Securock® ExoAir® 430 System FAQs

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SECUROCK® EXOAIR® 430 SYSTEM

What is the Securock® ExoAir® 430 system?

The Securock® ExoAir® 430 System is a high-performance, energy-efficient air and water barrier System comprised of the USG's Securock® Glass-Mat Sheathing, Tremco's ExoAir® 430 membrane, as well as System accessories. The System accessories contain sealants and transition products that provide a comprehensive air barrier system.

Why should the Securock ExoAir 430 System be specified and why?

We recommend specifying the Securock ExoAir 430 System in Division 7 - Fluid Applied Air Barriers - because the System utilizes a fluid air/water material applied to glass mat sheathing. The application takes place in a controlled environment as opposed to the field, providing a more consistent membrane application; this high-performance factory fluid applied System will meet and/or exceed the building performance requirements.

Help me understand the warranty coverage. You offer a 15-year material warranty but only cover 12 months of exposure.

The Material Warranty warrants that the panel is free of manufacturing defects and, when installed in accordance to the Installation Instructions (BE102), will have a useful life under normal service conditions for 15 years from the date of the building's Substantial Completion. The Warranty also warrants that the panel will not delaminate or deteriorate for up to 12 months during construction and before the cladding is installed.

This System is relatively new to the market and I have concerns about new products. Can you help me alleviate them?

Both products, Tremco's ExoAir fluid applied membrane and USG's Securock Brand Glass-Mat Sheathing, have been installed in the field together for over 10 years. This is simply a new delivery method of the same products. The Securock ExoAir 430 System installs 70% faster than a field fluid application (when you include cure time) and about 50% faster than a field peel-and-stick application. It reduces the construction process and QA/QC of the panel and membrane. The collaboration between Tremco and USG actively supports this system by providing System testing, evaluation and validation, as well as technical support throughout the duration of your project with dedicated sales teams.

How is Securock ExoAir 430 system different from a fluid, field-applied air barrier?

The Securock ExoAir 430 System is manufactured in a controlled factory environment. This provides consistent mil thickness, no membrane cure time or risk of washout. This System can reduce man hours and safety risks, and overall improves the schedule efficiency. The approach maintains the performance qualities of a fluid applied System, while addressing the challenges faced when applying a fluid in the field.

SECUROCK EXOAIR 430 PANEL

Does the minimum 20 dry mil membrane thickness provide a sufficient air barrier?

Field-applied membranes will always have a variance in the membranes thickness due to highs and lows of installation. Securock ExoAir 430's in-plant controlled application of the membrane removes this variability and ensures a consistent minimum 20 mil application of membrane on every panel, maintaining and/or exceeding air barrier material performance requirements by providing a sufficient air barrier.

What is the maximum time the Securock ExoAir 430 System can be left exposed? Does this apply in an open joint rainscreen application?

Securock ExoAir 430 has been formulated for UV exposure up to 12 months and can be permanently exposed in open joint rain screen applications. Although the membrane's color may change during exposure, the air and water barrier performance of the membrane is not compromised. The fully-installed Securock ExoAir 430 System (using approved sealants and transition materials) shall not be left exposed for more than 12 months prior to cladding.

Is the Securock ExoAir 430 membrane self-gasketing?

The ExoAir 430 membrane does provide self-gasketing capabilities with numerous types of fastener penetrations. Please reference our Façade Anchor / Nail Sealability document for further information.

Has the panel been tested as an assembly according to NFPA 285, Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components?

Yes, seven exterior wall assemblies have been tested according to NFPA 285. If your project condition varies from what we have tested, we would be happy to provide an engineering judgement.

What size is the panel available?

Currently product is available in 4' x 8' x $5/8$".

Do the Securock ExoAir 430 Panels require any special storage?

The panels require no special storage. However, all materials shall be delivered in their original, unopened packages and stored in an enclosed shelter, providing protection from damage and exposure to the elements.

Why are test methods ASTM D412 and C1305 not valid for the panel?

ASTM D412 and ASTM C1305 are test methods designed to measure membrane elongation, tensile strength and crack bridging capability; they are not applicable to this panel because the membrane is fully adhered to it and the panel cannot elongate or bridge cracks once installed. The joint treatment components of this system, Dymonic 100 and Spectrem 1, are products that provide elongation, tensile strength and the ability to bridge cracks. This information can be accessed on the Securock ExoAir 430's Submittal Data Sheet.

Is the panel membrane easily damaged? What do I do if it's damaged and what constitutes "damage"?

