



EMPIRE WEST, INC.

CEILUME CEILING TILES

CSI Section:

09 54 00 Specialty Ceilings

1.0 RECOGNITION

Empire West, Inc.'s Ceilume Ceiling Tiles recognized in this report has been evaluated for use as interior lay-in panels for ceilings. The interior finish classification, thermal stability, and physical properties of the Ceilume Ceiling Tiles complies with the intent of the provisions of the following codes and regulations:

- 2015, 2012, 2009 and 2006 International Building Code® (IBC)

2.0 LIMITATIONS

Use of the Ceilume Ceiling Tiles recognized in this report is subject to the following limitations:

2.1 The ceiling tiles are manufactured, identified and installed in accordance with this report and the Empire West installation instructions. In the event of a conflict between this report and the installation instructions, the more restrictive assumes governance.

2.2 The ceiling tiles are limited to use as a nonstructural component in non-fire-resistance-rated floor-ceiling or roof-ceiling assemblies.

2.3 Where translucent ceiling tiles are used as light diffusers, installation shall comply with IBC Section 2606.7.

2.4 The 0.013 inch (0.33 mm) thick tiles are limited to use with quick response (release) or standard-response sprinklers rated at 155°F (68°C) or above when used with sprinkler systems.

2.5 The 0.03 inch (0.76 mm) thick tiles are limited to use with standard-response sprinklers rated at 165°F (74°C) or above when used with sprinkler systems.

2.6 The ceiling tiles and panels shall be installed in accordance with FM Listing: OXOA7.AM (4651).

2.7 Drop-out ceilings shall not be installed below extended coverage sprinklers unless specifically listed for that application.

2.8 Piping installed above drop-out ceilings shall not be considered concealed piping.

2.9 Panels and tiles shall remain unpainted or otherwise uncoated, unless approved otherwise.

2.10 Drop-out panels and tiles shall not be used in conjunction with dry-pipe sprinkler system deflectors.

2.11 Quick response (release) sprinklers rated at 155°F (68°C) or above shall be installed 1 inch (25.4 mm) or less from the top of the suspended ceiling grid, when installed above panels.

2.12 Standard-response sprinklers rated at 165°F (74°C) or above shall be installed no less than 1 inch (25.4 mm), and no more than 5 feet (1524 mm) above the drop-out ceiling tiles, when installed above panels.

2.13 Insulation shall not be placed in the area between the drop out ceiling panels and tiles and the automatic sprinklers.

3.0 PRODUCT USE

3.1 General: Ceilume Ceiling Tiles are Class A interior finish lay-in panels for use in approved suspended ceiling framing systems in non-fire-resistance-rated floor-ceiling or roof-ceiling assemblies. The panels comply with Section 803 of the 2015, 2012, 2009 and 2006 IBC.

3.2 Installation: Ceilume Ceiling Tiles shall be installed only in a horizontal arrangement in suspended ceiling systems in accordance with the ceiling tile manufacturer's installation instructions. All installations shall be in approved suspended ceiling framing systems in non-fire-resistance-rated floor-ceiling or roof-ceiling assemblies.

The suspended ceiling framing system shall comply with and be installed in accordance with Sections 808.1.1 and 2506.2.1 of the 2015, 2012 IBC and 2009 IBC, and Sections 803.9.1.1 and 2506.2.1 of the 2006 IBC. Suspended ceilings located in Seismic Design Categories B, C, D, E, or F, shall comply with design and installation requirements set forth in Section 13.5.6 of ASCE 7. The panels shall have a nominally 3/8-inch (9.5 mm) edge support when installed using standard 1-inch (25.4 mm) T-bar grid framing as shown in Figure 2 of this report. The panels shall be installed in the framing members of suspended ceiling systems without the use of restraining clips that would impede or affect their downward movement. Uplift prevention clips are permitted but not required. Figure 1 of this report provides a detail of the clip.



Figure 1 – Uplift Prevention Clips Details

The space above the panels and tiles shall not be used as an air circulation plenum.

Installation of drop-out ceiling panels is prohibited in exits such as corridors, stairways, horizontal exits, pressurized enclosures and exit passageways as defined in Chapter 10 of the 2015 and 2012 IBC.

When automatic sprinklers are installed above, panels and tiles shall comply with requirements in IBC Section 2606.7 and may be installed as drop-out ceiling tiles and panels in light hazard and Group 1 ordinary hazard occupancies, as defined in NFPA 13.

The sprinklers shall be installed above the ceiling in accordance with NFPA 13, including separation from obstructions.

3.2.1 Installation With No Ceiling Sprinklers Present: Panels, in both nominal thicknesses of 0.013 inch (0.33 mm) and 0.03 inch (0.76 mm), may be installed throughout the ceiling.

3.2.2 Installation with No Ceiling Sprinklers Present – Refacing Mineral Fiber Tiles: Panels in nominal thickness of 0.03 inch (0.76 mm) may be installed beneath mineral fiber tiles throughout the ceiling.

