FABRICATION & INSTALLATION INSTRUCTIONS

OUTSULITE SECUROCK EXOAIR 430 PANEL SYSTEM®

Prefabricated, Insulated, Light Gauge Steel Stud Exterior Wall Panels with an Air/Water Barrier

1. FABRICATION MATERIALS AND TOOLS CHECKLIST

1.1 Steel suds and track per approved shop drawings
1.2 Securock® ExoAir® 430 and fasteners per approved shop drawings
1.3 Tremco Dymonic® 100 (green)
1.4 Insulation board manufactured to Dryvit's specifications
1.5 Dryvit adhesive/base coat
1.6 Type I or II Portland Cement
1.7 Dryvit reinforcing mesh
1.8 Dryvit Demandit® Smooth or Color Prime™
1.9 Dryvit finish
1.10 Twister mixing paddle or equivalent
1.11 1/2 in (12.7 mm) variable speed mixing drill
1.12 Hawk and trowel
1.13 Spray equipment – when required for spray product applications

2. ADHESIVES

2.1 Adhesives Required for Fabrication of Outsulite Securock ExoAir 430 Panels

- Dryvit Primus®, Primus® DM, Genesis®, Genesis® DM, Genesis DMS or AP Adhesive™

3. FABRICATION

3.1 Outsulite Securock ExoAir 430 Panel Fabricator

- When required the Outsulite Securock ExoAir 430 Panel fabricator submits engineered, stamped shop drawings to the architect for approval. Shop drawings will include engineered details for all necessary building connections to ensure compliance with all design requirements. The architect is responsible to ensure that the building elements are designed accordingly to ensure they accommodate the panel loads without exceeding requirements.

3.2 The Outsulite Securock ExoAir 430 Panels are fabricated per approved shop drawings.

- When possible, dimensions should be verified in the field before fabrication begins.
- Resolve all discrepancies of field dimensions versus shop drawings prior to fabrication.
- Determine final panel sizes based on project requirements and shop drawings, including:
  - Size, spacing and type of studs
  - Bracing requirements
  - Type and attachment requirements for the sheathing
  - Provisions for pick points and building attachments if required
- To minimize potential conflicts, shop drawings should include details for all interfaces to dissimilar materials, vertical and horizontal panel to panel joints, joint treatment with sealant type and backer rod specified.
- Label all panels as required to ensure the panels are erected in the proper position and sequence.

4. PREPARATION AND FABRICATION OF OUTSULITE SECUROCK EXOAIR 430 PANELS

4.1 Cut the steel studs and track to the required length and assemble per the approved shop drawings. Use jigs to ensure panels are of the proper dimension and squareness. Be sure to allow for the thickness of the coatings before setting the frame dimensions.
4.2 Once the frames are positioned and set square, weld the studs to the track and add any reinforcement required for lifting.
4.3 Fasten the Securock ExoAir 430 sheathing to the frame using, minimum #8, corrosion resistant, self-drilling screws spaced at minimum 8 in (203 mm) o-c, or closer, as required to meet structural requirements as well as the manufacturer's installation instructions.

5. JOINT SEALER AND FASTENER HEAD TREATMENT

5.1 ~~A.~~ Apply Dymonic 100 to sheathing joints, rough openings and fastener heads in accordance with the application instructions for Outsulation Plus MD Securock ExoAir 430, DS901.

6. APPLICATION OF INSULATION BOARD, ADHESIVE/BASE COAT, REINFORCING MESH, FINISH

6.1 Apply the insulation board, base coat, reinforcing mesh and finish, to the prepared sheathing substrate, in accordance with published Dryvit Application Instructions for the specified Dryvit CI cladding system.

- Outsulation: Dryvit publication DS204

6.2 Insulation Board

- Ensure the expanded polystyrene insulation meets Dryvit Specification DS131 and is purchased from a molder approved by Dryvit Systems.
- Apply the insulation board in a running bond pattern using a notched trowel configuration applied in the vertical direction.
- Ensure that the insulation board is a minimum of 1in (25 mm) thick.

6.3 Reinforced Base Coat

- Prior to applying the reinforcing base coat, remove any irregularities from the face of the insulation board by rasping the surface in a light circular motion. The entire surface of the panel must be rasped to minimize telegraphing of board joints and ensure maximum adhesion of the base coat.
  - Use Grade 36 grit sandpaper with a hand or air rasp. **TIP: Do not sand parallel to board joints.**
  - Remove all loose pieces of insulation board and dust from the sanding operation using a brush or compressed air.