The panel is not easily damaged but can be susceptible to scratches, knife cuts, fastener penetrations and unintentional holes caused before and/or after installation. The installer should examine the panels to ensure that the membrane's continuity has not been compromised. Additionally, QC should be performed before cladding is installed by the installing contractor. If damage has occurred, follow the repair instructions outlined in the Installation Instructions.

Will the panel change color if left exposed?

The panel's membrane may experience a light color change if left exposed for an extended period. However, this will not affect the air and water barrier performance of the membrane. It is recommended that the panels be covered as soon as possible to avoid any possible damage from other trades, weather, and/or falling debris.

SEALANTS

How do I choose the right sealant for the right application?

Dymonic 100 is used to detail panel joints and fastener heads as a cant bead in transitions and in expansion joints using break metal. Dymonic 100 is a high-performance, medium-modulus polyurethane; it skins quickly, making it a user-friendly economical choice in most climate conditions. Dymonic 100 exhibits tenacious adhesion once fully cured and should be used if an adhesively bonded façade will be installed. Spectrem 1 is used to detail control/expansion joints with Proglaze ETA Connections; it is an ultra-low modulus, high-performance, one-part, moisture-curing silicone sealant that is ideal for use in dynamically moving joints and in cold weather conditions. For complete information on how to select the right sealant for the right job, refer to the installation instructions.

How long does it take Dymonic 100 to cure once it's applied to the panel?

Dymonic 100 has a robust skin time of two hours with a tack-free time of 6-8 hours at standard conditions (75°F/23°C @ 50% RH). Full cure through of the sealant will vary depending on temperature, humidity and thickness but should be cured if applied at the $1/_{16}$" depth per the installation instructions within 24 hours at standard conditions (75°F/23°C @ 50% RH). We recommend adding an additional 24 hours for every 10 degrees decrease in temperature.

How long does it take Spectrem 1 to cure once it's applied to the panel?

Spectrem 1 has a skin and tack-free time of 30-60 minutes at standard conditions, 75°F (23°C) at 50% RH. Full cure through of the sealant will vary depending on temperature, humidity and thickness but should be cured if applied at the $1/_{16}$" depth per the installation instructions within 24 hours at standard conditions, 75°F (23°C) at 50% RH.

Can cladding be installed before Dymonic 100, Spectrem 1 and ExoAir 230 are cured?

All sealants should be allowed to cure before cladding is installed as to not compromise the sealant or membrane installation.

Can Dymonic 100 and Spectrem 1 be applied if there is dew/moisture on the surface of the panel?	No. Both sealants require the panel to be clean, dry and sound before installation.
What is the shelf life of Dymonic 100 and Spectrem 1?	Both sealants have a shelf life of 12 months when properly stored in original, unopened packaging.
What is the minimum surface temperature of the panel for installation of Dymonic 100 and Spectrem 1?	It's recommended that the surface temperature of the panel should be 40°F and rising; however, sealants may be applied at temperature below 40°F. Please reference our Cold Weather Recommendations for Air Barrier Applications document for further information.
How many lineal feet can I get from a sausage of sealant?	Per Installation Instructions (BE102), a bead of sealant shall be applied at a depth of $1/16$" and $1 1/2$" wide to board joints that are installed tight with no gap. A 20 oz. sausage of Dymonic 100 will cover 32 lineal feet at these dimensions.

EXOAIR 230 MEMBRANE

What is ExoAir 230 and how/where is it installed?	ExoAir 230 is a synthetic, fluid-applied air and water barrier used to stop unrestricted air infiltration and exfiltration. It can be either rolled or sprayed applied. It is installed on adjacent substrates to provide continuity from the panel to other surfaces. When reinforced with mesh, it is also used as a liquid-applied flashing as part of the Securock ExoAir 430 System.
How long does it take ExoAir 230 to cure/dry when applied?	The cure time of the ExoAir 230 ranges between 16-24 hours when evaluated at temperatures 75°F (23°C) and relative humidity at 50%.
How many square feet can I get from a five-gallon pail of ExoAir 230?	23 square feet per gallon when applied at the required 70 wet mils to porous substrates. 33 square feet per gallon when applied at the required 48 wet mils to exterior sheathing.

PRIMERS

When are primers required for this system?	ExoAir Primer is required on exposed gypsum core only when using ExoAir 230 fluid membrane and mesh in rough openings and outside corners. Primers are not required under Dymonic 100 and Spectrem 1 when detailing to the membrane face of the panel.
How many square feet can I get from a five-gallon pail of ExoAir Primer?	250 square feet per gallon. A five-gallon pail will cover 1,250 square feet.

INSTALLATION SPECIFICS

What types of fasteners are used to install Securock ExoAir 430 Panels?

