

ESR-4677

Reissued December 2024	This report also contains:		
	- City of LA Supplement		
Subject to renewal December 2025	- CA Supplement		

- FL Supplement

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DIVISION: 07 00 00 — THERMAL AND MOISTURE PROTECTION Section: 07 24 00 — Exterior Insulation and Finish Systems Section: 07 24 19 — Water-Drainage Exterior Insulation and Finish System	REPORT HOLDER: TREMCO CPG, INC.	EVALUATION SUBJECT: OUTSULATION® PLUS MD SECUROCK® EXOAIR® 430 SYSTEM	
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1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2021, 2018, 2015, 2012 and 2009 *International Building Code*[®] (IBC)
- 2021, 2018, 2015, 2012 and 2009 International Residential Code® (IRC)
- 2013 Abu Dhabi International Building Code (ADIBC)[†]

[†]The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

Properties evaluated:

PROPERTY	IBC CHAPTER	IRC CHAPTER
Exterior insulation and finish systems (EIFS)	14	R7
Weather resistance	14	R7
Fire-resistance-rated construction	7	R3
Special inspections	17	NA
Structural – transverse wind load resistance	16	R6
Types I-IV (noncombustible) construction	26	NA
Surface burning characteristics	26	R3
Ignition resistance	26	NA

2.0 USES

The Outsulation[®] Plus MD Securock[®] ExoAir[®] 430 System is an exterior insulation and finish system (EIFS) complying with 2021 and 2018 IBC Section 1407 (2015, 2012 and 2009 IBC Section 1408) and IRC Section



R703.9. The system complies as an EIFS with drainage in accordance with 2021 and 2018 IBC Section 1407.4.1 (2015, 2012 and 2009 IBC Section 1408.4.1) and IRC Section R703.9.

The system may be used in fire-resistance-rated Type V construction, when installed in accordance with Section 4.6 of this report, and in Types I, II, III and IV construction when installed in accordance with Section 4.5 of this report.

3.0 DESCRIPTION

3.1 System Components:

See <u>Table 1</u>. The system consists of the substrate described in Section 3.3, expanded polystyrene (EPS) insulation board, basecoat, reinforcing mesh and finish.

3.2 Insulation Board:

Insulation boards must be one of the following:

- a. EPS insulation board complying with ASTM C578, Type I, and ASTM E2430, produced by a molder with a current ICC-ES evaluation report. The board must be labeled in accordance with the applicable report.
- b. EPS insulation board complying with ASTM C578, Type I, and ASTM E2430, produced by a molder who participates in an approved third-party quality-assurance program. The board must be labeled in accordance with the applicable code.
- c. ThermalStar EIFS by Atlas Molded Products, a Division of Atlas Roofing Corporation, as described in ICC-ES evaluation report <u>ESR-1962</u>.

EPS insulation board must have a flame-spread index of 25 or less and a smoke developed index of 450 or less when tested in accordance with ASTM E84 or UL 723.

3.3 Substrate:

Substrate must be USG Corporation Securock[®] ExoAir[®] 430 panels described in ESR-4423.

3.4 Sealants:

Sealants must comply with ASTM C920, Type S or M, minimum Grade NS, minimum Class 25, and Use O and be Tremco, Inc. Spectrem[®] 1, Spectrem[®] 3 and Spectrem[®] 4.

4.0 DESIGN AND INSTALLATION

4.1 General:

Outsulation[®] Plus MD Securock[®] ExoAir[®] 430 System must be installed in accordance with 2021 and 2018 IBC Section 1407 (2015, 2012 and 2009 IBC Section 1408), IRC Section R703.9 and the manufacturer's application instructions, specifications, and installation details. These are available at:

https://www.dryvit.com/media/482249/outsulation-plus-md-se430-application-instructions_ds901_472020.pdf

https://www.dryvit.com/media/482257/details-opmd-se430-42020.pdf

https://www.dryvit.com/media/482261/ds902-opmd-securock-exoair-430-eifs-system-specification-472020.pdf

4.2 Drainage:

Drainage is provided by applying Primus, Genesis, or Genesis DM adhesive in a vertical notched trowel configuration between the Securock[®] ExoAir[®] 430 panels and the flat EPS insulation board.

4.3 Wind Design:

<u>Table 2</u> describes specific assemblies for which test data has been submitted. Other assemblies may be considered for approval by local code officials based on testing and/or calculations of a qualified design professional.

