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Renewal Date: 07-31-2026

DIVISION: 07 00 00 – Thermal and Moisture Protection
Section: 07 42 13 – Metal Wall Panels

REPORT HOLDER:
Morin Corporation
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+1-386-626-6789
www.morincorp.com
harshp@morincorp.com

REPORT SUBJECT:
Morin Exposed Fastener Series Wall Panels

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

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

NOTE: This report references the most recent Code editions noted. Section numbers in earlier editions may differ.

1.2 The Morin Exposed Fastener Series Wall Panels have been evaluated for the following properties (see Table 1):

- Physical properties
- Wind resistance

1.3 The Morin Exposed Fastener Series Wall Panels have been evaluated for the following uses (see Table 1):

- Exterior wall cladding in Types I, II, III, IV and V construction

2.0 STATEMENT OF COMPLIANCE

The Morin Exposed Fastener Series Wall Panels 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.

2.1 2024 IBC and IRC Evaluation Reports: The Intertek CCRR is an Evaluation Report for approval of an alternate

material, design, or method of construction in accordance with Section 104.2.3.6.1 of the 2024 IBC and Section R104.2.2.6.1 of the 2024 IRC.

3.0 DESCRIPTION

3.1 Morin Exposed Fastener Series Wall Panels: The wall panels recognized in this report are identified in the tables at the end of this report. The cladding panels are made of steel sheet, 55% aluminum-zinc alloy-coated structural steel (SS), Grade 40 or 50, Class 1, conforming to ASTM A792; or aluminum conforming to ASTM B209, Type 3003-H14/3004-H34.

3.2 Fasteners: Fasteners shall be self-drilling, self-tapping corrosion-resistant screws. Screw size and specification are determined by the design.

4.0 PERFORMANCE CHARACTERISTICS

4.1 Wind Resistance: When installed as described in this report, the panels have an allowable wind resistance as denoted in the Span Tables at the end of this report.

5.0 INSTALLATION

5.1 General:

The Morin Exposed Fastener Series Wall Panels 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.

The panels must be oriented perpendicular to steel framing complying with the code. Framing members must be specified by design and must be justified by engineering analysis. The maximum span of the installed metal panels must not exceed the span denoted for the particular profile in the tables at the end of this report. The allowable span is limited to the lower of the stress or deflection value in the table, or by the allowable withdrawal capacity of the fastener, or by the allowable pullover capacity of the fastener, as determined by the engineering analysis. The



allowable spans in the tables were determined by sectional properties for each profile.

A water-resistive barrier complying with IBC Section 1403.2 must be installed behind the panels and must be installed as required by that section of the code.

For use in Types I, II, III or IV construction on buildings greater than 40 feet above grade, evidence the water-resistive barrier complies with IBC Section 1402.5, Exception 2, or a report of testing in accordance with NFPA 285 for an assembly representative of the final construction, must be submitted to the building official.

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 Structural calculations demonstrating that applied loads are less than the allowable loads must be submitted to the local building official for approval.

6.3 The approval of the structural substrate to which the panels are attached is beyond the scope of this report.

6.4 A licensed design professional shall analyze the fasteners for pullout and pullover for use atop the specified framing. The framing shall be verified by the structural plans examiner.

6.5 Use of the panels as bracing against lateral wind or earthquake forces is outside the scope of this report.

6.6 The metal panels are manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc.

7.0

SUPPORTING EVIDENCE

7.1 Engineering calculations and reports of tests in accordance with ASTM E1592.

7.2 Intertek Listing Report "Morin Exposed Fastener Series Metal Wall Panels", on the [Intertek Directory of Building Products](#).

8.0 IDENTIFICATION

The panels are identified with the manufacturer's name (Morin Corporation), the product name, the job or lot number, the Intertek Mark as shown below, the Intertek Control Number and the Code Compliance Research Report number (CCRR-0550).



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.

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TABLE 1 - PROPERTIES EVALUATED

PROPERTY	2024 IBC SECTION
Physical Properties	1404.2 1404.12
Wind Resistance	1402.3
Types I, II, III, and IV construction	1402.5

Section numbers may differ for earlier versions of the Code

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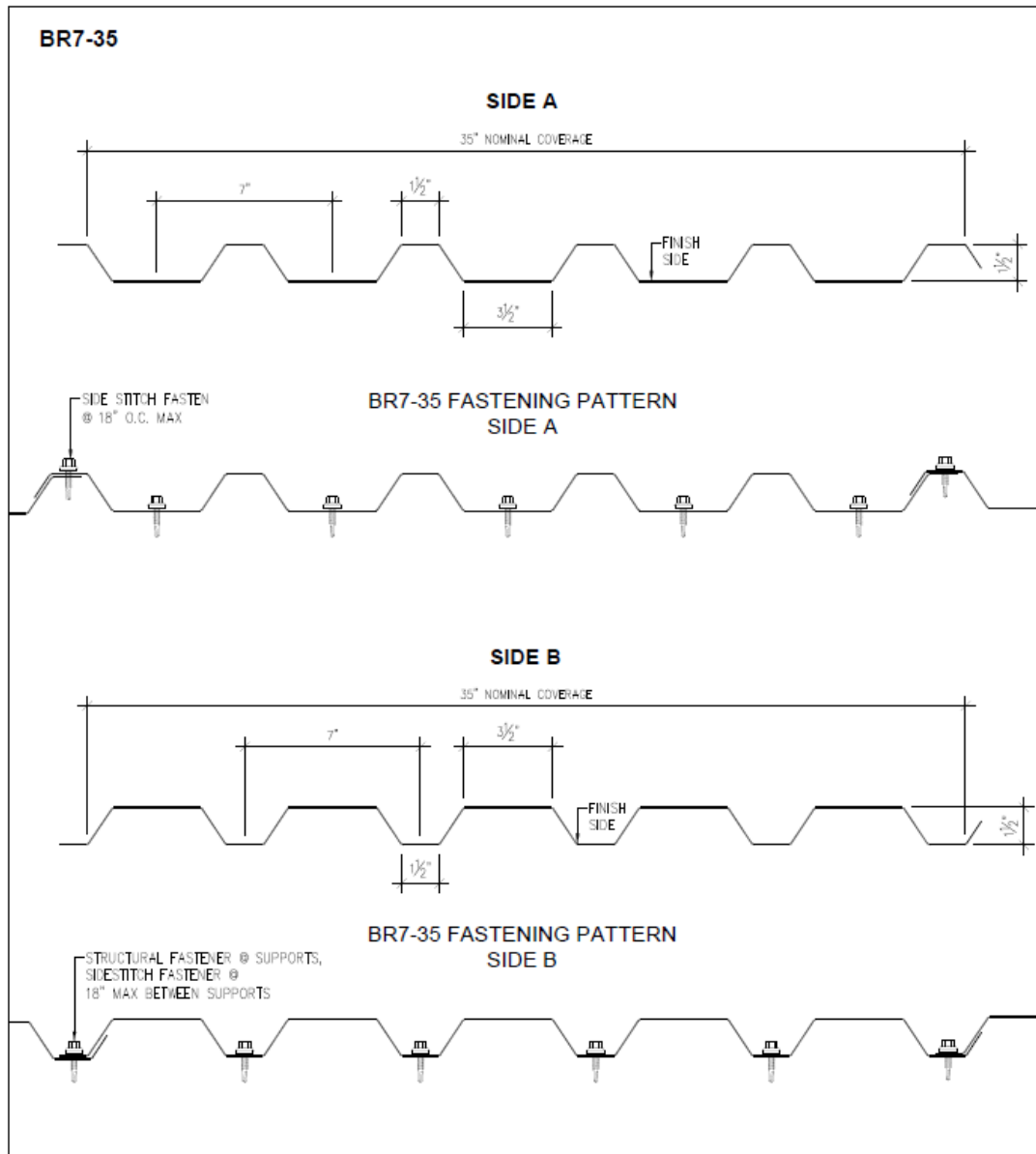
MORIN EXPOSED WALL SERIES SPAN CHARTS

Model BR7-35 – Panel Profiles and Span Tables

The following notes are applicable to the tables below:

1. Numbers in the tables indicate clear span distance between the structural supports.
2. Section properties listed are for the solid base sheet.
3. Load and span values listed do not include consideration of fastener with washer/oversize washer, to be determined by qualified personnel.
4. This table is intended as a guide to the allowable loads and spans for the panel product, however, actual assembly conditions must be determined by a qualified individual.
5. Refer to Morin install manual for fastening pattern across the panel (along the support) and side lap fastening.







Panel Type: BR7-35
 Material/Thickness: ST/18ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.291 in⁴/ft
 Sx: 0.252 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	14'-3"	14'-3"	15'-11"	55	Stress	8'-7"	8'-7"	9'-7"
	Deflection	10'-10"	14'-7"	13'-5"		Deflection	7'-9"	10'-5"	9'-7"
25	Stress	12'-9"	12'-9"	14'-3"	60	Stress	8'-2"	8'-2"	9'-2"
	Deflection	10'-1"	13'-7"	12'-6"		Deflection	7'-6"	10'-2"	9'-4"
30	Stress	11'-7"	11'-7"	13'-0"	65	Stress	7'-11"	7'-11"	8'-10"
	Deflection	9'-6"	12'-9"	11'-9"		Deflection	7'-4"	9'-10"	9'-1"
35	Stress	10'-9"	10'-9"	12'-0"	70	Stress	7'-7"	7'-7"	8'-6"
	Deflection	9'-0"	12'-2"	11'-2"		Deflection	7'-2"	9'-8"	8'-10"
40	Stress	10'-1"	10'-1"	11'-3"	75	Stress	7'-4"	7'-4"	8'-2"
	Deflection	8'-7"	11'-7"	10'-8"		Deflection	7'-0"	9'-5"	8'-8"
45	Stress	9'-6"	9'-6"	10'-7"	80	Stress	7'-1"	7'-1"	7'-11"
	Deflection	8'-3"	11'-2"	10'-3"		Deflection	6'-10"	9'-3"	8'-6"
50	Stress	9'-0"	9'-0"	10'-1"	85	Stress	6'-11"	6'-11"	7'-8"
	Deflection	8'-0"	10'-9"	9'-11"		Deflection	6'-8"	9'-0"	8'-3"



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Panel Type: **BR7-35**
 Material/Thickness: **ST/20ga**
 Perforation: **N/A**
 Hole Pattern:
 Deflection Limit: **L/180**
 Ix: 0.19 in⁴/ft
 Sx: 0.219 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	13'-3"	13'-3"	14'-10"	55	Stress	8'-0"	8'-0"	8'-11"
	Deflection	9'-5"	12'-8"	11'-8"		Deflection	6'-8"	9'-1"	8'-4"
25	Stress	11'-10"	11'-10"	13'-3"	60	Stress	7'-8"	7'-8"	8'-7"
	Deflection	8'-9"	11'-9"	10'-10"		Deflection	6'-6"	8'-9"	8'-1"
30	Stress	10'-10"	10'-10"	12'-1"	65	Stress	7'-4"	7'-4"	8'-3"
	Deflection	8'-2"	11'-1"	10'-2"		Deflection	6'-4"	8'-7"	7'-10"
35	Stress	10'-0"	10'-0"	11'-2"	70	Stress	7'-1"	7'-1"	7'-11"
	Deflection	7'-10"	10'-6"	9'-8"		Deflection	6'-2"	8'-4"	7'-8"
40	Stress	9'-4"	9'-4"	10'-6"	75	Stress	6'-10"	6'-10"	7'-8"
	Deflection	7'-5"	10'-1"	9'-3"		Deflection	6'-1"	8'-2"	7'-6"
45	Stress	8'-10"	8'-10"	9'-10"	80	Stress	6'-7"	6'-7"	7'-5"
	Deflection	7'-2"	9'-8"	8'-11"		Deflection	5'-11"	8'-0"	7'-4"
50	Stress	8'-5"	8'-5"	9'-4"	85	Stress	6'-5"	6'-5"	7'-2"
	Deflection	6'-11"	9'-4"	8'-7"		Deflection	5'-10"	7'-10"	7'-2"