The minimum requirement for fastener specification is as follows:
Corrosion Resistance: 48 hour per ASTM B 117
Head Diameter: 0.325"
Shank: #6
Minimum length: 1⅝" for wood installations. 1¼" for steel installations.

Do I have to install control joints?

The design and placement of control joints is the responsibility of the design professional of record. Refer to the Project Manual (specifications and construction drawings).

Do the panels handle like USG Securock® Brand Glass-Mat Sheathing in how they score & snap, rasp cut outs and screw & nail?

Yes. There are no discernible handling or installation differences between Securock ExoAir 430 Panel and USG Securock® Brand Glass-Mat Sheathing.

How much heavier are the panels than USG's Securock Brand Ultralight Glass-Mat Sheathing?

Securock ExoAir 430: 4x8 x $^5/_8$" thick: 2.6 lbs/SF.
Securock Ultralight Glass-Mat: 4x8 x $^5/_8$" thick: 2.2 lbs/SF.

What is the fastener spacing?

Fasteners shall be located no less than $^3/_8$" and no more than 1" from the ends and edges of the panel and shall be placed 8" maximum o.c.

How do I prepare a rough-opening?

The panel can be used on the jam, head and sill of a rough opening, and wood blocking can also be used. If steel framing is utilized, the framing member should be continuous, and any opening should be patched.

Does the panel work with EIFS?

Yes, it can. Please contact Tremco Technical Services at 866-209-2404 for more information on EIFS installation.

Is it necessary to detail the fastener heads and if so, why?

Yes, all fasteners securing the panel in place should be detailed with Dymonic 100 to provide a monolithic membrane. This is done to protect against over and under-driven fasteners.

Is it necessary to detail façade anchors?

A variety of façade anchors have been evaluated and solutions are available. Please contact Tremco Technical Services at 866-209-2404 for more information on specific façade anchor recommendations.

As a design professional, I think the Securock ExoAir 430 System could work for my project. However, I have an existing membrane that is already going to be applied on a portion of the building. How do we handle the tie-in?

Please contact Tremco Technical Services at 866-209-2404 for more information. We have the capabilities to perform testing to evaluate adhesion, compatibility and overall performance of this connection with the Securock ExoAir 430 System.

Can continuous insulation be installed over the Securock ExoAir 430 System?

Yes, please contact Tremco Technical Services at 866-209-2404 for more information.

STORAGE AND CLEANING

Do the Tremco products require any special storage?

Store all components under dry warehouse conditions at temperatures between 60˚F to 80˚F away from heat and all ignition sources. Sealants stored at these temperatures are easier to apply. Visit tremcosealants.com for complete storage and warehousing details.

What kind of cleanup do the Tremco products require?

Refer to the product's data sheet found on tremcosealants.com for specific cleaning instructions for each product.

APPLICATOR APPROVAL

Why do I need to be approved to install this product?

A thorough understanding of the building enclosure performance is essential to installing an effective barrier System. Applicator training provides the specific knowledge required to properly install a high-performance barrier system using Securock ExoAir 430 Panels and Tremco accessories. Becoming an approved Securock ExoAir 430 System contractor sets you apart from your competitors and demonstrates that you have the training and expertise to install high-performance barrier System.

MISCELLANEOUS

Why are they called air barriers when it seems that moisture is really the issue?

With air comes moisture, therefore, by stopping the natural flow of air coming into the building with an air barrier, this is also stopping the moisture that can be transported into your building by the moisture laden air.

As a specifier, I need two equals in order to specify the Securock ExoAir 430 system on a public job. Which products should I list?

Permeable fluids and permeable self-adhered.

As a contractor, my crew already knows how to estimate and install the existing products that we use. I am not sure I want to change anything.

We have a user-friendly estimating guideline available on the Securock ExoAir 430 website that we would be more than happy to work through with you. For installation, we have a training program for your installers and training videos online. We will also be a part of the mock up on your projects.

What are the framing requirements of the Securock ExoAir 430 system?

The maximum spacing for framing members is 24" o.c. on wood or steel studs.

Reference Links

1. Securock ExoAir 430 Website

2. Tremco Sealants Website

3. Facade Anchor / Nail Sealability

4. Installation Instructions

5. NFPA 285 Exterior Assemblies

6. Securock ExoAir 430 System Comparison to Field Fluid-Applied Membranes

7. Air Barrier System Defined

8. Securock ExoAir 430 System Accessories

9. Cold Temperature Recommendations for Air Barrier Applications

10. Spectrem 1 (Silicone Sealant) Product Data Sheet

11. Dymonic 100 (Polyurethane Sealant) Product Data Sheet