EVALUATION REPORT Number: 193

Originally Issued: 02/15/2011 Revised: 02/27/2018 Valid Through: 02/28/2019

MODULAR ARCHITECTURAL INTERIORS

ALUR WALL

CSI Section:
10 61 5 Demountable Partitions

1.0 RECOGNITION

Modular Architectural Interiors ALUR Wall recognized in this report has been evaluated for use as a relocatable, floor-to-ceiling, nonload-bearing, non-fire-resistance-rated, interior wall partition. The structural performance properties of the ALUR Wall complies with the intent of the provisions of the following codes and regulations:

- 2009 and 2006 International Building Code® (IBC)

2.0 LIMITATIONS

Use of the ALUR Wall System recognized in this report is subject to the following limitations:

2.1 The system shall be manufactured, identified, and installed in accordance with the IBC, this report and the manufacturer's published installation instructions. Where conflicts exist the more restrictive shall govern.

2.2 The maximum partition height is 10 feet (3048 mm)**.**

2.3 Panel installation is limited to interior non-load-bearing applications.

2.4 Glass panels shall be installed vertically.

2.5 Wired, patterned, sandblasted, or non-vertical glass are outside of the scope of this report.

2.6 Use of the panels to support furniture loads is outside the scope of this report.

2.7 Lateral bracing of the ALUR Wall System ceiling track shall be independent of the lateral bracing support of the building's ceiling grid, and shall conform to the requirements of this report, unless otherwise justified by a design professional and approved by the code official.

2.8 Anchorage of the ALUR Wall System floor track shall conform to the requirements of this report, unless otherwise justified by a design professional and approved by the code official.

2.9 In Essential Facilities (I_P = 1.5), the maximum S_S mapped short period spectral acceleration is 2.13 for partition heights of 10 feet (3048 mm) and 2.59 for partition heights of 9.5 feet 2896 mm).

2.10 In Seismic Design Categories A and B where I_p= 1.0, the minimum panel width shall be 6 inches (152 mm) wide with one floor anchor. In Seismic Design Categories A and B where I_p > 1.0 and Seismic Design Categories C to F, the minimum panel width shall be 14 inches (356 mm) wide with a minimum of two floor anchors, except in cases where the supporting floor slab consists of 4 inch (102 mm) minimum thickness normal-weight concrete, in which case the minimum panel width may be 6 inches (152 mm) wide with one anchor.

3.0 PRODUCT USE

3.1 General: The ALUR Wall System is a relocatable, floor-to-ceiling, nonload-bearing, nonfire-resistance-rated, interior wall partition system consisting of glazed wall panels and aluminum tracks and posts designed to interface and connect with one another or with existing building walls.

The system may be used in any Occupancy, including Essential Facilities, and in buildings assigned to Seismic Design Categories A to F.

3.2 Design: When the wall system is installed in accordance with this report and the manufacturer's published instructions, the wall system resists the greater of the 5 psf (239 Pa) transverse design load specified in IBC Section 1607.13, or the seismic design forces for nonstructural components in Seismic Design Categories A and B, where I_p >1.0, and in Seismic Design Categories C to F required in accordance with IBC Section 1613.1.

3.3 Installation: Installation shall be in accordance with the IBC, this report and the manufacturer's published installation guide.

4.0 PRODUCT DESCRIPTION

4.1 Product information: The wall system consists of glazed wall panels and doors and extruded aluminum tracks, as shown in Figures 1 and 2 of this report.

4.2 Material information:

4.2.1 Glazing: Tempered glass, ½ inch (12.7 mm) thick, with maximum height of 10 feet (3048 mm) complies with ANSI Z97.1, Class A and CPSC 16 CFR 1201, Category II as set forth in IBC Section 2406.2.

4.2.2 Aluminum Tracks and Posts: The members are extruded from 6063-T52 aluminum alloy with a minimum yield strength of 16,000 psi (110 MPa). Dimensional information is available from manufacturer upon request.

4.2.3 Doors: The ALUR Glass Pivot Door is made of full-height, frameless glass door leaf that is ½ inch (12.7 mm) thick and 35¾ inches (908 mm) wide, and operates with center pivot hinges, as shown in Figure 3 of this report.

The ALUR Wood Pivot Door is made of full-height, frameless solid core door leaf that is 1¾ inches (44.5 mm) thick and 35¾ inches (908 mm) wide and operates with ¾ inch (19 mm) offset pivot hinges.

