

TECHNICAL DATA SHEET

SECUROCK[®] EXOAIR[®] 430

Pre-Applied Fluid Synthetic Air & Vapor Permeable Membrane to Gypsum Exterior Sheathing

PRODUCT DESCRIPTION

Securock[®] ExoAir[®] 430 Panel is a glass mat-faced, moisture- and mold-resistant gypsum panel, with a non-combustible core integrated with a factory-applied synthetic vapor permeable air/water barrier membrane. The in-plant application provides a uniform membrane with superior bond resulting in predictable air and water barrier performance and adhesion to the base panel. The panel is a component of the Securock ExoAir 430 Air Barrier System, to be installed using Tremco[®] sealants and transition membranes to achieve air barrier continuity. The panel is designed for use under a variety of exterior claddings, including open joint rain screens, where traditionally a separate gypsum sheathing panel and air barrier would have been used.

FEATURES & BENEFITS

• Securock ExoAir 430 has a factory-applied UV stable, seamless, monolithic membrane. In-plant application ensures membrane uniformity, adhesion, and eliminates sheathing preparation in the field. The membrane is not climate-dependent and not susceptible to wash out.

• UV and weather resistance allows the panel to be installed, sealed, and left exposed while interior construction begins. The UV resistance provides the flexibility to install rainscreen systems with open joints or to allow the membrane to be exposed longer during the construction process.

• The high-performance properties of the Securock ExoAir 430 System retard the migration of air and bulk water but allows water vapor to pass through the membrane. Vapor permeable systems like Securock ExoAir 430 allow for more flexibility in the placement of the air barrier membrane in the wall design.

• Securock ExoAir 430 Panel is specifically formulated for design options requiring assemblies that have been evaluated for NFPA 285.

AVAILABILITY

Immediately available from your local Tremco Sales Representative or Tremco distributor. For Distributor locations, visit www.tremcosealants.com

INSTALLATION

Securock ExoAir 430 Panel is designed for use under exterior claddings where a conventional gypsum sheathing, and air barrier system have traditionally been used. Common claddings include brick veneer, metal, stone or terracotta panels, shingle siding, shake siding and conventional stucco. The panel must be installed with the Tremco approved sealants and transition materials to ensure a 100% monolithic barrier. See the Application Instructions for specific details.

Manage the sequence of installation of the Securock ExoAir 430 Panel and detailing components with other trades and systems to ensure continuity and compatibility. Once the building is enclosed, by whatever means, care should be taken to prevent excess moisture/humidity buildup on the interior side of the Securock ExoAir Panel. Avoid conditions during construction that result in excessive moisture load in the building. High moisture can cause condensation in the unfinished exterior walls and sheathing during periods of cold weather. Forced air heaters, wet masonry, poured concrete and finishing materials introduce large volumes of water vapor into the building. Use ventilation and mechanical dehumidification to reduce moisture levels to below the dew point temperature of the exterior air. Any damage resulting from insufficient interior moisture management during construction is not the responsibility of USG/CGC or Tremco. At every point in the construction process, minimizing moisture exposure is the key to maximizing the performance of the finished assembly. Refer to Gypsum Association for information.

LIMITATIONS

1. Securock ExoAir 430 Panel shall not be used as a nail base for exterior cladding.

2. Specific requirements regarding framing spacing, fastener spacing and fastener specifics to provide required lateral wind-load resistance are the responsibility of the design professional. (Refer to the application instructions and technical data and specifications on the following pages.)

- 3. Not recommended for direct lamination to masonry surfaces. Use furring strips or framing.
- 4. Maximum stud spacing is 24" o.c.
- 5. Securock ExoAir 430 Panel is not a finished surface.
- 6. Securock ExoAir 430 Panel is not intended for tile applications.

7. The Securock ExoAir 430 Panel, installed in accordance with the application Instructions, shall not be left exposed for more than 12 months prior to the installation of cladding.

8. The Securock ExoAir 430 System must be installed using only Tremco approved sealants, Dymonic® 100 and Spectrem® 1.

PRODUCT DATA

Dimensions: 5/8" thick, 4' wide, 8' long. 1/2" thickness or other lengths available special order, contact your Tremco sales representative for details.

Weight, Nominal: 2.0 psf for 1/2", 2.5 psf for 5/8" Edge Configuration: Square edges

Membrane Thickness: Minimum 20 dry mils

Compliance with Standards: Meets or exceeds the physical property requirements of ASTM C1177. 5/8" Securock ExoAir 430 Panel is UL Classified as to fire resistance, surface burning characteristics and core compatibility.

Fire Performance: Securock ExoAir 430 Panel has a noncombustible core when tested in accordance with ASTM E136. Fire resistance – 5/8" panels meet the requirements of Type X as defined in ASTM C1396 and ASTM C1177 when tested in accordance with ASTM E119. Tested as a component of wall assemblies in accordance with NFPA285. Flame spread index of 20 and smoke developed of 15 when measured in accordance with ASTM E84. UL Classified as to fire resistance. See Underwriters Laboratories Fire Resistance Directory for specific designs.