4.4 Weather Protection:

Outsulation[®] Plus MD Securock[®] ExoAir[®] 430 System complies with 2021 and 2018 IBC Section 1402.2 (2015, 2012 and 2009 IBC Section 1403.2) and IRC Section R703.1.1. Securock[®] ExoAir[®] 430 panels must be installed in accordance with ESR-4423.

4.5 Types I, II, III and IV Construction:

<u>Table 3</u> describes assemblies using the Outsulation[®] Plus MD Securock[®] ExoAir[®] 430 System that are qualified for use in Types I through IV construction.

4.6 Fire-resistance-rated Construction Assemblies:

Table 4 describes assemblies using the Outsulation[®] Plus MD Securock[®] ExoAir[®] 430 System that are qualified for use in nonload-bearing and load-bearing fire-resistance-rated construction. In Type V construction, the Outsulation[®] Plus MD Securock[®] ExoAir[®] 430 System may be attached to the surface of combustible exterior fire-resistance-rated assemblies described in 2021, 2018, 2015 and 2012 IBC Table 721.1(2) [2009 IBC Table 720.1(2)] without changing the assigned hourly rating of the assembly. The exterior wall must have a minimum 10-foot (3048 mm) separation distance from adjacent construction.

5.0 CONDITIONS OF USE

The Outsulation[®] Plus MD Securock[®] ExoAir[®] 430 System described in this report complies with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- **5.1** Installation must comply with this report, the manufacturer's published application instructions, installation details and the applicable code. In the event of a conflict between the manufacturer's instructions and this report, this report governs.
- **5.2** The insulation board must be separated from the building interior by a thermal barrier complying with the applicable code.
- **5.3** Installation must be by applicators listed by Tremco CPG, Inc.
- 5.4 Termination of the system must not be less than 6 inches (152 mm) above finished grade, in accordance with 2021, 2018, 2015 and 2009 IBC Section 2603.8 (2012 IBC Section 2603.9) and IRC Section R318.4 and 2018, 2015 IRC Section R703.9.2 (2012 and 2009 IRC Section R703.9.4.1).

6.0 EVIDENCE SUBMITTED

- 6.1 Reports of tests in accordance with ASTM E2568.
- **6.2** Data in accordance with the ICC-ES Acceptance Criteria for EIFS Clad Drainage Wall Assemblies (AC235), dated January 2015 (editorially revised July 2020).
- 6.3 Reports of tests in accordance with ASTM E119, NFPA 285 and NFPA 268.

7.0 IDENTIFICATION

- **7.1** The ICC-ES mark of conformity, electronic labeling, or the evaluation report number (ICC-ES ESR-4677) along with the name, registered trademark, or registered logo of the report holder (Tremco CPG, Inc.) must be included in the product label.
- **7.2** In addition, each container or package of the coating or reinforcing mesh used as part of the Outsulation[®] Plus MD Securock[®] ExoAir[®] 430 System must be labeled with the Tremco CPG, Inc., name, and address; the product name; lot or batch number; quantity of material; storage instructions; pot life and the expiration date.

EPS insulation boards must be labeled with the manufacturer's name; manufacturing address or plant identification; name of the inspection agency; and the current ICC-ES evaluation report number.

7.3 The report holder's contact information is as follows:

TREMCO CPG, INC. 3735 GREEN ROAD BEACHWOOD, OHIO 44122 (216) 292-5154 www.tremcosealants.com

TABLE 1—COATING SYSTEM COMPONENTS¹

System	Water-Resistive Barrier System	Base Coat	Reinforcing Mesh	Finish
Outsulation [®] Plus MD Securock [®] ExoAir [®] 430 System	Securock [®] ExoAir [®] 430 panels installed in accordance with ESR-4423	Primus, Genesis, or Genesis DM	Standard Reinforcing Mesh, Nominally 4.3 oz/yd ² minimum ²	DPR PMR NewBrick ³

¹Refer to Section 3.2 for insulation boards.

²Higher weight meshes are permitted.

³Evaluation of NewBrick finish is limited to assemblies described in <u>Table 3</u> and <u>4</u> of this report. Compliance with other aspects of code compliance is outside the scope of this report and must be shown to the satisfaction of the code official.

