

ICC-ES Evaluation Report

ESR-5387

Issued December 2025

Subject to renewal December 2026

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DIVISION: 07 00 00 — THERMAL AND MOISTURE PROTECTION Section: 07 21 00 — Thermal Insulation	REPORT HOLDER: TIMBERHP	EVALUATION SUBJECT: TIMBERBOARD NATURAL FIBER INSULATION	
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1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2024, 2021, and 2018 [International Building Code® \(IBC\)](#)
- 2024, 2021, and 2018 [International Residential Code® \(IRC\)](#)

Property evaluated:

- Physical Properties
- Surface-Burning Characteristics
- Thermal Transmission Properties

2.0 USES

TimberBoard™ insulation is a rigid natural fiber board used as continuous nonstructural insulating materials in buildings of Type V-B construction and dwellings constructed in accordance with the IRC. The insulation is for use on the outside face of exterior walls.

3.0 DESCRIPTION

3.1 General:

TimberBoard™ is a rigid wood fiber insulation board designed for use as continuous exterior insulation. TimberBoard™ is manufactured utilizing forest product and forestry byproducts in a dry process where refined residual wood chips and additives are compressed. TimberBoard™ insulation boards are manufactured in nominal thicknesses ranging from 1.5 inches (38.1 mm) to 4.0 inches (101.6 mm) at a density of 9 lb/ft³ (150 kg/m³).

3.2 Surface Burning Characteristics:

The TimberBoard™, at a thickness of 4 inches (101.6 mm), has a flame-spread index (FSI) of 75 or less and a smoke-developed index (SDI) of 450 or less, when tested in accordance with ASTM E84.

3.3 Thermal Resistance Value:

The TimberBoard™ has a thermal resistance value (R-value) of 5 °F•h•ft²/Btu (0.88 K•m²/W) at a 1.5-inch thickness (38.1 mm), a 12 °F•h•ft²/Btu (2.11 K•m²/W) at a 3.5-inch thickness (88.9 mm), and a 14 °F•h•ft²/Btu (2.46 K•m²/W) at a 4.0-inch thickness (101.6 mm).

3.4 Corrosiveness:

The TimberBoardTM did not show perforations on the copper or steel specimens when tested for corrosiveness in accordance with ASTM C739, Test Method B.

3.5 Fungi Resistance:

The TimberBoardTM did not show fungal growth, when tested in accordance with ASTM C1338.

3.6 Moisture Vapor Sorption:

The TimberBoardTM did not gain more than 15% by weight in moisture, when tested in accordance with ASTM C739.

4.0 INSTALLATION

4.1 General:

Installation of TimberBoard insulation must comply with this report and the manufacturers published installation instructions. The manufacturers published installation instructions must be available at the jobsite during installation.

The TimberBoardTM insulation boards must be attached to supports in a manner that will hold the insulation securely in place. The insulation boards must not be used structurally to resist transverse, vertical or in-plane loads except when specifically recognized in a separate evaluation report. The boards must not be used as exterior stud wall bracing. Wall bracing must be provided in accordance with 2024 IBC Section 2308.10 (2021 and 2018 IBC Section 2308.6) or IRC Section R602.10. The insulation boards must not be used as a nailing base for exterior wall coverings.

For cementitious exterior wall coating applications, fasteners for insulation boards thicker than 1.5 inches (38 mm) must be considered for lateral resistance to ensure support for the exterior wall coatings. Finish materials over the insulation boards must be structurally adequate to resist the required horizontal forces perpendicular to the wall.

5.0 CONDITIONS OF USE:

The TimberBoardTM Insulation 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 Installation must comply with this report, the manufacturer's published installation instructions and the applicable code. In the event of a conflict between the manufacturer's published installation instructions and this report, this report governs.
- 5.2 This evaluation report and the manufacturer's published installation instructions, when required by the code official, must be submitted at the time of permit application.
- 5.3 An approved water-resistive barrier may be installed behind or in front of the insulation board.
- 5.4 The TimberBoardTM is limited to Type V-B construction under the IBC and dwellings constructed in accordance with the IRC.
- 5.5 The installer must provide the code official a signed and dated statement describing the type of insulation installed, including thickness, coverage area, and R-value.
- 5.6 The interior of the building must be protected by an approved thermal barrier, such as 1/2-inch-thick (12.7 mm) gypsum board in accordance with IBC Section 2603.4 or 2024 IRC Section R303.4 (2021 and 2018 IRC Section R316.4)
- 5.7 The TimberBoardTM must be installed behind a code approved exterior wall covering immediately after installation. The exterior wall covering shall be securely fastened with corrosion-resistant fasteners in accordance with 2024 IBC Section 1404.5 (2021 and 2018 IBC Section 1404.17) and IRC Section R703.3.3.
- 5.8 The TimberBoardTM must be installed in accordance with IBC Section 2304.12.1.5 and IRC Section R317.1.
- 5.9 The TimberBoardTM insulation shall not be installed with aluminum wall coverings or with aluminum fasteners.
- 5.10 The TimberBoardTM insulation is manufactured under an approved quality control program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

Data in accordance with the [ICC-ES Acceptance Criteria for Natural Fiber Board Insulation \(AC565\)](#), dated June 2024, revised February 2025.

7.0 IDENTIFICATION

- 7.1 The ICC-ES mark of conformity, electronic labeling, or the evaluation report number (ICC-ES ESR-5387) along with the name, registered trademark, or registered logo of the report holder must be included in the product label.
- 7.2 In addition, the TimberBoard[™] Insulation described in this report must be – identified by a label bearing the manufacturers name (TimberHP), product name, address of the manufacturing plant, and the date of manufacture. The label must also include the Flame Spread Index (FSI), Smoke Developed Index (SDI) and thermal resistance (R-value) of the product.
- 7.3 The report holder's contact information is the following:

TIMBERHP
POST OFFICE BOX 119
MADISON, MAINE 04950
(855) 755-1359
www.timberhp.com