

# Securock® ExoAir® 430 System Comparison

## Field Fluid-Applied Membranes



|                                   | FIELD FLUID-APPLIED MEMBRANES   | SECUROCK® EXOAIR® 430 SYSTEM   |
|-----------------------------------|---|--|
| Membrane Uniformity               | Varies per brand requirements and installation application. Overspray membrane is a field reality resulting in increased cost. Underspray membrane results in underperformance of the air barrier.    | Factory-applied for a 20 dry mils eliminates application variability. Eliminates overspray and possible damage to area. Eliminates waste of product.     |
| Mil Thickness                     | Top air barrier manufacturers' range from 40 wet mils to 90 wet mils. Requires field test (ASTM D4541) to validate thickness.   | Uniform 20 dry mils on every panel. 20 dry mils fully tested for air and water leakage and air permeance (ASTM E2357)                                    |
| Membrane Cure Time                | Cure dependent on temperature, humidity and surface conditions of substrate. Cure times range from 24-48 hours.   | Fully cured on the base panel. Fully cured when it arrives to the jobsite. Accelerates jobsite scheduling and sequencing of work.                        |
| Membrane Shelf Life               | Top air barrier manufacturers' range from six months to nine months.  | Unlimited.   |
| Overall Substrate Preparation     | Requires the entire substrate to be free of dirt, grease, oil, water, spalled material, sharp protrusions, loose nails or screws. Requires taping of joints and assurance that tape needs no repairs. | Minimal. Remove water, dust and debris under sealant areas only. Speeds installation of the air barrier.   |
| Joint Detailing                   | Requires detailing with adhesives and tapes. Detailing components may or may not have been tested for compatibility. Field testing requires additional time.  | Requires detailing with one product. All detailing components already tested for compatibility. Fluid-to-fluid system; no tape used to make connections. |
| Monolithic Barrier                | Components' compatibility must be verified to ensure a monolithic barrier.  | Fully tested fluid-to-fluid system ensures monolithic barrier.   |
| Membrane Bond to Substrate        | Each membrane must be verified for each substrate.  | The 430 membrane is fully bonded to the core panel. Tested and passed requirements (ASTM C297).  |
| Membrane to Sealant Compatibility | Must be verified for each combination under and on top of membrane.   | Tested and passed requirements (ASTM D3330). Both Dymonic® 100 and Spectrem® 1 bond sufficiently to the 430 membrane when peeled at a 90° angle.         |
| Washout Concerns                  | Cannot be installed before, during or after rain.   | None. The membrane is fully cured and fully bonded to the base panel; rain makes no impact to the membrane or installation.                              |

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| Temperature Impact                                  | Top air barrier manufacturers' application temperature range from minimum 30°F to 40°F. Product storage range from 32°F to 90°F. Service temperature range from -20°F to 140°F.                  | None.  |
| Need for Specialized Equipment or Jobsite Materials | Airless spray equipment, tenting, possible multiple scaffolding and cleanup products.  | None. Equipment to install board is the same as conventional sheathing and uses the same fasteners. One pass installation requires single scaffolding. No tenting required to control overspray to surrounding areas. No specialized materials needed for cleanup. |
| UV Exposure   | Top air barrier manufacturer's exposure ranges from six months to 30 months.   | Detailed panels have been tested in 12-month cycles in varying conditions showing no change in performance. Detailed panels should not be left exposed for more than 12 months prior to cladding.  |
| Jobsite Waste                                       | Waste includes product packaging and application equipment.  | Eliminates 5-gallon pails.   |
| Quality Control                                     | Onsite product testing required to ensure compatibility of components used.  | In-plant application of the membrane ensures bond and required mil thickness. Detailing sealants are color specific to aid QC. Installers are fully trained and approved to install the system.  |
| Labor Impact  | Requires two trades (drywall contractor and waterproofing contractor). Requires substantial cleanup with harsh chemicals. Requires finished and exposed surfaces to be protected from overspray. | Bundles sheathing installation with air barrier installation into an efficient delivery method of the air barrier.   |
| Time Impact   | Requires GC to sequence two trades. Additional time to apply air barrier after sheathing is hung. Substrate preparation can be time consuming.   | Installation of the air barrier occurs at the same time as sheathing installation. Building interior can be dried in sooner. Time to prep substrate eliminated.  |
| Cost Impact   | Variable cost closely tied to application variability. Specialized equipment is costly. Two trades bidding.  | More accurate estimating of product. Preapplied membrane means predictable membrane usage and cost; less waste. No surprise costs due to overspray and damage to surrounding areas. Efficient bidding from one trade.  |
| Job Safety Concerns                                 | Spray equipment laborious to carry up and down scaffolding.  | Reduced concerns with one scaffold and one-pass installation.  |
| Building Complexities                               | Good for multiple penetrations and complex geometries.   | No concerns; air barrier already installed with conventional sheathing.  |