OUTSULITE[®] SECUROCK[®] EXOAIR[®] 430 PANEL SYSTEM

A Prefabricated Light Gauge Steel Stud Exterior Wall Insulation and Finish System Panel that Incorporates Continuous Insulation over a Coated Fiberglass Mat Gypsum Sheathing Panel with Integral Weather-Resistant Barrier and Air Barrier with Accessory Materials and Silicone Sealants



INTRODUCTION

This manufacturer's guide specification is intended for use by design and construction professionals in the development of project specifications. By referring to the manufacturer's edit notes (in parentheses and **bolded**), the specifier may easily elect the portions of the comprehensive guide specification which are pertinent to his or her project. This guide specification follows the Construction Specification Institute's MasterFormat and SectionFormat protocols.

It will be prudent to place certain parts of the Dryvit Outsulite Securock ExoAir 430 Panel System Specification in other parts of the project's total specification, such as sheathing, air and water-resistive barrier membrane, accessory materials, sealants, and framing. The project design professionals are responsible for verifying that the project specifications are suitable for the project. For assistance in preparing your specification, please contact your Dryvit Distributor or Dryvit.

WARNING

The Outsulite Securock ExoAir 430 Panel System is designed as a barrier EIF panel system design to prevent water from entering the system. Specifications should be followed, and proper details adhered to, in order to prevent water intrusion, resulting in possible damage to the System or other building elements. Care should be taken to ensure that all building envelope elements, including without limitations, roofs, windows, flashings, sealants, etc., are compatible with this system where Securock ExoAir 430 sheathing and Tremco Commercial Sealants and Waterproofing Products are not used as specified herein.

The Outsulite Securock ExoAir 430 Panel System is an engineered assembly of multiple compatible components: a coated fiberglass mat gypsum sheathing panel with integral weather-resistant barrier and air barrier with polyurethane accessory materials, adhesive, rigid insulation board, base coat, reinforcing mesh, finish coat and silicone sealants.

DISCLAIMER

It is the responsibility of both the specifier and the purchaser to determine if a product is suitable for its intended use. The designer selected by the purchaser is responsible for all decisions pertaining to design, detail, structural capability, attachment details, shop drawings and the like. The Exterior Insulation and Finish System materials Manufacturer has prepared guidelines in the form of specifications, installation details, application instructions and product data sheets to facilitate the design process only. The Manufacturer is not liable for any errors or omissions in design, detail, structural capability, attachment details, shop drawings, or the like, whether based upon the information prepared by the Manufacturer or otherwise, or for any changes which purchasers, specifiers, designers, or their appointed representatives may make to the Manufacturer's published comments.

Information contained in this specification 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 assumes no liability, expressed or implied, as to the architecture, engineering or installation of any project. To ensure that you are using the latest, most complete information, visit our website at www.dryvit.com or contact Dryvit at:

3735 Green Road Beachwood, OH 44122 (401) 822-4100 <u>www.dryvit.com</u>

The Trained Contractor Certificate referenced in this guide specification indicates certain employees of the EIFS sub-contractor company have been instructed in the proper application of Dryvit products and have received copies of Dryvit's Application Instructions and Specifications. The Trained Contractor Program is not an apprenticeship or endorsement. Each trained contractor is an independent company experienced in the trade and bears responsibility for its own quality. Dryvit assumes no liability for the performance of a trained contractor.

DRYVIT MANUFACTURER'S GUIDE SPECIFICATION CSI FORMAT SECTION 07 24 13 OUTSULITE® SECUROCK® EXOAIR® 430 PANEL SYSTEM

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. This document is to be used in preparing specifications for a Prefabricated Panel System including: a. Engineered light gauge steel stud frame.
 - b. Coated fiberglass mat gypsum sheathing board panel with integral weather-resistant barrier and air barrier compatible with the adhesive application of the EIF system.
 - c. Accessory materials required for treating sheathing joints, fasteners, penetrations, rough openings, and material transitions.
 - d. Exterior Insulation and Finish System (EIFS).
 - e. Joint sealants compatible with specified EIFS for use in all exterior envelope joint waterproofing.
 - f. Comprehensive single source limited system warranty inclusive of sheathing panel, accessory materials, EIF system and sealants.
- B. Related Requirements:

(Note to Specifier: please delete any sections below not relevant to this project and add others as required.)

- 1. 05 40 00 Cold-formed Metal Framing
- 2. 06 16 56 Sheathing (Note to Specifier: Coordinate for coated fiberglass mat gypsum sheathing with integral weather-resistant barrier and air barrier sheathing as manufactured by USG Corporation and including Accessory Materials as specified.)
- Engineered Framing Systems 3. 06 17 00
- 4. 07 27 26 Fluid-Applied Air Barriers

(Note to Specifier: Coordinate with Section 061656 as outlined above for coated fiberglass mat gypsum sheathing with integral weather-resistant barrier and air barrier sheathing referenced in Section 2.02.B.1 as manufactured by Tremco Incorporated.)

