Code Compliance Research Report
CCRR-0279

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Renewal Date: 10-31-2027

DIVISION: 06 00 00 – WOOD, PLASTICS, AND COMPOSITES
Section: 06 05 23 – Wood, Plastic, and Composite Fastenings

REPORT HOLDER:
METWOOD, INC.
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540-334-4294
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REPORT SUBJECT:
2810HR Joist Reinforcer

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

- 2024, 2021, 2018 *International Building Code®* (IBC)
- 2024, 2021, 2018 *International Residential Code®* (IRC)

NOTE: This report references 2024 Code sections with [2021, 2018] Code sections shown in brackets where they differ.

1.2 Metwood Joist Reinforcers have been evaluated for the following properties:

- Structural Properties
- Corrosion Protection

1.3 Metwood Joist Reinforcers have been evaluated for the construction in accordance with the IRC and Type VB of the IBC.

2.0 STATEMENT OF COMPLIANCE

Metwood Joist Reinforcers comply with the Codes listed in Section 1.1, for the properties stated in Section 1.2 and uses stated in Section 1.3, when installed as described in this report, including the Conditions of Use stated in Section 6.

3.0 DESCRIPTION

3.1 2810HR Conventional Wood Joist Reinforcers consist of 2 cold-formed steel components fabricated from 14 gauge, galvanized (G90) sheet steel with yield strength of 50 ksi.

3.2 Subject to the conditions specified within this report, use of the Metwood Joist Reinforcer allows a maximum 6 inch diameter hole to be placed in any location along the length of a nominal 2x10 wood joist except within 12 inches of a support.

4.0 PERFORMANCE CHARACTERISTICS

4.1 Conventional 2x10 solid sawn lumber installed with a 6 inch diameter hole reinforced with a 2810HR joist reinforcer has equivalent design strength and stiffness to the same framing member with a code permitted hole size of 3 inches, unreinforced. See Section 5.0 for Installation and Section 6.0 for Conditions of Use.

5.0 INSTALLATION

Metwood Joist Reinforcers must be installed in accordance with the manufacturer's published installation instructions, the applicable Code, and this Research Report. A copy of the manufacturer's instructions must be available on the jobsite during installation.

5.1 Metwood 2810HR Joist Reinforcer is installed with 30 SFS Intec #12-8 XG (0.133" shank dia.), 1-1/2" long, pancake head, carbon steel wood screws in the designated pre-drilled holes. See Figure 2 for fastening pattern.

5.2 Metwood Joist Reinforcers may be installed at any location along the span of the wood joist, with the holes located no less than 12" of the closest support or edge.

6.0 CONDITIONS OF USE

6.1 Installation must comply with this Research Report, the manufacturer's published installation instructions, and the applicable Code. In the event of a conflict, this report governs.

6.2 Holes in the joists, where the Metwood 2810HR Joist Reinforcer is installed, shall be limited to a maximum size of 6" in diameter located at the center of the joist height. Holes shall not be located within 12 inches from supports to the center of the hole.

6.3 The Metwood Joist Reinforcers shall be limited to use with nominal 2x10 solid sawn Southern Pine (G=0.50), Spruce-Pine-Fir (G=0.42) or, other graded wood species with a specific gravity (G) no less than 0.42.

6.4 A maximum of one Metwood Joist Reinforcer shall be used in a single joist.

6.5 Installation of the Metwood Joist Reinforcer is limited to dry conditions, where the moisture content of the lumber is 19% or less.

6.6 Use with preservative treated lumber is outside the scope of this report.

6.7 The Metwood Joist Reinforcers are manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc.

7.0 SUPPORTING EVIDENCE

7.1 Reports of tests in accordance with ASTM D198-15, Standard Test Methods of Static Tests of Lumber in Structural Sizes.

7.2 Engineering Analysis of the fastening demonstrating compliance with the National Design Specification for Wood Construction and Supplement, American Wood Council, ANSI/AWC NDS-2024 [2018], signed and sealed by a professional engineer.

7.3 Documentation of an Intertek approved quality control system for the manufacturing of products recognized in this report.

8.0 IDENTIFICATION

The Metwood Joist Reinforcers produced in accordance with this report shall be identified by the following information:

8.1 An imprint on the bracket identifying the name and/or trademark of manufacturer on the product, and text "Intertek CCRR-0279".

8.2 Packaging with a label with the Intertek Compliance Research Report mark and number (CCRR-0279).

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9.0 OTHER CODES

This section is not applicable.

10.0 CODE COMPLIANCE RESEARCH REPORT USE

10.1 Approval of building products and/or materials can only be granted by a building official having legal authority in the specific jurisdiction where approval is sought.

10.2 Code Compliance Research Reports shall not be used in any manner that implies an endorsement of the product by Intertek.

