

# TECHNICAL DATA SHEET

ExoAir® 230

Fluid-Applied, Synthetic Air and Vapor

Permeable Membrane

## PRODUCT DESCRIPTION

ExoAir® 230 Fluid-Applied Synthetic Permeable Air Barrier Membrane is a monolithic, elastomeric membrane designed to be rolled or sprayed onto exterior above-grade wall assemblies to mitigate air infiltration/exfiltration and water penetration while remaining permeable to the passage of water vapor. It may also be used as a liquid-applied flashing, enabling the contractor to address both the membrane and flashing needs with a single material.

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## **BASIC USES**

ExoAir 230 is typically applied to exterior sheathing panels, concrete block, poured concrete, wood substrates, Nudura Insulated Concrete Forms (ICF), or insulated concrete forms, as an air and vapor permeable membrane. ExoAir 230 can be used with ExoAir 110, ExoAir 110AT, ExoAir 230 (and mesh) or Dymonic® 100 as liquid applied flashing to detail into the rough opening.

## **FEATURES & BENEFITS**

- ExoAir 230 is a UV stable, seamless, monolithic membrane that creates a fully adhered air barrier when properly installed.
- The ability to roller or spray apply the material affords the contractor the ability to accelerate installation times compared to traditional self-adhered membrane systems.
- The high-performance properties of the ExoAir 230 membrane retard the migration of air and bulk water but allow water vapor to pass through the membrane. As a result, vapor permeable systems like ExoAir 230 allow for more flexibility in the placement of the air barrier membrane in the wall design.
- ExoAir 230 is formulated for UV resistance providing the flexibility to install rainscreen systems with open joints or to allow the membrane to be exposed longer during the construction process.
- ExoAir 230 can be custom colored to meet all of your design needs.
- ExoAir 230 is specifically formulated for design options requiring assemblies that have been evaluated for NFPA 285.
- ExoAir 230 is an approved Water Resistive Barrier when applied to Nudura Insulated Concrete Forms (ICF), or insulated concrete forms.

## **AVAILABILITY**

ExoAir 230 is immediately available from your local Tremco Sales Representative or Distributor. For Distributor locations, visit www.tremcosealants.com

## **COVERAGE RATES**

Exterior Sheathing or Insulated Concrete Forms: Minimum 48 wet mils (25 dry mils); 33 ft<sup>2</sup>/gal (3.07 M<sup>2</sup>/US gal)

Porous Substrates: Minimum 70 wet mils (35 dry mils); 23 ft²/gal (2.13 M²/US gal)

Note: Above listed coverage rates are minimums, installing at a greater thickness is acceptable. For more information, please contact your Tremco Representative

## **PACKAGING**

5-gal (19-L) pails 52-gal (197-L) drums

## **COLORS**

Standard color: Black & Limestone; Custom colors available upon request.

#### **STORAGE**

Store ExoAir 230 in original, undamaged packages in a clean, dry, protected location with temperatures 40 to 100 °F (5 to 37 °C).

#### SHELF LIFE

1 year when stored in accordance with storage instructions

## APPLICABLE STANDARDS

ExoAir 230 has been tested to the following industry standards for air barriers:

- AATCC 127-2008 Water Resistance: Hydrostatic Pressure Test
- ASTM C1305 Standard Test Method for Crack Bridging Ability of Liquid-Applied Waterproofing Membrane
- ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers Tension
- ASTM D1970 Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection
- ASTM D4541 Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers
- ASTM E96 Standard Test Methods for Water Vapor Transmission of Materials
- ASTM E331 Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference
- ASTM E2178 Standard Test Method for Air Permeance of Building Materials
- ASTM E2357 Standard Test Methods for Determining Air Leakage of Air Barrier Assemblies
- NFPA 285 Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components

## FIRE RATED SYSTEMS

ExoAir 230 has been tested in assemblies according to NFPA 285 Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components. All of the NFPA 285 UL listed assemblies using Tremco materials can be found using the technical bulletin: ASHRA 90.1 & NFPA 285: Defining & Specifying to Meet IECC & IBC or utilizing the following link: <a href="http://database.ul.com/cgi-">http://database.ul.com/cgi-</a>

<u>bin/XYV/template/LISEXT/1FRAME/showpage.html?name=FWFX.R27656&ccnshorttitle=Exterior+Wall+System+Components&objid=1082999775&cfgid=1073741824&version=versionless&parent\_id=1082761881&sequence=1.</u>

For NFPA 285 engineering judgment requests please go to www.tremcosealants.com/NFPA 285 Engineering Judgment Request or contact Tremco Technical Service at 866-209-2404.