- 5. 07 62 00 Sheet Metal Flashing and Trim
- 6. 07 92 00 Joint Sealants (Note to Specifier: Coordinate for Joint Sealants integration with product(s) referenced in Section 2.02.C as manufactured by Tremco Incorporated.)
- Entrances. Store Fronts. and Curtain Walls 7. 08 40 00
- 8. 08 50 00 Windows

1.02 REFERENCES

(Note to Specifier: Delete any standards below not relevant to this project and add others as required.

- A. Reference Standards:
- Β.
 - 1. ASTM Standards:
 - a. ASTM B 117 Standard Practice for Operating Salt Spray (Fog) Apparatus
 - b. ASTM C 67 Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile c. ASTM C 150 Standard Specification for Portland Cement

 - d. ASTM C 177 Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission
 - e. ASTM C 203 Standard Test Methods for Breaking Load and Flexural Properties of Block-Type Thermal f. ASTM C 272
 - Standard Test Method for Water Absorption of Core Materials for Sandwich

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		Constructions
g.	ASTM C 297	Standard Test Method for Flatwise Tensile Strength of Sandwich Constructions
h.	ASTM C 303	Standard Test Method for Dimensions and Density of Preformed Block and
		Board–Type Thermal Insulation
h.	ASTM C 473	Standard Test Methods for Physical Testing of Gypsum Panel Products
i.	ASTM C 510	Standard Test Method for Staining and Color Change of Single- or
		Multicomponent Joint Sealants
j.	ASTM C 518	Standard Test Method for Steady-State Thermal Transmission Properties by
		Means of the Heat Flow Meter Apparatus
K.	ASTM C 639	Standard Test Method for Rheological (Flow) Properties of Elastomeric
		Sealants
١.	ASTM C 661	Standard Test Method for Indentation Hardness of Elastomeric-Type Sealants
100		by Means of a Durometer Standard Test Method for Test Free Time of Electomeric Sectors
ш. р	ASTM C 079	Standard Test Method for Adhesion and Cohesion of Electometric Joint
п.	ASTIN C / 19	Scalants Linder Cyclic Meyoment (Heckman Cycle)1. 2
0	4 STM C 703	Standard Test Method for Effects of Laboratory Accelerated Weathering on
0.	A011010135	Elastomeric Joint Sealants
n	ASTM C 794	Standard Test Method for Adhesion-in-Peel of Elastomeric Joint Sealants
р. а	ASTM C 920	Standard Specification for Flastomeric Joint Sealants
۹۰ r	ASTM C 1177	Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing
s	ASTM C 1184	Standard Specification for Elastomeric Joint Sealants
t.	ASTM C 1246	Standard Test Method for Effects of Heat Aging on Weight Loss, Cracking, and
		Chalking of Elastomeric Sealants After Cure
u.	ASTM C 1248	Standard Test Method for Staining of Porous Substrate by Joint Sealants
٧.	ASTM C 1305	Standard Test Method for Crack Bridging Ability of Liquid-Applied
		Waterproofing Membrane
w.	ASTM C 1325	Standard Specification for Non-Asbestos Fiber-Mat Reinforced Cementitious
		Backer Units
Х.	ASTM C 1382	Standard Test Method for Determining Tensile Adhesion Properties of Sealants
		When Used in Exterior Insulation and Finish Systems (EIFS) Joints
у.	ASTM C 1396	Standard Specification for Gypsum Board
Z.	ASTM C 1397	Standard Practice for Application of Class PB Exterior Insulation and Finish
		System (EIFS) and EIFS with Drainage
aa.	ASTM D 412	Standard Test Methods for Vulcanized Rubber and Thermoplastic
b b		Elastomers—Tension Standard Test Method for Test Strength of Conventional Vulcenized Dubber
.ממ	ASTM D 624	Standard Test Method for Tear Strength of Conventional Vulcanized Rubber
~~		Standard Test Methods for Abrasian Posistance of Organic Costings by Falling Abrasian
dd	ASTM D 900	Standard Test Methods for Compressive Properties of Digalic Coalings by Failing Abrasive
uu. ee	ASTM D 1021 ASTM D 1622	Standard Test Method for Apparent Density of Rigid Cellular Plastics
ff	ASTM D 1022	Standard Specification for Rigid PVC and CPVC Compounds
	ASTM D 1970	Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet
99.		Materials Used as Steen Roofing Underlayment for Ice Dam Protection
hh.	ASTM D 2247	Standard Practice for Testing Water Resistance of Coatings in 100% Relative
		Humidity
ii.	ASTM D 2863	Standard Test Method for Measuring the Minimum Oxygen Concentration to
		Support Candle-Like Combustion of Plastics (Oxygen Index)
ij.	ASTM D 2898	Standard Test Method for Accelerated Weathering of Fire-Retardant-Treated
		Wood for Fire Testing
kk.	ASTM D 3273	Standard Test Method for Resistance to Growth of Mold on the Surface of
		Interior Coatings in an Environmental Chamber
II.	ASTM D 3330	Standard Test Method for Peel Adhesion of Pressure-Sensitive Tape
mm	n. ASTM D 4060	Standard Test Method for Abrasion Resistance of Organic Coatings by the
		Taber Abraser
nn.	ASTM D 4541	Standard Test Method for Pull-Off Strength of Coatings Using Portable
		Adhesion Testers
00.	ASTM E 72	Standard Methods of Conducting Strength Tests of Panels for Building
		Construction
pp.	ASTM E 84	Standard Test Method for Surface Burning Characteristics of Building Materials

