ICC-ES Evaluation Report

ESR-4646

Reissued October 2023

Revised February 2024

Subject to renewal October 2024

This report also contains:

- CBC Supplement

- FBC Supplement

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DIVISION: 07 00 00 — THERMAL AND MOISTURE PROTECTION **Section: 07 46 00 — Siding**	**REPORT HOLDER: INNOVATIVE METALS COMPANY, INC.**	**EVALUATION SUBJECT: LATITUDE AND ELEMENT EXTERIOR WALL PANELS**	

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2021 and 2018 *International Building Code*® (IBC)

For evaluation for compliance with codes adopted by the California Office of Statewide Health Planning and Development (OSHPD) and Division of State Architects (DSA), see ESR-4646 CBC Supplement.

Properties evaluated:

- Transverse wind load
- Fire

2.0 USES

Latitude and Element Exterior Wall Panels made from steel sheets are used as an exterior veneer on exterior walls of combustible or non-combustible construction (Type I-V). Latitude and Element Exterior Wall Panels made from aluminum sheets are used as exterior veneer on exterior walls of combustible construction (Type V).

3.0 DESCRIPTION

3.1 Latitude and Element Exterior Wall Panels: The Latitude and Element exterior wall panels are formed from steel conforming to ASTM A653 minimum Grade 40 with a G90 zinc coating designation or ASTM A792 Grade 40 with an AZ55 zinc coating or aluminum alloy confirming to 3003-H14 or 3105-H14. The Latitude Exterior wall panels made from steel have a minimum thickness of 22 gage [base metal thickness of 0.029-inch (0.74 mm)] and a maximum width of 16 inches 406 mm). The Latitude Exterior wall panels made from aluminum have a minimum thickness of 0.032-inch (0.81 mm) and a maximum width of 16 inches (406 mm). The Element exterior wall panels made from aluminum have a minimum thickness of 0.050-inch and a maximum width of 24 inches (610 mm). The Latitude and Element panels come in different profiles as shown in Figure 1. The Element panels come with folded ends as shown in Figure 2. The Latitude and Element panels may be painted with a minimum two coat coil applied, baked on full strength (70%) resin fluorocarbon coating system (polyvinylidene fluoride, PVF2) system. With the PVF2 coating applied, the Latitude and Element exterior wall panels have a flame spread index of less than 25 and a smoke-developed index of less than 450 when tested in accordance with ASTM E84. The steel material panels with the PVF2 coating applied is a composite material in accordance with IBC Section 703.5.2 and is acceptable as a noncombustible material. See Figures 1 and 2 for product details.

3.2 Clips: The clips used to attach the panels to the supporting structure are formed from minimum No. 18 gage thick [base-metal thickness of 0.047-inch (1.19 mm)] steel conforming to ASTM A653 Grade 40 with a G90 zinc coating designation or stainless-steel conforming to Type 304, 2B finish. The fasteners used to attach the clips to the supporting structure must be corrosion resistant No. 12 self-drilling sheet metal screws. See Figures 1 and 2 for clip details.

4.0 DESIGN AND INSTALLATION

4.1 General:

Installation of Latitude and Element exterior wall panels must comply with the prescriptive requirements of Section 1404.11 of the IBC; this report; and the manufacturer's published instructions. The manufacturer's published installation instructions must be available at the jobsite at all times during installation.

4.2 Wind Resistance:

The allowable wind pressures reported in Table 1 are based on the Latitude and Element Exterior Wall Panels attached to minimum 16 gage thick [base-metal thickness of 0.060-inch (1.52 mm)] cold-formed steel members using the clips and fasteners described in Section 3.2 of this report. Where required by the code, a code-complying water-resistive barrier must be installed behind the panels.

5.0 CONDITIONS OF USE:

The Latitude and Element Exterior Wall Panels described in this report comply with, or are 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 installation instructions and the applicable code. In the event of a conflict between the manufacturer's published installation instruction and this report, the most stringent governs.

5.2 A water-resistive barrier must be provided as required by the applicable code.

5.3 For the steel material panels, where installed on exterior walls greater than 40 feet in Types I, II, III or IV construction and the only combustible material is the water-resistive barrier, the water-resistive barrier must comply with Exception 2 of IBC Section 1402.5.

