



# CERTIFICATION

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Morton Hi-Rib II and Hi-Rib Steel Roof Panels, 2026 FBC Compliance, FL37257 - ENG-2609-340  
October 19, 2026

Mr. Brian Long  
Morton Buildings, Inc.  
252 W. Adams St.  
Morton, IL 61550

Re: Hi-Rib II and Hi-Rib Steel Roof Panels, 2026 Florida Building Code Compliance for Standard (Non-HVHZ)  
Applications<sup>1,2,3,4</sup>

Dear Mr. Long:

DrJ Engineering, LLC (DrJ) has been asked to provide a Florida professional engineering accepted engineering practice review with respect to the Hi-Rib II Steel Roof Panels and Hi-Rib Steel Roof Panels. This work has been performed pursuant to our areas of expertise. The purpose of the DrJ review is to provide an engineering assessment of the conformance of the Hi-Rib II and Hi-Rib Steel Roof Panels with the 2026 Florida Building Code (FBC).

## Hi-Rib II Steel Roof Panels

Hi-Rib II Steel Roof Panels conform to Section 1507.4 and Section 2204 of the 2026 FBC. The panels were tested via UL 580: Tests for Uplift Resistance of Roof Assemblies, UL 1897: Standard for Safety, Uplift Tests for Roof Covering Systems and via ASTM E455: Standard Test Method for Static Load Testing of Framed Floor or Roof Diaphragm Constructions for Buildings by Architectural Testing, Inc. Hi-Rib II panels have a coverage width of 36" and have thicknesses of 0.015" and 0.017". On the panel edges and every 12" widthwise, the panel has a  $\frac{7}{8}$ " half circle rib. Panels may be installed through each panel's rib to wooden purlins that have a maximum spacing of 24" and a minimum slope of 3:12 using proprietary #9 x 2" stainless steel screws with a  $\frac{7}{16}$ " diameter bonded stainless steel washer placed under the head. When installed within 3000 ft of a saltwater coastline all fasteners and connectors used during installation shall meet the requirements of FBC Section 1711 for corrosion resistance based on the specific location of the project.



THE QUALTIM FAMILY OF SERVICES

*Where building innovation thrives.*

Morton Buildings, Inc. Hi-Rib II and Hi-Rib Steel Roof Panels ENG-2609-340

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), as protected by Defend Trade Secrets Act 2016

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This Research Report, created by an Approved Source, is valid through October 1, 2030.