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Panel Type: BR7-35
 Material/Thickness: ST/22ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.158 in⁴/ft
 Sx: 0.183 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	12'-1"	12'-1"	13'-6"	55	Stress	7'-4"	7'-4"	8'-2"
	Deflection	8'-10"	11'-11"	10'-11"		Deflection	6'-4"	8'-6"	7'-10"
25	Stress	10'-10"	10'-10"	12'-1"	60	Stress	6'-12"	6'-12"	7'-10"
	Deflection	8'-2"	11'-1"	10'-2"		Deflection	6'-1"	8'-3"	7'-7"
30	Stress	9'-11"	9'-11"	11'-1"	65	Stress	6'-9"	6'-9"	7'-6"
	Deflection	7'-9"	10'-5"	9'-7"		Deflection	6'-0"	8'-1"	7'-5"
35	Stress	9'-2"	9'-2"	10'-3"	70	Stress	6'-6"	6'-6"	7'-3"
	Deflection	7'-4"	9'-11"	9'-1"		Deflection	5'-10"	7'-10"	7'-3"
40	Stress	8'-7"	8'-7"	9'-7"	75	Stress	6'-3"	6'-3"	7'-0"
	Deflection	7'-0"	9'-6"	8'-8"		Deflection	5'-8"	7'-8"	7'-1"
45	Stress	8'-1"	8'-1"	9'-0"	80	Stress	6'-1"	6'-1"	6'-9"
	Deflection	6'-9"	9'-1"	8'-4"		Deflection	5'-7"	7'-6"	6'-11"
50	Stress	7'-8"	7'-8"	8'-7"	85	Stress	5'-10"	5'-10"	6'-7"
	Deflection	6'-6"	8'-9"	8'-1"		Deflection	5'-5"	7'-4"	6'-9"



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Wind Load Span Table For Siding Panel

Panel Type: BR7-35
 Material/Thickness: ST/24ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.126 in⁴/ft
 Sx: 0.147 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	10'-10"	10'-10"	12'-1"	55	Stress	6'-6"	6'-6"	7'-4"
	Deflection	8'-2"	11'-1"	10'-2"		Deflection	5'-10"	7'-11"	7'-3"
25	Stress	9'-8"	9'-8"	10'-10"	60	Stress	6'-3"	6'-3"	7'-0"
	Deflection	7'-7"	10'-3"	9'-5"		Deflection	5'-8"	7'-8"	7'-1"
30	Stress	8'-10"	8'-10"	9'-11"	65	Stress	6'-0"	6'-0"	6'-9"
	Deflection	7'-2"	9'-8"	8'-11"		Deflection	5'-6"	7'-6"	6'-10"
35	Stress	8'-2"	8'-2"	9'-2"	70	Stress	5'-9"	5'-9"	6'-6"
	Deflection	6'-10"	9'-2"	8'-5"		Deflection	5'-5"	7'-3"	6'-8"
40	Stress	7'-8"	7'-8"	8'-7"	75	Stress	5'-7"	5'-7"	6'-3"
	Deflection	6'-6"	8'-9"	8'-1"		Deflection	5'-3"	7'-1"	6'-7"
45	Stress	7'-3"	7'-3"	8'-1"	80	Stress	5'-5"	5'-5"	6'-1"
	Deflection	6'-3"	8'-5"	7'-9"		Deflection	5'-2"	7'-0"	6'-5"
50	Stress	6'-10"	6'-10"	7'-8"	85	Stress	5'-3"	5'-3"	5'-11"
	Deflection	6'-0"	8'-2"	7'-6"		Deflection	5'-1"	6'-10"	6'-3"



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Panel Type:
Material/Thickness
Perforation:
Hole Pattern:
Deflection Limit:
Ix: 0.169 in⁴/ft
Sx: 0.196 in³/ft

BR7-35
AL/0.032

L/180

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	8'-6"	8'-6"	9'-6"	55	Stress	5'-1"	5'-1"	5'-9"
	Deflection	6'-4"	8'-6"	7'-10"		Deflection	4'-6"	6'-1"	5'-7"
25	Stress	7'-7"	7'-7"	8'-6"	60	Stress	4'-11"	4'-11"	5'-6"
	Deflection	5'-10"	7'-11"	7'-3"		Deflection	4'-4"	5'-11"	5'-5"
30	Stress	6'-11"	6'-11"	7'-9"	65	Stress	4'-8"	4'-8"	5'-3"
	Deflection	5'-6"	7'-5"	6'-10"		Deflection	4'-3"	5'-9"	5'-3"
35	Stress	6'-5"	6'-5"	7'-2"	70	Stress	4'-6"	4'-6"	5'-1"
	Deflection	5'-3"	7'-1"	6'-6"		Deflection	4'-2"	5'-7"	5'-2"
40	Stress	6'-0"	6'-0"	6'-8"	75	Stress	4'-5"	4'-5"	4'-11"
	Deflection	5'-0"	6'-9"	6'-2"		Deflection	4'-1"	5'-6"	5'-0"
45	Stress	5'-8"	5'-8"	6'-4"	80	Stress	4'-3"	4'-3"	4'-9"
	Deflection	4'-10"	6'-6"	6'-0"		Deflection	4'-0"	5'-4"	4'-11"
50	Stress	5'-4"	5'-4"	6'-0"	85	Stress	4'-1"	4'-1"	4'-7"
	Deflection	4'-8"	6'-3"	5'-9"		Deflection	3'-11"	5'-3"	4'-10"



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Panel Type: **BR7-35**
 Material/Thickness: **AL/0.040**
 Perforation:
 Hole Pattern:
 Deflection Limit: **L/180**
 Ix: 0.211 in⁴/ft
 Sx: 0.244 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	9'-5"	9'-5"	10'-7"	55	Stress	5'-8"	5'-8"	6'-5"
	Deflection	6'-9"	9'-2"	8'-5"		Deflection	4'-10"	6'-6"	6'-0"
25	Stress	8'-6"	8'-6"	9'-5"	60	Stress	5'-6"	5'-6"	6'-1"
	Deflection	6'-4"	8'-6"	7'-10"		Deflection	4'-8"	6'-4"	5'-10"
30	Stress	7'-9"	7'-9"	8'-8"	65	Stress	5'-3"	5'-3"	5'-10"
	Deflection	5'-11"	8'-0"	7'-4"		Deflection	4'-7"	6'-2"	5'-8"
35	Stress	7'-2"	7'-2"	8'-0"	70	Stress	5'-1"	5'-1"	5'-8"
	Deflection	5'-8"	7'-7"	7'-0"		Deflection	4'-6"	6'-0"	5'-7"
40	Stress	6'-8"	6'-8"	7'-6"	75	Stress	4'-11"	4'-11"	5'-6"
	Deflection	5'-5"	7'-3"	6'-8"		Deflection	4'-4"	5'-11"	5'-5"
45	Stress	6'-4"	6'-4"	7'-1"	80	Stress	4'-9"	4'-9"	5'-3"
	Deflection	5'-2"	7'-0"	6'-5"		Deflection	4'-3"	5'-9"	5'-4"
50	Stress	6'-0"	6'-0"	6'-8"	85	Stress	4'-7"	4'-7"	5'-2"
	Deflection	5'-0"	6'-9"	6'-2"		Deflection	4'-2"	5'-8"	5'-2"





Panel Type: **BR7-35**
 Material/Thickness: **AL/0.050**
 Perforation:
 Hole Pattern:
 Deflection Limit: **L/180**
 Ix: 0.264 in⁴/ft
 Sx: 0.304 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	10'-7"	10'-7"	11'-10"	55	Stress	6'-4"	6'-4"	7'-1"
	Deflection	7'-4"	9'-10"	9'-1"		Deflection	5'-3"	7'-1"	6'-6"
25	Stress	9'-5"	9'-5"	10'-7"	60	Stress	6'-1"	6'-1"	6'-10"
	Deflection	6'-9"	9'-2"	8'-5"		Deflection	5'-1"	6'-10"	6'-3"
30	Stress	8'-7"	8'-7"	9'-8"	65	Stress	5'-10"	5'-10"	6'-7"
	Deflection	6'-5"	8'-8"	7'-11"		Deflection	4'-11"	6'-8"	6'-1"
35	Stress	8'-0"	8'-0"	8'-11"	70	Stress	5'-8"	5'-8"	6'-4"
	Deflection	6'-1"	8'-2"	7'-6"		Deflection	4'-10"	6'-6"	6'-0"
40	Stress	7'-6"	7'-6"	8'-4"	75	Stress	5'-5"	5'-5"	6'-1"
	Deflection	5'-10"	7'-10"	7'-2"		Deflection	4'-8"	6'-4"	5'-10"
45	Stress	7'-0"	7'-0"	7'-10"	80	Stress	5'-3"	5'-3"	5'-11"
	Deflection	5'-7"	7'-6"	6'-11"		Deflection	4'-7"	6'-3"	5'-9"
50	Stress	6'-8"	6'-8"	7'-6"	85	Stress	5'-1"	5'-1"	5'-9"
	Deflection	5'-5"	7'-3"	6'-8"		Deflection	4'-6"	6'-1"	5'-7"



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MORIN EXPOSED WALL SERIES SPAN CHARTS

Model BR-28 – Panel Profiles and Span Tables

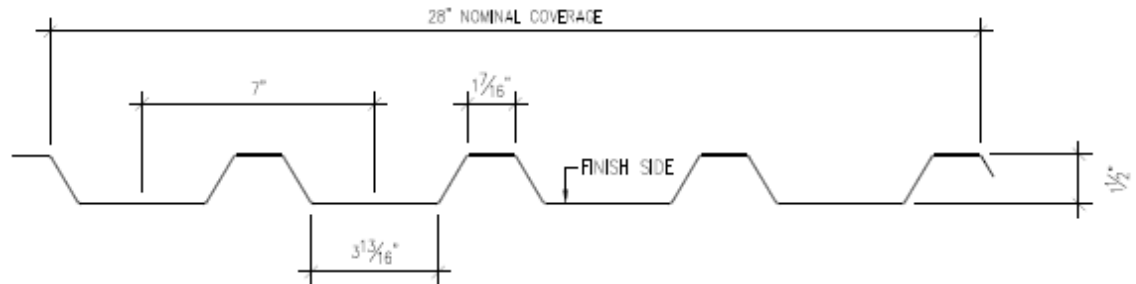
The following notes are applicable to the tables below:

1. Numbers in the tables indicate clear span distance between the structural supports.
2. Section properties listed are for the solid base sheet.
3. Load and span values listed do not include consideration of fastener with washer/oversize washer, to be determined by qualified personnel.
4. This table is intended as a guide to the allowable loads and spans for the panel product, however, actual assembly conditions must be determined by a qualified individual.
5. Refer to Morin install manual for fastening pattern across the panel (along the support) and side lap fastening.