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	qq. A rr. A	ASTM E 96 ASTM E 119 ASTM E 283	Standard Test Methods for Water Vapor Transmission of Materials Standard Method for Fire Tests of Building Construction and Materials Standard Test Method for Determining Rate of Air Leakage Through Exterior
	33. <i>F</i>		Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen
	tt. A	ASTM E 330	Test Method for Structural Performance of Exterior Windows, Doors and Curtain Walls by Uniform Static Air Pressure Difference
	uu. A	ASTM E 331	Test Method for Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Uniform Static Air Pressure Difference
	vv. A	ASTM E 831	Standard Test Method for Linear Thermal Expansion of Solid Materials by Thermomechanical Analysis
	ww.A	ASTM E 1233	Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights, and Curtain Walls by Cyclic Air Pressure Differential
	xx. A	ASTM E 2098	Test Method for Determining the Tensile Breaking Strength of Glass Fiber Reinforcing Mesh for use in Class PB Exterior Insulation and Finish Systems (EIFS), after Exposure to Sodium Hydroxide Solution
	уу. А	ASTM E 2134	Test Method for Evaluating the Tensile-Adhesion Performance of Exterior Insulation and Finish Systems (EIFS)
	zz. A	ASTM E 2178	Standard Test Method for Air Permeance of Building Materials
	aaa.	ASTM E 2357	Standard Test Method for Determining Air Leakage of Air Barrier Assemblies
	bbb.	ASTM E 2430	Standard Specification for Expanded Polystyrene (EPS) Thermal Insulation Boards for use in Exterior Insulation and Finish Systems (EIFS)
	ccc.A	ASTM E 2485	Standard Test Method for Freeze-Thaw Resistance of Exterior Insulation and Finish Systems (EIFS) and Water-Resistive Barrier Coatings
	ddd.	ASTM E 2486	Standard Test Method for Impact Resistance of Class PB and PI Exterior Insulation and Finish Systems (EIFS)
	eee.	ASTM E 2568	Standard Specification for PB Exterior Insulation and Finish Systems
	fff. A	ASTM E 2570	Standard Test Method for Evaluating Water-Resistive Barrier (WRB) Coatings Used Under Exterior Insulation and Finish Systems (EIFS) or EIFS with Drainage
	ggg.	ASTM G 154	Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials
	hhh.	ASTM G 155	Standard Practice for Operating-Xenon Arc Light Apparatus for Exposure of Nonmetallic Materials
2.	Natio	nal Fire Protection	Association (NFPA) Standards:
	a. N	IFPA 268	Standard Test Method for Determining Ignitability of Exterior Wall Assemblies Using a Radiant Heat Source
	b. N	NFPA 285	Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load Bearing Wall Assemblies Containing Combustible Components
3.	The /	American Associati	on of Textile Chemists and Colorists:
-	a. A	ATCC 127-08	Water Resistance: Hydrostatic Pressure Test
4.	US F	ederal Specification	ns
	a. T	T-S-001543A	Sealing Compound: Silicone Rubber Base (for Calking, Sealing, and Glazing in Buildings and Other Structures)
	b. T	T-S-00230	Sealing Compound: Elastomeric Type, Single Component (for Calking, Sealing, and Glazing in Buildings and Other Structures)

1.03 ADMINISTRATIVE REQUIREMENTS

A. Pre-Construction Meetings

(Note to Specifier: Work in this section requires coordination with related sections and trades. A pre-installation meeting of all related sub-contractors <u>is required</u> for standard limited warranty.)

 The panel system fabricator and/or erector shall coordinate with the General Contractor to schedule, invite and administer a pre-construction meeting including but not limited to the architect of record, consultant(s), EIFS, sheathing board, accessory materials and sealant manufacturer's representatives and the owner to assure required integration of products selected as specified herein and for proper sequencing, installation detailing and sealant color coordination.

- B. Coordinate for related specification and integration of Required Materials as referenced in Section 2.02.B.1 and 2.02.C herein below.
- C. Sequencing
 - 1. Provide jobsite grading prior to installation of the panel system so that the system may be terminated at 8 in above grade or as required by code.
 - 2. Coordinate installation of sheathing board and accessory materials, flashing, foundation waterproofing, roofing membrane, windows, doors, and other penetrations of the exterior walls to provide a continuous air and water-resistive membrane barrier.
 - 3. Provide protection of rough openings before installing windows, doors, and other penetrations of the exterior walls.
 - 4. Coordinate installation of windows and doors so air and water-resistive membrane barrier accessory materials, transitions, flashings, etc. are connected to them to provide a continuous barrier.
 - 5. Coordinate installation of window and door head flashings.
 - 6. Install diverter flashings wherever water can enter the wall assembly to direct water to the exterior.
 - 7. Install copings and sealants immediately after installation of the panel system and when EIFS coatings are dry.
 - 8. Attach penetrations through prefabricated panel system to structural support and provide water-tight seals at penetrations.

