



APPLICATION INSTRUCTIONS

ENVIRODRI®
Weather-Resistant Barrier
Vapor Permeable Membrane

1. PURPOSE

- 1.1 The purpose of this document is to establish uniform procedures for installing EnviroDri Fluid-Applied Asphaltic Weather-Resistant Barrier and Vapor Permeable Membrane.
- 1.2 The techniques involved may require modification to adjust to jobsite conditions. Tremco recognizes that site specific conditions, weather patterns, contractor preferences, and membrane detailing may require deviation or alteration from these prescribed installation procedures. When such circumstances exist on a project, Tremco recommends that the local Tremco Sales Representative or Tremco Technical Service be contacted for assistance and approval as required.
- 1.3 EnviroDri is ICC-ES approved under ESR-2843. EnviroDri can be applied to plywood, OBS, 1/2" Type IV, Grade 2 Structural Fiberboard, Glass-mat faced gypsum recognized in a current evaluation report as complying with ASTM C1177. EnviroDri can also be applied to concrete, block masonry, Nudura Insulated Concrete Forms and Insulated Concrete Forms (ICF).

2. SCOPE

- 2.1 This document will provide the necessary instructions for the application of EnviroDri and its related air barrier system components.

3. POSSIBLE SYSTEM COMPONENTS

- 3.1 Recommended materials and their use are as follows. For more information on the following materials, please contact your local Tremco Sales Representative or visit our website for product-specific data sheet and application instructions at www.tremcosealants.com.
- 3.2 EnviroDri Accessories
 - a. EnviroDri Joint Fabric
 - b. EnviroDri Counterflashing
 - c. EnviroDri Door and Window Flashing
 - d. EnviroDri Pan and Arch
 - e. EnviroDri Pipe and Vent
- 3.3 Detail Sealant
 - a. Dymonic® 100
 - b. Dymonic® FC
 - c. Vulkem® 116
 - d. TremGlaze® U1600

*These may be used as directed in sections 8.5 or for board gaps and seams if the specific project does not require NFPA 285 approval or ICC approval. The Tremco Contractor applying the EnviroDri should get approval from the Architect to use the above listed detail sealants for board gaps and seams instead of EnviroDri Joint Fabric.
- 3.4 Transition Membrane
 - a. ExoAir® 110
 - b. ExoAir® 110AT
 - c. EnviroDri Brick Ledge Sheet Membrane
- 3.5 Other Accessories
 - a. ExoAir® Flex Foam
 - b. ExoAir® LEF (Low Expanding Foam)

4. LIMITATIONS

- 4.1 UV exposure should not exceed 4 months before facade installation. If the 4 month limit is exceeded, contact Tremco Technical Service at 866-209-2404, or visit the Technical Resource Center of our website at www.tremcosealants.com and "Ask the Expert".
- 4.2 Do not apply to wet, contaminated, or frost-covered surfaces. EnviroDri can be applied to slightly damp substrates if the weather for the day is favorable for application.

- 4.3 EnviroDri is not to be used as a permanently exposed surface.
- 4.4 The membrane shall be protected from rain and washout prior to drying.
- 4.5 EnviroDri can be applied at temperatures down to 0 °F, with the use of a heat exchanger and insulated hoses. The experience of the installing contractor is the best guide to when the weather is suitable, as they are responsible to achieve the properly cured, coated, and sealed system.
- 4.6 EnviroDri is not to be applied directly to fireproofing materials.
- 4.7 Keep product from freezing prior to being applied to the substrate. It is best to store EnviroDri off the floor at an ambient temperature above 50 °F.
- 4.8 Building codes require a bond break between an air and vapor barrier and cementitious coatings such as stucco. When using EnviroDri, it is best practice to use one layer of building paper or wrap on top of the EnviroDri Membrane as a bond break.

5. STORAGE

- 5.1 Store EnviroDri in original, undamaged packages in a clean, dry, protected location with temperatures between 40 to 100 °F.