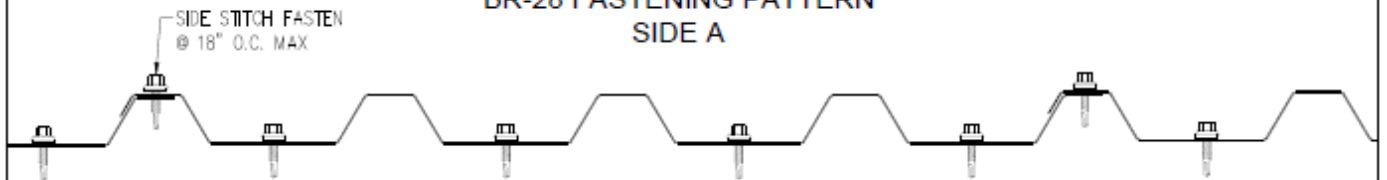


BR-28

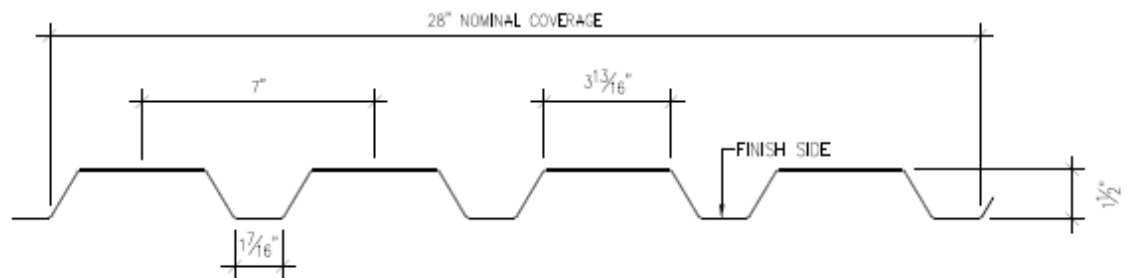
SIDE A



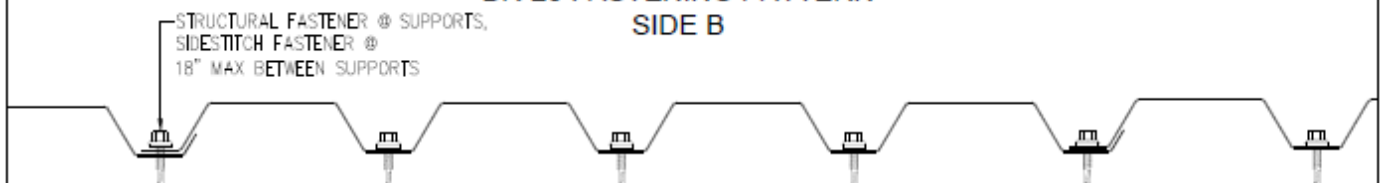
**BR-28 FASTENING PATTERN
SIDE A**



SIDE B



**BR-28 FASTENING PATTERN
SIDE B**





Panel Type: BR-28
 Material/Thickness: ST/18ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.251 in⁴/ft
 Sx: 0.256 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	14'-4"	14'-4"	16'-0"	55	Stress	8'-8"	8'-8"	9'-8"
	Deflection	10'-4"	13'-11"	12'-9"		Deflection	7'-4"	9'-11"	9'-2"
25	Stress	12'-10"	12'-10"	14'-4"	60	Stress	8'-3"	8'-3"	9'-3"
	Deflection	9'-7"	12'-11"	11'-10"		Deflection	7'-2"	9'-8"	8'-10"
30	Stress	11'-8"	11'-8"	13'-1"	65	Stress	7'-11"	7'-11"	8'-11"
	Deflection	9'-0"	12'-2"	11'-2"		Deflection	7'-0"	9'-5"	8'-8"
35	Stress	10'-10"	10'-10"	12'-1"	70	Stress	7'-8"	7'-8"	8'-7"
	Deflection	8'-7"	11'-7"	10'-7"		Deflection	6'-10"	9'-2"	8'-5"
40	Stress	10'-1"	10'-1"	11'-4"	75	Stress	7'-5"	7'-5"	8'-3"
	Deflection	8'-2"	11'-1"	10'-2"		Deflection	6'-8"	9'-0"	8'-3"
45	Stress	9'-6"	9'-6"	10'-8"	80	Stress	7'-2"	7'-2"	8'-0"
	Deflection	7'-10"	10'-8"	9'-9"		Deflection	6'-6"	8'-9"	8'-1"
50	Stress	9'-1"	9'-1"	10'-1"	85	Stress	6'-11"	6'-11"	7'-9"
	Deflection	7'-7"	10'-3"	9'-5"		Deflection	6'-4"	8'-7"	7'-11"



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Panel Type:
Material/Thickness
Perforation:
Hole Pattern:
Deflection Limit:

BR-28
ST/20ga
N/A

L/180

Ix: 0.187 in⁴/ft
Sx: 0.207 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	12'-10"	12'-10"	14'-5"	55	Stress	7'-9"	7'-9"	8'-8"
	Deflection	9'-4"	12'-7"	11'-7"		Deflection	6'-8"	9'-0"	8'-3"
25	Stress	11'-6"	11'-6"	12'-10"	60	Stress	7'-5"	7'-5"	8'-4"
	Deflection	8'-8"	11'-9"	10'-9"		Deflection	6'-6"	8'-9"	8'-0"
30	Stress	10'-6"	10'-6"	11'-9"	65	Stress	7'-2"	7'-2"	8'-0"
	Deflection	8'-2"	11'-0"	10'-2"		Deflection	6'-4"	8'-6"	7'-10"
35	Stress	9'-9"	9'-9"	10'-11"	70	Stress	6'-11"	6'-11"	7'-8"
	Deflection	7'-9"	10'-6"	9'-7"		Deflection	6'-2"	8'-4"	7'-8"
40	Stress	9'-1"	9'-1"	10'-2"	75	Stress	6'-8"	6'-8"	7'-5"
	Deflection	7'-5"	10'-0"	9'-2"		Deflection	6'-0"	8'-2"	7'-6"
45	Stress	8'-7"	8'-7"	9'-7"	80	Stress	6'-5"	6'-5"	7'-2"
	Deflection	7'-2"	9'-8"	8'-10"		Deflection	5'-11"	7'-11"	7'-4"
50	Stress	8'-2"	8'-2"	9'-1"	85	Stress	6'-3"	6'-3"	7'-0"
	Deflection	6'-11"	9'-4"	8'-7"		Deflection	5'-9"	7'-10"	7'-2"



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Panel Type: BR-28
 Material/Thickness: ST/22ga
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.156 in⁴/ft
 Sx: 0.173 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	11'-9"	11'-9"	13'-2"	55	Stress	7'-1"	7'-1"	7'-11"
	Deflection	8'-10"	11'-11"	10'-11"		Deflection	6'-3"	8'-6"	7'-9"
25	Stress	10'-6"	10'-6"	11'-9"	60	Stress	6'-10"	6'-10"	7'-7"
	Deflection	8'-2"	11'-0"	10'-2"		Deflection	6'-1"	8'-3"	7'-7"
30	Stress	9'-7"	9'-7"	10'-9"	65	Stress	6'-6"	6'-6"	7'-4"
	Deflection	7'-8"	10'-5"	9'-6"		Deflection	5'-11"	8'-0"	7'-4"
35	Stress	8'-11"	8'-11"	9'-11"	70	Stress	6'-3"	6'-3"	7'-0"
	Deflection	7'-4"	9'-10"	9'-1"		Deflection	5'-10"	7'-10"	7'-2"
40	Stress	8'-4"	8'-4"	9'-4"	75	Stress	6'-1"	6'-1"	6'-10"
	Deflection	7'-0"	9'-5"	8'-8"		Deflection	5'-8"	7'-8"	7'-0"
45	Stress	7'-10"	7'-10"	8'-9"	80	Stress	5'-11"	5'-11"	6'-7"
	Deflection	6'-9"	9'-1"	8'-4"		Deflection	5'-7"	7'-6"	6'-10"
50	Stress	7'-5"	7'-5"	8'-4"	85	Stress	5'-8"	5'-8"	6'-5"
	Deflection	6'-6"	8'-9"	8'-0"		Deflection	5'-5"	7'-4"	6'-9"



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Panel Type: BR-28
 Material/Thickness: ST/24ga
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.122 in⁴/ft
 Sx: 0.137 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	10'-6"	10'-6"	11'-8"	55	Stress	6'-4"	6'-4"	7'-1"
	Deflection	8'-1"	10'-11"	10'-1"		Deflection	5'-9"	7'-10"	7'-2"
25	Stress	9'-4"	9'-4"	10'-6"	60	Stress	6'-0"	6'-0"	6'-9"
	Deflection	7'-6"	10'-2"	9'-4"		Deflection	5'-7"	7'-7"	7'-0"
30	Stress	8'-6"	8'-6"	9'-7"	65	Stress	5'-10"	5'-10"	6'-6"
	Deflection	7'-1"	9'-7"	8'-9"		Deflection	5'-6"	7'-5"	6'-9"
35	Stress	7'-11"	7'-11"	8'-10"	70	Stress	5'-7"	5'-7"	6'-3"
	Deflection	6'-9"	9'-1"	8'-4"		Deflection	5'-4"	7'-3"	6'-7"
40	Stress	7'-5"	7'-5"	8'-3"	75	Stress	5'-5"	5'-5"	6'-0"
	Deflection	6'-5"	8'-8"	8'-0"		Deflection	5'-3"	7'-1"	6'-6"
45	Stress	7'-0"	7'-0"	7'-10"	80	Stress	5'-3"	5'-3"	5'-10"
	Deflection	6'-2"	8'-4"	7'-8"		Deflection	5'-1"	6'-11"	6'-4"
50	Stress	6'-7"	6'-7"	7'-5"	85	Stress	5'-1"	5'-1"	5'-8"
	Deflection	6'-0"	8'-1"	7'-5"		Deflection	5'-0"	6'-9"	6'-3"



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Panel Type: BR-28
 Material/Thickness: AL/.032
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.167 in⁴/ft
 Sx: 0.185 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	8'-3"	8'-3"	9'-3"	55	Stress	5'-0"	5'-0"	5'-7"
	Deflection	6'-3"	8'-6"	7'-9"		Deflection	4'-6"	6'-1"	5'-7"
25	Stress	7'-4"	7'-4"	8'-3"	60	Stress	4'-9"	4'-9"	5'-4"
	Deflection	5'-10"	7'-10"	7'-3"		Deflection	4'-4"	5'-10"	5'-5"
30	Stress	6'-9"	6'-9"	7'-6"	65	Stress	4'-7"	4'-7"	5'-1"
	Deflection	5'-6"	7'-5"	6'-10"		Deflection	4'-3"	5'-9"	5'-3"
35	Stress	6'-3"	6'-3"	7'-0"	70	Stress	4'-5"	4'-5"	4'-11"
	Deflection	5'-2"	7'-0"	6'-5"		Deflection	4'-2"	5'-7"	5'-1"
40	Stress	5'-10"	5'-10"	6'-6"	75	Stress	4'-3"	4'-3"	4'-9"
	Deflection	5'-0"	6'-9"	6'-2"		Deflection	4'-0"	5'-5"	5'-0"
45	Stress	5'-6"	5'-6"	6'-2"	80	Stress	4'-1"	4'-1"	4'-7"
	Deflection	4'-9"	6'-6"	5'-11"		Deflection	3'-11"	5'-4"	4'-11"
50	Stress	5'-3"	5'-3"	5'-10"	85	Stress	3'-12"	3'-12"	4'-6"
	Deflection	4'-7"	6'-3"	5'-9"		Deflection	3'-10"	5'-3"	4'-10"