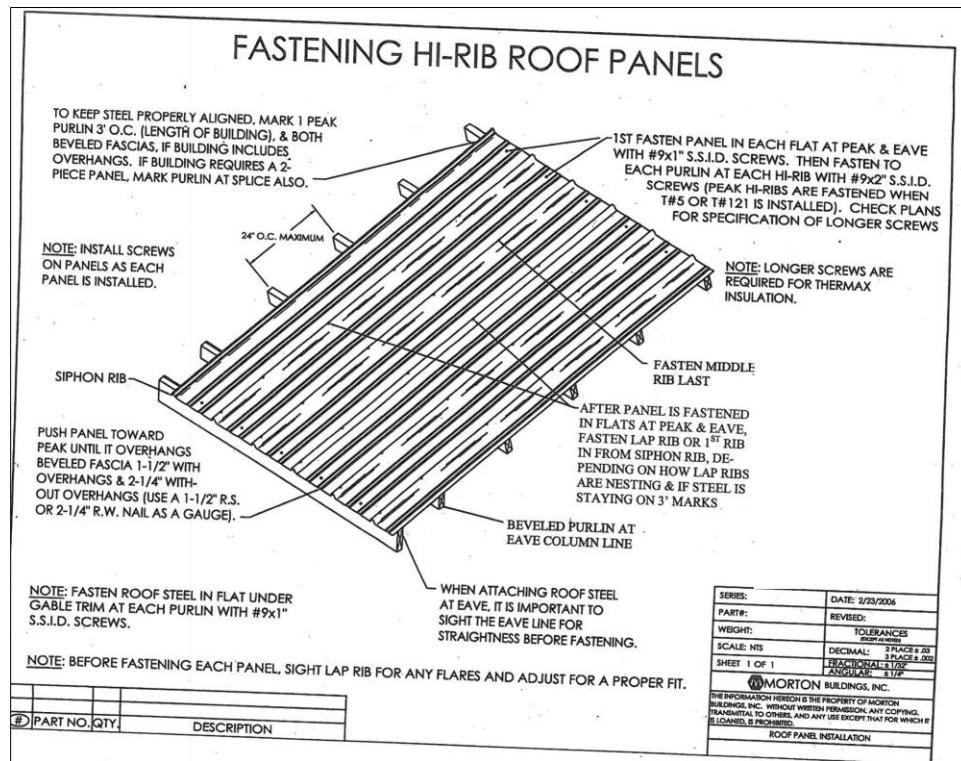


**Figure 1. Fastening Hi-Rib II Steel Roof Panels**

The allowable uplift and gravity design pressures for these products can be found below in Table 1.

**Table 1. Allowable Uplift and Gravity Design Pressures for Hi-Rib II Steel Roof Panels<sup>1,2</sup>**

| Product Thickness (in) | Maximum Purlin Spacing (in) | Positive Pressure (psf) | Negative Pressure (psf) |
|------------------------|-----------------------------|-------------------------|-------------------------|
| 0.015                  | 24                          | 60                      |                         |
| 0.017                  | 24                          |                         | 75                      |

1. Design pressures found via UL 580 testing.

2. All fasteners must have a minimum penetration into purlins of 1 1/8"

The results of the ASTM E455 diaphragm testing can be found in Table 2.

**Table 2.** Diaphragm Shear Loads for Hi-Rib II Steel Roof Panels

| Product Thickness (in) | Fastener                                                   | Insulation   | Allowable Shear Strength (lb/ft) | Average Shear Stiffness G (lb/in) |
|------------------------|------------------------------------------------------------|--------------|----------------------------------|-----------------------------------|
| 0.015                  | #9 x 3" Screws through rib and #9 x 2" Screws through flat | 1/2" Thermax | 96                               | 2,012                             |
|                        | #9 x 2" Screws through rib and #9 x 1" Screws through flat | None         | 104                              | 2,624                             |
| 0.017                  | #9 x 3" Screws through rib and #9 x 2" Screws through flat | 1/2" Thermax | 102                              | 1,960                             |
|                        | #9 x 2" Screws through rib and #9 x 1" Screws through flat | None         | 122                              | 2,940                             |

These panels may be used on Risk Category I, II, III and IV buildings.

### Hi-Rib Steel Roof Panels

Hi-Rib Steel Roof Panels conform to Section 1507.4 and Section 2204 of the 2026 FBC. The panels were tested via UL 580: Tests for Uplift Resistance of Roof Assemblies by Architectural Testing, Inc. Hi-Rib panels have a minimum thickness of 0.020" and have a coverage width of 36". On the panel edges and every 12" widthwise, the panel has a 1" half circle rib. Installation shall be to wooden purlins that have a maximum spacing of 24" o.c. and a minimum slope of 3:12 using proprietary #9 x 2" pan head screws and a 7/16" diameter bonded stainless steel washer below the screw head.