3.2.3 Installation With Ceiling Sprinklers Penetrating Tiles – Oversized Hole: Panels, in both nominal thicknesses of 0.013 inch (0.33 mm) and 0.03 inch (0.76 mm), may be installed by themselves. Sprinklers shall be located a maximum of 3 inches (76 mm) below the ceiling grid. Standard trim rings/escutcheons may be used at

sprinkler penetrations. When trim rings/escutcheons are used corresponding openings in panel tiles shall be a minimum of ¼ inch (6.3 mm) larger than the outer diameter of the trim ring/escutcheon to enable tiles to fall from the ceiling grid without becoming entangled with the sprinkler or interfering with its operation. When escutcheons are not used the opening in panel tiles shall be a minimum of ¼ inch (6.3 mm) greater than the sprinkler head.

3.2.4 Installation With Ceiling Sprinklers Penetrating Tiles – Refacing Mineral Fiber - Penetrations Only: At sprinkler penetrations panels in nominal thickness of 0.03 inch (0.76 mm) shall be installed beneath mineral fiber tiles. Sprinklers shall be located a maximum of 3 inches (76 mm) below the ceiling grid. Standard trim rings/escutcheons may be used at penetrations. When trim ring/escutcheons are used corresponding opening in panel tiles shall be ¼ inch (6.3 mm) smaller than the outer diameter of the trim ring/escutcheon. When trim rings/escutcheons are not used the opening in panel tiles shall be a minimum of ¼ inch (6.3 mm) larger in diameter than the sprinkler head.

3.2.5 Installation With Ceiling Sprinklers Penetrating Tiles – Refacing Mineral Fiber – Full Ceiling: Panels in 0.03 inch (0.76 mm) thickness may be installed beneath mineral fiber tiles throughout the ceiling, and shall be installed beneath mineral fiber at sprinkler penetrations. Standard trim rings/escutcheons shall be used at sprinkler penetrations, in accordance with Section 4.3 of this report.

3.2.6 Installation With Ceiling Sprinklers Above Ceiling Tiles – Concealed Sprinklers – Full Ceiling: Panels, both 0.013 (0.33 mm) and 0.03 (0.76 mm) thickness, may be installed by themselves throughout the ceiling below sprinkler heads, pursuant to Sections 2.3 through 2.13 of this report.

4.0 PRODUCT DESCRIPTION

4.1 Product information: Ceilume Ceiling Tiles are thermoformed polyvinyl chloride (PVC) panels. The panels are nominally 24 inches by 24 inches [actually 23.75 inches long by 23.75 inches wide (603.3 mm by 603.3 mm)] and nominally 24 inches by 48 inches (actually 23.75 inches long by 47.75 inches wide (603.3 mm by 1212.9 mm)), and are available in two thicknesses and multiple colors.

4.1.1 Premier Featherlight: Nominal thickness of 0.013 inch (0.33 mm) and weight of 167 grams (5.89 ounces) for a nominally 24-inch-by-24-inch panel, and a weight of 334 grams (11.78 ounces) for a nominal 24-inch-by-48-inch panel.

4.1.2 Premier Signature: Nominal thickness of 0.03 inch (0.76 mm) and weight of 381 grams (13.43 ounces) for a nominal 24-inch-by-24-inch panel, and a weight of 762 grams (26.86 ounces) for a nominally 24-inch-by-48-inch panel.



4.1.3 Better Than Tin/Faux Wood; Feather-Light:

Nominal thickness of 0.013 inch (0.33 mm) and weight of 167 grams (5.89 ounces) for a nominal 24-inch-by-24-inch panel, and a weight of 334 grams (11.78 ounces) for a nominal 24-inch-by-48-inch panel.

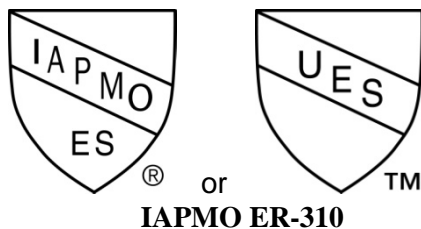
4.1.4 Better Than Tin/Faux Wood; Signature: Nominal thickness of 0.03 inch (0.76 mm) and weight of 381 grams (13.43 ounces) for a nominal 24-inch-by-24-inch panel, and a weight of 762 grams (26.86 ounces) for a nominally 24-inch-by-48-inch panel.

4.2 Interior Finish Classification

Ceilume Ceiling Tiles, which have a minimum nominal thickness of 0.013 inch (0.25 mm) and a maximum nominal thickness of 0.03 inch (0.76 mm), have a Class A interior finish classification in accordance with Section 803.1.1 of the IBC, with a flame-spread index of not more than 25, and a smoke-developed index of not more than 450.