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Panel Type: BR-28
 Material/Thickness: AL/.040
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.208 in⁴/ft
 Sx: 0.23 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	9'-2"	9'-2"	10'-3"	55	Stress	5'-7"	5'-7"	6'-2"
	Deflection	6'-9"	9'-1"	8'-5"		Deflection	4'-10"	6'-6"	6'-0"
25	Stress	8'-3"	8'-3"	9'-2"	60	Stress	5'-4"	5'-4"	5'-11"
	Deflection	6'-3"	8'-6"	7'-9"		Deflection	4'-8"	6'-4"	5'-10"
30	Stress	7'-6"	7'-6"	8'-5"	65	Stress	5'-1"	5'-1"	5'-8"
	Deflection	5'-11"	8'-0"	7'-4"		Deflection	4'-7"	6'-2"	5'-8"
35	Stress	6'-11"	6'-11"	7'-9"	70	Stress	4'-11"	4'-11"	5'-6"
	Deflection	5'-7"	7'-7"	6'-11"		Deflection	4'-5"	6'-0"	5'-6"
40	Stress	6'-6"	6'-6"	7'-3"	75	Stress	4'-9"	4'-9"	5'-4"
	Deflection	5'-4"	7'-3"	6'-8"		Deflection	4'-4"	5'-10"	5'-5"
45	Stress	6'-2"	6'-2"	6'-10"	80	Stress	4'-7"	4'-7"	5'-2"
	Deflection	5'-2"	7'-0"	6'-5"		Deflection	4'-3"	5'-9"	5'-3"
50	Stress	5'-10"	5'-10"	6'-6"	85	Stress	4'-6"	4'-6"	5'-0"
	Deflection	5'-0"	6'-9"	6'-2"		Deflection	4'-2"	5'-8"	5'-2"



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Panel Type:
Material/Thickness
Perforation:
Hole Pattern:
Deflection Limit:

BR-28
AL/.050
N/A
L/180

Ix: 0.251 in⁴/ft
Sx: 0.256 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	9'-8"	9'-8"	10'-10"	55	Stress	5'-10"	5'-10"	6'-6"
	Deflection	7'-2"	9'-8"	8'-11"		Deflection	5'-2"	6'-11"	6'-4"
25	Stress	8'-8"	8'-8"	9'-8"	60	Stress	5'-7"	5'-7"	6'-3"
	Deflection	6'-8"	9'-0"	8'-3"		Deflection	5'-0"	6'-9"	6'-2"
30	Stress	7'-11"	7'-11"	8'-10"	65	Stress	5'-4"	5'-4"	6'-0"
	Deflection	6'-3"	8'-6"	7'-9"		Deflection	4'-10"	6'-7"	6'-0"
35	Stress	7'-4"	7'-4"	8'-2"	70	Stress	5'-2"	5'-2"	5'-9"
	Deflection	6'-0"	8'-1"	7'-5"		Deflection	4'-9"	6'-5"	5'-10"
40	Stress	6'-10"	6'-10"	7'-8"	75	Stress	5'-0"	5'-0"	5'-7"
	Deflection	5'-8"	7'-8"	7'-1"		Deflection	4'-8"	6'-3"	5'-9"
45	Stress	6'-6"	6'-6"	7'-3"	80	Stress	4'-10"	4'-10"	5'-5"
	Deflection	5'-6"	7'-5"	6'-10"		Deflection	4'-6"	6'-1"	5'-7"
50	Stress	6'-2"	6'-2"	6'-10"	85	Stress	4'-8"	4'-8"	5'-3"
	Deflection	5'-4"	7'-2"	6'-7"		Deflection	4'-5"	6'-0"	5'-6"



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MORIN EXPOSED WALL SERIES SPAN CHARTS

Model BR-35 – Panel Profiles and Span Tables

The following notes are applicable to the tables below:

1. Numbers in the tables indicate clear span distance between the structural supports.
2. Section properties listed are for the solid base sheet.
3. Load and span values listed do not include consideration of fastener with washer/oversize washer, to be determined by qualified personnel.
4. This table is intended as a guide to the allowable loads and spans for the panel product, however, actual assembly conditions must be determined by a qualified individual.
5. Refer to Morin install manual for fastening pattern across the panel (along the support) and side lap fastening.



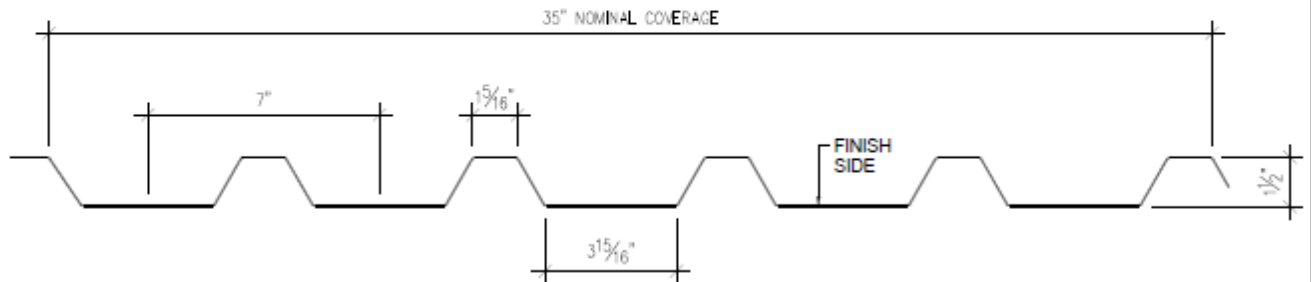
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BR-35

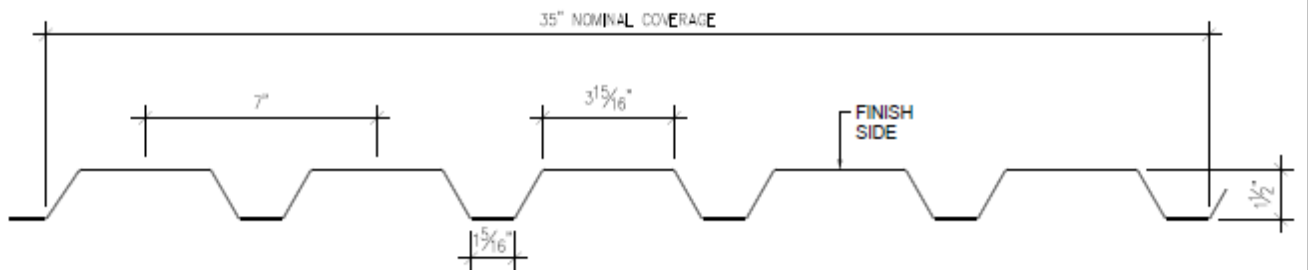
SIDE A



**BR-35 FASTENING PATTERN
SIDE A**

SIDE STITCH FASTEN
@ 18" O.C. MAX

SIDE B



**BR-35 FASTENING PATTERN
SIDE B**

STRUCTURAL FASTENER @ SUPPORTS,
SIDE STITCH FASTENER @
18" MAX BETWEEN SUPPORTS



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Panel Type:
Material/Thickness
Perforation:
Hole Pattern:
Deflection Limit:

BR-35
ST/18ga
N/A

L/180

Ix: 0.26 in⁴/ft
Sx: 0.28 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	15'-0"	15'-0"	16'-9"	55	Stress	9'-0"	9'-0"	10'-1"
	Deflection	10'-5"	14'-1"	12'-11"		Deflection	7'-5"	10'-1"	9'-3"
25	Stress	13'-5"	13'-5"	15'-0"	60	Stress	8'-8"	8'-8"	9'-8"
	Deflection	9'-8"	13'-1"	12'-0"		Deflection	7'-3"	9'-9"	9'-0"
30	Stress	12'-3"	12'-3"	13'-8"	65	Stress	8'-4"	8'-4"	9'-3"
	Deflection	9'-1"	12'-4"	11'-4"		Deflection	7'-1"	9'-6"	8'-9"
35	Stress	11'-4"	11'-4"	12'-8"	70	Stress	8'-0"	8'-0"	8'-11"
	Deflection	8'-8"	11'-8"	10'-9"		Deflection	6'-11"	9'-3"	8'-6"
40	Stress	10'-7"	10'-7"	11'-10"	75	Stress	7'-9"	7'-9"	8'-8"
	Deflection	8'-3"	11'-2"	10'-3"		Deflection	6'-9"	9'-1"	8'-4"
45	Stress	10'-0"	10'-0"	11'-2"	80	Stress	7'-6"	7'-6"	8'-4"
	Deflection	8'-0"	10'-9"	9'-11"		Deflection	6'-7"	8'-11"	8'-2"
50	Stress	9'-6"	9'-6"	10'-7"	85	Stress	7'-3"	7'-3"	8'-1"
	Deflection	7'-8"	10'-5"	9'-6"		Deflection	6'-5"	8'-8"	8'-0"



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Panel Type: BR-35
 Material/Thickness: ST/20ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.195 in⁴/ft
 Sx: 0.211 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	13'-0"	13'-0"	14'-6"	55	Stress	7'-10"	7'-10"	8'-9"
	Deflection	9'-6"	12'-10"	11'-9"		Deflection	6'-9"	9'-2"	8'-5"
25	Stress	11'-7"	11'-7"	13'-0"	60	Stress	7'-6"	7'-6"	8'-5"
	Deflection	8'-10"	11'-11"	10'-11"		Deflection	6'-7"	8'-11"	8'-2"
30	Stress	10'-7"	10'-7"	11'-10"	65	Stress	7'-3"	7'-3"	8'-1"
	Deflection	8'-3"	11'-2"	10'-3"		Deflection	6'-5"	8'-8"	7'-11"
35	Stress	9'-10"	9'-10"	11'-0"	70	Stress	6'-11"	6'-11"	7'-9"
	Deflection	7'-10"	10'-7"	9'-9"		Deflection	6'-3"	8'-5"	7'-9"
40	Stress	9'-2"	9'-2"	10'-3"	75	Stress	6'-9"	6'-9"	7'-6"
	Deflection	7'-6"	10'-2"	9'-4"		Deflection	6'-1"	8'-3"	7'-7"
45	Stress	8'-8"	8'-8"	9'-8"	80	Stress	6'-6"	6'-6"	7'-3"
	Deflection	7'-3"	9'-9"	9'-0"		Deflection	6'-0"	8'-1"	7'-5"
50	Stress	8'-3"	8'-3"	9'-2"	85	Stress	6'-4"	6'-4"	7'-1"
	Deflection	7'-0"	9'-5"	8'-8"		Deflection	5'-10"	7'-11"	7'-3"



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Panel Type:
Material/Thickness
Perforation:
Hole Pattern:
Deflection Limit:

BR-35
ST/22ga
N/A

L/180

Ix: 0.163 in⁴/ft
Sx: 0.176 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	11'-10"	11'-10"	13'-3"	55	Stress	7'-2"	7'-2"	8'-0"
	Deflection	8'-11"	12'-1"	11'-1"		Deflection	6'-4"	8'-7"	7'-11"
25	Stress	10'-7"	10'-7"	11'-10"	60	Stress	6'-10"	6'-10"	7'-8"
	Deflection	8'-3"	11'-2"	10'-3"		Deflection	6'-2"	8'-4"	7'-8"
30	Stress	9'-8"	9'-8"	10'-10"	65	Stress	6'-7"	6'-7"	7'-4"
	Deflection	7'-10"	10'-6"	9'-8"		Deflection	6'-0"	8'-2"	7'-6"
35	Stress	9'-0"	9'-0"	10'-0"	70	Stress	6'-4"	6'-4"	7'-1"
	Deflection	7'-5"	10'-0"	9'-2"		Deflection	5'-11"	7'-11"	7'-3"
40	Stress	8'-5"	8'-5"	9'-5"	75	Stress	6'-2"	6'-2"	6'-10"
	Deflection	7'-1"	9'-7"	8'-9"		Deflection	5'-9"	7'-9"	7'-1"
45	Stress	7'-11"	7'-11"	8'-10"	80	Stress	5'-11"	5'-11"	6'-8"
	Deflection	6'-10"	9'-2"	8'-5"		Deflection	5'-7"	7'-7"	7'-0"
50	Stress	7'-6"	7'-6"	8'-5"	85	Stress	5'-9"	5'-9"	6'-5"
	Deflection	6'-7"	8'-10"	8'-2"		Deflection	5'-6"	7'-5"	6'-10"



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Panel Type: BR-35
 Material/Thickness: ST/24ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.1238 in⁴/ft
 Sx: 0.1294 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	10'-2"	10'-2"	11'-5"	55	Stress	6'-2"	6'-2"	6'-10"
	Deflection	8'-2"	11'-0"	10'-1"		Deflection	5'-10"	7'-10"	7'-3"
25	Stress	9'-1"	9'-1"	10'-2"	60	Stress	5'-10"	5'-10"	6'-7"
	Deflection	7'-7"	10'-3"	9'-5"		Deflection	5'-8"	7'-8"	7'-0"
30	Stress	8'-4"	8'-4"	9'-3"	65	Stress	5'-8"	5'-8"	6'-4"
	Deflection	7'-1"	9'-7"	8'-10"		Deflection	5'-6"	7'-5"	6'-10"
35	Stress	7'-8"	7'-8"	8'-7"	70	Stress	5'-5"	5'-5"	6'-1"
	Deflection	6'-9"	9'-2"	8'-5"		Deflection	5'-4"	7'-3"	6'-8"
40	Stress	7'-2"	7'-2"	8'-1"	75	Stress	5'-3"	5'-3"	5'-10"
	Deflection	6'-6"	8'-9"	8'-0"		Deflection	5'-3"	7'-1"	6'-6"
45	Stress	6'-9"	6'-9"	7'-7"	80	Stress	5'-1"	5'-1"	5'-8"
	Deflection	6'-3"	8'-5"	7'-9"		Deflection	5'-2"	6'-11"	6'-4"
50	Stress	6'-5"	6'-5"	7'-2"	85	Stress	4'-11"	4'-11"	5'-6"
	Deflection	6'-0"	8'-1"	7'-5"		Deflection	5'-0"	6'-9"	6'-3"



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Panel Type: **BR-35**
 Material/Thickness: **AL/032**
 Perforation:
 Hole Pattern:
 Deflection Limit: **L/180**
 Ix: 0.174 in⁴/ft
 Sx: 0.188 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	8'-4"	8'-4"	9'-4"	55	Stress	5'-0"	5'-0"	5'-7"
	Deflection	6'-4"	8'-7"	7'-11"		Deflection	4'-7"	6'-2"	5'-8"
25	Stress	7'-5"	7'-5"	8'-4"	60	Stress	4'-10"	4'-10"	5'-4"
	Deflection	5'-11"	8'-0"	7'-4"		Deflection	4'-5"	5'-11"	5'-6"
30	Stress	6'-9"	6'-9"	7'-7"	65	Stress	4'-7"	4'-7"	5'-2"
	Deflection	5'-7"	7'-6"	6'-11"		Deflection	4'-4"	5'-10"	5'-4"
35	Stress	6'-3"	6'-3"	7'-0"	70	Stress	4'-5"	4'-5"	5'-0"
	Deflection	5'-3"	7'-2"	6'-7"		Deflection	4'-2"	5'-8"	5'-2"
40	Stress	5'-11"	5'-11"	6'-7"	75	Stress	4'-4"	4'-4"	4'-10"
	Deflection	5'-1"	6'-10"	6'-3"		Deflection	4'-1"	5'-6"	5'-1"
45	Stress	5'-6"	5'-6"	6'-2"	80	Stress	4'-2"	4'-2"	4'-8"
	Deflection	4'-10"	6'-7"	6'-0"		Deflection	4'-0"	5'-5"	5'-0"
50	Stress	5'-3"	5'-3"	5'-11"	85	Stress	4'-0"	4'-0"	4'-6"
	Deflection	4'-8"	6'-4"	5'-10"		Deflection	3'-11"	5'-4"	4'-10"



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Panel Type:
Material/Thickness
Perforation:
Hole Pattern:
Deflection Limit:
Ix(perf): 0.207 in⁴/ft
Sx(perf): 0.215 in³/ft

BR-35
AL/040

L/180

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	8'-10"	8'-10"	9'-11"	55	Stress	5'-4"	5'-4"	6'-0"
	Deflection	6'-9"	9'-1"	8'-4"		Deflection	4'-10"	6'-6"	6'-0"
25	Stress	7'-11"	7'-11"	8'-10"	60	Stress	5'-1"	5'-1"	5'-9"
	Deflection	6'-3"	8'-5"	7'-9"		Deflection	4'-8"	6'-4"	5'-10"
30	Stress	7'-3"	7'-3"	8'-1"	65	Stress	4'-11"	4'-11"	5'-6"
	Deflection	5'-11"	7'-11"	7'-4"		Deflection	4'-7"	6'-2"	5'-8"
35	Stress	6'-8"	6'-8"	7'-6"	70	Stress	4'-9"	4'-9"	5'-4"
	Deflection	5'-7"	7'-7"	6'-11"		Deflection	4'-5"	6'-0"	5'-6"
40	Stress	6'-3"	6'-3"	7'-0"	75	Stress	4'-7"	4'-7"	5'-1"
	Deflection	5'-4"	7'-3"	6'-8"		Deflection	4'-4"	5'-10"	5'-5"
45	Stress	5'-11"	5'-11"	6'-7"	80	Stress	4'-5"	4'-5"	5'-0"
	Deflection	5'-2"	6'-11"	6'-5"		Deflection	4'-3"	5'-9"	5'-3"
50	Stress	5'-7"	5'-7"	6'-3"	85	Stress	4'-4"	4'-4"	4'-10"
	Deflection	5'-0"	6'-9"	6'-2"		Deflection	4'-2"	5'-7"	5'-2"



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Panel Type: **BR-35**
 Material/Thickness: **AL/050**
 Perforation:
 Hole Pattern:
 Deflection Limit: **L/180**
 Ix(perf): 0.26 in⁴/ft
 Sx(perf): 0.267 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	9'-11"	9'-11"	11'-1"	55	Stress	6'-0"	6'-0"	6'-8"
	Deflection	7'-3"	9'-10"	9'-0"		Deflection	5'-2"	7'-0"	6'-5"
25	Stress	8'-10"	8'-10"	9'-11"	60	Stress	5'-9"	5'-9"	6'-5"
	Deflection	6'-9"	9'-1"	8'-4"		Deflection	5'-0"	6'-10"	6'-3"
30	Stress	8'-1"	8'-1"	9'-0"	65	Stress	5'-6"	5'-6"	6'-2"
	Deflection	6'-4"	8'-7"	7'-11"		Deflection	4'-11"	6'-8"	6'-1"
35	Stress	7'-6"	7'-6"	8'-4"	70	Stress	5'-4"	5'-4"	5'-11"
	Deflection	6'-0"	8'-2"	7'-6"		Deflection	4'-9"	6'-6"	5'-11"
40	Stress	7'-0"	7'-0"	7'-10"	75	Stress	5'-1"	5'-1"	5'-9"
	Deflection	5'-9"	7'-9"	7'-2"		Deflection	4'-8"	6'-4"	5'-10"
45	Stress	6'-7"	6'-7"	7'-5"	80	Stress	4'-11"	4'-11"	5'-6"
	Deflection	5'-7"	7'-6"	6'-11"		Deflection	4'-7"	6'-2"	5'-8"
50	Stress	6'-3"	6'-3"	7'-0"	85	Stress	4'-10"	4'-10"	5'-4"
	Deflection	5'-4"	7'-3"	6'-8"		Deflection	4'-6"	6'-1"	5'-7"



MORIN EXPOSED WALL SERIES SPAN CHARTS

Model BR9-36 – Panel Profiles and Span Tables

The following notes are applicable to the tables below:

1. Numbers in the tables indicate clear span distance between the structural supports.
2. Section properties listed are for the solid base sheet.
3. Load and span values listed do not include consideration of fastener with washer/oversize washer, to be determined by qualified personnel.
4. This table is intended as a guide to the allowable loads and spans for the panel product, however, actual assembly conditions must be determined by a qualified individual.
5. Refer to Morin install manual for fastening pattern across the panel (along the support) and side lap fastening.



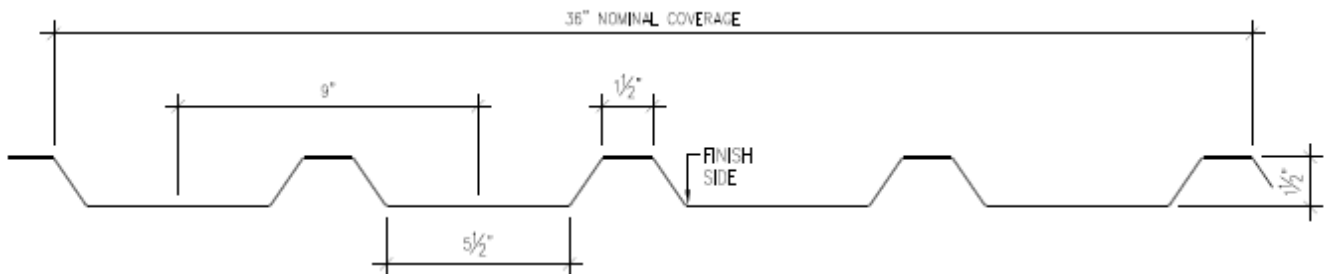
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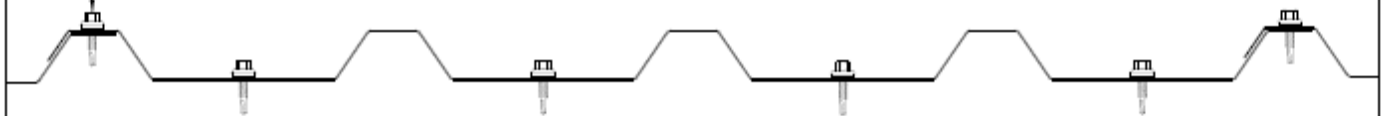
BR9-36