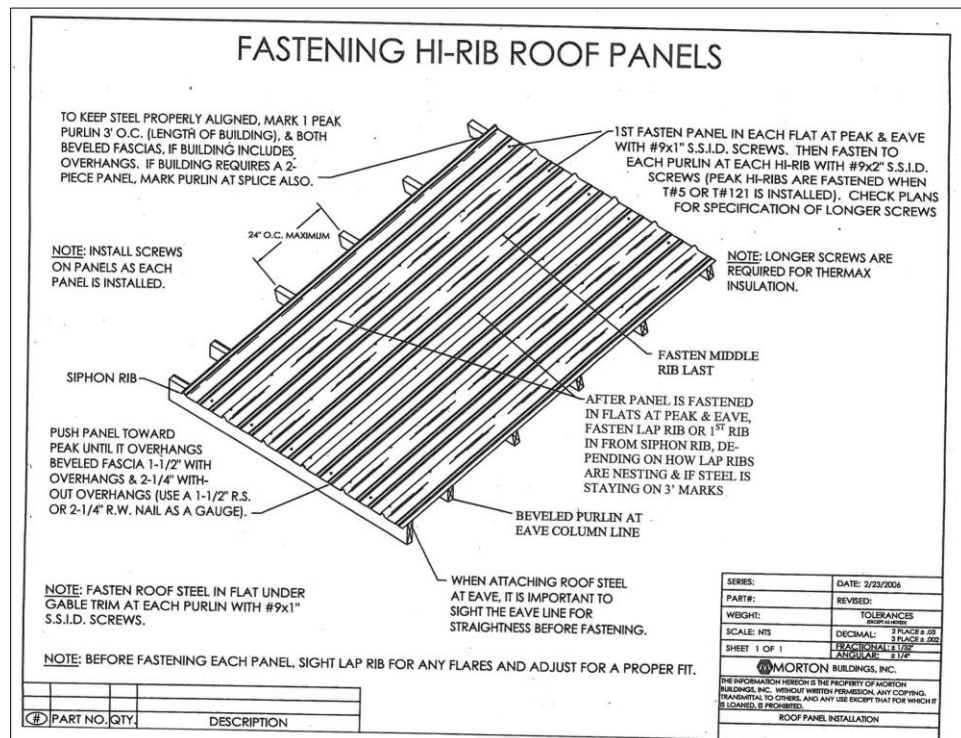


**Figure 2.** Fastening Hi-Rib Steel Roof Panels



The maximum allowable design wind uplift/gravity for this product can be found below in Table 3. The design pressure conforms with the requirements of the 2026 FBC.

**Table 3.** Allowable Design Wind Uplift for Hi-Rib Steel Roof Panels

| Product                  | Allowable Design Wind Uplift/Gravity (psf) |
|--------------------------|--------------------------------------------|
| Hi-Rib Steel Roof Panels | 75                                         |

This panel may be used on Risk Category I, II, III and IV buildings.

Hi-Rib II Steel Roof Panels and Hi-Rib Steel Roof Panels are not currently available for use in High-Velocity Hurricane Zones (HVHZ).

### General Code Compliance and Approval

DrJ's procedures are fully compliant with 17065 certification procedures and DrJ's scope of expertise.

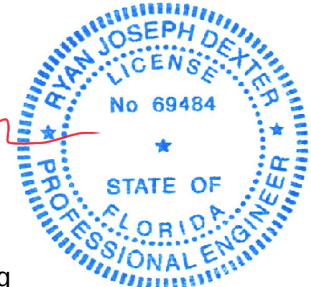
If there are any questions or concerns, we will gladly provide a professional engineering<sup>5</sup> and ANAB 17065 accredited approved agency<sup>6</sup> response. Pursuant to FBC Section 1707.1 and 104.11, we would sincerely appreciate knowing the specific building regulations and/or professional engineering law that this 17065 Research Report does not comply with, so that we can cure any non-conformance.<sup>7</sup> From specifics, we can then delineate a path forward that will serve everyone's best interests regarding free and fair market<sup>8</sup> competition.

Our goal with this 17065 evaluation and certification is to provide both the accepted engineering analysis and regulatory compliance substance that supports efficient approval. Please contact us if we can help further in any way. If your request is time sensitive, please contact Jill Zimmerman at 920-988-7165. Thank you very much.

