work. Ensure reinforced base coat is applied in a continuous manner from mineral wool onto feature.



PRE BACKWRAPPING AT HORIZONTAL TERMINATIONS WITH DRAINAGE DETAILING:

At window and door heads, top side of horizontal expansion joints, terminations at foundation, etc.; Where the system is designed to allow incidental moisture to exit, the insulation board can be pre backwrapped or wet on wet partially wrapped. As explanation, a pre backwrapped board includes Senergy reinforced base coat on three sides (min. 2 ½" onto back of board, across the edge and onto the face several inches) that has been premade and allowed to dry prior to board installation. Reference "Importance of Properly Back-Wrapping EIFS with Drainage" technical bulletin for additional information.

BACK-WRAPPING:

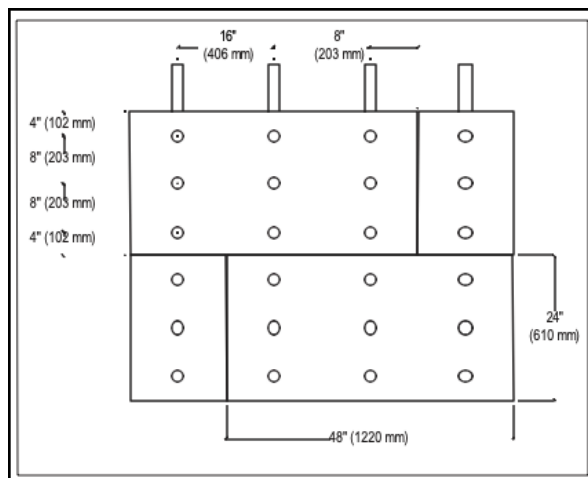
Where drainage is not applicable such as window jambs and sills, pipe or electrical box penetrations, vertical terminations at dissimilar materials and vertical expansion joint terminations; Backwrap mesh can be applied to the substrate with staples or with Senergy adhesive base coat, followed by adhering the insulation board over the backwrap mesh on the wall. The backwrap is completed after the adhesive has dried. Pre back-wrapped insulation can also be used in these areas but is not required. Reference "Importance of Properly Back-Wrapping EIFS with Drainage" technical bulletin for additional information.

GENERAL GUIDELINES:

Begin at base of wall with firm, temporary support or spacer. Stagger joints horizontally in a running bond pattern offset a minimum of 6" (152 mm). Pre-cut insulation board to fit openings and projections. Insulation board must be a single piece around corners of openings. Stagger vertical joints and corners. Stagger insulation and sheathing board joints. Offset insulation board joints from sheathing joints by a minimum of 8" (203 mm).

FASTENERS SPACING:

9 fasteners are required per 2' x 4' (610 mm x 1220 mm) piece of insulation board. Install mechanical fasteners at not more than 8" (203mm) o.c. vertically and 16" (406) mm o.c. horizontally, 4" from horizontal board joints and 8" from vertical board joints.



ADHESIVE:

1. Apply mixed Senergy Base Coat to entire surface of insulation board using a stainless-steel notched trowel with 1/2"x 1/2" (13 mm x 13 mm) notches spaced 2" (50 mm) apart. Ribbons of adhesive must be applied parallel to the 2' (610 mm) dimension of the insulation board to ensure they are vertical when the insulation board is applied to the substrate. Keep the trowel clean to avoid adhesive build-up between adhesive ribbons, remove or scrape off any excess adhesive left between ribbons.

NOTE: When dual density insulation is used, ensure high-density side faces out. Boards are marked "This side out".



2. Immediately set board into place and apply pressure over entire surface of board to ensure positive uniform contact and high initial grab. Do not slide board into place. Do not allow base coat to dry prior to installing.
3. Abut all joints tightly to prevent gaps and ensure overall flush level surface.
4. Interlock boards at inside and outside corners
5. Fill gaps in the insulation board 1/8" (3 mm) or greater with slivers of mineral wool insulation.
6. The straight edge of a trowel can be used to shave high spots in the mineral wool insulation to create an even plane
7. Allow adhesive application of insulation board to dry (minimum 8 to 10 hours) prior to installation of mechanical fasteners.

