

Morton Hi-Rib II and Hi-Rib Steel Wall Panels, 2026 FBC Compliance, FL37256 - ENG-2609-339
October 5, 2026

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

Re: Hi-Rib II and Hi-Rib Steel Wall Panels, 2026 Florida Building Code Compliance for Standard (Non-HVHZ)
Applications^{1,2,3,4}

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 Wall Panels and Hi-Rib Steel Wall 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 Wall Panels with the 2026 Florida Building Code (FBC).

Hi-Rib II Steel Wall Panels

Hi-Rib II Steel Wall Panels conform to Section 1404.5, Section 1405.11 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 girts using either proprietary #9 x 2" stainless steel screws with a $\frac{7}{16}$ " diameter bonded stainless steel washer placed under the head or 2 $\frac{1}{4}$ " long ring shank nails.



THE QUALTIM FAMILY OF SERVICES
Where building innovation thrives.



The maximum allowable design wind pressure for these products can be found in Table 1 and Table 2. The design pressure conforms to the requirements of the 2026 FBC.

Table 1. Allowable Design Wind Pressures using #9 x 2" Screws to attach the Hi-Rib II Panels to the Girts¹

Product Thickness (in)	Girt Spacing (in)	Positive Pressure (psf)	Negative Pressure (psf)
0.015	24	80	
	27	71.1	
	30	64	
	33	58.2	
	36	53.3	
	39	49.2	
0.017	24	100	
	27	88.9	
	30	80	
	33	72.7	
	36	66.7	
	39	61.5	
1. All fasteners must have a minimum penetration into girts of 1 1/8"			

Table 2. Allowable Design Wind Pressures using 2 1/4" Nails to attach the Hi-Rib II Panels to the Girts¹

Product Thickness (in)	Girt Spacing (in)	Positive Pressure (psf)	Negative Pressure (psf)
0.015 and 0.017	24	55	
	27	48.9	
	30	44	
	33	40	
	36	36.7	
	39	33.8	
1. All fasteners must have a minimum penetration into girts of 1 3/8"			

The results of the ASTM E455 diaphragm testing can be found in Table 3.

Table 3. Diaphragm Shear Loads for Hi-Rib II Steel Wall 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
	2 1/4" Nails through rib and 1 1/2" Nails through flat		85	1,756
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
	2 1/4" Nails through rib and 1 1/2" Nails through flat		89	1,647

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

Hi-Rib Steel Wall Panels

Hi-Rib Steel Wall Panels conform to Section 1404.5, Section 1405.11 and Section 2204 of the 2026 FBC. 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. Panels shall be placed with edge ribs overlapping and fastened to the girts with proprietary #9 x 2" pan head screws with a 7/16" diameter bonded stainless steel washer below the screw head. Each panel rib shall be fastened to the girts following the layout in Figure 1 (note any additional fasteners needed beyond the third fastener shall be placed at most 24" from the previous fastener). The ends of the panels shall be secured every 6" using the proprietary #9 x 2" pan head screws in the ribs and by #9 x 1" pan head screws in the flat of the panel centered between the two ribs (See Figure 1).

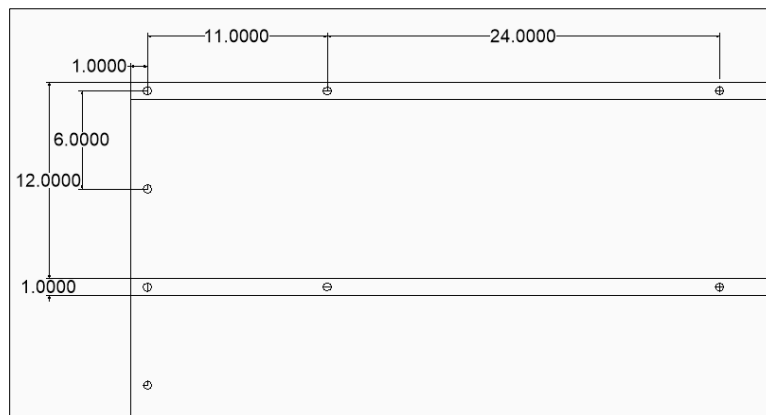


Figure 1. Fastener Placements (in) on Hi-Rib Steel Wall Panels (Panel Width is on Vertical Axis)



The maximum allowable design wind pressure for this product can be found in Table 4. The design pressure conforms to the requirements of the FBC.

Table 4. Allowable Design Wind Pressures using #9 x 2" Screws to attach the Hi-Rib Panels to the Girts¹

Product	Girt Spacing (in)	Positive Pressure (psf)	Negative Pressure (psf)
Hi-Rib Steel Wall Panels	24	95	64.5
	27	75.1	57.4
	30	60.8	51.6
	33	50.9	46.9
	36	42	
	39	35.8	
1. All fasteners must have a minimum penetration into girts of 1 1/8"			

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

Hi-Rib II Steel Wall Panels and Hi-Rib Steel Wall 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.

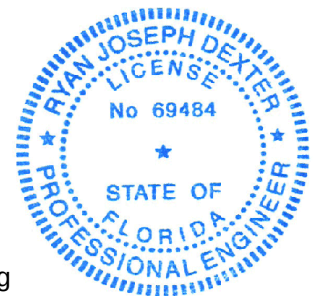
If there are any questions or concerns, we will gladly provide a professional engineering⁵ and ANAB 17065 accredited approved agency⁶ response. Pursuant to FBC Section 1707.1 and 104.11, we would sincerely appreciate knowing the specific building regulations and/or professional engineering law that this 17065 Research Report does not comply with, so that we can cure any non-conformance.⁷ From specifics, we can then delineate a path forward that will serve everyone's best interests regarding free and fair market⁸ 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



DrJ Engineering, LLC
Certificate of Authorization #29766



Digitally signed
by RYAN J DEXTER
Date: 2026.10.08
10:42:21 -04'00'



¹ 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.

² 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.

³ 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.

⁴ 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>.

⁵ 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.

⁶ 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.

⁷ 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.

⁸ 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. 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>.