## **LIMITATIONS**

- No more than 12 months of UV exposure before façade installation. If membrane is exposed for a period exceeding 12 months, 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."
- Do not apply to damp, contaminated or frost-covered surfaces.
- Not to be used as a permanently exposed surface. Contact your local Tremco Sales Representative for project specific requirements.
- Membrane shall be protected from rain and washout prior to drying.
- 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 886-209-2404.



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- ExoAir 230 is not to be applied directly to fireproofing materials. Contact Tremco Technical Service at www.tremcosealants.com for alternative recommendations.
- Keep product from freezing prior to being applied to the substrate. It is best to store ExoAir 230 off the floor at an ambient temperature above 40 °F (10 °C).

## WARRANTY

Tremco warrants its Products to be free of defects in materials but makes no warranty as to appearance or color. Since methods of application and on-site conditions are beyond our control and can affect performance, Tremco makes no other warranty, expressed or implied, including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE with respect to Tremco Products. Tremco's sole obligation shall be, at its option, to replace or to refund the purchase price of the quantity of Tremco Products proven to be defective, and Tremco shall not be liable for any loss or damage.

TYPICAL PHYSICAL PROPERTI		
PROPERTY	DESCRIPTION	
TYPE	Synthetic Acrylic	
COLOR	Limestone; Custom colors available upon request	
SOLIDS	0.53	
APPLICATION	Spray/Roller	
THICKNESS	Exterior Sheathing: Minimum 48 mils (wet), 25 mils (dry); Porous Substrates: Minimum 70 mils (wet), 35 mils (dry)	
STORAGE TEMPERATURE	40 to 100 °F (5 to 37 °C)	
CURE TIME	16 to 24 hr at 75 °F (24 °C), 50% RH	
APPLICATION TEMPERATURE	Above 40 °F (5 °C) and rising. If installing below 40 °F (5 °C), please refer to Cold Weather Air Barrier Installation Technical Bulletin or contact Tremco Technical Service at 866-209-2404.	
SERVICE TEMPERATURE	Intermittent Exposure up to 240 °F (115 °C)	
PROPERTY	TEST METHOD	TYPICAL RESULTS
MAXIMUM V.O.C.	Method 310	18 g/L
HYDROSTATIC HEAD	AATCC – 127	Pass (5 hours)
CRACK BRIDGING	ASTM C1305	Pass
ELONGATION TENSILE STRENGTH	ASTM D412 Die C	900% 121 psi
WATER IMMERSION	ASTM D870	Pass
PLIABILITY, 180°, 1" (25 MM) MANDREL (LOW TEMPERATURE FLEX)	ASTM D1970 – Section 7.6	Pass
NAIL SEALABILITY	ASTM D1970 – Section 7.9	Pass
ADHESION	ASTM D4541	Concrete: 38 psi Exterior Sheathing: 20 psi
ANTIFUNGAL	ASTM D5590	Pass
FLAME SPREAD SMOKE DEVELOPMENT	E84	10 25
WATER VAPOR PERMEANCE	ASTM E96 Dry Cup ASTM E96 Wet Cup	1.44 US Perms 11.71 US Perms
WATER PENETRATION	ASTM E331	Passed at 15 lb/ft² (718 Pa); Passed at 6.27 lb/ft² (300 Pa) for 2 hours
AIR LEAKAGE OF MATERIAL	ASTM E2178; Free Film Method @ 75 Pa ASTM E2178; Free Film Method @ 300 Pa	$0.00158 \text{ cfm/ft}^2 (0.00805 \text{ L/(s} \bullet \text{m}^2))$ $0.00435 \text{ cfm/ft}^2 (0.02211 \text{ L/(s} \bullet \text{m}^2))$
AIR LEAKAGE OF ASSEMBLY	ASTM E2357	0.003 cfm/ft² @ 1.56 lb/ft² (0.013 L/(s•m²) @ (75 Pa))
FIRE RESISTANCE OF ASSEMBLY	NFPA 285	Pass

<sup>\*</sup>All product testing performed at 35 dry mils.