FASTENER INSTALLATION 1 OF 2

1. Install 4 fasteners per insulation board after adhesive application of the insulation board
2. Install fasteners along termination points within 4" (102 mm) of the horizontal edge and 8" (203 mm) vertical edge.
3. Reference below detail for spacing/placement.
4. Where installation occurs over frame construction, ensure fasteners are installed into the framing members.
5. Install fasteners to a depth to leave the ULP-302 plate flush or slightly recessed from the surface of the insulation, maximum recess of 1/16" (1.6 mm)



5. If required, apply a second layer of base coat to achieve total nominal base coat/reinforcing mesh thickness of 1/16" (1.6 mm).
6. Allow base coat with embedded reinforcing mesh to dry hard (normally 8 to 10 hours).

FASTENERS 2 OF 2:

Install remaining 5 fasteners per board after the installation of the reinforced base coat. Follow same application guidelines as outlined in Fastener Installation 1 of 2. Do not overdrive fasteners, ULP-302 plate should be flush or slightly recessed from the surface of the base coat.

FINAL BASE/SKIM COAT:

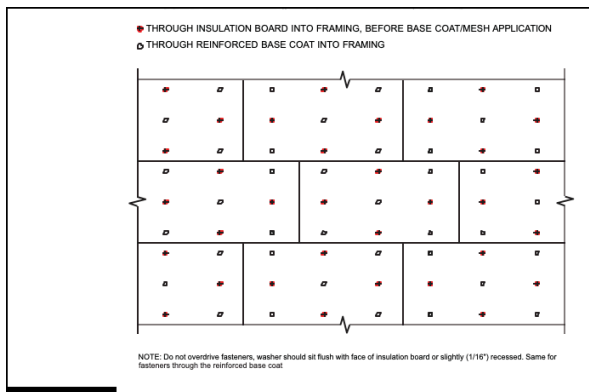
Spot all exposed fasteners (fasteners on outside of reinforced base coat) with Senergy base coat prior to



application of skim coat layer of Senergy base coat. Multiple coats of base coat may be required to achieve a flat surface.

FINISH:

Apply selected Senergy finish over dry base coat or Senergy Primer.



BASE COAT AND REINFORCING MESH:

1. Apply mixed Senergy Base Coat to entire surface of insulation board with a stainless-steel trowel to embed the reinforcing mesh.
2. Immediately place Senergy Reinforcing Mesh against wet base coat and embed the reinforcing mesh into the base coat by troweling from the center to the edges.
3. Lap reinforcing mesh 2 1/2" (64 mm) minimum at edges.
4. Ensure reinforcing mesh is continuous at corners, void of wrinkles and embedded in base coat so that no reinforcing mesh color is visible.

Note: For Strong 15 and HI-Impact 20 Reinforcing Mesh: Butt mesh at all adjoining edges; do not use to backwrap or bend around corners. After base coat with embedded reinforcing mesh is dry and hard (normally 8 to 10 hours), apply a layer of FLEXGUARD 4 or INTERMEDIATE 6 Reinforcing Mesh over the entire surface in accordance with steps 1 to 6 to achieve total nominal base coat/ reinforcing mesh thickness of 3/32" (2.4 mm).

LIMITATIONS AND CONSIDERATIONS:

1. Keep insulation boards dry during construction and while in service. Installed insulation should be protected as soon as possible with base coat application or other means. Insulation that has been exposed to moisture should be allowed to dry out prior to completing the installation and applying base coat.
2. For long-term storage, mineral wool should be stored indoors in a dry location with the factory packaging removed. If stored outdoors, factory packaging should be perforated and the product protected by a waterproof, breathable covering that has been properly secured
3. Use of smooth/fine finish textures is not advised, however if desired to achieve design requirements, a large-scale mock-up is recommended. Use of MaxGrip and adhered veneer is not acceptable.
4. Multiple coats of base coat may be required to achieve a flat surface. Published base coat coverage rates may be impacted by fastener depth.
5. For use on above grade vertical walls only. System must terminate a minimum of 6-inches (152 mm) above grade.
6. Fastener read through in the finish may occur due to counter sunk fasteners greater than 1/16" (base coat build up) or lack of complete leveling.