1.04 ACTION SUBMITTALS / INFORMATIONAL SUBMITTALS

- A. Submit product data as required by Section 01 33 00, Administrative Requirements.
- B. Submit professionally engineered and stamped shop drawings for panel system showing wall layout, connections, details, expansion joints, and installation sequence.
- C. Submit two (2) samples of the panel system for each finish, texture, and color to be used on the project. Use the same tools and techniques proposed for the actual installation. Make the samples of sufficient size to accurately represent each color and texture being utilized on the project.
- D. Submit a current copy of the manufacturer's Trained Contractor Certificate for the system specified.
- E. Submit Owner/Architect-requested test results verifying the performance of the panel system.
- F. Submit a copy of the manufacturer's installation details and application instructions.

1.05 CLOSEOUT SUBMITTALS

- A. Submit a copy of the manufacturer's recommended maintenance and repair manual.
- B. Submit a copy of the panel system manufacturer's comprehensive single source limited warranty.

1.06 QUALITY ASSURANCE

(Note to Specifier: Please delete any qualification below not relevant to this project and add others as required.)

A. Manufacturer's Qualifications:

(Note to Specifier: Coordinate with section 01 43 00, Quality Requirements.)

- 1. A member in good standing of the EIFS Industry Members Association (EIMA).
- 2. Manufacture Exterior Insulation and Finish System (EIFS) materials at a facility covered by a current ISO 9001:2015 and ISO 14001:2015 certification. Certification of the facility is done by a registrar accredited by the American National Standards Institute, Registrar Accreditation Board (ANSI-RAB).
- B. Contractor Qualifications:
 - 1. Knowledgeable in the proper fabrication and/or erection of the panel system.
 - 2. Possess a current copy of the manufacturer's Trained Contractor Certificate for the system specified.
 - 3. Successfully complete a minimum of three (3) projects of similar scope and scale to the specified project.
- C Insulation Board Manufacturer Qualifications:
 - 1. Listed by EIFS Manufacturer, and capable of producing the Expanded Polystyrene (EPS) in accordance with the current EIFS Manufacturer's Specification for Insulation Board.
 - 2. Subscribe to the Dryvit Third Party Certification and Quality Assurance Program.
- D. Panel Fabricator Qualifications:
 - 1. Experienced and competent in the design, engineering and fabrication of panel system architectural wall panels.
 - 2. Possess a current panel system Trained Contractor Certificate* issued by EIFS materials Manufacturer.
- E. Panel Erector Qualifications:
 - 1. Experienced and competent in the erection and installation of architectural wall panel systems.
- F. Mock-Up:
 - 1. Provide the owner/architect with a mock-up for approval.
 - a. Of suitable size as required to accurately represent the products being installed, as well as each color and texture to be utilized on the project.
 - b. Prepared with the same products, tools, equipment and techniques required for the actual applications. Use finish from the same batch that is being used on the project.
 - c. Available and maintained at the jobsite or as further designated in contract documents.
- G. Regulatory Requirements:
 - 1. Separate the EPS insulation board from the interior of the building by a minimum 15-minute thermal barrier.
 - 2. Comply with local building codes for the use and maximum thickness of EPS insulation board.
- H. Inspections:
 - 1. Cooperate with independent, third-party inspectors when required by code or by contract documents.

1.07 DELIVERY, STORAGE AND HANDLING

- 1. Deliver all panel system components and materials to the fabrication location in the original, unopened packages with labels intact.
- 2. Inspect all panel system components and materials upon arrival at fabrication location for physical damage, freezing or overheating. Do not use questionable materials.

- 3. Store all panel system components and materials at the fabrication location in a cool, dry location, out of direct sunlight, protected from weather and other sources of damage. Maintain minimum and maximum storage temperature as stated in the product data sheets or specifications for the materials selected. NOTE: Minimize exposure of materials to temperatures over 90 °F (32 °C). Finishes exposed to temperatures over the published maximum storage temperature for even short periods may exhibit skinning and increased viscosity and should be inspected prior to use.
- 4. Protect all products from inclement weather and direct sunlight.

1.08 FABRICATION LOCATION CONDITIONS

A. Ambient Conditions

- 1. Do not apply wet materials during inclement weather unless appropriate protection is provided. Protect materials from inclement weather until they are completely dry.
- 2. Verify the minimum air and wall surface temperatures at the time of application as stated in the product data sheets or specifications for the materials selected.
- Maintain these temperatures with adequate air ventilation and circulation for a minimum of 24 hours (48 hours for specific Specialty Finishes) thereafter, or until the products are completely dry. (Note to Specifier: The use of dark colors must be considered in relation to wall surface temperature as a function of local climatic conditions. Use of dark colors in high temperature climates can affect the performance of the system.)

