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### PLYCEM PRIME FIBER-CEMENT BOARDS

#### CSI Section:

07 46 46 Fiber-Cement Siding

#### 1.0 RECOGNITION

Plycem Prime Fiber-Cement Boards have been evaluated for use as a nonload-bearing exterior wall covering and as exterior soffit covering in accordance with Chapter 14 of the IBC and Chapter 7 of the IRC. The fiber-cement boards may also be used for interior applications as part of a Class A interior wall finish. The wall boards may be installed on buildings of Types I, II, III, or IV construction when installed in accordance with Section 3.4 of this report. The wall boards have been evaluated for durability, weather resistance, wind-load resistance, non-combustibility, use on exterior walls on Types I, II, III, and IV construction, and as an interior finish. The Plycem Prime Fiber-Cement Boards evaluated in this report are satisfactory alternatives to the following codes and regulations:

- 2015 and 2012 International Building Code® (IBC)
- 2015 and 2012 International Residential Code® (IRC)

#### 2.0 LIMITATIONS

Use of the Plycem Prime Fiber-Cement Boards recognized in this report is subject to the following limitations:

**2.1 Installation of the Plycem Prime Fiber-Cement Boards shall be in accordance with this report, the project details, installation instructions, and the applicable code. If there are any conflicts between the manufacturer’s published installation instructions and this report, the more restrictive shall govern.**

**2.2 The maximum allowable wind pressure for the Plycem Prime Fiber-Cement Boards is provided in Table 1 of this report. The capacities of the supporting wall, framing members and connections shall be equal to or greater than the allowable wind pressure.**

**2.3 Where installed as exterior cladding only on buildings of Type I, II, III, or IV Construction, the Plycem Prime Fiber-Cement Boards shall be constructed in accordance with Section 3.4 of this report.**

**2.4** When used as an interior wall covering, with spaces between adjacent panels, the Plycem Prime Fiber-Cement Boards shall be installed over a substrate having a Class A finish, complying with IBC Section 803.1.1.

**2.5** The Plycem Prime Fiber-Cement Boards shall be manufactured in Cartago, Costa Rica, under a quality control program with inspections by Ramtech Laboratories, Inc.

#### 3.0 PRODUCT USE

**3.1 General:** The Plycem Prime Fiber-Cement Boards shall be installed in accordance with the applicable code, the manufacturer’s installation instructions, and this report. A copy of the installation documents shall be available on the jobsite at all times during construction.

**3.2 Design:** Table 1 of this report provides the allowable wind load for the Plycem Prime Fiber-Cement Boards when used as an exterior wall covering or soffit cover, as applicable. Steel studs or framing members shall be minimum No. 20-gauge spaced at a maximum of 24 inches (610 mm) on-center. Wood studs or framing members shall be minimum 2x4 nominal, spaced at 16 or 24 inches on-center.

**TABLE 1 – MAXIMUM SPACING AND ALLOWABLE TRANSVERSE LOAD**

	MAXIMUM STUD or FRAMING MEMBERS SPACING <sup>1</sup> (inch)	ALLOWABLE TRANSVERSE LOAD (psf)
Steel Stud <sup>2</sup>	24	23
Wood Stud <sup>3</sup>	16	34
	24	20

SI: 1 inch = 25.4 mm, 1 psf = 47.9 N/m<sup>2</sup>

<sup>1</sup> Load tests were conducted on multi-span configurations

<sup>2</sup> Steel studs shall be minimum No. 20-gauge thickness.

<sup>3</sup> Minimum 2x4 nominal, Douglas Fir-Larch.

The connection capacity and the supporting steel or wood stud or framing member capacity shall equal or exceed the design uniform transverse loads for the Plycem Prime boards and steel or wood studs or framing members determined in accordance with IBC Chapter 16 or IRC Section R301.2.1 as applicable.

#### 3.3 Installation

**3.3.1 General:** Installation of the Plycem Prime Fiber-Cement Boards shall be in accordance with the manufacturer’s published installation instructions and this evaluation report. If there is a conflict between this report and the manufacturer’s published installation instructions, the more restrictive prevails.

The product described in this Uniform Evaluation Service (UES) Report has been evaluated as an alternative material, design or method of construction in order to satisfy and comply with the intent of the provision of the code, as noted in this report, and for at least equivalence to that prescribed in the code in quality, strength, effectiveness, fire resistance, durability and safety, as applicable, in accordance with IBC Section 104.11. This document shall only be reproduced in its entirety.





