

# **ICC-ES Listing Report**



**ESL-1250** 

Reissued February 2023 This listing is subject to renewal February 2024.

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A Subsidiary of the International Code Council®

CSI: DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION

Section: 07 42 43 - Composite Wall Panels

# **Product Certification System:**

The ICC-ES product-certification system includes evaluating reports of tests of standard manufactured product, prepared by accredited testing laboratories and provided by the listee, to verify compliance with applicable codes and standards. The system also involves factory inspections, and assessment and surveillance of the listee's quality system.

**Product:** OMEGA-LITE® ACM PANELS

Listee: LAMINATORS INC.

Omega-Lite® ACM panels are prefabricated panels consisting of a 0.185-inch (4.7 mm) thick extruded polypropylene core bonded to an unfinished 0.013-inch (0.33 mm) thick aluminum backer sheet on one side and a finished 0.028-inch (0.71 mm) thick aluminum sheet on the other side to create an overall panel thickness of 0.24-inch (6 mm) nominal; the panels were evaluated when tested in accordance to the following standard:

■ ASTM E330-14, Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference, ASTM International.

Findings:

**Evaluation:** 

Omega-Lite® ACM panels when used in various installations systems have ultimate design pressures as specified in Table 1 below based on testing in accordance with ASTM E330. See Figures 1-3 for details.

# TABLE 1—ULTIMATE DESIGN PRESSURE OF INSTALLATION SYSTEMS USING OMEGA-LITE® ACM PANELS

	INSTALLATION SYSTEMS		
	CLIP & CAULK SYSTEM WITH HORIZONTAL LAYOUT OF BD&V SUB-FRAMING OVER GYPSUM SHEATHING (Figure 1)	CLIP & CAULK SYSTEM WITH VERTICAL LAYOUT OF BD&V SUB-FRAMING OVER OMEGA CI (Figure 2)	1-PIECE, TIGHT-FIT MOLDING SYSTEM WITH VERTICAL LAYOUT OF BD&V SUB-FRAMING OVER OMEGA CI (Figure 3)
ULTIMATE DESIGN PRESSURE	+ 60 psf / -120 psf	+60 psf / -100 psf	+60 psf / -100 psf

For SI: 1 pound per square foot = 47.88 Pa

### Identification:

- Packaging of the Omega-Lite® ACM panels carry a label indicating the manufacturer's name (Laminators Inc.) and address, the product name (Omega-Lite® ACM panels), ICC-ES listing number (ESL-1250), and when applicable, the ICC-ES listing mark.
- The report holder's contact information is the following:

LAMINATORS INC. **3255 PENN STREET HATFIELD, PENNSYLVANIA 19440** (877) 663-4277 www.laminatorsinc.com



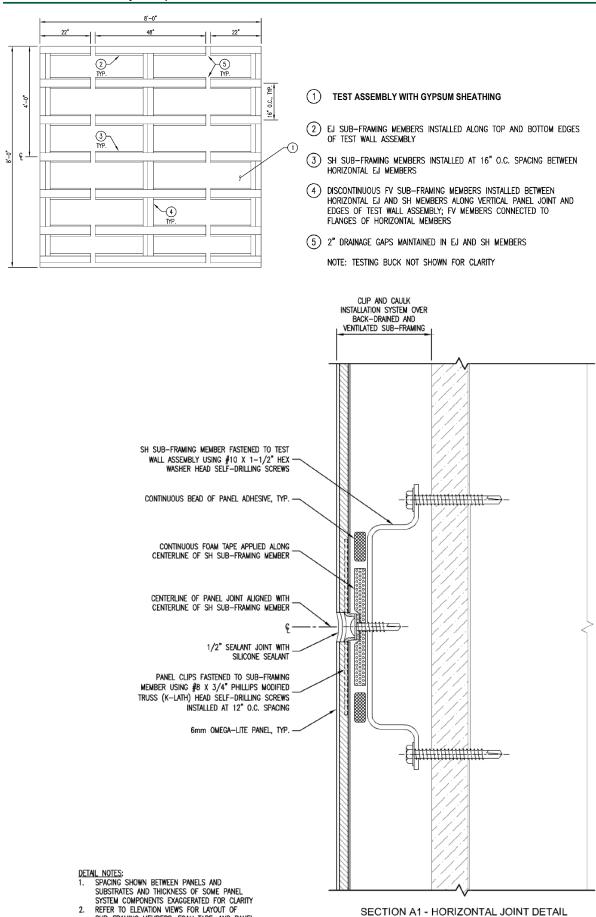
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Installation:

The product must be installed in accordance with Laminators Inc's published installation instructions and applicable codes.