1.09 WARRANTY

- A. Manufacturers' Limited EIF Panel System Warranty
 - 1. Manufacturer shall offer a limited material defect and labor to repair or replace defective material warranty stating the Products will be free from manufacturing defect and will perform as warranted in the manner specified for the stated term measured from the Date of Project Substantial Completion.
 - a. A pre-construction meeting, including representatives of the Manufacturer, the Applicator, the Owner, and the Consultant (if applicable), shall be required prior to installation of the Products.
 - b. The warranty is available upon written request.
 - 2. The EIF Panel System warranty shall additionally include the following for the term of the warranty or as specifically noted hereunder.
 - a. The EIF Panel System warranty term shall be 20 years.
 - b. The EIF Panel System will remain in a watertight condition when the EIF Panel System is used in conjunction with approved Company Joinery and Sealants.
 - c. Finish will be UV fade resistant for 10 years, except for specially produced colors.
 - 1) Specially produced colors will be UV fade resistant for 5 years when high-performance colorants are used to formulate.
- B. Installer Warranty:
 - 1. The Fabricator and Erector shall warrant engineering, workmanship, erection, and installation separately in accordance with the contract documents. The Manufacturers listed herein shall not be responsible for design, engineering, workmanship, connections, erection and/or installation associated with the fabrication and installation of the panel system.

PART 2 - PRODUCTS

2.01 MANUFACTURER AND SYSTEM

A. Manufacturer

1. Dryvit, 3735 Green Road, Beachwood, OH 44122 800-556-7752, www.dryvit.com.

B. System

- 1. Dryvit "Outsulite Securock ExoAir 430 Panel System"
- C. Substitution Limitations:
 - 1. All components of the Outsulite Securock ExoAir 430 Panel System shall be supplied or obtained from Dryvit, its authorized distributors or an approved supplier or affiliates. Substitutions or additions of materials manufactured or supplied by others will void the system warranty.
- D. Product Options:

(Note to Specifier: For projects what will include some wall area of Field Applied EIFS, retain item 2 below and select a system preference. Delete item 2 below where there is no field applied EIFS.)

- 1. Panelized: The Dryvit Outsulite Securock ExoAir 430 Panel System is an engineered, shop-fabricated prefabricated wall panel system.
- 2. Field Applied: Where appliable for non-prefabricated EIF System wall areas, the [Dryvit Outsulation Barrier EIF System] [Dryvit Outsulation Plus MD Securock ExoAir 430 Moisture Drainage EIF System] shall be installed.

2.02 DESCRIPTION

- A. System Description:
 - 1. The Dryvit Outsulite Securock ExoAir 430 Panel System is a prefabricated panelized Exterior Insulation and Finish System (EIFS); consisting of:
 - a. A Coated Fiberglass Mat Gypsum Sheathing with Integral Weather-Resistant Barrier and Air Barrier with accessory materials
 - b. Adhesive installed in vertical ribbons
 - c. Expanded Polystyrene (EPS) insulation boardd. Base Coat

 - e. Reinforcing Mesh
 - f. Finish Coat
 - g. Sealants
- B. Materials:
 - 1. A Coated Fiberglass Mat Gypsum Sheathing Panel with Integral Weather-Resistant Barrier and Air Barrier and Accessory Materials:
 - a. Shall be Securock ExoAir 430 Panel as manufactured by USG Corporation.
 - b. Accessory Materials: Provide compatible accessory materials as required by project conditions for treating sheathing board joints, fastener heads, penetrations, rough openings, material transitions and flashing integration to produce a complete air barrier assembly.
 - Basis of Design: Dymonic® 100 A high-performance, high-movement, single-component, 1) medium-modulus, low-VOC, UV-stable, non-sag polyurethane sealant as manufactured by Tremco Incorporated.
 - 2. Adhesives:

(Note to Specifier: Edit list below to reference specific product(s) of choice for this project or leave list intact allowing the EIFS installer to select as their preference and/or what is most appropriate for the project and project conditions.)

- a. Liquid polymer-based adhesive field mixed with Portland cement.
 - 1) Dryvit Primus[®]
 - 2) Dryvit Genesis®
- b. Ready mixed dry blend cementitious, copolymer-based adhesive field mixed with water.