6. SUBSTRATE PREPARATION

- 6.1 Roofing systems shall be capped and sealed, or top of walls protected, in such a way as to eliminate the ability of water to saturate the wall or interior space, both before and after air barrier installation. Coordinate installation of EnviroDri with the roofing trade to endure compatibility and continuity with the roofing system.
- 6.2 Continuity of the air barrier system is critical to the performance of the facade. Proper connections to other envelope systems such as the waterproofing, flashing, roof, and window/curtain wall systems shall be documented and approved by each manufacturer. Visit www.tremcosealants.com for various system testing performed at the Tremco Test Facility or to submit each project connection detail for testing.
- 6.3 Surface to be coated must be dry or very slightly damp, clean, smooth, firm, free of release agents, dust, mud, loose mortar, wires, fins, metal projections, or any other substances that might prevent placement and bonding of membrane.
- 6.4 EnviroDri may be applied to most typical building materials such as exterior sheathing boards, CMU block masonry, concrete, exterior grade plywood, OSB, Nudura Insulated Concrete Forms, Insulated Concrete Forms, and metal surfaces. Plywood and OSB surfaces should not have a moisture content higher than 19%.
- 6.5 Exterior sheathing shall be installed according to the manufacturer's installation instructions. All board edges shall be sound and anchored in a way to provide minimum deflection. All board edges shall be cut cleanly and excess debris shall be removed.
- 6.6 CMU walls shall have all joints filled and struck flush. Mortar should be cured for a minimum of 7 days. Any voids shall be patched with mortar, a non-shrinking grout or other approved patching material.
- 6.7 All concrete substrates shall be clean and free of release agents. Any voids shall be patched with mortar, non-shrinking grout, or any other approved patching material.
- 6.8 Exterior grade plywood OSB shall be securely fastened.
- 6.9 Metal surfaces require a pull test to validate proper adhesion and performance. Metal surfaces need to be clean and free of oils or other contaminants.
- 6.10 Nudura Insulated Concrete Forms (ICF) or Insulated Concrete Forms must be dry, clean, free of dust, mud, or any other substances that might prevent placement and bonding of membrane. After UV exposure it is recommended to rasp and clean substrate to the standards above. Contact Tremco and/or Nudura Technical Services for additional information.

7. DETAIL WORK

- 7.1 Penetrations must be rigidly supported through the sheathing as to not allow movement of penetrating item.
- 7.2 Gaps, fasteners, and tie-ins are addressed during membrane application.

8. APPLICATION PROCEDURE

- 8.1 EnviroDri Membrane should be applied at a uniform thickness of 12 to 15 wet mils using a high pressure spray gun or a heavy nap roller (3/4" or 1" nap). It can be roller applied manually or through a power roller. Spray application pressures should be 1800 to 2500 psi, through a 0.525, 0.527, or 0.529 tip.
- 8.2 Use a notch film gauge to ensure proper application thickness.

- 8.3 The proper application thickness results in an approximate coverage rate of 75 (plus or minus 10) square feet per gallon, when used as a complete system and re-coating over the top of the EnviroDri Joint Fabric. The coverage rate on individual installations will vary due to surface roughness, sheathing conditions, and other varying conditions. The cured EnviroDri Membrane should be a minimum of 10 mils cured.
- 8.4 All board joints and corner board joints must be first sprayed with EnviroDri Membrane, then EnviroDri Joint Fabric should be applied into the wet membrane, the re-coating the Joint Fabric with an additional coat of Membrane. This will ensure a fully adhered and waterproof board joint. Sufficient care must be taken to ensure that any wrinkles or other irregularities in the Joint Fabric are eliminated and smoothed out and properly coated.
- 8.5 Board joints, corner board joints, and terminations can be detailed with Dymonic 100, Dymonic FC, Vulkem 116 or TremGlaze U1600 only if the ICC and NFPA 285 certifications are NOT required for the project. Projects that require ICC and/or NFPA 285 approval MUST use Joint Fabric for joints. All Nudura or ICF joints and corners should be treated with joint fabric or one of the above listed Tremco approved sealants.
- 8.6 The application of EnviroDri Membrane over plywood and OSB sheathing requires careful attention. Before installing EnviroDri Membrane, inspect for any overdriven fasteners into the plywood or OSB. The applicator should pre-treat areas where overdriven nails or fasteners are more than 1/16" overdriving. This can be done with a heavy nap roller, brush, or spray gun. The pre-treatment should cover the main hole and the nail head and leave no gaps or open areas. If the overdriven nails are aligned vertically or horizontally, installing joint fabric over the holes is also acceptable.
- 8.7 EnviroDri Counterflashing, and other flashing and sealant, are to be done at the time of EnviroDri installation, or after windows, doors, and penetrations are installed. See EnviroDri Detail Drawings for installation of Counterflashing, and window details.
- 8.8 Protect membranes to avoid damage by other trades and construction materials during subsequent operations, Insulation and/or protection products may be installed after.
- 8.9 Connect the EnviroDri System to the adjacent building envelope systems when using the recommended Tremco materials. The EnviroDri System should be covered as soon as possible after installation. If the EnviroDri System cannot be covered within 4 months after installation, apply temporary UV protection. As inspection of the EnviroDri may be required.

9. INSPECTION, TESTING & REPAIR

- 9.1 Inspect the surface of the EnviroDri for pinholes, blisters, or other voids in the membrane. If any are detected, reapply until a monolithic coating at the specified minimum thickness is achieved. Other punctures or voids can be repaired with EnviroDri Membrane and Joint Fabric, or one of the approved Tremco Sealants.
- 9.2 If on-site adhesion testing is required, Tremco recommends ASTM D4541 Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers. EnviroDri should be allowed to dry for a minimum of 96 hours or until fully cured, whichever is longer, prior to conducting testing.

10. CLEAN UP

- 10.1 Remove any masking materials immediately after installation. Clean up any spillage or soiling with soapy water or a mild solvent, or cleaning agents and procedures recommended by the manufacturer of the affected construction.
- 10.2 The spray pump used to apply EnviroDri can be flushed out and cleaned with soapy water or a mild solvent, depending on weather conditions.

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