5.4 The framing to which the Latitude and Element Exterior Wall Panels are attached must be designed for the applicable positive and negative wind loads. Design of the substrate and framing is outside the scope of this report.

6.0 EVIDENCE SUBMITTED

6.1 Manufacturer's descriptive literature and installation instructions.

6.2 Documentation in accordance with American Architectural Manufactures Association Standard Specifications for Aluminum Siding, Soffit and Fascia (AAMA 1402).

6.3 Data in accordance with ASTM E84.

6.4 Quality documentation in accordance with ICC-ES Acceptance Criteria for Quality Documentation (AC10).

7.0 IDENTIFICATION

7.1 The panels are marked with the report holder's name, the panel name, and the evaluation report number (ESR-4646).

7.2 The report holder's contact information is the following:

INNOVATIVE METALS COMPANY, INC.
4648 OLD PEACHTREE ROAD
NORCROSS, GEORGIA 30071
(770) 908-1030
www.imetco.com

TABLE 1—LATITUDE AND ELEMENT EXTERIOR WALL PANELS ALLOWABLE WIND PRESSURES

PANEL TYPE	PANEL MATERIAL	PANEL MINIMUM THICKNESS (inch)	PANEL MAXIMUM WIDTH (inch)	PANEL METHOD OF ATTACHMENT TO SUPPORTING FRAMING		ALLOWABLE POSITVE AND NEGATIVE WIND PRESSURES, (psf)
				CLIP SPACING (inch)	QUANTITY OF FASTENERS COMPLYING WITH SECTION 3.2	
Latitude	Steel	0.029 (22 gage)	16	12	2	100
				36	2	50
	Aluminum	0.032	16	12	2	90
				36	2	40
Element	Aluminum	0.050	24	24	2	50

For **SI:** 1 inch = 25.4 mm, 1 psf = 47.88 Pa.