Wind Load Capacity (Allowable)^{2,3} **Framing Members** Substrate Max. Max. Fastener Type, Min. Depth Negative Positive Spacing Type Fastener Type Spacing (inches) (psf) (psf) (inches o.c.) (inches o.c.) No. 6 self-drilling 2x4 Wood¹ 16 6 40 50 screws, 1⁵/₈-inch long No. 6 self-drilling 8 2x6 Wood¹ See note 2 16 35 screws, 13/8 -inch-long No. 6 self-drilling 2x6 Wood¹ 8 24 26 See note 2 screws, 1³/₈-inch-long No. 6 self-drilling 3⁵/₈-inch-by No. 18 16 Section 3.3 8 37 See note 2 gage-steel screws, 1¹/₄-inch-long 3⁵/₈-inch-by No. 18 No. 6 self-drilling 6 43 16 See note 2 gage-steel screws, 1¹/₄-inch-long 3⁵/₈-inch-by No. 18 No. 6 self-drilling 4 16 54 See note 2 gage-steel screws, 1¹/₄-inch-long 3⁵/₈-inch-by No. 18 No. 6 self-drilling 6 16 40 60 screws, 15/8-inch-long gage-steel

TABLE 2—WIND LOAD DESIGN

For SI: 1 inch = 25.4 mm; 1 psf = 0.0479 kPa.

¹Minimum nominal 2x4 wood framing, minimum specific gravity 0.43.

²Maximum positive pressure is limited to the capacity of the framing and structural sheathing substrate, determined in accordance with the applicable code. ³Framing members must be designed to resist all positive and negative transverse design loads with a maximum allowable deflection of 1/240 of the span.

TABLE 3—ASSEMBLIES FOR USE WITH TYPE I, II, III AND IV CONSTRUCTION²

Framing Members			Interior Sheathing			Exterior Sheathing			Insulation Board
Min. Depth (inch)	Min. Gage	Max. spacing (inch)	Type and Min. Thickness (inch)	Fastener Type	Max. Fastener Spacing (inches o.c.)	Туре	Fastener Type	Max. Fastener Spacing (inches o.c.)	Thickness Maximum ¹ (inch)
S	teel Frami	ng							
3 ⁵ /8	20 (0.033 inch)	16" o.c.	Min. ⁵ /e inch Type X gypsum wallboard complying with ASTM C36 or ASTM C1396	Minimum No. 6, 1 ¹ / ₄ -inch-long buglehead, self- drilling Type S screws	8 inch at board joints, 12 inch at intermediate framing	Securock ExoAir 430 panels complying with ESR- 4423	Minimum No. 8, 1 ¹ / ₄ -inch-long, self-drilling Type S screws	8 inch o.c. along all studs	13 ⁵
3 ⁵ /8	18 (0.043 inch)	16" o.c.	Min. ⁵ / ₈ inch Type X gypsum wallboard complying with ASTM C36 or ASTM C1396	Minimum No. 6, 1 ¹ / ₄ -inch-long buglehead, self- drilling Type S screws	8 inch at board joints, 12 inch at intermediate framing	Securock ExoAir 430 panels complying with ESR- 4423	Minimum No. 6, 1 ¹ / ₄ -inch-long, self-drilling Type S screws	8 inch o.c. around perimeter and 12 inch o.c. in the field	44
Fire-retardant-treated Wood Studs ³									
2x4	N/A	24" o.c.	Min. ⁵ / ₈ inch Type X gypsum wallboard complying with ASTM C36 or ASTM C1396	Minimum No. 8, corrosion-resistant steel, Type W, bugle-head drywall screws	8 inch at board joints, 12 inch at intermediate framing	Securock ExoAir 430 panels complying with ESR- 4423	Minimum No. 8, 1 ⁵ / ₈ -inch-long, corrosion- resistant steel, Type W, bugle- head drywall screws	8 inch at board joints, 12 inch at intermediate framing	4 ⁵

For SI: 1 inch = 25.4 mm.