SIDE A

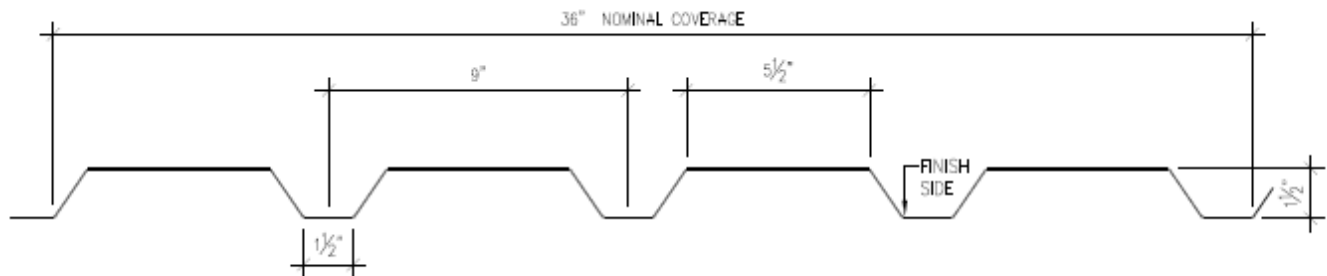


**BR9-36 FASTENING PATTERN
SIDE A**

SIDE STITCH FASTEN
@ 18\"/>



SIDE B



**BR9-36 FASTENING PATTERN
SIDE B**

STRUCTURAL FASTENER @ SUPPORTS,
SIDE STITCH FASTENER @
18\"/>





Panel Type: BR9-36
 Material/Thickness: ST/18ga
 Perforation: None
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.241 in⁴/ft
 Sx: 0.247 in⁴/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	14'-1"	14'-1"	15'-9"	55	Stress	8'-6"	8'-6"	9'-6"
	Deflection	10'-2"	13'-9"	12'-7"		Deflection	7'-3"	9'-10"	9'-0"
25	Stress	12'-7"	12'-7"	14'-1"	60	Stress	8'-1"	8'-1"	9'-1"
	Deflection	9'-5"	12'-9"	11'-8"		Deflection	7'-1"	9'-6"	8'-9"
30	Stress	11'-6"	11'-6"	12'-10"	65	Stress	7'-10"	7'-10"	8'-9"
	Deflection	8'-11"	12'-0"	11'-0"		Deflection	6'-10"	9'-3"	8'-6"
35	Stress	10'-8"	10'-8"	11'-11"	70	Stress	7'-6"	7'-6"	8'-5"
	Deflection	8'-5"	11'-5"	10'-6"		Deflection	6'-8"	9'-0"	8'-4"
40	Stress	9'-11"	9'-11"	11'-1"	75	Stress	7'-3"	7'-3"	8'-1"
	Deflection	8'-1"	10'-11"	10'-0"		Deflection	6'-7"	8'-10"	8'-1"
45	Stress	9'-5"	9'-5"	10'-6"	80	Stress	7'-0"	7'-0"	7'-10"
	Deflection	7'-9"	10'-6"	9'-7"		Deflection	6'-5"	8'-8"	7'-11"
50	Stress	8'-11"	8'-11"	9'-11"	85	Stress	6'-10"	6'-10"	7'-8"
	Deflection	7'-6"	10'-1"	9'-3"		Deflection	6'-3"	8'-6"	7'-9"



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Panel Type: BR9-36
 Material/Thickness: ST/20ga
 Perforation: None
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.181 in⁴/ft
 Sx: 0.187 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	12'-3"	12'-3"	13'-8"	55	Stress	7'-4"	7'-4"	8'-3"
	Deflection	9'-3"	12'-6"	11'-5"		Deflection	6'-7"	8'-11"	8'-2"
25	Stress	10'-11"	10'-11"	12'-3"	60	Stress	7'-1"	7'-1"	7'-11"
	Deflection	8'-7"	11'-7"	10'-8"		Deflection	6'-5"	8'-8"	7'-11"
30	Stress	10'-0"	10'-0"	11'-2"	65	Stress	6'-9"	6'-9"	7'-7"
	Deflection	8'-1"	10'-11"	10'-0"		Deflection	6'-3"	8'-5"	7'-9"
35	Stress	9'-3"	9'-3"	10'-4"	70	Stress	6'-6"	6'-6"	7'-4"
	Deflection	7'-8"	10'-4"	9'-6"		Deflection	6'-1"	8'-3"	7'-7"
40	Stress	8'-8"	8'-8"	9'-8"	75	Stress	6'-4"	6'-4"	7'-1"
	Deflection	7'-4"	9'-11"	9'-1"		Deflection	5'-11"	8'-0"	7'-4"
45	Stress	8'-2"	8'-2"	9'-1"	80	Stress	6'-1"	6'-1"	6'-10"
	Deflection	7'-1"	9'-6"	8'-9"		Deflection	5'-10"	7'-10"	7'-3"
50	Stress	7'-9"	7'-9"	8'-8"	85	Stress	5'-11"	5'-11"	6'-8"
	Deflection	6'-10"	9'-2"	8'-5"		Deflection	5'-8"	7'-8"	7'-1"





Panel Type: **BR9-36**
 Material/Thickness: **ST/22ga**
 Perforation: **None**
 Hole Pattern:
 Deflection Limit: **L/180**
 Ix: 0.151 in⁴/ft
 Sx: 0.156 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	11'-2"	11'-2"	12'-6"	55	Stress	6'-9"	6'-9"	7'-6"
	Deflection	8'-8"	11'-9"	10'-9"		Deflection	6'-3"	8'-5"	7'-8"
25	Stress	10'-0"	10'-0"	11'-2"	60	Stress	6'-5"	6'-5"	7'-3"
	Deflection	8'-1"	10'-11"	10'-0"		Deflection	6'-0"	8'-2"	7'-6"
30	Stress	9'-1"	9'-1"	10'-2"	65	Stress	6'-2"	6'-2"	6'-11"
	Deflection	7'-7"	10'-3"	9'-5"		Deflection	5'-10"	7'-11"	7'-3"
35	Stress	8'-5"	8'-5"	9'-5"	70	Stress	6'-0"	6'-0"	6'-8"
	Deflection	7'-3"	9'-9"	8'-11"		Deflection	5'-9"	7'-9"	7'-1"
40	Stress	7'-11"	7'-11"	8'-10"	75	Stress	5'-9"	5'-9"	6'-5"
	Deflection	6'-11"	9'-4"	8'-7"		Deflection	5'-7"	7'-7"	6'-11"
45	Stress	7'-5"	7'-5"	8'-4"	80	Stress	5'-7"	5'-7"	6'-3"
	Deflection	6'-8"	9'-0"	8'-3"		Deflection	5'-6"	7'-5"	6'-10"
50	Stress	7'-1"	7'-1"	7'-11"	85	Stress	5'-5"	5'-5"	6'-1"
	Deflection	6'-5"	8'-8"	7'-11"		Deflection	5'-4"	7'-3"	6'-8"



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PCA-101



Panel Type: BR9-36
 Material/Thickness: ST/24ga
 Perforation: None
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.12 in⁴/ft
 Sx: 0.125 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	10'-0"	10'-0"	11'-2"	55	Stress	6'-0"	6'-0"	6'-9"
	Deflection	8'-1"	10'-11"	10'-0"		Deflection	5'-9"	7'-9"	7'-2"
25	Stress	8'-11"	8'-11"	10'-0"	60	Stress	5'-9"	5'-9"	6'-5"
	Deflection	7'-6"	10'-1"	9'-3"		Deflection	5'-7"	7'-7"	6'-11"
30	Stress	8'-2"	8'-2"	9'-2"	65	Stress	5'-7"	5'-7"	6'-2"
	Deflection	7'-1"	9'-6"	8'-9"		Deflection	5'-5"	7'-4"	6'-9"
35	Stress	7'-7"	7'-7"	8'-5"	70	Stress	5'-4"	5'-4"	6'-0"
	Deflection	6'-8"	9'-0"	8'-4"		Deflection	5'-4"	7'-2"	6'-7"
40	Stress	7'-1"	7'-1"	7'-11"	75	Stress	5'-2"	5'-2"	5'-9"
	Deflection	6'-5"	8'-8"	7'-11"		Deflection	5'-2"	7'-0"	6'-5"
45	Stress	6'-8"	6'-8"	7'-5"	80	Stress	5'-0"	5'-0"	5'-7"
	Deflection	6'-2"	8'-4"	7'-8"		Deflection	5'-1"	6'-10"	6'-4"
50	Stress	6'-4"	6'-4"	7'-1"	85	Stress	4'-10"	4'-10"	5'-5"
	Deflection	5'-11"	8'-0"	7'-4"		Deflection	5'-0"	6'-9"	6'-2"





Panel Type: BR9-36
 Material/Thickness: AL/032
 Perforation: None
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.154 in⁴/ft
 Sx: 0.16 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	7'-8"	7'-8"	8'-7"	55	Stress	4'-7"	4'-7"	5'-2"
	Deflection	6'-1"	8'-3"	7'-7"		Deflection	4'-4"	5'-11"	5'-5"
25	Stress	6'-10"	6'-10"	7'-8"	60	Stress	4'-5"	4'-5"	4'-11"
	Deflection	5'-8"	7'-8"	7'-0"		Deflection	4'-3"	5'-9"	5'-3"
30	Stress	6'-3"	6'-3"	7'-0"	65	Stress	4'-3"	4'-3"	4'-9"
	Deflection	5'-4"	7'-2"	6'-7"		Deflection	4'-2"	5'-7"	5'-1"
35	Stress	5'-9"	5'-9"	6'-6"	70	Stress	4'-1"	4'-1"	4'-7"
	Deflection	5'-1"	6'-10"	6'-3"		Deflection	4'-0"	5'-5"	5'-0"
40	Stress	5'-5"	5'-5"	6'-1"	75	Stress	3'-11"	3'-11"	4'-5"
	Deflection	4'-10"	6'-7"	6'-0"		Deflection	3'-11"	5'-4"	4'-11"
45	Stress	5'-1"	5'-1"	5'-8"	80	Stress	3'-10"	3'-10"	4'-3"
	Deflection	4'-8"	6'-4"	5'-9"		Deflection	3'-10"	5'-2"	4'-9"
50	Stress	4'-10"	4'-10"	5'-5"	85	Stress	3'-9"	3'-9"	4'-2"
	Deflection	4'-6"	6'-1"	5'-7"		Deflection	3'-9"	5'-1"	4'-8"





Panel Type: BR9-36
 Material/Thickness: AL/040
 Perforation: None
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.193 in⁴/ft
 Sx: 0.199 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	8'-7"	8'-7"	9'-7"	55	Stress	5'-2"	5'-2"	5'-9"
	Deflection	6'-7"	8'-11"	8'-2"		Deflection	4'-8"	6'-4"	5'-10"
25	Stress	7'-8"	7'-8"	8'-7"	60	Stress	4'-11"	4'-11"	5'-6"
	Deflection	6'-1"	8'-3"	7'-7"		Deflection	4'-7"	6'-2"	5'-8"
30	Stress	7'-0"	7'-0"	7'-10"	65	Stress	4'-9"	4'-9"	5'-4"
	Deflection	5'-9"	7'-9"	7'-2"		Deflection	4'-5"	6'-0"	5'-6"
35	Stress	6'-5"	6'-5"	7'-3"	70	Stress	4'-7"	4'-7"	5'-1"
	Deflection	5'-6"	7'-5"	6'-9"		Deflection	4'-4"	5'-10"	5'-5"
40	Stress	6'-0"	6'-0"	6'-9"	75	Stress	4'-5"	4'-5"	4'-11"
	Deflection	5'-3"	7'-1"	6'-6"		Deflection	4'-3"	5'-9"	5'-3"
45	Stress	5'-8"	5'-8"	6'-4"	80	Stress	4'-3"	4'-3"	4'-9"
	Deflection	5'-0"	6'-9"	6'-3"		Deflection	4'-2"	5'-7"	5'-2"
50	Stress	5'-5"	5'-5"	6'-0"	85	Stress	4'-2"	4'-2"	4'-8"
	Deflection	4'-10"	6'-7"	6'-0"		Deflection	4'-1"	5'-6"	5'-0"