- 1) Dryvit Primus[®] DM
- 2) Dryvit Genesis[®] DM
- 3) Dryvit Genesis[®] DMS
- 4) Rapidry DM[™] 35-50
- 5) Rapidry DM™ 50-75
- 4. Insulation Board:
 - a. Expanded Polystyrene; minimum thickness 1 in (25 mm); meeting Dryvit Specification <u>DS131</u> and ASTM E 2430.
- 5. Pre-Coated Insulation Starter Boards and Shapes:
 - (Note to Specifier: Pre-Base Coated Insulation Starter Boards provide for properly back wrapped and encapsulated EIF system termination edges typically scheduled to receive primers and sealants and are recommended. Machine or Non-Machine coated starter boards and shapes must be produced with Dryvit materials to be covered under the EIF system warranty. Retain one or both items below as desired or delete those item(s) not desired.)
 - a. Machine Coated Starter Boards and Shapes: Shall be produced with materials approved by Dryvit and be supplied by a fabricator approved by Dryvit.
 - b. Non-Machine Coated Starter Boards and Shapes: Shall be produced with materials approved by Dryvit.
- 6. Base Coat:

(Note to Specifier: Edit list below to reference specific product(s) of choice for this project or leave list intact allowing the EIFS installer to select as their preference and/or what is most appropriate for the project and project conditions.)

- a. Liquid polymer-based base coat field mixed with Portland cement.
 - 1) Dryvit Primus,
 - 2) Dryvit Genesis
 - 3) Dryvit Dryflex
- b. Ready mixed dry blend cementitious, copolymer-based base coat field mixed with water.
 - 1) Dryvit Primus DM
 - 2) Dryvit Genesis DM
 - 3) Dryvit Genesis DMS
 - 4) Rapidry DM 35-50
 - 5) Rapidry DM 50-75
 - 6) Dryvit NCB Non-cementitious
- c. High Impact Liquid polymer-based base coats field mixed with Portland cement. (Note to Specifier: ShieldIt[™] is a 2-pass, 2-composite base coat application installed over new EIFS reinforced base coat or existing EIFS textured finish to improve impact resistance and provide warranted protection from woodpecker damage on EIFS substrates.)
 - 1) ShieldIt™
- 7. Reinforcing Mesh:
 - Open-weave, glass fiber fabric treated for compatibility with other system materials.
 (Note to Specifier: Reinforcing meshes are classified by impact resistance and specified by weight and tensile strength. Please refer to the table below and/or confer with your manufacturer's representative to assure specification of mesh appropriate for the anticipated use of your project.)

Reinforcing Mesh ¹ /Weight oz/yd ² (g/m ²)	Minimum Tensile Strengths	EIMA Impact Classificatio	EIMA Impact Range		Impact Test Results	
		n	in-lbs	(Joules)	in-lbs	(Joules)
Standard - 4.3 (146)	150 lbs/in (27 g/cm)	Standard	25-49	(3-6)	36	(4)

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Standard Plus - 6 (203)	200 lbs/in (36 g/cm)	Medium	50-89	(6-10)	56	(6)	
Intermediate™ - 12 (407)	300 lbs/in (54 g/cm)	High	90- 150	(10-17)	108	(12)	
Panzer [®] 15 ¹ - 15 (509)	400 lbs/in (71 g/cm)	Ultra High	>150	(>17)	162	(18)	
Panzer 20 ¹ - 20.5 (695)	550 lbs/in (98 g/cm)	Ultra High	>150	(>17)	352	(40)	
Detail Mesh [®] Short Rolls - 4.3 (146)	150 lbs/in (27 g/cm)	n/a	n/a	n/a	n/a	n/a	
Corner Mesh™ - 7.2 (244)	274 lbs/in (49 g/cm)	n/a	n/a	n/a	n/a	n/a	
* It shall be solared blue and beer the Druvit lage for product identification							

* It shall be colored blue and bear the Dryvit logo for product identification

1. Shall be used in conjunction with Standard Mesh (recommended for areas exposed to high traffic)

8. Finish:

(Note to Specifier: Numerous finishes, specialty finish, performance enhancements, textures and coatings are available. Select those that apply and delete those that do not.)

- a. Water-based, acrylic coating with integral color and texture; formulated with Dirt Pickup Resistance (DPR) chemistry.
 - 1) Available textures:
 - a) Quarzputz[®] DPR open texture
 - b) Sandblast[®] DPR medium texture
 - c) Freestyle[®] DPR fine texture
 - d) Sandpebble[®] DPR pebble texture
 - e) Sandpebble[®] Fine fine pebble texture
- b. Hydrophobic (HDP[™]) Finishes: 100% acrylic coating with integral color and texture and formulated with hydrophobic properties:
 - 1) Available textures:
 - a) Quarzputz® HDP
 - b) Sandblast[®] HDP
 - c) Sandpebble[®] HDP
 - d) Sandpebble[®] Fine HDP
 - e) Lymestone™ HDP
- c. Lightweight, water-based acrylic coating with integral color and texture; formulated with Dirt Pickup Resistance (DPR) chemistry.
 - 1) Available textures:
 - a) Quarzputz[®] E
 - b) Sandpebble[®] E
 - c) Sandpebble Fine® E
- 9. Specialty Finishes and Veneers:
 - a. Ameristone multi-colored quartz aggregate with a flamed granite appearance.
 - b. Stone Mist[®] ceramically colored quartz aggregate.
 - c. Custom Brick[™] acrylic polymer-based finish used in conjunction with a proprietary template system to create the look of stone, brick, slate, or tile.
 - d. TerraNeo acrylic-based finish with large mica chips and multi-colored quartz aggregates.
 - e. Lymestone premixed, acrylic-based finish designed to replicate the appearance of limestone blocks.
 - f. Reflectit[™] acrylic coating providing a pearlescent appearance.
 - g. Finesse a smooth 100% acrylic-based dirt pickup resistance finish.
 - h. Tibur Stone™: 100% acrylic-based finish with the appearance of Travertine Stone.
 - i. NewBrick[™]: A lightweight insulated brick veneer for use on exterior walls.
 - 1) For fire resistance rated assembly, CI insulation thickness is limited to 2 1/4 in (57 mm)
 - 2) For Type I IV Construction, CI insulation thickness is limited to 4 in (101.6 mm)

