

ICC-ES Evaluation Report


ESR-4436

Reissued December 2023

Subject to renewal December 2025

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<p>DIVISION: 10 00 00 — SPECIALTIES</p> <p>Section: 10 73 00 — Protective Covers</p>	<p>REPORT HOLDER: ALUMI-COVER AWNING CO., LLC.</p>	<p>EVALUATION SUBJECT: PATIO COVERS, CARPORTS AND COMMERCIAL ROOF STRUCTURES</p>	
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1.0 EVALUATION SCOPE

1.1 Compliance with the following codes:

- 2018 [International Building Code® \(IBC\)](#)
- 2018 [International Residential Code® \(IRC\)](#)

Property evaluated:

- Structural

1.2 Evaluation to the following green code(s) and/or standards:

- 2022 [California Green Building Standards Code \(CALGreen\)](#), Title 24, Part 11
- 2020, 2015, 2012 and 2008 [ICC 700 National Green Building Standard™](#) (ICC 700-2020, ICC 700-2015, ICC 700-2012 and ICC 700-2008)

2.0 USES

The Alumi-Cover Awning Co., LLC. freestanding and attached patio covers described in this report comply with Appendix I of the IBC and Appendix H of the IRC. Freestanding and attached carports and commercial structures are used as covers where permitted by the applicable chapters of the IBC, including IBC Section 406 for carports.

3.0 DESCRIPTION

3.1 General:

The freestanding and attached patio covers, carports and commercial structures must be constructed according to the engineering plans accompanying this report and as indicated in this report. The walls must be unenclosed on three sides for attached patio covers, and on four sides for freestanding patio covers, carports and commercial structures.

The attributes of the patio covers have been verified as conforming to the provisions of (i) CALGreen Section A4.404.3.3 for panelized framing systems and (ii) ICC 700-2020, ICC 700-2015, and ICC 700-2012 Sections 601.5 and 11.601.5 and ICC 700-2008 Section 601.5 for prefabricated components. Note that decisions on compliance for those areas rest with the user of this report. The user is advised of the project-specific provisions that may be contingent upon meeting specific conditions, and the verification of those conditions is outside the scope of this report. These codes or standards often provide supplemental information as guidance.

3.2 Materials:

3.2.1 Aluminum: The aluminum members are roll-formed and extruded shapes of various alloys and tempers, complying with Chapter 20 of the IBC and as specified in the engineering plans accompanying this report.

3.2.2 Steel: The steel members are formed from various grades of galvanized steel complying with ASTM A653, ASTM A123 or ASTM A153 and having a minimum grade or specified strengths and a minimum galvanized coating designation as specified in the engineering plans accompanying this report.

3.3 Mechanical Fasteners and Anchors:

Mechanical fasteners and anchors, used for connection amongst components of the cover structures (including patio covers, carports and commercial structures), and for connection of the attached cover structures to the supporting structures, must be in accordance with the engineering plans accompanying this report.

4.0 DESIGN AND INSTALLATION

The design and installation of the patio covers, carports and commercial structures must be in accordance with this report and the engineering plans, dated December 2, 2019, for the 2018 IBC/IRC, accompanying this report, as referenced in [Table 1](#).

5.0 CONDITIONS OF USE

The Alumi-Cover Awning Co., LLC., freestanding and attached patio covers, carports, and commercial structures described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 Construction of patio covers, carports and commercial structures must comply with this report and the engineering plans, dated December 2, 2019, for the 2018 IBC/IRC, as referenced in [Table 1](#). Where there is a conflict between this report and the plans, the more restrictive requirement governs.
- 5.2 Patio covers are limited to use as structures regulated under Appendix I of the IBC or Appendix H of the IRC. For columns supporting loads greater than 750 lbf (3336 N) when attached to a 3.5-inch (89 mm) concrete slab on grade without footings, a registered design professional must provide design and calculations to the satisfaction of the code official.
- 5.3 Carports and commercial structures are limited to use as structures regulated by the applicable chapters of the IBC, including IBC Section 406 for carports.
- 5.4 Any unit built in an area with a flat roof snow load greater than 30 psf (143.6 Pa) in Seismic Design Category A, B, C, D, D0, D1, D2, E or F, and not complying with Exception 1 of IBC Section 1613.1, is outside the scope of this report, except as permitted in the engineering plans corresponding to the 2018 IBC codes. The 2018 IBC engineering plans address seismic loads with roof snow loads over 30 psf.
- 5.5 Patio covers, carports and commercial structures installed in geographical areas cited in Section 26.8.1 of ASCE/SEI 7-16 for the 2018 IBC/IRC are outside the scope of this report.
- 5.6 Effects of sliding snow described in Section 7.9 of ASCE/SEI 7-16 for the 2018 IBC/IRC are outside the scope of this report.
- 5.7 The minimum live load for patio covers must be 10 psf (47.88 Pa). The minimum live load for carports and commercial structures must be 20 psf (95.76 Pa).
- 5.8 For attached patio cover structures, the mean roof height of the structure to which the patio cover is attached must not exceed 30 feet (9.1 m).
- 5.9 For attached units, the loads that are to be resisted by the structures to which the patios, carports and commercial structures are attached, as applicable, are provided in the accompanying plans. The adequacy of the structures that support the additional loading from the attached units must be justified, by a registered design professional, when required by the jurisdiction where the project is located, and the justification is subject to the approval of the code official.
- 5.10 Plans, details and specifications concerning proper installation of the patio covers, carports and commercial structures, that are applicable to the specific building under consideration, must be part of the construction documents submitted to the code official for approval.

6.0 EVIDENCE SUBMITTED

Data in accordance with the [ICC-ES Acceptance Criteria for Patio Covers \(AC340\)](#), dated August 2018.

7.0 IDENTIFICATION

- 7.1 Each structure bears a permanent decal or identifying tag stating allowable roof live/snow load, design wind speed and exposure, name of manufacturer (Alumi-Cover Awning Co., LLC.), and the ICC-ES evaluation report number (ESR-4436).
- 7.2 The report holder's contact information is the following:

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TABLE 1—ALUMI-COVER AWNING CO., LLC.: ENGINEERING PLANS (DATED DECEMBER 2, 2019) FOR PATIO COVERS, CARPORTS, AND COMMERCIAL STRUCTURES (FOR THE 2018 IBC/IRC)

DRAWINGS	PAGES	SECTION DESCRIPTION
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	2	STRUCTURAL CONFIGURATIONS
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Misc6-2018	1	7.0 FORCES ON EXISTING STRUCTURES
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