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Panel Type: BR9-36
 Material/Thickness: AL/050
 Perforation: None
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.234 in⁴/ft
 Sx: 0.24 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	9'-5"	9'-5"	10'-6"	55	Stress	5'-8"	5'-8"	6'-4"
	Deflection	7'-0"	9'-6"	8'-8"		Deflection	5'-0"	6'-9"	6'-3"
25	Stress	8'-5"	8'-5"	9'-5"	60	Stress	5'-5"	5'-5"	6'-1"
	Deflection	6'-6"	8'-10"	8'-1"		Deflection	4'-10"	6'-7"	6'-0"
30	Stress	7'-8"	7'-8"	8'-7"	65	Stress	5'-2"	5'-2"	5'-10"
	Deflection	6'-2"	8'-3"	7'-7"		Deflection	4'-9"	6'-5"	5'-11"
35	Stress	7'-1"	7'-1"	7'-11"	70	Stress	5'-0"	5'-0"	5'-7"
	Deflection	5'-10"	7'-10"	7'-3"		Deflection	4'-7"	6'-3"	5'-9"
40	Stress	6'-8"	6'-8"	7'-5"	75	Stress	4'-10"	4'-10"	5'-5"
	Deflection	5'-7"	7'-6"	6'-11"		Deflection	4'-6"	6'-1"	5'-7"
45	Stress	6'-3"	6'-3"	7'-0"	80	Stress	4'-8"	4'-8"	5'-3"
	Deflection	5'-4"	7'-3"	6'-8"		Deflection	4'-5"	6'-0"	5'-6"
50	Stress	5'-11"	5'-11"	6'-8"	85	Stress	4'-7"	4'-7"	5'-1"
	Deflection	5'-2"	7'-0"	6'-5"		Deflection	4'-4"	5'-10"	5'-4"



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MORIN EXPOSED WALL SERIES SPAN CHARTS

Model C-29 – Panel Profiles and Span Tables

The following notes are applicable to the tables below:

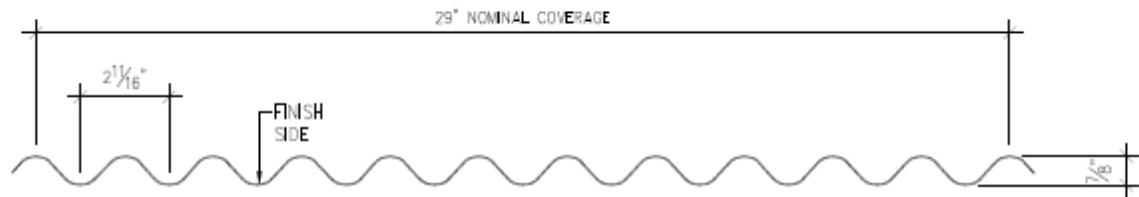
1. Numbers in the tables indicate clear span distance between the structural supports.
2. Section properties listed are for the solid base sheet.
3. Load and span values listed do not include consideration of fastener with washer/oversize washer, to be determined by qualified personnel.
4. This table is intended as a guide to the allowable loads and spans for the panel product, however, actual assembly conditions must be determined by a qualified individual.
5. Refer to Morin install manual for fastening pattern across the panel (along the support) and side lap fastening.





C-29

SIDE A

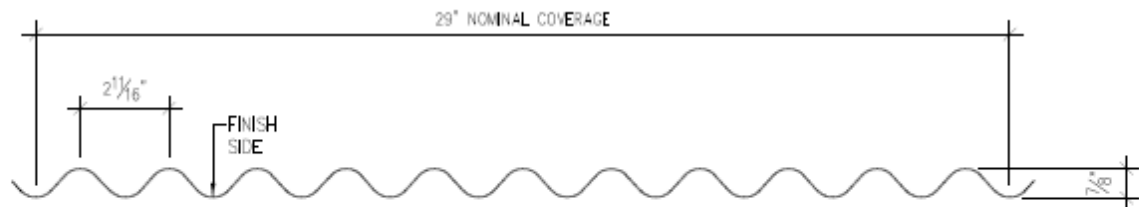


**C-29 FASTENING PATTERN
SIDE A**

SIDE STITCH FASTENER
@ 18\"/>



SIDE B



**C-29 FASTENING PATTERN
SIDE B**

STRUCTURAL FASTENER @ SUPPORTS,
SIDE STITCH FASTENER @
18\"/>



NOTE: FASTEN EVERY CELL @ PANEL ENDS AND LAPS





Panel Type: C-29-7/8
 Material/Thickness: ST/18ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.058 in⁴/ft
 Sx: 0.149 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	10'-11"	10'-11"	12'-2"	55	Stress	6'-7"	6'-7"	7'-4"
	Deflection	6'-4"	8'-7"	7'-10"		Deflection	4'-6"	6'-1"	5'-7"
25	Stress	9'-9"	9'-9"	10'-11"	60	Stress	6'-4"	6'-4"	7'-0"
	Deflection	5'-11"	7'-11"	7'-4"		Deflection	4'-5"	5'-11"	5'-5"
30	Stress	8'-11"	8'-11"	9'-11"	65	Stress	6'-1"	6'-1"	6'-9"
	Deflection	5'-6"	7'-6"	6'-10"		Deflection	4'-3"	5'-9"	5'-4"
35	Stress	8'-3"	8'-3"	9'-3"	70	Stress	5'-10"	5'-10"	6'-6"
	Deflection	5'-3"	7'-1"	6'-6"		Deflection	4'-2"	5'-8"	5'-2"
40	Stress	7'-8"	7'-8"	8'-7"	75	Stress	5'-8"	5'-8"	6'-4"
	Deflection	5'-0"	6'-10"	6'-3"		Deflection	4'-1"	5'-6"	5'-1"
45	Stress	7'-3"	7'-3"	8'-1"	80	Stress	5'-5"	5'-5"	6'-1"
	Deflection	4'-10"	6'-6"	6'-0"		Deflection	4'-0"	5'-5"	4'-11"
50	Stress	6'-11"	6'-11"	7'-8"	85	Stress	5'-3"	5'-3"	5'-11"
	Deflection	4'-8"	6'-4"	5'-10"		Deflection	3'-11"	5'-3"	4'-10"



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Panel Type: C-29-7/8
 Material/Thickness: ST/20ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.059 in⁴/ft
 Sx: 0.103 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	9'-1"	9'-1"	10'-2"	55	Stress	5'-6"	5'-6"	6'-1"
	Deflection	6'-5"	8'-7"	7'-11"		Deflection	4'-7"	6'-2"	5'-8"
25	Stress	8'-1"	8'-1"	9'-1"	60	Stress	5'-3"	5'-3"	5'-10"
	Deflection	5'-11"	8'-0"	7'-4"		Deflection	4'-5"	6'-0"	5'-6"
30	Stress	7'-5"	7'-5"	8'-3"	65	Stress	5'-0"	5'-0"	5'-7"
	Deflection	5'-7"	7'-6"	6'-11"		Deflection	4'-4"	5'-10"	5'-4"
35	Stress	6'-10"	6'-10"	7'-8"	70	Stress	4'-10"	4'-10"	5'-5"
	Deflection	5'-3"	7'-2"	6'-7"		Deflection	4'-2"	5'-8"	5'-2"
40	Stress	6'-5"	6'-5"	7'-2"	75	Stress	4'-8"	4'-8"	5'-3"
	Deflection	5'-1"	6'-10"	6'-3"		Deflection	4'-1"	5'-6"	5'-1"
45	Stress	6'-0"	6'-0"	6'-9"	80	Stress	4'-6"	4'-6"	5'-1"
	Deflection	4'-10"	6'-7"	6'-0"		Deflection	4'-0"	5'-5"	5'-0"
50	Stress	5'-9"	5'-9"	6'-5"	85	Stress	4'-5"	4'-5"	4'-11"
	Deflection	4'-8"	6'-4"	5'-10"		Deflection	3'-11"	5'-4"	4'-11"



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Panel Type: C-29-7/8
 Material/Thickness: ST/22ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.043 in⁴/ft
 Sx: 0.093 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	8'-8"	8'-8"	9'-8"	55	Stress	5'-2"	5'-2"	5'-10"
	Deflection	5'-9"	7'-9"	7'-1"		Deflection	4'-1"	5'-6"	5'-1"
25	Stress	7'-9"	7'-9"	8'-8"	60	Stress	4'-12"	4'-12"	5'-7"
	Deflection	5'-4"	7'-2"	6'-7"		Deflection	4'-0"	5'-4"	4'-11"
30	Stress	7'-1"	7'-1"	7'-11"	65	Stress	4'-9"	4'-9"	5'-4"
	Deflection	5'-0"	6'-9"	6'-2"		Deflection	3'-10"	5'-2"	4'-9"
35	Stress	6'-6"	6'-6"	7'-4"	70	Stress	4'-7"	4'-7"	5'-2"
	Deflection	4'-9"	6'-5"	5'-11"		Deflection	3'-9"	5'-1"	4'-8"
40	Stress	6'-1"	6'-1"	6'-10"	75	Stress	4'-6"	4'-6"	5'-0"
	Deflection	4'-6"	6'-1"	5'-7"		Deflection	3'-8"	5'-0"	4'-7"
45	Stress	5'-9"	5'-9"	6'-5"	80	Stress	4'-4"	4'-4"	4'-10"
	Deflection	4'-4"	5'-11"	5'-5"		Deflection	3'-7"	4'-10"	4'-6"
50	Stress	5'-6"	5'-6"	6'-1"	85	Stress	4'-2"	4'-2"	4'-8"
	Deflection	4'-3"	5'-8"	5'-3"		Deflection	3'-6"	4'-9"	4'-4"



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Panel Type: C-29-7/8
 Material/Thickness: ST/24ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.034 in⁴/ft
 Sx: 0.075 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	7'-9"	7'-9"	8'-8"	55	Stress	4'-8"	4'-8"	5'-3"
	Deflection	5'-4"	7'-2"	6'-7"		Deflection	3'-9"	5'-1"	4'-8"
25	Stress	6'-11"	6'-11"	7'-9"	60	Stress	4'-6"	4'-6"	5'-0"
	Deflection	4'-11"	6'-8"	6'-1"		Deflection	3'-8"	5'-0"	4'-7"
30	Stress	6'-4"	6'-4"	7'-1"	65	Stress	4'-4"	4'-4"	4'-10"
	Deflection	4'-8"	6'-3"	5'-9"		Deflection	3'-7"	4'-10"	4'-5"
35	Stress	5'-10"	5'-10"	6'-7"	70	Stress	4'-2"	4'-2"	4'-8"
	Deflection	4'-5"	5'-11"	5'-5"		Deflection	3'-6"	4'-9"	4'-4"
40	Stress	5'-6"	5'-6"	6'-1"	75	Stress	4'-0"	4'-0"	4'-6"
	Deflection	4'-2"	5'-8"	5'-3"		Deflection	3'-5"	4'-7"	4'-3"
45	Stress	5'-2"	5'-2"	5'-9"	80	Stress	3'-10"	3'-10"	4'-4"
	Deflection	4'-1"	5'-6"	5'-0"		Deflection	3'-4"	4'-6"	4'-2"
50	Stress	4'-11"	4'-11"	5'-6"	85	Stress	3'-9"	3'-9"	4'-2"
	Deflection	3'-11"	5'-3"	4'-10"		Deflection	3'-3"	4'-5"	4'-1"