10.3 Reference to the https://bpdirectory.intertek.com is recommended to ascertain the current version and status of this report.

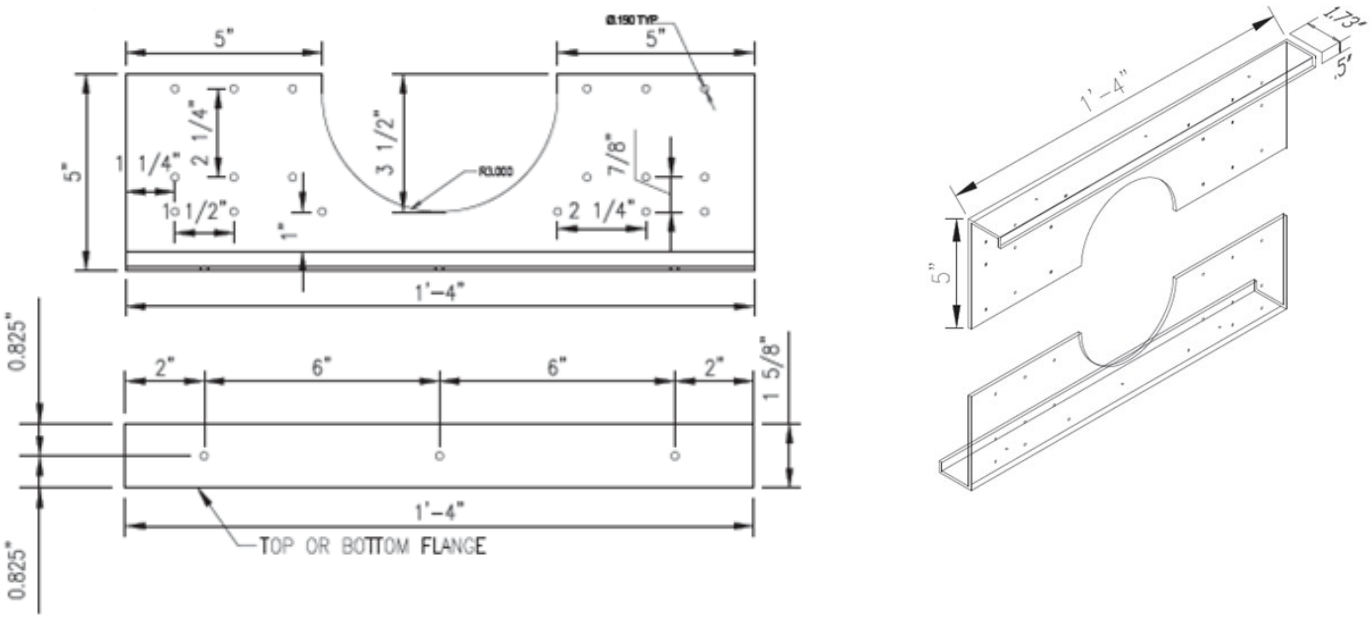


FIGURE 1 – 2810HR JOIST REINFORCER

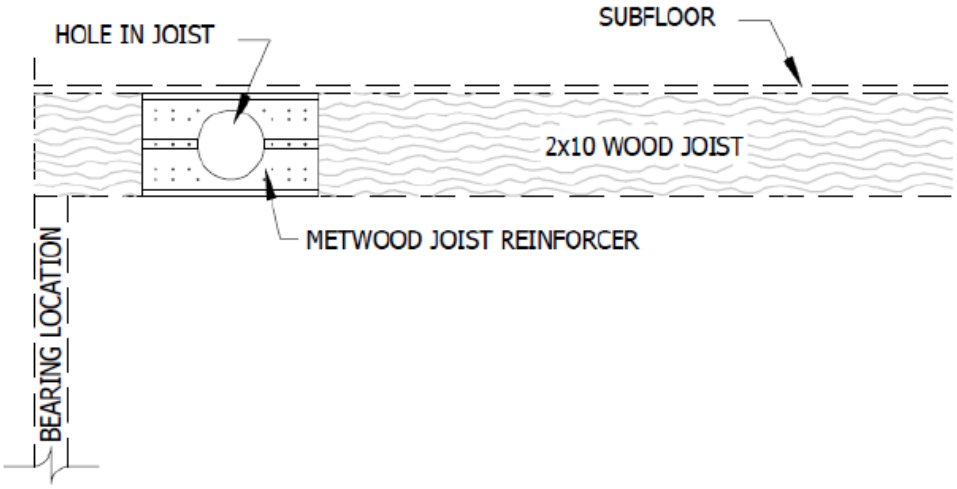


FIGURE 2 – INSTALLATION DIAGRAM OF 2810HR JOIST REINFORCER

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