5.0 IDENTIFICATION

A label shall be affixed on at least one of the following: product, packaging, installation instructions or descriptive literature. The label shall include the company name or trademark, model number, and the IAPMO Uniform ES Mark of Conformity, the name of the inspection agency (when applicable) and the Evaluation Report Number (ER-310) to identify the products recognized in this report. A die-stamp label may also substitute for the label. Either Mark of Conformity may be used as shown below:



6.0 SUBSTANTIATING DATA

Data and Test Reports submitted from this report are from laboratories recognized in compliance with ISO/IEC 17025 and the following:

6.1 Reports of Optical Density of Smoke in accordance with ASTM E662.

6.2 Reports of Ignition Properties of Plastics in accordance with ASTM D1929.

6.3 Reports of Surface Burning Characteristics in accordance with ASTM E84.

6.4 Reports of Room Fire Testing in accordance with UBC Standard No. 26-3.

6.5 Data in accordance with NFPA 13-10 and -13

7.0 CONTACT INFORMATION

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8.0 STATEMENT OF RECOGNITION

This evaluation report describes the results of research carried out by IAPMO Uniform Evaluation Service on Empire West Inc.'s Ceilume Ceiling Tiles 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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For additional information about this evaluation report please visit
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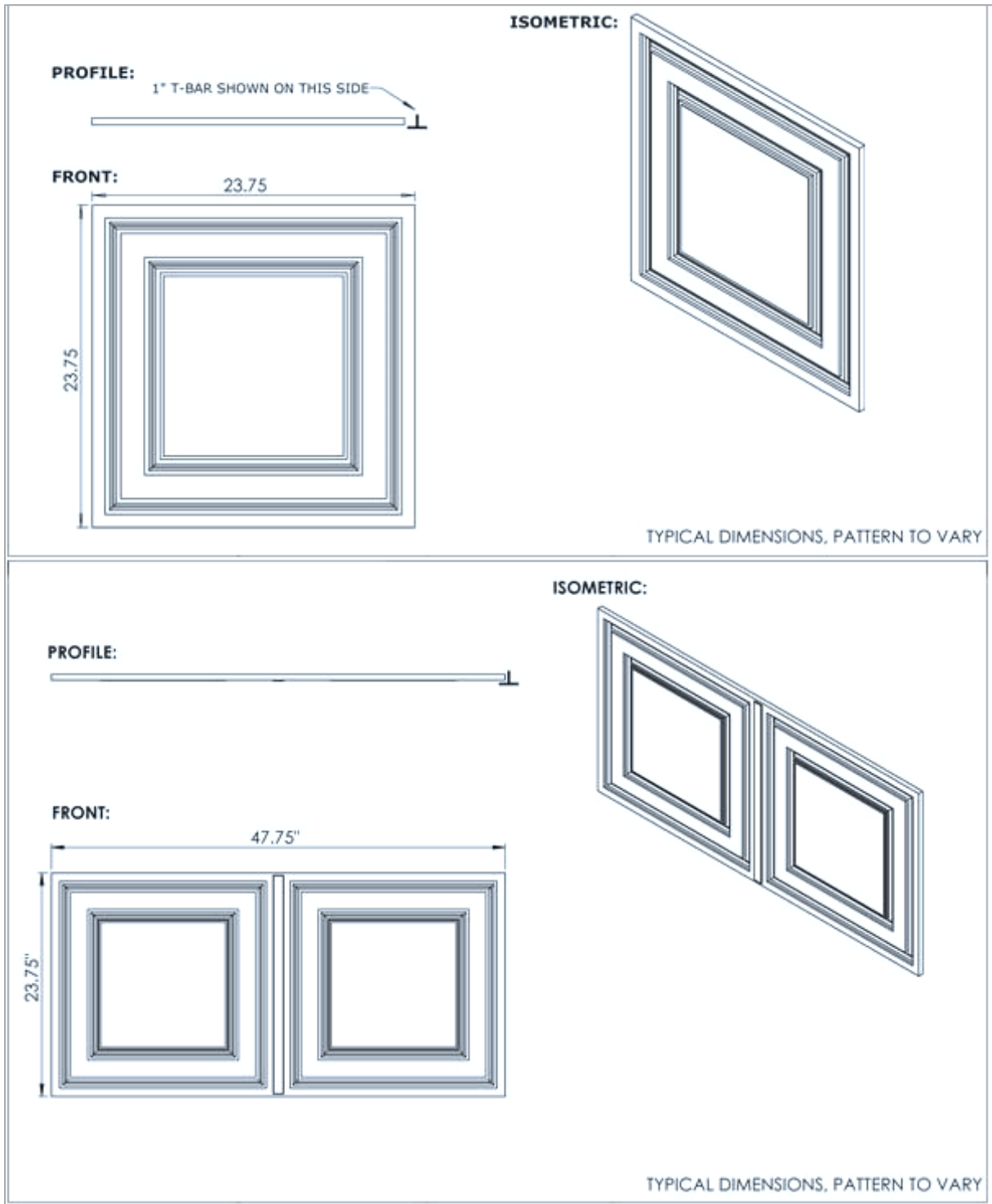


Figure 2 – Ceilume Ceiling Tiles Details