



# APPLICATION INSTRUCTIONS

**ExoAir® 110AT**

Self-Adhered Air and Vapor Barrier  
Membrane

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## 1. PURPOSE

- 1.1 The purpose of this document is to establish uniform procedures for installing ExoAir® 110 AT.
- 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 110 AT is compatible with and part of ExoAir Air Barrier Systems, a complete line of air barrier systems provided by Tremco.

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## 2. SCOPE

- 2.1 This document will provide the necessary instructions for the application of ExoAir 110 AT and its related air barrier system components.

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## 3. LIMITATIONS

- 3.1 UV exposure should not exceed 12 months after installation. If the 12-month limit is exceeded, contact Tremco Technical Service for additional recommendations at 866-209-2404, or visit the Technical Resources area of our website at [www.tremcosealants.com](http://www.tremcosealants.com) and "Ask the Expert."
- 3.2 Do not apply to damp, contaminated or frost-covered surfaces.
- 3.3 ExoAir 110AT is not to be used as a permanently exposed surface. Contact your local Tremco Sales Representative for project specific requirements.
- 3.4 Termination Mastic should not be used with ExoAir 110 AT in a fully encapsulated area.

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## 4. STORAGE

- 4.1 Store ExoAir 110AT in original, undamaged packages in a clean, dry, protected location with temperatures not exceeding 100° F (37° C).

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## 5. SUBSTRATE PREPARATION

- 5.1 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 110 AT with the roofing trade to ensure compatibility and continuity with the roofing system.
- 5.2 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](http://www.tremcosealants.com) for various system testing performed at the Tremco Test Facility or to submit a project connection detail for testing.
- 5.3 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. Please visit [www.tremcosealants.com/technical-resources/technical-bulletins.aspx](http://www.tremcosealants.com/technical-resources/technical-bulletins.aspx) to review additional information.
- 5.4 ExoAir 110 AT may be applied to most typical building materials such as exterior sheathing boards, CMU, concrete, exterior grade plywood, OSB and metal surfaces.
- 5.5 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.
- 5.6 CMU wall 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.
- 5.7 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 materials.
- 5.8 Exterior grade plywood shall be securely fastened. All knots, or other defects need to be detailed with Tremco Dymonic 100.

- 5.9 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.
- 5.10 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. Visit [www.tremcosealants.com](http://www.tremcosealants.com) for various system testing performed at the Tremco Test Facility or to submit a project connection details for testing.
- 5.11 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. DETAIL WORK PRIOR TO AIR BARRIER MEMBRANE APPLICATION

- 6.1 Construction Gaps: ExoAir 110 AT sheet applied membranes can bridge construction gaps  $\frac{1}{4}$ " (6mm) or less without additional detailing. All gaps greater than  $\frac{1}{4}$ " (6mm) 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,  $\frac{1}{4}$ " to 1" joint)
  - Spectrem® 1 (+100/-50% movement,  $\frac{1}{4}$ " to 1" joint)
  - Illmod 600® (+/-25% movement,  $\frac{1}{8}$ " to 2-5/8" joint)
  - Proglaze® ETA (varies based on system selection)
  - Tremflex 834 (+/-12% movement,  $\frac{1}{4}$ " to 1" joint)
- 6.2 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 Dymonic 100 or Tremflex 834 prior to the ExoAir 110 AT installation. The details sealants may be coated over once a skin has developed. If the fastener penetration occurs after the ExoAir 110 AT membrane has been installed, detail all fastener penetrations not flush to the ExoAir 110 AT membrane with Dymonic 100 or Spectrem 1 sealant.
- 6.3 Rough Openings, Penetrations, Corners, Tie-Ins to other building envelope systems: Please consult [www.tremcosealants.com](http://www.tremcosealants.com) for detail drawings and technical bulletins showing typical transitions and tie-ins. For job specific details or questions, please contact Tremco Technical Service at 866-209-2404.

## 7. MEMBRANE APPLICATION

- 7.1 ExoAir 110 AT does not typically require the use of primer. If primer is deemed necessary or required by the specifications, apply ExoAir primer to all areas that will receive the ExoAir 110 AT membrane. Allow ExoAir Primer to develop a tack (typically 15 to 30 min) prior to installing the ExoAir 110 AT.
- 7.2 ExoAir 110 AT can be applied vertically or horizontally. ExoAir 110 AT membrane shall be lapped onto previous sheet a minimum of 2" (5cm) when overlap is in place. All other transitions should have a minimum of 3" (8 cm) overlap. All horizontal laps should be shingled. ExoAir 110 AT must be mechanically roll pressed with a J-Roller to ensure the ExoAir 110 AT develops sound contact to the substrate.
- 7.3 All seams not oriented to shed water and edges at the end of that day's work shall be detailed with Dymonic 100 or ExoAir Termination Mastic. All edges that will be receiving ExoAir fluid applied membrane must be detailed with Dymonic 100. Dymonic 100 will provide the bonding surface for the ExoAir fluid applied membrane transition. Spectrem 1 may be used on edges/terminations of the membrane 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.
- 7.4 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/façade anchors tested in conjunction with the ExoAir membranes created an air and watertight seal. Tremco recommends contacting Technical Service at [www.tremcosealants.com](http://www.tremcosealants.com) for a list of evaluated fasteners/façade anchors or to submit fasteners/façade anchors for testing.
- 7.5 If detail work is being done after the air barrier membrane has been installed, seal around brick-ties and other penetrations with Dymonic 100, ExoAir Termination Mastic 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.
- 7.6 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 been installed.
- 7.7 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](http://www.tremcosealants.com).

- 7.8 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 at 66-209-2404 for additional recommendations or visit the Technical Resources area of our website at [www.tremcosealants.com](http://www.tremcosealants.com) and “Ask the Expert”.

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## 8. INSPECTION, TESTING, REPAIR

- 8.1 Inspect the air barrier system before covering, and repair any punctures, fishmouths, wrinkles or damaged areas. Make repairs with ExoAir 110 AT, Dymonic 100 or ExoAir Termination Mastic as appropriate, extending the repair material a minimum of 4” (10 cm) beyond the puncture or damage in all directions. Location, cladding type and service life temperature may determine which detail material must be used.
- 8.2 If on-site adhesion testing is required, Tremco recommends ASTM D4542 Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers. ExoAir 110 AT should be installed defect free prior to conducting test. Additional information about this testing can be found at [www.tremcosealants.com](http://www.tremcosealants.com) in the Technical Bulletin section.

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## 9. CLEAN UP

- 9.1 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.
- 9.2 Uncured Dymonic 100, ExoAir Termination Mastic, Spectrem 1 or ExoAir Primer can be cleaned using a solvent wipe.
- 9.3 Uncured Tremflex 834 can be cleaned using a clean, damp cloth and water.
- 9.4 Cured sealants can be cleaned using a solvent wipe. Mechanical removal methods may also be necessary.