Exterior wall assemblies shall include a water-resistive barrier, flashing, a means for draining water that enters the assembly to the exterior, and protection against condensation in accordance with IBC Section 1403.2 or IRC Section R703.2, as applicable. The wall boards may be cut and trimmed in accordance with the design documents and this report. A nominal gap of  $\frac{1}{8}$  inch (3.2 mm) shall be maintained at panel-to-panel and panel-to-penetration joints, except that horizontal joints and corners may be closed with joint closures and corner closures as decorative elements when specified by the building designer. The wall boards may be used for interior applications as part of a Class A interior wall finish.

**3.3.2 Fastening:** For steel studs or framing members, fasteners shall be spaced a maximum of 8 inches (203 mm) on-center into supporting studs or framing members. For wood studs or framing members, fasteners shall be spaced a maximum of 6 inches (152 mm) on-center into supporting studs or framing members. Supporting studs or framing members shall be spaced a maximum of 24 inches (610 mm) on-center. Fasteners shall be placed between 2-inches to 6-inches (51 to 152 mm) from board corners and  $\frac{5}{8}$ -inch (15.9 mm) from board edges.

**3.4 Types I, II, III, and IV Construction:** Plycem Prime wall boards may also be installed on buildings of Types I, II, III, or IV construction under the IBC. Installation on exterior walls is limited to heights not greater than 40 feet (12,192 mm) above grade plane when the wall assembly includes a combustible water-resistive barrier. For use with combustible water-resistive barriers at heights greater than 40 feet (12,192 mm) above grade plane, the wall constructions shall be tested in accordance with and comply with the acceptance criteria of NFPA 285, in accordance with Section 1403.5 of the IBC.

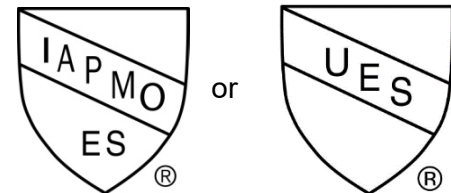
#### 4.0 PRODUCT DESCRIPTION

**4.1 General:** Plycem Prime Fiber-Cement Boards are fiber-cement boards complying with ASTM C1186 as Type A Grade II sheets, in accordance with Sections 1404.10 and 1405.16 of the IBC. The Plycem boards are nominally  $\frac{5}{16}$ -inch (8 mm) thick and are available in 48-inch (1,219 mm) widths and 96-inch (2,438 mm) lengths. Plycem Prime Fiber-cement Boards have a flame spread index of 0 and a smoke-developed index of not more than 5 when tested in accordance with ASTM E84 and comply as Class A interior finish in accordance with IBC Section 803.1.1. The boards are classified as noncombustible when tested in accordance with ASTM E136.

**4.2 Fasteners:** Wall board fasteners shall be minimum  $1\frac{1}{4}$  inch (31 mm) long, No. 8, self-tapping stainless steel screws or corrosion-resistant 6d common nails, as applicable. Nails shall penetrate a minimum of 1-inch (25.4 mm) into the supporting wood stud or framing member.

#### 5.0 IDENTIFICATION

The Plycem Prime Fiber-Cement Boards shall be labeled with the manufacturer's name (Plycem Construsistemas Costa Rica S.A.) and address, product name, thickness, color, finish, batch number, and the name of the approved inspection agency, Ramtech Laboratories, Inc. The label shall include the Evaluation Report Number (ER-360). Either IAPMO Uniform ES Mark of Conformity may also be used as shown below:



IAPMO UES ER-360

#### 6.0 SUBSTANTIATING DATA

**6.1** Data in accordance with the ICC-ES Acceptance Criteria for Fiber-cement Siding (AC90), dated June 2012 (editorially revised September 2015).

**6.2** Reports of non-combustibility testing in accordance with ASTM E136.

**6.3** Test results are from laboratories in compliance with ISO/IEC 17025.

#### 7.0 STATEMENT OF RECOGNITION

This evaluation report describes the results of research carried out by IAPMO Uniform Evaluation Service on Plycem Prime Fiber-Cement Boards to assess its conformance to the codes and standards shown in Section 1.0 of this report and documents the product's certification. Products are manufactured at the location noted in Section 2.5 of this report under a quality control program with periodic inspections under the surveillance of IAPMO UES.

For additional information about this evaluation report please visit [www.uniform-es.org](http://www.uniform-es.org) or email us at [info@uniform-es.org](mailto:info@uniform-es.org)