Respectfully yours,

Chris Scoville  
Vice President Product Certification  
608-310-6720

Ryan Dexter, P.E.  
Florida P.E. No. 69484  
Vice President of Engineering  
608-310-6744



Digitally signed by  
RYAN J DEXTER  
Date: 2026.10.19  
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DrJ Engineering, LLC  
Certificate of Authorization  
#29766



<sup>1</sup> The scope of work contained herein is limited to the specific engineering and/or code compliance analysis undertaken in this duly authenticated report, which is also known as a technical evaluation, evaluation report, research report, accepted evaluation to a reasonable degree of engineering certainty, and so forth. This work has been prepared by an approved source, who is a Registered Design Professional (RDP). No representation or warranty is expressed or implied by this duly authenticated report beyond the scope of work performed. Information, data, and/or analysis that becomes available in the future may justify modifications to this professional evaluation report.

<sup>2</sup> Approval of an RDP takes place when the RDP is properly licensed in the pertinent jurisdiction. Commercial and professional engineering laws affirm that the RDP has the ability to undertake commerce applying engineering principles in their area of expertise without restraint or discrimination. Ohio has set legal precedent.

<sup>3</sup> Capitalized terms are defined in the building code, reference standards, TPI 1, the NDS, AISI S202, professional engineering law, Appendix A: Definitions/Commentary, and the National Building Code of Canada. Otherwise, terms not defined shall have ordinarily accepted meanings as the context implies.

<sup>4</sup> All ideas, engineering analysis, and test data are proprietary intellectual property (IP) and trade secrets (TS) and should not be provided to anyone. In particular, public regulatory officials are subject to freedom of information act requests – federal and state public records acts. This means that IP and TS will be in the public domain when any information is provided. In addition, each state also has legislation that mimics the federal Defend Trade Secrets Act 2016 (DTSA), where providing test reports, engineering analysis, and/or other related IP/TS is subject to prison of not more than 10 years and/or a \$5,000,000 fine or 3 times the value of the IP and TS. To follow DTSA and to comply with state public records and trade secret legislation requires approval through ANAB ISO/IEC 17065 accredited certification bodies or approved sources. For more information, please visit <http://www.drjengineering.org/AppendixC> and <https://www.drjcertification.org/cornell-2016-protection-trade-secrets>.

<sup>5</sup> Approved source. An independent person, firm, or corporation, approved by the building official, who is competent and experienced in the application of engineering principles to materials, methods, or systems analyses, which is a professional engineer. To find licensed professional engineers please see this website: <https://www.nspe.org/resources/licensure/licensing-boards>. An approved source is “approved” when a professional engineer (i.e., Registered Design Professional [RDP]) is properly licensed to transact engineering commerce. The regulatory authority governing approved sources is the state legislature via its professional engineering regulations. Commercial and professional engineering laws affirm that the RDP has the ability to undertake commerce applying engineering principles in their area of expertise without restraint or discrimination. Ohio has set legal precedent.

<sup>6</sup> ANAB accredited approved agencies. An approved agency shall be objective, competent and independent. An approved agency is “approved” when it is ANAB ISO/IEC 17065 accredited. DrJ Engineering, LLC (DrJ) is listed in the ANAB directory. Language is found in Section 1703.1.1.

<sup>7</sup> Where the alternative material, design, or method of construction is not approved, the building official shall respond in writing, stating the reasons why the alternative was not approved. Language is found in Section 104.11.

<sup>8</sup> Competition provides businesses the opportunity to compete on price, quality, innovation, and wages, in an open market and on a level playing field, unhampered by anticompetitive restraints: <https://www.justice.gov/atr/mission>. State statutes by topic can be found at [https://www.law.cornell.edu/wex/unfair\\_competition](https://www.law.cornell.edu/wex/unfair_competition). Finally, given that government employees have monopoly approval power, they are held to high standards as it relates to bias in commerce (i.e., discrimination) as found at <https://www.justice.gov/crt/deprivation-rights-under-color-law> and <https://www.law.cornell.edu/uscode/text/42/1983>.