



ICC-ES Evaluation Report

ESR-3830

Reissued January 2023

Revised March 2023

This report is subject to renewal January 2024.

DIVISION: 09 00 00—FINISHES
Section: 09 29 00—Gypsum Board

REPORT HOLDER:

PANEL REY, S.A.

EVALUATION SUBJECT:

PANEL REY® FIRE REY ½-INCH AND 5/8-INCH GYPSUM BOARDS

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2021, 2018, 2015, 2012, and 2009 *International Building Code*® (IBC)
- 2021, 2018, 2015, 2012, and 2009 *International Residential Code*® (IRC)

Properties evaluated:

- Physical properties
- Surface-burning characteristics
- Fire-resistance-rated construction

2.0 USES

Fire Rey gypsum boards are used as gypsum panel for interior applications complying with IBC Section 2506 and IRC Section R702.3, in buildings of all construction types under the IBC or buildings constructed under the IRC when installed in accordance with IBC Section 2508 and IRC Section R702.3.

3.0 DESCRIPTION

Fire Rey gypsum boards are a paper-faced gypsum board which conforms to the physical property requirements of ASTM C1396. The boards come in either ½-inch thick (12.7 mm) or 5/8-inch thick (15.9 mm), 48 inches (1220 mm) in width, and available in various lengths.

Fire Rey boards exhibits a flame-spread index of 25 or less, and a smoke-developed index of 450 or less, in accordance with ASTM E84.

4.0 DESIGN AND INSTALLATION

4.1 Installation:

4.1.1 General:

Fire Rey gypsum boards must be installed in accordance with the manufacturer's published installation recommendations, this report, and GA-216 or ASTM C840 for IBC applications or IRC Section R702.3.5 for IRC applications. Fire Rey must be kept dry and stored off the ground under protective covering prior to installation. The gypsum board can be installed vertically or horizontally, and must be fastened or adhered to framing in accordance with the applicable code.

The gypsum boards must not be installed where the temperature may exceed 125°F (52°C), and must be installed when the ambient temperature at the time of installation is not less than 40°F (4°C) for mechanical attachment and not less than 50°F (10°C) for adhesive attachment per ASTM C840.

The manufacturer's published installation instructions must be available on the jobsite at all times during construction.

4.2 Fire-resistance-rated Assembly:

4.2.1 One-hour Fire-resistance-rated Limited-Load-bearing Wall: The 5/8-inch thick (15.9 mm) Fire Rey gypsum board must be applied horizontally to both faces of the wall, of minimum nominally 2-by-4 wood studs spaced at a maximum of 16 inches (406 mm) on-center. The boards must be attached using minimum 1-7/8-inch long (47.6 mm) galvanized 6d nails, spaced at 7 inches on-center (177.8 mm) at the edges and 16 inches on-center (406 mm) at intermediate studs. All exposed interior gypsum wallboard joints must be taped with joint tape and compound, and all nail heads must be covered with joint compound, in accordance with ASTM C840 or GA216. The wall framing members must be braced laterally at the mid-height of the wall assembly with horizontal blocking. The allowable bearing loads must not exceed 1615 pounds (7183 N) per stud and were calculated using an unbraced length for bracing in the wood studs' weak direction based on the horizontal blocking located at the wall mid-height [60 inches (1524 mm) on center maximum] with the wood studs having a slenderness ratio, (l_e/d), value of 39.

5.0 CONDITIONS OF USE

The Fire Rey gypsum boards described in this report complies with, or is 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 The products must be manufactured, identified and installed in accordance with this report, the manufacturer's published installation instructions, and the applicable code. If there is a conflict between the manufacturer's published installation instructions and this report, this report governs.
- 5.2 The gypsum boards are for interior use only.
- 5.3 The gypsum boards must not be used as a nailing base.
- 5.4 Recognition for mold-resistance is outside the scope of this evaluation report.
- 5.5 The gypsum board is manufactured in El Carmen, Nuevo Leon, Mexico, under a quality control program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

- 6.1 Reports of physical property testing in accordance with ASTM C473, for compliance with ASTM C1396.
- 6.2 Reports of surface-burning tests in accordance with ASTM E84 (UL 723).

6.3 Reports of fire-resistance testing in accordance with ASTM E119 (UL 263).

6.4 Quality documentation

7.0 IDENTIFICATION

7.1 The ICC-ES mark of conformity, electronic labeling, or the evaluation report number (ICC-ES ESR-3830) along with the name, registered trademark, or registered logo of the report holder must be included in the product label.

7.2 In addition, each Fire Rey gypsum board is identified with the manufacturer's name (Panel Rey, S.A.), a plant identifier and date code, the product name, the board thickness.

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

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PANEL REY, S.A.

EVALUATION SUBJECT:

PANEL REY® FIRE REY ½-INCH AND 5/8-INCH GYPSUM BOARDS

1.0 REPORT PURPOSE AND SCOPE**Purpose:**

The purpose of this evaluation report supplement is to indicate that Panel Rey® Fire Rey ½-inch and 5/8-inch Gypsum Boards, described in ICC-ES evaluation report ESR-3830, have also been evaluated for compliance with the codes noted below.

Applicable code editions:

- 2016 and 2013 *California Building Code* (CBC)
- 2016 and 2013 *California Residential Code* (CRC)

2.0 CONCLUSIONS**2.1 CBC:**

The Panel Rey® Fire Rey ½-inch and 5/8-inch Gypsum Boards, described in Sections 2.0 through 7.0 of the evaluation report ESR-3830, comply with 2016 and 2013 CBC Sections 703.2, 703.5, 2506 and 2508, provided the design and installation are in accordance with the 2015 and 2012 *International Building Code*® (IBC) provisions, respectively, noted in the evaluation report and the additional requirements of CBC Chapters 7 and 25, as applicable.

2.2 CRC:

The Panel Rey® Fire Rey ½-inch and 5/8-inch Gypsum Boards, described in Sections 2.0 through 7.0 of the evaluation report ESR-3830, comply with 2016 and 2013 CRC Section R702.3, provided the design and installation are in accordance with the 2015 and 2012 *International Residential Code*® (IRC) provisions, respectively, noted in the evaluation report.

This supplement expires concurrently with the evaluation report, reissued January 2023, revised March 2023.