¹Combustible content of the foam plastic must not exceed an average potential heat content of 6,000 Btu/ft² (68.2 MJ/m²) in every 20-square-foot wall area. ²Floor levels must be blocked with 4-inch-thick (102 mm), 4 pcf (64.1 kg/m³) mineral-fiber insulation. ³ Fire-retardant treated wood studs must comply with IBC Section 2303.2. Fire-retardant-treated wood framing is acceptable in Types I, II, III or IV construction as permitted by Chapter 6 of the IBC. ⁴ EIFS Assembly: Basecoat: Any. Finish: NewBrick installed over insulation board covered with reinforcing mesh and adhesive. NewBrick must be ⁵ the tended to the method for the tended over insulation board covered with reinforcing mesh and adhesive. NewBrick must be

installed with manufacturers installation instructions. Evaluation of the NewBrick system is limited to use in Types I, II, III or IV construction. Code compliance of other aspects of NewBrick is outside the scope of this report and must be shown to the satisfaction of the code official. ⁵EIFS Assembly: Basecoat: Any. Finish Coat: DPR and PMR.

TABLE 4—FIRE-RESISTANCE-RATED ASSEMBLIES^{1, 2}

ONE-HOUR – NONLOADBEARING								
Framing	Framing members Interior Sheathing		Exterior Sheathing			Insulation Board		
Туре	Max. spacing (inches o.c.)	Type and Min. Thickness (inch)	Fastener Type	Max. Fastener Spacing (inches o.c.)	Type and Min. Thickness (inch)	Fastener Type	Max. Fastener Spacing (inches o.c.)	Max. Thickness (inches)
3 ⁵ / ₈ -inch- by No. 25 gage- steel	24	Min. ⁵ / ₈ inch Type X gypsum wallboard complying with ASTM C36 or ASTM C1396	Minimum No. 6, 1 ¹ / ₄ -inch-long buglehead, self- drilling Type S screws	8inch at board joints, 12 inch at intermediate framing	⁵ / ₈ inch Securock ExoAir 430 panels complying with ESR-4423	Minimum No. 8, 1 ¹ / ₄ -inch-long, self- drilling Type S screws	8inch at board joints, 12 inch at intermediate framing	4
			TWO-H	IOUR - LOAD-	BEARING ³			
Туре	Max. spacing (inches o.c.)	Type and Min. Thickness (inch)	Fastener Type	Max. Fastener Spacing (inches o.c.)	Type and Min. Thickness (inch)	Fastener Type	Max. Fastener Spacing (inches o.c.)	Max. Thickness (inches)
2x4 wood studs	16	(2) layers of min. ⁵ / ₈ inch Type X gypsum wallboard complying with ASTM C36 or ASTM C1396	Layer 1: Minimum No. 8, 2-inch-long buglehead, Type W screws Layer 2: Minimum No. 8, 2 ¹ / ₂ -inch- long buglehead, Type W screws	Layers 1 and 2: 8 inch at board joints, 12 inch at intermediate framing	(2) layers of ⁵ / ₈ inch Securock ExoAir 430 panels complying with ESR-4423	Layer 1: Minimum No. 8, 2-inch-long buglehead, Type W screws Layer 2: Minimum No. 8, 2 ¹ / ₂ -inch-long buglehead, Type W screws	Layers 1 and 2: 8 inch at board joints, 12" at intermediate framing	4

For SI: 1 inch = 25.4 mm.

¹EIFS Assembly: Adhesive: Any, except Genesis DM; Base Coat: Any, except Genesis DM; Finish Coat: Any.

²Rated from both sides.

³Design stress reduced to 78 percent of the adjusted F'c and have a slenderness ratio of le/d of 33.



ESR-4677 City of LA Supplement

Reissued December 2024 This report is subject to renewal December 2025.

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DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION Section: 07 24 00—Exterior Insulation and Finish Systems Section: 07 24 19—Water-Drainage Exterior Insulation and Finish System

REPORT HOLDER:

TREMCO CPG, INC.

EVALUATION SUBJECT:

OUTSULATION® PLUS MD SECUROCK® EXOAIR® 430 SYSTEM

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that the Outsulation[®] Plus MD Securock[®] ExoAir[®] 430 System, described in ICC-ES evaluation report <u>ESR-4677</u>, has also been evaluated for compliance with the codes noted below as adopted by the Los Angeles Department of Building and Safety (LADBS).

Applicable code editions:

- 2023 City of Los Angeles Building Code (LABC)
- 2023 City of Los Angeles Residential Code (LARC)

2.0 CONCLUSIONS

The Outsulation[®] Plus MD Securock[®] ExoAir[®] 430 System, described in Sections 2.0 through 7.0 of the evaluation report <u>ESR-4677</u>, complies with LABC Chapters 7, 14 and 26, and LARC Sections R316 and R703, and is subjected to the conditions of use described in this evaluation report supplement.