The ALUR Single Glass Sliding Door is made of full-height, frameless glass door leaf that is ½ inch (12.7 mm) thick and 41-15/16 inches (1065 mm) wide, and operates with a sliding mechanism concealed in the 81⅞ inches (1249 mm) wide door track, as shown in Figure 4 of this report.

The ALUR Double Glass Sliding Door is made of two full-height, frameless glass door leaves that are 1½ inch (12.7 mm) thick and 36 inches (914 mm) wide each, and operate with a sliding mechanism concealed in the 138⅛ inch (3508 mm) wide door track.

Dimensional information of door hardware is available from manufacturer upon request.

4.2.4 Fasteners: Bolts and screws connecting aluminum members shall be stainless, hot-dipped galvanized or electro-galvanized steel.

4.2.5 Gaskets: Polyvinyl chloride acrylic, CAS No. 9002-86-2.

4.2.6 Shims: Acrylic shims for leveling bottom frame.

4.2.7 Floor anchors: ⅜ inch (9.5 mm) diameter Hilti Carbon Steel Kwik Bolt TZ (KB-TZ) with washer & hex nut installed in accordance with the manufacturer's instructions, with drilled hole depth and embedment depth in accordance with an evaluation report issued by an approved, accredited evaluation service; Periodic or Continuous Special Inspection is required in accordance with the evaluation report and spacing is four feet (1219 mm) maximum. Floor anchors may be installed into normal-weight or lightweight concrete in accordance with the evaluation report and as shown in Figure 6 of this report.

4.2.8 Top track bracing from ALUR Wall Y-bracket to structural level above:

Option 1: 350S162-33 (1⅝ inch by 3½ inch, No. 20 gage) steel stud braces, at 1:1 angle, spaced eight feet (2438 mm) each side of panel and alternating such that panel is braced at four feet (1219 mm) maximum, as shown in Figure 5 of this report.

Option 2: No. 12 gage steel wires each side of panel, spaced four feet (1219 mm) feet maximum, at 1:1 angle, with a 350S162-33 (1⅝ inch by 3½ inch, No. 20 gage) steel stud vertical compression strut, spaced 12 feet (3658 mm) maximum.

5.0 IDENTIFICATION

5.1 Identification of the system components is made on the packaging of the individual components, labeled "ALUR".

5.2 Glazing Identification: Each pane shall bear the glass manufacturer's permanent identification mark designating the manufacturer, type and thickness of the glass, and indication of the safety glazing standard(s) including "16 CFR 1201-I, II". The identification mark shall be acid etched, sand blasted, ceramic fired, laser etched, embossed or a type of that, once applied, cannot be removed without being destroyed.

IAPMO ES ® or UES ™

IAPMO UES ER-193

6.0 SUBSTANTIATING DATA

Structural calculations in accordance with IBC.

7.0 CONTACT INFORMATION

Modular Architectural Interiors
330 Waterloo Valley Road
Mount Olive, NJ 07828
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http://alurwalls.com/

8.0 STATEMENT OF RECOGNITION

This evaluation report describes the results of research carried out by IAPMO Uniform Evaluation Service on Modular Architectural Interiors ALUR Wall to assess conformance to the codes shown in Section 1.0 of this report, and serves as documentation of the product certification.

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Uniform Evaluation Service

Richard Beck, PE, CBO, MCP
Vice President, Uniform Evaluation Service

GP Russ Chaney
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For additional information about this evaluation report please visit www.uniform-es.org or email us at info@uniform-es.org