Tensile Bond: Exceeds 15 psi requirements for both cementitious and acrylic adhesives per ASTM C297.

	5/8" Securock® ExoAir® Panel Firecode X (UL Type USGX)	1/2" Securock [®] ExoAir [®] Panel			
Thickness	5/8" (15.9 mm)	1/2" (12.7 mm)			
Length	8' (2438 mm)	8' (2438 mm)			
Width	4' (1219 mm)	4' (1219 mm)			
Weight, nominal	2.5 lb./sq. ft. (12.2 kg/m2)	2.0 lb./sq. ft. (9.8 kg/m2)			
Edges	Square	Square			

PANEL DATA

PANEL PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	5/8" SECUROCK [®] EXOAIR [®] PANEL FIRECODE X (UL TYPE USGX)	1/2" SECUROCK [®] EXOAIR [®] PANEL	
Tensile Bond, psi	ASTM C297	>15	>15	
Tensile Bond, psi	ASTM C473			
Bearing edge perpendicular to board length, lbf.		>140	>100	
Bearing edge parallel to board length, lbf.		>100	>80	
Water Absorption		<10	<10	
Nail-Pull Resistance, lbf. min.		90	80	
Weight, psf nominal		2.5	2.0	
Thermal Resistance, R (°F ft2.h/BTU)	ASTM C518	0.50	0.45	
Nail Sealability	ASTM D1970, Section 8.9	Pass	Pass	
Mold Resistance	ASTM D3273	10	10	
Peel Adhesion, lbf./in.	ASTM D3330	pli >1	pli >1	
Membrane Adhesion to Panel, 16 psi min.**	ASTM D4541	Pass	Pass	
Water Vapor Permeance, perms Composite, Wet Cup	ASTM E96	8	8***	
Air Permeance, 0.004 cfm/ft2 @ 1.57 lb./ft2 max.	ASTM E2178	0.0001 cfm/ft2	0.0001 cfm/ft2	
Assembly Air Leakage, 0.04 cfm/ft2 @ 1.57 lb./ft2 max.	ASTM E2357	0.002 cfm/ft2	0.002 cfm/ft2	
Assembly Water Penetration, 15 minutes @ 2.86 lb./ft2	ASTM E331	Pass	Pass	
Bending Radius*, Dry		9'	9'	
Coefficient of Thermal Expansion, in./in./°F	ASTM E831	8.5x10-6	8.5x10-6	
Water Resistance, @22 in./5 hrs.	AATCC 127-08	Pass	Pass	
R-Value R (h. °ft2.F/Btu		0.50	0.50	
R-Value RSI (m2.K/W)		0.088	0.079	

TECHNICAL DATA

*Recommended fastener spacing is 6" o.c. when panels are bent.

**Tested at 70°F and 50% RH environmental conditions. X

***Based on comparative third party panel and coating testing. Third Party composite testing pending.

JOINT TREATMENT PHYSICAL PROPERTIES

Cyclic Movement	ASTM C719	
Dymonic 100		+/- 50%
Spectrem 1		+100 / -50%
Crack Bridging	ASTM C1305	
Dymonic 100		Pass
Spectrem 1		Pass
Elongation	ASTM D412	
Dymonic 100		800% Elongation @ 350 PSI
Spectrem 1		1000% Elongation @ 160 PSI

ALLOWABLE UNIFORM WIND LOAD (PSF) FOR 5/8" THICK PANELS									
Frame Spacing		12" O.C. 16" O.C.			24" O.C.				
Fastener Spacing	4"	6"	8″	4"	6"	8"	4"	6"	8"
5/8" Allowable Pressure	96	67	50	75	50	38	34	27	25
1/2" Allowable Pressure	75	35	26	40	26	26	26	17	16

Note: Applicable for both steel and wood framing. The sheathing can be installed perpendicular or parallel to the framing. Fasteners must have a minimum edge distance of 3/8". The values in this table are based on testing per ASTM E330 and represent the capacity of the panel to resist flexural failure or fastener pull-through with a 3.0 factor of safety. Capacities are based on a minimum fastener head diameter of 0.325" (#6 bugle head screw). The withdrawal resistance of fasteners from framing is different on several factors, including but not limited to fastener type, fastener length and framing properties. The specification of fasteners is the responsibility of the designer of record. Manufacturer's recommendations are given below. These capacities assume continuous support of each stud flange over the full length of the panel. Allowable Pressures are based on maximum deflection limitation of L/360. Consult a Tremco representative for higher deflection limitations. Allowable pressure values are for short-term wind loads. Framing design is independent of these values. The design capacities of assemblies constructed with pneumatically driven fasteners are beyond the scope of this submittal sheet.

WARRANTY

A repair or replacement warranty is available on all Tremco products. Visit https://www.tremcosealants.com/warranties/ for details.

Please refer to our website at www.tremcosealants.com for the most up-to-date Product Data Sheets.

NOTE: All Tremco Safety Data Sheets (SDS) are in alignment with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) requirements.

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