6.4 Demandit Smooth/Color Prime

- Using a brush or roller, apply a coating of Demandit Smooth or Color Prime along the panel edges that will receive sealant.

6.5 Finish

- Ensure that the base coat is properly applied so that the reinforcing mesh is fully embedded. Dryvit recommends that the base coat be applied in two passes to minimize mesh pattern show through and provide a smoother base for the finish application.

6.6 Allow the materials to completely dry before being covered or exposed to the elements. To protect the panels from damage, contamination and excessive heat build-up, cover with opaque breathable films only. **Do not use clear materials.**

6.7 Tolerances

- Ensure that finished panels conform to the following dimensional tolerances:
  - Length and Width ± 1/8 in (3.2 mm)
  - Thickness ± 1/8 in (3.2 mm)
  - Out of plane ± 1/8 in (3.2 mm)
  - Squareness ± 1/4 in (6.4 mm)

7. OUTSULITE SECUROCK EXOAIR 430 PANEL HANDLING AND SHIPPING

7.1 Material Handling

- When handling Outsulite Securock ExoAir 430 Panels, we suggest that clean gloves be used by workers to ensure that the panel faces are kept clean.
- Lift from designed pick points and avoid bending, twisting or racking of the panels. When lifting panels with a hoist use a tie line to control the panel while in the air and keep panel from kiting, being damaged, or creating an unsafe condition.
  - Panel weight is approximately 8-10 lbs per square foot. Use appropriate equipment.

7.2 Delivery

- When shipping multiple panels, it is recommended that they be shipped vertically and separated to prevent shifting and damage.
- Panels must be covered with appropriate covering to prevent damage and soiling during transport.

  NOTE: We recommend that the panels be transported in a vertical position. Stacking the panels horizontally may result in indentations or damage to the panel face. All materials must be completely dry prior to packaging.
- Secure panels during transport to prevent shifting.
- Protective covering of the panels is necessary during transport to prevent staining and damage from roadside debris. The covering must be secured and weighted to prevent wind damage. Use opaque, white protective wrap to cover and protect the panels. Avoid clear and darker colored material as excessive heat can damage packaged panels. Panels must be completely dry prior to covering.
- The maximum service temperature of the EPS and XPS insulation is 165 °F (74 °C). Care must be taken to protect the panels from exposures that would cause this value to be exceeded.

- Upon delivery, the panels shall be handled as listed in the Material Handling Section. At this time, all panels must be inspected by the panel installer. The panel installer shall ensure that all panels meet the contract documents and are proper size, color and texture. The panel installer must notify the panel manufacturer of all discrepancies. The panel installer should not accept the panels which are not in accordance with the contract documents.

8. STORAGE

8.1 Panels must be protected from weather and kept in an area free from traffic.
8.2 Temporary covering must be provided to prevent soiling of the panels and must be secured and weighted to prevent wind damage.
8.3 Store panels in a vertical position, separated by appropriate spacers to prevent damage.
8.4 Place panels in close proximity to the area where they will be installed.
8.5 Protect all panels from weather and other contaminants prior to installation.
NOTE: To minimize potential for damage and contamination, panels should be installed as soon as possible and not be stored for an excessive amount of time at the job site.

9. ERECTION AND PLACEMENT OF OUTSULITE SECUROCK EXOAIR 430 PANELS

9.1 The Outsulite Securock ExoAir 430 Panels will weigh approximately 8-10 lbs/sq ft and will normally require a crane for lifting and placement.
9.2 Using a crane and designed lifting points, lift the panels into position on the building, and attach to the building structure in accordance with approved shop and placement drawings.
9.3 Use proper procedures to prevent movement from wind that might cause damage to the panels or building, or create safety issues.
9.4 Position the panels in their final location on the building with a minimum 3/4 in (19 mm) space between panels to allow for building tolerances and proper sealant placement. Use shims to control horizontal and vertical panel spacing.

10. FLASHING AND SEALANT

9.5 Install all flashings and sealant as soon as practical after panel installation. Take appropriate measures to prevent water from entering behind the panels until all required sealants and flashings are installed.
9.6 Refer to Dryvit's publication DS920 for the most current listing of Tremco sealants which have been tested for compatibility with the Outsulite Securock ExoAir 430 Panel materials.

DISCLAIMER

Information contained in this document conforms to standard detail and product recommendations for the installation of the Dryvit Outsulite Securock ExoAir 430 Panel System products as of the date of publication of this document and is presented in good faith. Dryvit Systems, Inc. assumes no liability, expressed or implied, as to the architecture, engineering, or workmanship of any project. To ensure that you are using the latest, most complete information, contact Dryvit Systems, Inc.

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