- j. Ferros™ Finish: a water-based finish that replicates the look of rusting metal.
- k. Woodgrain: A 100% acrylic-based finish created with a textured finish, a coating, a graining tool, and a sealer providing an authentic woodgrain appearance.
- 10. Elastomeric, water-based acrylic coating with integral color and texture; formulated with Dirt Pickup Resistance (DPR) chemistry:
 - a. Weatherlastic® Quarzputz
 - b. Weatherlastic® Sandpebble
 - c. Weatherlastic® Sandpebble Fine
 - d. Weatherlastic[®] Adobe
- 11. Medallion Series water-based, acrylic coating with integral color and texture; formulated with Proven Mildew Resistance (PMR[™]) chemistry:
 - a. Quarzputz[®] PMR
 - b. Sandblast[®] PMR
 - c. Freestyle® PMR
 - d. Sandpebble® PMR
 - e. Sandpebble[®] Fine PMR
- 12. Coatings, Primers, and Sealants:
 - a. Demandit[®] Smooth
 - b. Demandit® Sanded
 - c. Demandit[®] Advantage™
 - d. HDP Water-Repellent Coating
 - e. Weatherlastic[®] Smooth
 - f. Tuscan Glaze™
 - g. Color Prime
 - h. Prymit[®]
 - i. SealClear™

C. Joint Sealants:

- 1. Silicone Sealant: A non-sag, non-staining, neutral-curing silicone joint sealant as manufactured by Tremco Inc. Commercial Sealants and Waterproofing.
 - a. Spectrem 1: An ultra-low modulus, high-performance, one-part, moisture-curing silicone joint sealant with physical properties making it an ideal sealant for sealing dynamic joints.
 - b. Spectrem 3: A general-purpose, low-modulus, high performance, one-part, neutral-cure, nonstaining, low dirt pickup, construction-grade silicone sealant.
 - c. Spectrem 4-TS: A multi-component, neutral-curing, non-staining, low dirt pick up, low-modulus silicone sealant specially formulated for use in dynamically moving building joints. Spectrem 4-TS offers color flexibility with the opportunity to tint the material on site.
 - d. Coordination for custom sealant colors is required.
 - e. Joint backing material shall be closed cell.
 - f. See related specification section or consult with Tremco, Inc. for more information.
- D. Jobsite-Mixed Materials:
 - 1. Portland cement: verify is Type I or II, meeting ASTM C 150, white or gray in color, fresh and free of lumps.
 - 2. Water: verify is clean and free of foreign matter.
- E. Reference Documentation for the Dryvit Outsulite Securock ExoAir 430 Panel System:
 - 1. Data Sheet DS952
 - 2. Details DS959
 - 3. Fabrication and Installation <u>DS951</u>

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verification of Conditions:
 - 1. Verify access to electric power, clean water and a clean work area at the fabrication location where the Dryvit materials are to be applied.
 - 2. Prior to installation of the Outsulite Securock ExoAir 430 Panel System, the panel erector shall verify that the building structure is of a type that can accommodate attachment of the Outsulite Panels in accordance with approved engineered as per approved engineered shop drawings.
 - 3. Verify that wall surface on which Outsulite Securock ExoAir 430 Panel System is to be installed is Securock ExoAir 430 coated fiberglass mat gypsum sheathing panel with integral weather-resistant barrier and air barrier (USG Corporation).
 - 4. Verify the deflection of the substrate does not exceed 1/240 times the span. Verify substrate is flat within 1/4 in (6.4 mm) in a 4 ft (1.2 m) radius.
 - 5. Verify substrate is sound, dry, connections are tight; has no surface voids, projections, or other conditions that may interfere with the Outsulite Securock ExoAir 430 Panel System installation or performance.
 - 6. Verify the slope of inclined surfaces are not less than 6:12 (27 °) where the length of the slope does not exceed 12 in (305 mm) or 3:12 (14 °) where the length of the slope does not exceed 4 in (102 mm).
 - 7. Verify metal roof flashings have been installed in accordance with Sheet Metal and Air Conditioning Contractors National Association (SMACNA) standards in accordance with approved shop drawings.
 - 8. Verify all rough openings are flashed in accordance with the Outsulite Securock ExoAir 430 Panel System manufacturer's installation details, or as otherwise necessary to prevent water penetration. Verify chimneys, balconies and decks have been properly flashed as necessary to prevent water penetration.
 - 9. Verify windows and doors are installed and flashed per manufacturer's requirements and installation details in accordance with approved shop drawings. as per approved shop drawings.
 - 10. Notify general contractor of all discrepancies prior to the installation of the Outsulite Securock ExoAir 430 Panel System.
 - 11. Verify that expansion joints are coordinated for and installed:
 - (Note to Specifier: Design and location of expansion joints in the panel system is the responsibility of the panel fabricator, panel engineer and project designer and as designated on contract drawings and in the panel shop drawings.)
 - a. Where building expansion joints occur.
 - b. Where significant movement is expected.
 - c. Where the Outsulite Securock ExoAir 430 Panel System abuts dissimilar materials.
 - d. Where prefabricated panels abut one another.
 - e. Where significant structural movement occurs, such as changes in roof line, building shape or structural system.
 - 12. Vapor Retarders: The use and location of vapor retarders within a wall assembly is the responsibility of the project designer and shall comply with local building code requirements. The type and location shall be noted on the project drawings and specifications. Vapor retarders may be inappropriate in certain climates and can result in condensation within the wall assembly.

