APPLICATION INSTRUCTIONS

EXOAIR® 130

Fluid-Applied Synthetic, Air and Vapor Retarder Membrane

1. PURPOSE

1.1 The purpose of this document is to establish uniform procedures for installing EXOAIR® 130 Fluid-Applied Synthetic, Air and Vapor Retarder Membrane.

1.2 The techniques involved may require modifications 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 EXOAIR® 130 is compatible with and part of ExoAir Air Barrier Systems, a complete line of air barrier systems provided by Tremco.

2. SCOPE

2.1 This document will provide the necessary instructions for the application of EXOAIR® 130 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 **Detail Sealant:**

- Dymonic® 100
- Spectrem® 1*
- ExoAir DualFlash®
- Tremflex® 834*

3.3 *May only be used as directed in Sections 7.1, 7.2, and 8.6.

3.4 **Transition Membrane:**

- ExoAir 110
- ExoAir 110AT
- ExoAir 230
- Proglaze ETA (Engineered Transition Assemblies)

3.5 **Other Accessories:**

- ExoAir Eco
- ExoAir Flex Foam
- ExoAir LEF (Low Expanding Foam)
- ExoAir Trio
- Illmod 600®
- Tremco 2011 Mesh

4. LIMITATIONS

4.1 UV exposure should not exceed 12 months before façade installation. If the 12-month limit is exceeded, contact Tremco Technical Service at 866-209-2404, or visit the Technical Resources area of our website at www.tremcosealants.com and "Ask the Expert."

4.2 Do not apply to damp, contaminated or frost-covered surfaces.

4.3 EXOAIR 130 is not to be used as a permanently exposed surface. Contact your local Tremco Sales Representative for project specific requirements

4.4 The membrane shall be protected from rain and washout prior to drying.

4.5 When applying to surfaces below 40 °F (5 °C), please refer to the Technical Bulletin - Cold Temperature Recommendations for Air Barrier Applications at www.tremcosealants.com or contact Tremco Technical Service at 866-209-2404.

4.6 EXOAIR 130 is not to be applied directly to fireproofing materials. Contact Tremco Technical Service at www.tremcosealants.com for alternative recommendations.

4.7 Keep product from freezing prior to being applied to the substrate. It is best to store EXOAIR® 130 off the floor at an ambient temperature above 50 °F (10 °C).

5. STORAGE

5.1 Store EXOAIR® 130 in original, undamaged packages in a clean, dry, protected location with temperatures 40 to 100 °F (5 to 37 °C).

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 system installation. Coordinate installation of EXOAIR® 130 with the roofing trade to ensure compatibility and continuity with the roofing system.

6.2 Continuity of the air barrier system is critical to the performance of the façade. 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 a project connection detail for testing.

6.3 Surface to be coated must be dry, 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 EXOAIR® 130 may be applied to most typical building materials such as exterior sheathing boards, CMU, concrete, exterior grade plywood, OSB and metal surfaces.

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 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 all release agents. Any voids shall be patched with mortar, non-shrinking grout or other approved patching material.

6.8 Exterior grade plywood shall be securely fastened. All board joints, fasteners, knots, or other defects need to be detailed with Tremco Dymonic 100 or ExoAir DualFlash.

6.9 OSB requires approval by the local Tremco Sales Representative prior to application. OSB requires mock-ups and pull-tests to validate proper adhesion and performance. Please consult your local Tremco Sales Representative when OSB is used.

6.10 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

6.11 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.

6.12 Visit www.tremcosealants.com for various system testing performed at the Tremco Test Facility or to submit a project connection detail for testing.

7. DETAIL WORK PRIOR TO AIR BARRIER MEMBRANE APPLICATION

7.1 Construction Gaps: It is best practice to have all construction gaps detailed with Dymonic 100, ExoAir DualFlash or Tremflex 834. However, EXOAIR® 130 fluid-applied membranes can bridge construction gaps 1/16” (1.6 mm) or less without additional detailing. All gaps greater than 1/16” (1.6 mm) shall be treated in the following ways, depending on substrate, joint size and expected movement. Please choose the appropriate product based on the movement requirements and joint dimensions set forth from the design build team.

- Dymonic 100 (+100/-50% movement, 1/4" to 1” joint)
- ExoAir DualFlash (elongation 200^)
- Illmod 600 (+/-25% movement, 1/8" to 2-5/8” joint)
- Proglaze ETA (varies based on system selection)
- Tremflex 834 (+/-12% movement, 1/4" to 1” joint)

7.2 Fasteners: Fasteners should be flush with the surface of the substrate. Fasteners which are protruding from or sunk below the face of the substrate shall be treated with a detail coat of Dymonic 100, or Tremflex 834 prior to the installation of EXOAIR® 130. The detail sealants may be coated over once a skin has developed. If the fastener penetration occurs after the EXOAIR® 130 membrane has been installed, detail all fastener penetrations not flush to the EXOAIR® 130 membrane with Dymonic 100 or Spectrem 1 sealant.