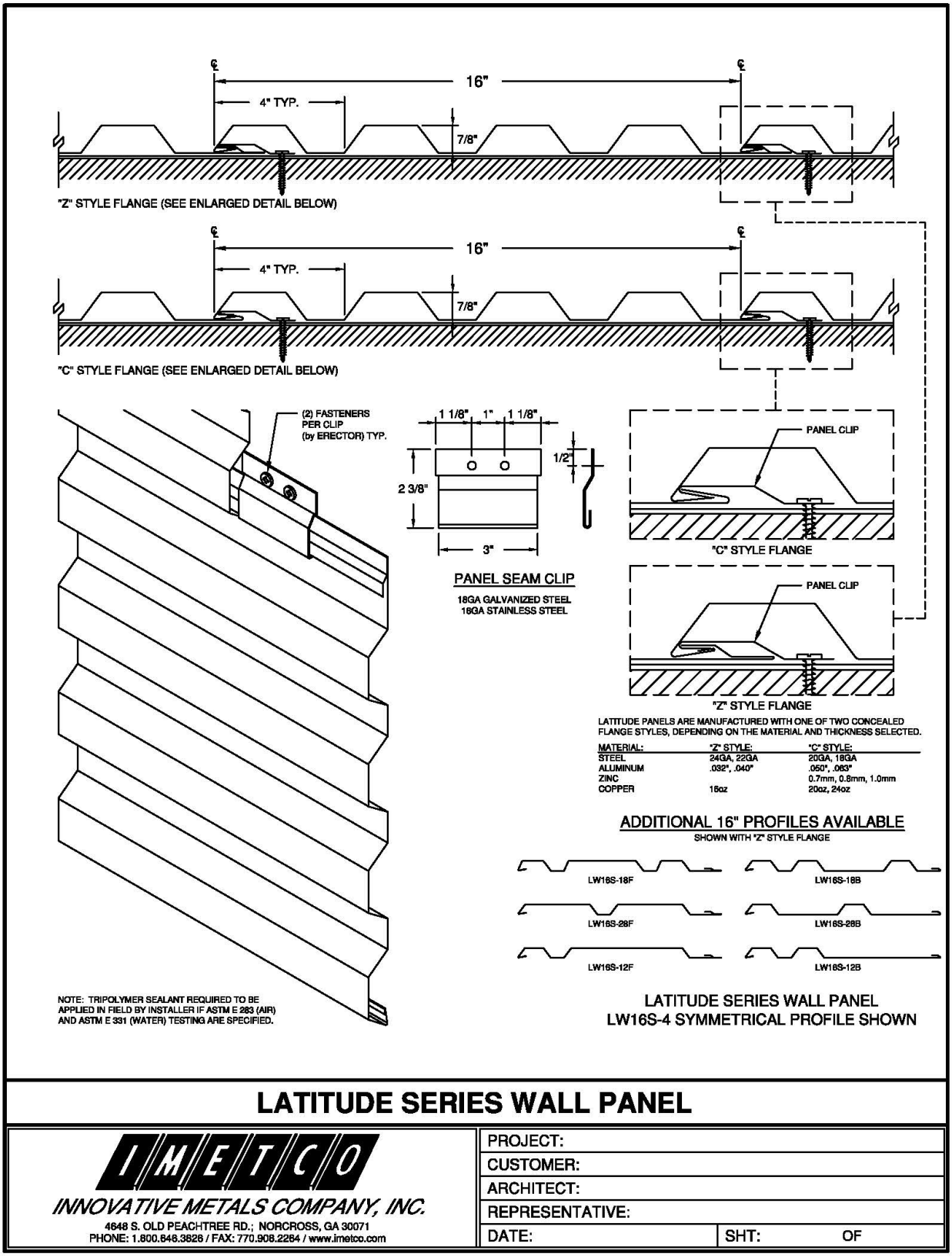

FIGURE 1—LATITUDE EXTERIOR WALL PANEL

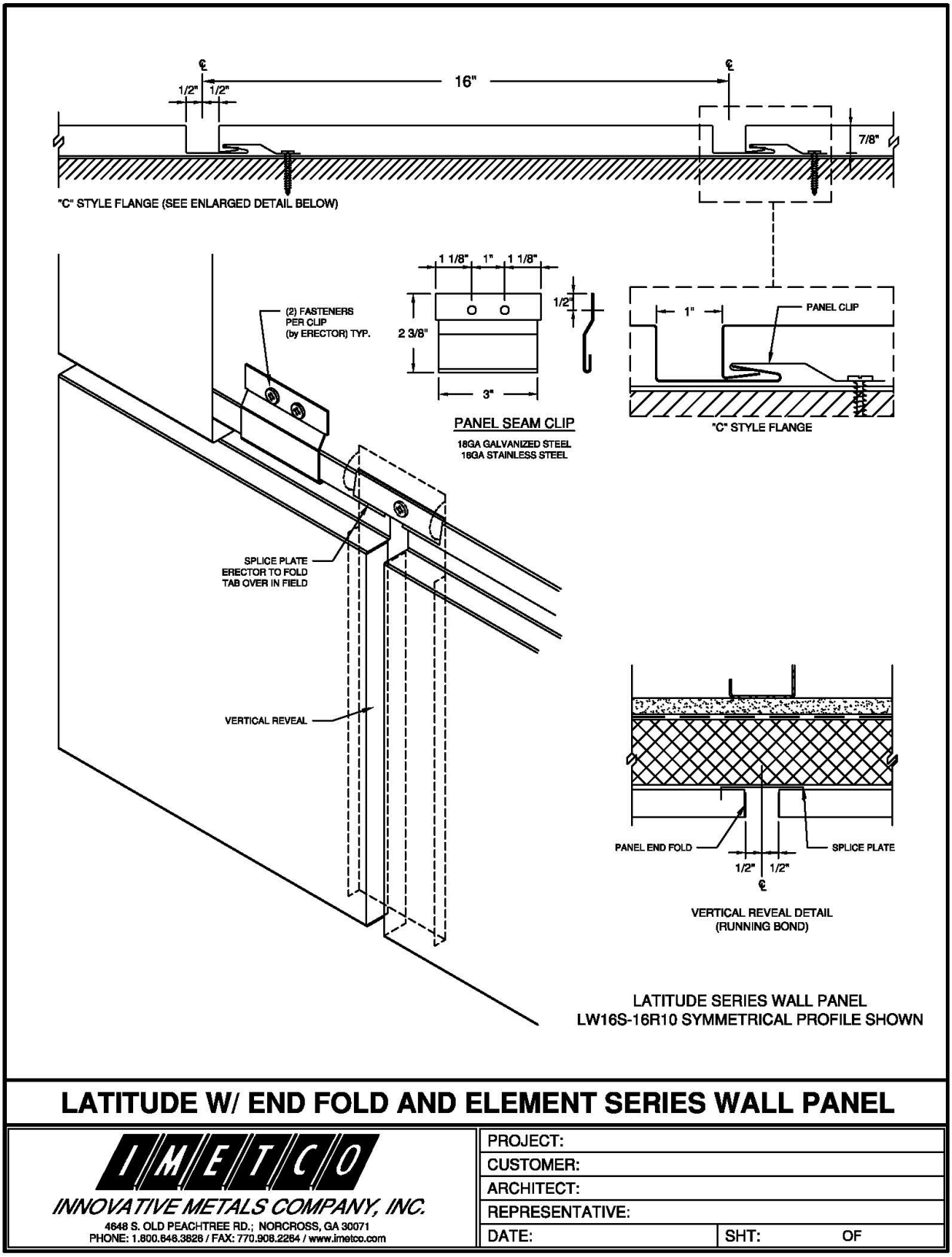

FIGURE 2—ELEMENT EXTERIOR WALL PANEL

DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION
Section: 07 46 00—Siding

REPORT HOLDER:

INNOVATIVE METALS COMPANY, INC.

EVALUATION SUBJECT:

LATITUDE AND ELEMENT EXTERIOR WALL PANELS

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that the Latitude and Element exterior wall panels, described in ICC-ES evaluation report ESR-4646, have also been evaluated for compliance with the code noted below.

Applicable code edition:

- 2019 *California Building Code* (CBC)

For evaluation of applicable chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) and Division of State Architect (DSA), see section 2.1.1 and 2.1.2 below.

2.0 CONCLUSIONS

2.1 CBC:

The Latitude and Element exterior wall panels, described in Sections 2.0 through 7.0 of the evaluation report ESR-4646, comply with CBC Chapters 7 and 14, provided the design and installation are in accordance with the 2018 *International Building Code®* (IBC) provisions noted in the evaluation report and the additional requirements of the CBC Chapters 7, 14 and 16, as applicable.

2.1.1 OSHPD:

The Latitude and Element exterior wall panels, described in Section 2.0 through 7.0 of the evaluation report ESR-4646, comply with CBC Chapter 7 and Chapter 14 with amendments, provided the design and installation are in accordance with CBC Chapters 14, 16 and 16A, as applicable.

2.1.2 DSA:

The Latitude and Element exterior wall panels described in Section 2.0 through 7.0 of the evaluation report ESR-4646, comply with CBC Chapter 7 and 14, provided the design and installation are in accordance with CBC Chapters 14, 16 and 16A, as applicable.

This supplement expires concurrently with the evaluation report, reissued October 2023 and revised February 2024.

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INNOVATIVE METALS COMPANY, INC.

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LATITUDE AND ELEMENT EXTERIOR WALL PANELS

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that the Latitude and Element exterior wall panels, described in ICC-ES evaluation report ESR-4646, have also been evaluated for compliance with the code noted below.

Applicable code editions:

- 2023 *Florida Building Code—Building*

2.0 CONCLUSIONS

The Latitude and Element exterior wall panels, described in Sections 2.0 through 7.0 of ICC-ES evaluation report ESR-4646, comply with the *Florida Building Code—Building*. The design requirements must be determined in accordance with the *Florida Building Code—Building*. The installation requirements noted in ICC-ES evaluation report ESR-4646 for the 2021 *International Building Code®* meet the requirements of the *Florida Building Code—Building.*

Use of the Latitude and Element exterior wall panels for compliance with the High-Velocity Hurricane Zone provisions of the *Florida Building Code—Building* have not been evaluated and is outside the scope of this supplemental 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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