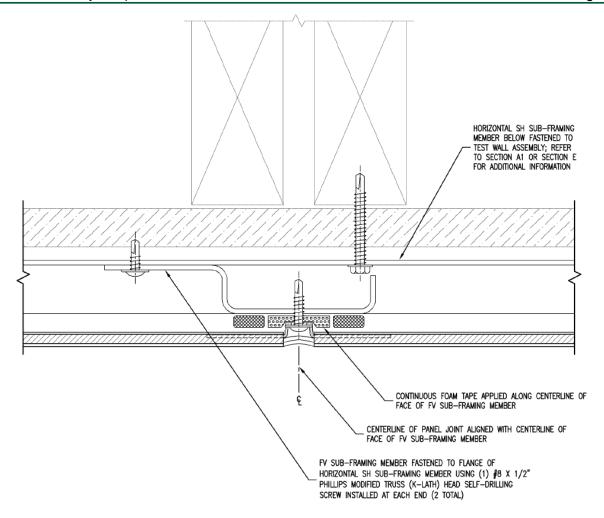
# **Conditions of Listing:**

- 1. The listing report addresses only conformance with the standard and code sections noted above.
- 2. Approval of the product's use is the sole responsibility of the local code official.
- 3. The listing report applies only to the materials tested and as submitted for review by ICC-ES.
- 4. The Omega-Lite® ACM panels are manufactured under a quality control program with inspections by ICC-ES.



SUB-FRAMING MEMBERS, FOAM TAPE, AND PANEL ADHESIVE

SECTION A1 - HORIZONTAL JOINT DETAIL



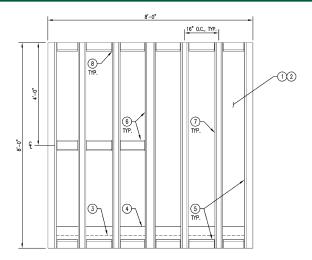
- DETAIL NOTES:

  1. SPACING SHOWN BETWEEN PANELS AND SUBSTRATES AND THICKNESS OF SOME PANEL SYSTEM COMPONENTS EXAGERATED FOR CLARITY

  2. REFER TO ELEVATION VIEWS FOR LAYOUT OF SUB-FRANING MEMBERS, FOAM TAPE, PANEL STREET AND MAD DIVING
- ADHESIVE, AND MOLDINGS
- REFER TO HORIZONTAL JOINT DETAIL (SECTION A1)
  FOR TYPICAL COMPONENTS NOT ANNOTATED

# SECTION A2 - VERTICAL JOINT DETAIL

FIGURE 1—CLIP & CAULK INSTALLATION SYSTEM WITH HORIZONTAL LAYOUT OF BD&V SUB-FRAMING OVER GYPSUM SHEATHING (continued)



- OMEGA CI. RIGID INSULATION PANELS (4" X 8" SHEETS, 2.1" THICK)
   PANELS CONSIST OF CLOSED-CELL, POLYISOCYANURATE FOAM
  BONDED TO A COATED GLASS BACKER AND 5/8" FIRE-TREATED
  PLYWOOD AS AN EXTERIOR FACE
   PANELS INSTALLED ON WALL ASSEMBLY COMPRISING
  EXTERIOR-GRADE CYPSUM SHEATHING INSTALLED OVER STEEL
  CYPSUM SHEATHING INSTALLED OVER STEEL
  - STUDS
  - PANELS FASTENED TO STUD FRAMING USING 1/4" X 3-3/4" FPH
  - PANELS FASIENCE ID SIDU FRAMING COING 1/7 A 0 3/7 ....
    WINGED REAMERS INSTALLED AT 8" O.C. SPACING ALONG PERIMETERS AND 16" O.C. VERTICAL SPACING ALONG STUDS SELF-ADHERING MEMBRANE FLASHING APPLIED TO BOTTOM EDGE OF OMEGA CI PANELS AND WRAPPED 2" (MIN) ON EACH VERTICAL FACE INCLUDING ENDS (NOT SHOWN)
- 2 HENRY AIR-BLOC 31MR FLUID-APPLIED AIR AND WATER BARRIER
- 3 METAL BASE WALL FLASHING
- 4 SELF-ADHERING MEMBRANE FLASHING LAPPED OVER TOP OF METAL BASE WALL FLASHING IN SHINGLE FASHION

- EJ SUB-FRAMING MEMBERS INSTALLED ALONG PERIMETER OF INSTALLATION; CONTINUOUS MEMBERS AT VERTICAL EDGES AND DISCONTINUOUS MEMBERS FIT BETWEEN FLANGES OF VERTICAL (5) MEMBERS AT HORIZONTAL EDGES
- 6 SH SUB-FRAMING MEMBERS INSTALLED ALONG PANEL JOINTS; CONTINUOUS MEMBERS AT VERTICAL JOINT AND DISCONTINUOUS MEMBERS FIT BETWEEN FLANGES OF VERTICAL MEMBERS AT HORIZONTAL JOINT
- 7 CONTINUOUS AH SUB-FRAMING MEMBERS INSTALLED AT 16" O.C. SPACING BETWEEN VERTICAL EJ AND SH MEMBERS
- (8) MESH VENT MATERIAL PLACED INTO GAPS BETWEEN HORIZONTAL AND VERTICAL MEMBERS AT TOP AND BOTTOM OF WALL (NOT SHOWN)