7.3 Penetrations: Penetrations must be rigidly supported through membrane as to not allow movement of penetrating item.

7.4 Rough Openings, Corners, Tie-Ins to other building envelope systems: Please consult www.tremcosealants.com for detail drawings and technical bulletins showing typical transitions and tieins. For job specific details or questions, please contact Tremco Technical Service at 866-209-2404.

8. MEMBRANE APPLICATION

8.1 ExoAir 130 should be applied at a rate of 70 wet mils (23 ft^2/gal; 2.01 M^2/US gal) using a minimum 3/4” (19 mm) nap roller or spray applicator. Please refer to the Technical Bulletin Spraying Guide at www.tremcosealants.com for more information on spraying ExoAir 130.

8.2 Use a wet film mil gauge as well as staging of material to ensure proper application thickness.

8.3 When transitioning onto ExoAir self-adhered membranes, Dymonic 100 shall be used on all edges of self-adhered membranes. Dymonic 100 will provide the bonding surface for the ExoAir 130 transition.

8.4 Seal around brick-ties and other penetrations as work progresses. Exercise care when applying around brick-ties to ensure uniform coverage.

8.5 Tremco has conducted in-house testing on a variety of fasteners/façade anchors used in commercial construction for attaching various insulation/cladding systems. The results demonstrated that if installed properly according to the manufacturer's installation instructions, the fasteners tested in conjunction with the ExoAir membranes created an air and watertight seal. Tremco recommends contacting Technical Service at www.tremcosealants.com for a list of evaluated fasteners/façade anchors, or to submit a fastener/façade anchor for testing.

8.6 If detail work is being done after the air barrier membrane has been installed, seal around brick-ties and other penetrations with an additional coat of ExoAir 130, or detail with Dymonic 100 or Spectrem 1. Spectrem 1 may be used when there will not be any additional ExoAir membranes installed over it. Location, cladding type and service life temperature may determine which detail material must be used.

8.7 Protect membranes to avoid damage by other trades and construction materials during subsequent operations. Insulation and/or protection products may be installed after membranes have cured, 16 to 24 hr following application, or firm and dry to the touch.

8.8 Connect the ExoAir Air Barrier System to the adjacent building envelope systems such as the roof membrane, below-grade waterproofing membrane, window and curtain wall systems and other portions of the building envelope using the recommended Tremco materials. For more information on those materials and application details, please visit www.tremcosealants.com.

8.9 Schedule work so that the air and vapor barrier system is covered as soon as possible after installation. If the air and vapor barrier system cannot be covered within 12 months after installation, apply temporary UV protection. Contact Tremco Technical Service for additional recommendations at 866-209-2404 or visit the Technical Resources area of our website at www.tremcosealants.com and "Ask the Expert."

9. INSPECTION, TESTING, REPAIR

9.1 Inspect the surface of the EXOAIR® 130 thoroughly 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. If the membrane has already been completely cured, prepare the surface with a mineral spirit wipe or xylene to clean and soften the surface of the EXOAIR® 130 membrane. Reapply at the minimum specified thickness with EXOAIR® 130, extending out 4" (10 cm) beyond the pinholes, blisters or other voids.

9.2 Inspect the air barrier system before covering and repair any punctures or damaged areas. Make repairs with Dymonic 100 or Spectrem 1 as appropriate, extending the repair material a minimum of 4" (10 cm) beyond the puncture or damage in all directions.

9.3 If on-site adhesion testing is required, Tremco recommends ASTM D4541 Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers. EXOAIR® 130 should be allowed to dry for a minimum of 72 hr or until fully cured, whichever is longer, prior to conducting test. Additional information about this testing can be found at www.tremcosealants.com in the Technical Bulletin section.

10. CLEAN UP

10.1 Remove any masking materials immediately after installation. Clean spillage and soiling on adjacent construction that will be exposed in the finished work using cleaning agents and procedures recommended by manufacturer of the affected construction.

10.2 Uncured Dymonic 100, TREMprime BE Primer, EXOAIR® 120 or Spectrem 1 can be cleaned using a solvent wipe.

10.3 Uncured ExoAir DualFlash can be cleaned with an approved solvent such as Xylene or Isopropyl Alcohol. Utensils used for tooling can also be cleaned with an approved solvent. Cured ExoAir DualFlash can be cleaned with an approved solvent such as Xylene.

10.4 Uncured Tremflex 834 or EXOAIR® 130 can be cleaned using a clean, damp cloth and water.

10.5 Cured sealants or fluid-applied membranes can be cleaned using a solvent wipe. Mechanical removal methods may also be necessary.

10.6 Please refer to the Technical Bulletin Spraying Guide at www.tremcosealants.com for more information on cleaning the spray pump after EXOAIR membrane application.

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