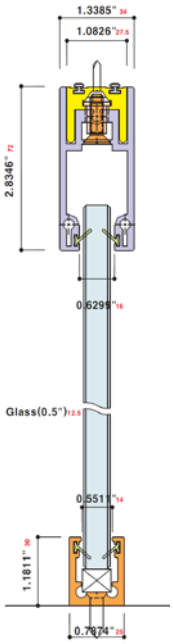

FIGURE 1 – TYPICAL CROSS-SECTION OF GLAZED WALL PANEL

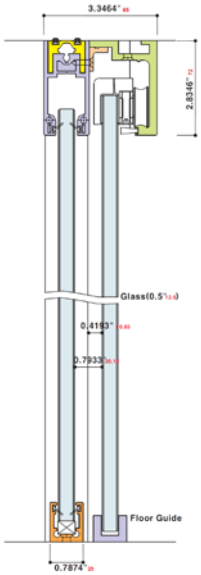

FIGURE 2 – TYPICAL CROSS-SECTION OF SLIDING DOOR

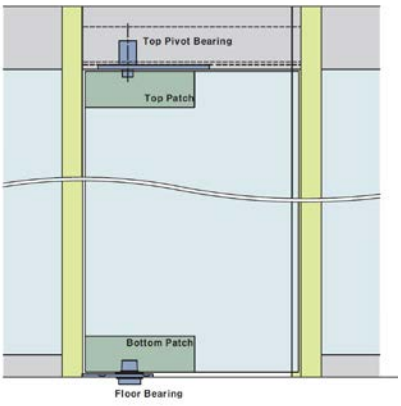

FIGURE 3 – TYPICAL ELEVATION GLASS PIVOT DOOR

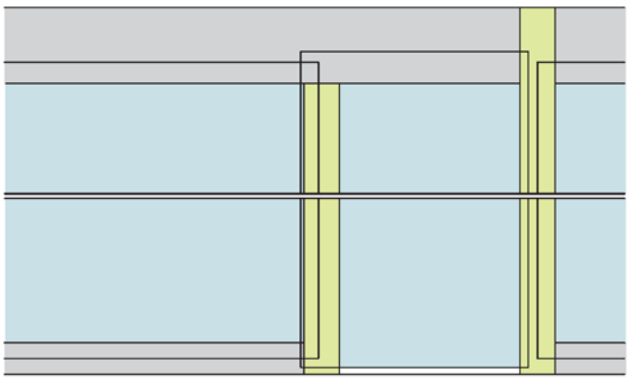

FIGURE 4 – TYPICAL ELEVATION OF SINGLE GLASS SLIDING DOOR

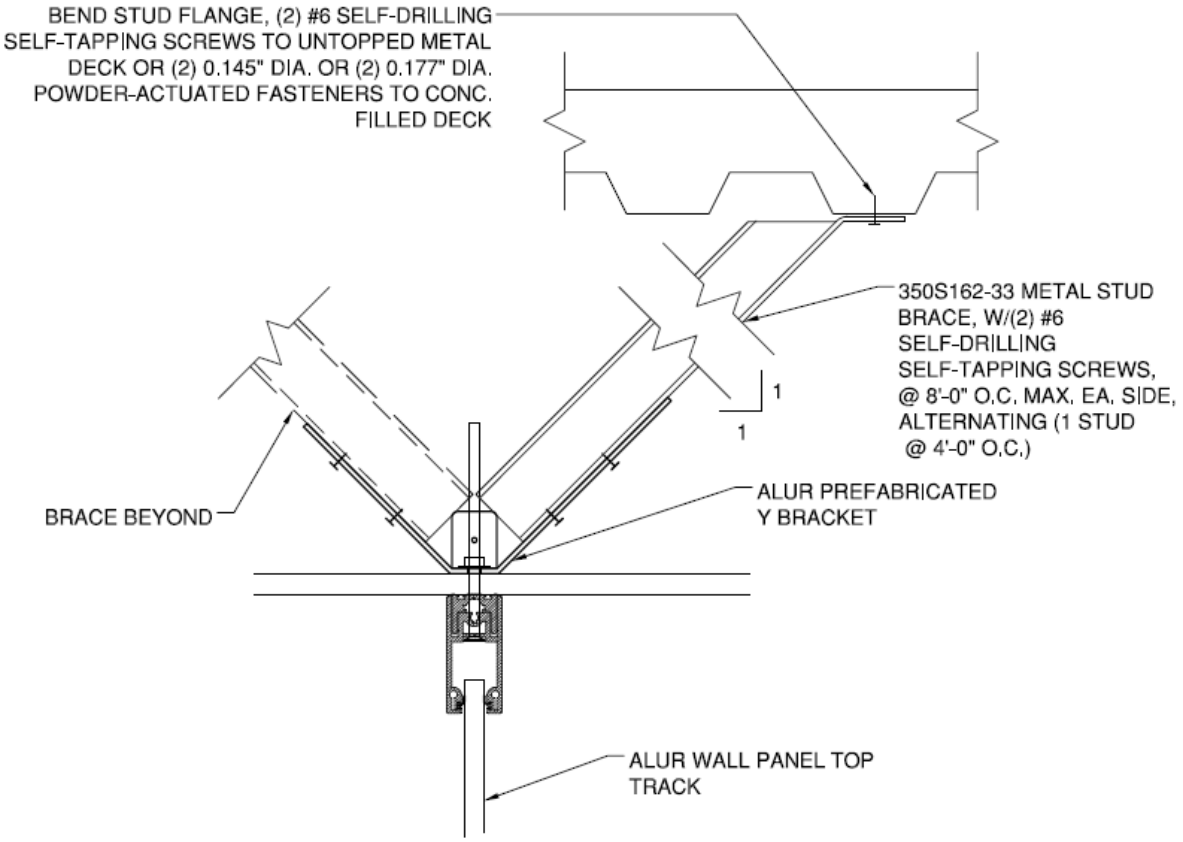

FIGURE 5 – TOP TRACK BRACING

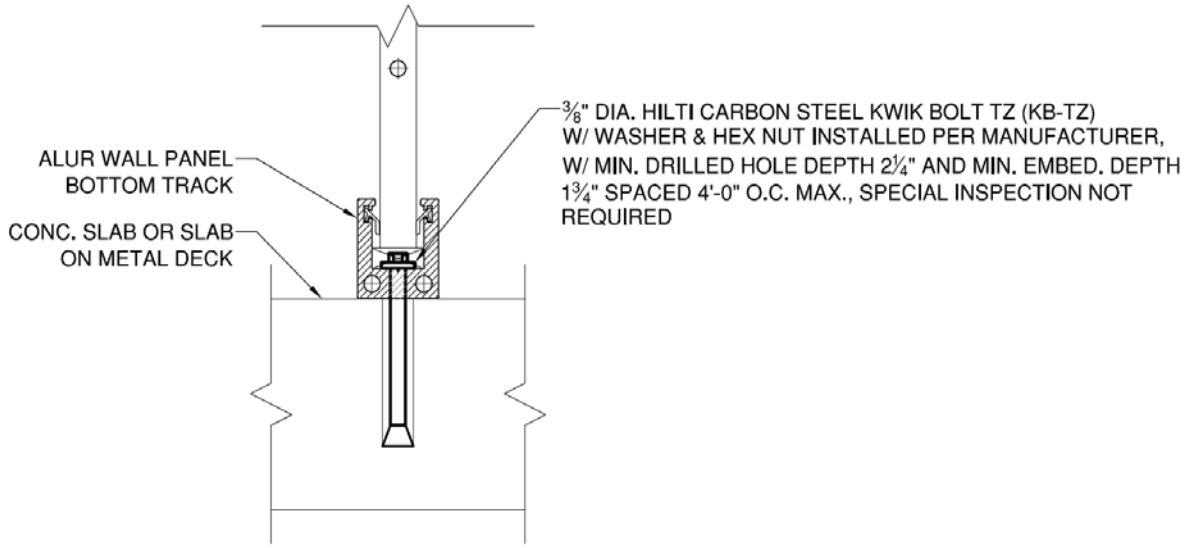

FIGURE 6 – BOTTOM TRACK ANCHORAGE

CALIFORNIA SUPPLEMENT

EVALUATION SUBJECT:
ALUR WALL

REPORT HOLDER:
Modular Architectural Interiors
330 Waterloo Valley Road
Mount Olive, NJ 07828
Phone: (973) 446-2300 Fax: (973) 446-2399
http://alurwalls.com/

CSI Division: 10— SPECIALTIES
CSI Section: 10615—Demountable Partitions

1.0 SCOPE OF EVALUATION

1.1 Compliance with the following codes:
- 2013 California Building Code (CBC)

1.2 Evaluated in accordance with:
- CBC Chapter 16
- CBC Chapter 20
- CBC Chapter 24

1.3 The safety glazing complies with:
- Consumer Product Safety Commission (CPSC) 16 CFR 1201 Safety Standard for Architectural Glazing Material, Category II
- ANSI Z97.1, Class A

1.4 Properties assessed:
- Structural

2.0 FINDINGS

The ALUR Wall System described in IAPMO UES Evaluation Report ER-193 complies with the 2013 CBC.

Design and Installation shall be in accordance with ER-193 and Chapters 14 and 25 of the CBC.

ADDITIONAL REQUIREMENTS

1. For DSA and OSHPD projects, compliance with CBC Section 2403.2.1 is required. Detailed construction documents and detailed shop drawings and analysis assuring safe performance for the specific installation shall be prepared by a Structural Engineer registered in the State of California and submitted to the enforcement agency for approval.

SUBSTANTIATING DATA
Structural calculations in accordance with CBC.