3.02 PREPARATION

DS960

- A. Coordinate for related specification and integration of Coated Fiberglass Mat Gypsum Sheathing Panel with Integral Weather-Resistant Barrier and Air Barrier and Accessory Materials as referenced in Section 2.02.B.1 herein above and Sealants as referenced in Section 2.02.C herein above.
- B. Prepare the substrate to be free of foreign materials, such as oil, dust, dirt, form-release agents, efflorescence, paint, wax, water repellants, moisture, frost, and any other condition that may inhibit adhesion.
- C. Protect the Outsulite Securock ExoAir 430 Panel System materials by permanent or temporary means from inclement weather and other sources of damage prior to, during, and following application until completely dry.
- D. Protect adjoining work and property during installation of the Outsulite Securock ExoAir 430 Panel System.

3.03 INSTALLATION

- A. The prefabricated Outsulite Securock ExoAir 430 Panel System shall be applied in strict accordance with the current Dryvit Outsulite Fabrication and Installation Instructions <u>DS951</u>.
- B. The overall minimum base coat thickness shall be sufficient to fully embed the reinforcing mesh. The recommended method is to apply the base coat in two (2) passes.
- C. Install the Dryvit Exterior Insulation and Finish System materials / system in accordance with ASTM C1397 and the Dryvit Outsulite Securock ExoAir 430 Panel System Application Instructions, <u>DS951</u>. Apply base coat sufficient to fully embed the reinforcing mesh. The recommended method is to apply the base coat in two (2) passes.
- D. Apply sealant to base coat surface prepared in accordance with Dryvit Publication <u>DS153</u>.
- E. Install high impact reinforcing mesh as specified at ground level, high traffic areas and other areas exposed to or susceptible to impact damage as designated on contract drawings.
 - F. Install Site and/or Machine Pre-Base Coated EPS starter boards in accordance with Dryvit Publication <u>DS854</u>.

3.04 FABRICATION AND FIELD QUALITY CONTROL

- A. The panel fabricator, panel erector and general contractor shall coordinate and provide adequate space for the safe and protected handling, loading, transporting, storing, craning and erecting of the panels in a safe manner as necessary and in accordance with contract documents.
- B. The panel fabricator shall be responsible for the proper design in accordance with contract documents, fabrication and application of the Dryvit Outsulite Exterior Insulation and Finish System (EIFS) materials.
- C. The panel erector shall be responsible for the proper erection of the panels in accordance with approved shop drawings and contract documents.
- D. The manufacturer of the Exterior Insulation and Finish System materials integrated into the Outsulite Securock ExoAir 430 Panel System assumes no responsibility for fabrication location or on-site inspections or application of its products.
- E. The Outsulite Securock ExoAir 430 Panel System fabricator to certify in writing the quality of work performed relative to the substrate system, details, installation procedures, and as to the specific products used.
- C. EPS supplier, if requested, to certify in writing that the EPS meets the Outsulite Securock ExoAir 430 Panel System manufacturer's specifications.

D. The sealant contractor, if requested, to certify in writing that the sealant application is in accordance with the sealant manufacturer's and the Outsulite Securock ExoAir 430 Panel System manufacturer's recommendations.

3.05 CLEANING

- A. Remove all excess Outsulite Securock ExoAir 430 Panel System materials from the job site by the contractor in accordance with contract provisions and as required by applicable law.
- B. Leave all surrounding areas, where the Outsulite Securock ExoAir 430 Panel System has been applied, free of debris and foreign substances resulting from the Outsulite Securock ExoAir 430 Panel System fabricator's work.

For more information on <u>Dryvit Systems</u> or <u>Continuous Insulation</u> visit these links.



USG SECUROCK" EXOAIR" 430