3.0 CONDITIONS OF USE

The Outsulation[®] Plus MD Securock[®] ExoAir[®] 430 System described in this evaluation report supplement must comply with all of the following conditions:

- All applicable sections in the evaluation report ESR-4677.
- The design, installation, conditions of use and identification of the Outsulation[®] Plus MD Securock[®] ExoAir[®] 430 System are in accordance with the 2021 *International Building Code*[®] (IBC) provisions noted in the evaluation report <u>ESR-4677</u>.
- The design, installation and inspection are in accordance with additional requirements of LABC Chapters 16 and 17, as applicable.

This supplement expires concurrently with the evaluation report, reissued December 2024.





ESR-4677 CA Supplement

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DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION Section: 07 24 00—Exterior Insulation and Finish Systems Section: 07 24 19—Water-Drainage Exterior Insulation and Finish System

REPORT HOLDER:

TREMCO CPG, INC.

EVALUATION SUBJECT:

OUTSULATION® PLUS MD SECUROCK® EXOAIR® 430 SYSTEM

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that the Outsulation[®] Plus MD Securock[®] ExoAir[®] 430 System, described in ICC-ES evaluation report ESR-4677, has also been evaluated for compliance with the codes noted below.

Applicable code editions:

■ 2022 California Building Code (CBC)

For evaluation of applicable chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) AKA: California Department of Health Care Access and Information (HCAI) and the Division of State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

■ 2022 California Residential Code (CRC)

2.0 CONCLUSIONS

2.1 CBC:

The Outsulation[®] Plus MD Securock[®] ExoAir[®] 430 System, described in Sections 2.0 through 7.0 of the evaluation report ESR-4677, complies with CBC Chapters 7, 14, and 26 provided the design and installation are in accordance with the 2021 *International Building Code*[®] (IBC) provisions noted in the evaluation report, ESR-4677, and the additional requirements of CBC Chapters 16 and 17, as applicable.

2.1.1 OSHPD:

The applicable OSHPD Sections and Chapters of the CBC are beyond the scope of this supplement.

2.1.2 DSA:

The applicable DSA Sections and Chapters of the CBC are beyond the scope of this supplement.

2.2 CRC:

The Outsulation[®] Plus MD Securock[®] ExoAir[®] 430 System, described in Sections 2.0 through 7.0 of the evaluation report ESR-4677, complies with CRC Chapters 3 and 7, provided the design and installation are in accordance with the 2022 *International Residential Code[®]* (IRC) provisions noted in the evaluation report, ESR-4677.

This supplement expires concurrently with the evaluation report, reissued December 2024.





ESR-4677 FL Supplement

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REPORT HOLDER:

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1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Outsulation[®] Plus MD Securock[®] ExoAir[®] 430 System, described in ICC-ES evaluation report ESR-4677, has also been evaluated for compliance with the codes noted below.

Applicable code editions:

- 2023 Florida Building Code—Building
- 2023 Florida Building Code—Residential

2.0 CONCLUSIONS

The Outsulation[®] Plus MD Securock[®] ExoAir[®] 430 System, described in Sections 2.0 through 7.0 of the evaluation report ESR-4677, complies with the *Florida Building Code—Building* and the *Florida Building Code—Residential*. The design requirements must be determined in accordance with the *Florida Building Code—Building* or the *Florida Building Code—Residential*, as applicable. The installation requirements noted in ICC-ES evaluation report ESR-4677 for the 2021 *International Building Code[®]* meet the requirements of the *Florida Building Code—Building* or the *Florida Building Code—Residential*, as applicable, with the following condition:

The installation must meet the requirements of Section 1403.8 of the *Florida Building Code—Building* or Section R318.7 of the *Florida Building Code—Residential*, as applicable.

Use of the Outsulation[®] Plus MD Securock[®] ExoAir[®] 430 System for compliance with the High-Velocity Hurricane Zone provisions of the *Florida Building Code—Building* and the *Florida Building Code—Residential* has not been evaluated and is outside the scope of this evaluation report.

For products falling under Florida Rule 61G20-3, verification that the report holder's quality assurance program is audited by a quality assurance entity approved by the Florida Building Commission for the type of inspections being conducted is the responsibility of an approved validation entity (or the code official when the report holder does not possess an approval by the Commission).

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