NOTE: TESTING BUCK NOT SHOWN FOR CLARITY

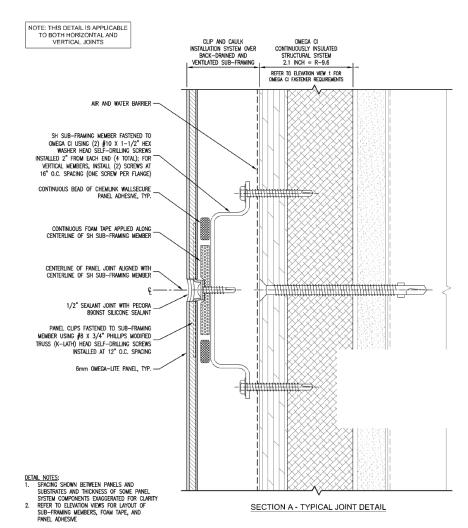
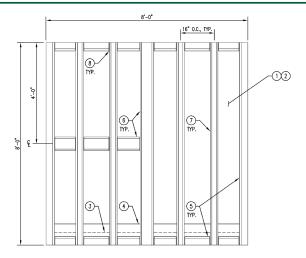


FIGURE 2—CLIP & CAULK INSTALLATION SYSTEM WITH VERTICAL LAYOUT OF BD&V SUB-FRAMING OVER OMEGA CI



- OMEGA CI RIGID INSULATION PANELS (4' X 8' SHEETS, 2.1" THICK)
   PANELS CONSIST OF CLOSED-CELL, POLYISOCYANUPATE FOAM
   BONDED TO A COATED GLASS BUCKER AND 5/8" FIRE-TREATED
   PLYWOOD AS AN EXTERIOR FACE
   PANELS INSTALLED ON WALL ASSEMBLY COMPRISING
   EXTERIOR—CRADE CYPSIUM SHEATHING INSTALLED OVER STEEL
   STUDS.

  - STUDS

    PANELS FASTENED TO STUD FRAMING USING 1/4" X 3-3/4" FPH
    WINGED REAMERS INSTALLED AT 8" O.C. SPACING ALONG
    PERMISTERS AND 16" O.C. VERTICAL SPACING ALONG STUDS

    SELF-ADHERING MEMBRANE FLASHING APPLIED TO BOTTOM EDGE
    OF DIAGRA CI PANELS AND WRAPPED 2" (MIN) ON EACH VERTICAL
    FACE INCLUDING ENDS (NOT SHOWN)
- (2) HENRY AIR-BLOC 31MR FLUID-APPLIED AIR AND WATER BARRIER
- (3) METAL BASE WALL FLASHING
- (4) SELF-ADHERING MEMBRANE FLASHING LAPPED OVER TOP OF METAL BASE WALL FLASHING IN SHINGLE FASHION
- (5) EJ SUB-FRAMING MEMBERS INSTALLED ALONG PERIMETER OF INSTALLATION; CONTINUOUS MEMBERS AT VERTICAL EDGES AND DISCONTINUOUS MEMBERS FIT BETWEEN FLANGES OF VERTICAL MEMBERS AT HORIZONTAL EDGES
- 6 RH SUB-FRAMING MEMBERS INSTALLED ALONG PANEL JOINTS; CONTINUOUS MEMBERS AT VERTICAL JOINT AND DISCONTINUOUS MEMBERS FIT BETWEEN FLANGES OF VERTICAL MEMBERS AT HORIZONTAL JOINT
- 7 CONTINUOUS AH SUB-FRAMING MEMBERS INSTALLED AT 16" O.C. SPACING BETWEEN VERTICAL EJ AND RH MEMBERS
- (8) MESH VENT MATERIAL PLACED INTO GAPS BETWEEN HORIZONTAL AND VERTICAL MEMBERS AT TOP AND BOTTOM OF WALL (NOT SHOWN)

NOTE: TESTING BUCK NOT SHOWN FOR CLARITY

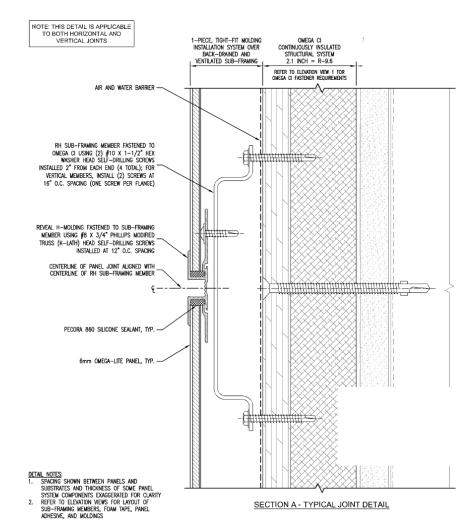


FIGURE 3—1-PIECE, TIGHT-FIT MOLDING INSTALLATION SYSTEM WITH VERTICAL LAYOUT OF BD&V SUB-FRAMING OVER **OMEGA CI**