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Panel Type: C-29
 Material/Thickness: AL/0.032
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.046 in⁴/ft
 Sx: 0.099 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5'-9"	5'-9"	6'-5"	55	Stress	3'-6"	3'-6"	3'-11"
	Deflection	4'-1"	5'-6"	5'-1"		Deflection	2'-11"	3'-11"	3'-7"
25	Stress	5'-2"	5'-2"	5'-9"	60	Stress	3'-4"	3'-4"	3'-9"
	Deflection	3'-9"	5'-1"	4'-8"		Deflection	2'-10"	3'-10"	3'-6"
30	Stress	4'-8"	4'-8"	5'-3"	65	Stress	3'-2"	3'-2"	3'-7"
	Deflection	3'-7"	4'-10"	4'-5"		Deflection	2'-9"	3'-9"	3'-5"
35	Stress	4'-4"	4'-4"	4'-10"	70	Stress	3'-1"	3'-1"	3'-5"
	Deflection	3'-5"	4'-7"	4'-2"		Deflection	2'-8"	3'-7"	3'-4"
40	Stress	4'-1"	4'-1"	4'-7"	75	Stress	3'-0"	3'-0"	3'-4"
	Deflection	3'-3"	4'-4"	4'-0"		Deflection	2'-7"	3'-6"	3'-3"
45	Stress	3'-10"	3'-10"	4'-3"	80	Stress	2'-11"	2'-11"	3'-3"
	Deflection	3'-1"	4'-2"	3'-10"		Deflection	2'-7"	3'-6"	3'-2"
50	Stress	3'-8"	3'-8"	4'-1"	85	Stress	2'-10"	2'-10"	3'-1"
	Deflection	3'-0"	4'-1"	3'-9"		Deflection	2'-6"	3'-5"	3'-1"



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Panel Type: C-29
 Material/Thickness: AL/0.040
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.057 in⁴/ft
 Sx: 0.13 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6'-7"	6'-7"	7'-4"	55	Stress	4'-0"	4'-0"	4'-5"
	Deflection	4'-5"	5'-11"	5'-5"		Deflection	3'-2"	4'-3"	3'-11"
25	Stress	5'-11"	5'-11"	6'-7"	60	Stress	3'-10"	3'-10"	4'-3"
	Deflection	4'-1"	5'-6"	5'-0"		Deflection	3'-0"	4'-1"	3'-9"
30	Stress	5'-4"	5'-4"	6'-0"	65	Stress	3'-8"	3'-8"	4'-1"
	Deflection	3'-10"	5'-2"	4'-9"		Deflection	2'-11"	4'-0"	3'-8"
35	Stress	5'-0"	5'-0"	5'-7"	70	Stress	3'-6"	3'-6"	3'-11"
	Deflection	3'-8"	4'-11"	4'-6"		Deflection	2'-11"	3'-11"	3'-7"
40	Stress	4'-8"	4'-8"	5'-2"	75	Stress	3'-5"	3'-5"	3'-10"
	Deflection	3'-6"	4'-8"	4'-4"		Deflection	2'-10"	3'-10"	3'-6"
45	Stress	4'-5"	4'-5"	4'-11"	80	Stress	3'-3"	3'-3"	3'-8"
	Deflection	3'-4"	4'-6"	4'-2"		Deflection	2'-9"	3'-9"	3'-5"
50	Stress	4'-2"	4'-2"	4'-8"	85	Stress	3'-2"	3'-2"	3'-7"
	Deflection	3'-3"	4'-4"	4'-0"		Deflection	2'-8"	3'-8"	3'-4"



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Panel Type:
Material/Thickness
Perforation:
Hole Pattern:
Deflection Limit:

C-29
AL/0.050

L/180

Ix: 0.071 in⁴/ft
Sx: 0.152 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	7'-1"	7'-1"	7'-11"	55	Stress	4'-4"	4'-4"	4'-10"
	Deflection	4'-9"	6'-5"	5'-10"		Deflection	3'-5"	4'-7"	4'-2"
25	Stress	6'-4"	6'-4"	7'-1"	60	Stress	4'-1"	4'-1"	4'-7"
	Deflection	4'-5"	5'-11"	5'-5"		Deflection	3'-3"	4'-5"	4'-1"
30	Stress	5'-10"	5'-10"	6'-6"	65	Stress	3'-11"	3'-11"	4'-5"
	Deflection	4'-2"	5'-7"	5'-1"		Deflection	3'-2"	4'-4"	4'-0"
35	Stress	5'-5"	5'-5"	6'-0"	70	Stress	3'-10"	3'-10"	4'-3"
	Deflection	3'-11"	5'-4"	4'-10"		Deflection	3'-1"	4'-2"	3'-10"
40	Stress	5'-0"	5'-0"	5'-8"	75	Stress	3'-8"	3'-8"	4'-1"
	Deflection	3'-9"	5'-1"	4'-8"		Deflection	3'-1"	4'-1"	3'-9"
45	Stress	4'-9"	4'-9"	5'-4"	80	Stress	3'-7"	3'-7"	4'-0"
	Deflection	3'-7"	4'-10"	4'-6"		Deflection	3'-0"	4'-0"	3'-8"
50	Stress	4'-6"	4'-6"	5'-0"	85	Stress	3'-5"	3'-5"	3'-10"
	Deflection	3'-6"	4'-8"	4'-4"		Deflection	2'-11"	3'-11"	3'-7"



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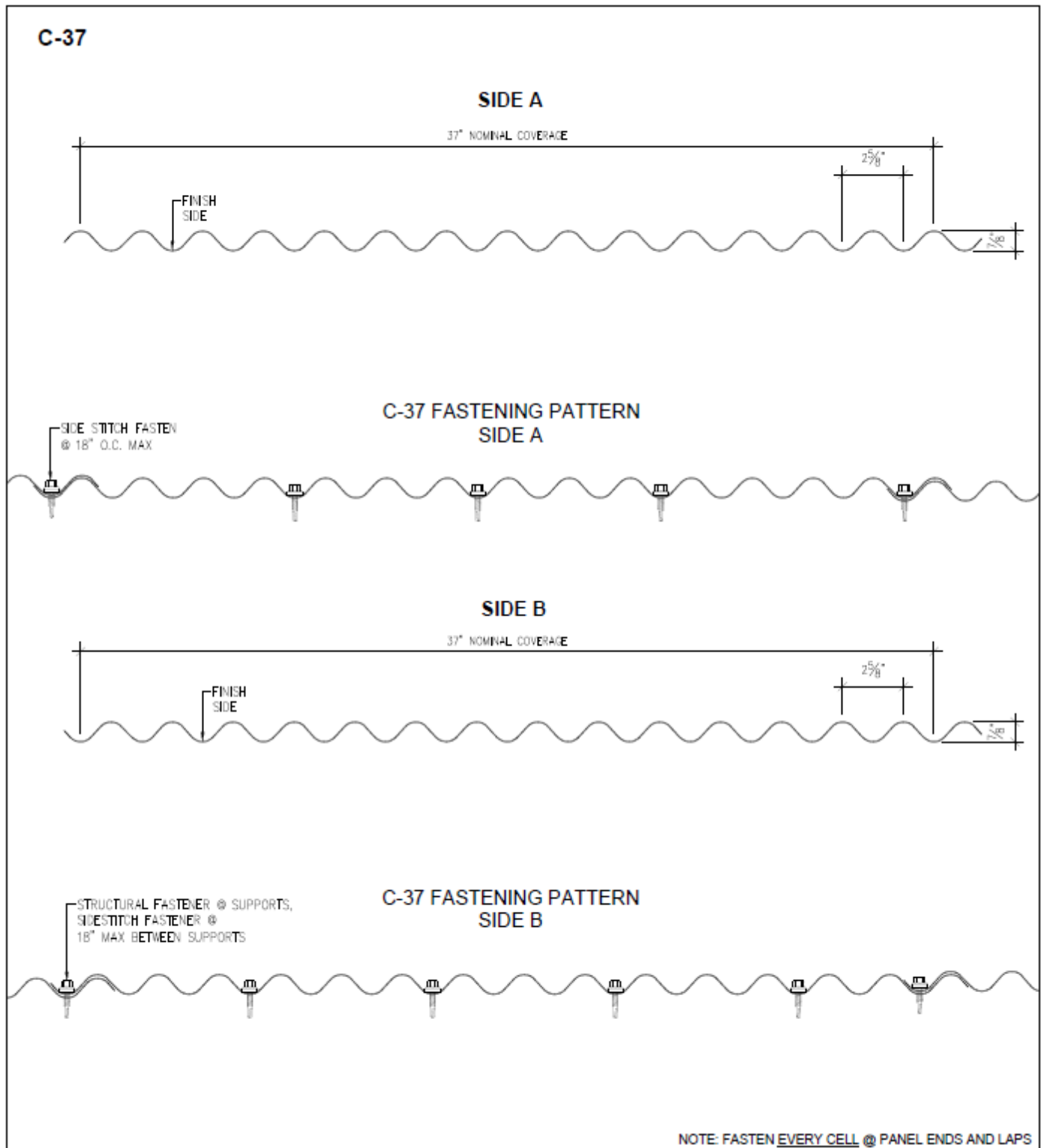
MORIN EXPOSED WALL SERIES SPAN CHARTS

Model C-37 – Panel Profiles and Span Tables

The following notes are applicable to the tables below:

1. Numbers in the tables indicate clear span distance between the structural supports.
2. Section properties listed are for the solid base sheet.
3. Load and span values listed do not include consideration of fastener with washer/oversize washer, to be determined by qualified personnel.
4. This table is intended as a guide to the allowable loads and spans for the panel product, however, actual assembly conditions must be determined by a qualified individual.
5. Refer to Morin install manual for fastening pattern across the panel (along the support) and side lap fastening.







Panel Type: C-37-7/8
 Material/Thickness: ST/18ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.071 in⁴/ft
 Sx: 0.1622 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	11'-5"	11'-5"	12'-9"	55	Stress	6'-10"	6'-10"	7'-8"
	Deflection	6'-9"	9'-2"	8'-5"		Deflection	4'-10"	6'-6"	6'-0"
25	Stress	10'-2"	10'-2"	11'-5"	60	Stress	6'-7"	6'-7"	7'-4"
	Deflection	6'-3"	8'-6"	7'-10"		Deflection	4'-8"	6'-4"	5'-10"
30	Stress	9'-4"	9'-4"	10'-5"	65	Stress	6'-4"	6'-4"	7'-1"
	Deflection	5'-11"	8'-0"	7'-4"		Deflection	4'-7"	6'-2"	5'-8"
35	Stress	8'-7"	8'-7"	9'-8"	70	Stress	6'-1"	6'-1"	6'-10"
	Deflection	5'-7"	7'-7"	7'-0"		Deflection	4'-6"	6'-0"	5'-6"
40	Stress	8'-1"	8'-1"	9'-0"	75	Stress	5'-11"	5'-11"	6'-7"
	Deflection	5'-4"	7'-3"	6'-8"		Deflection	4'-4"	5'-11"	5'-5"
45	Stress	7'-7"	7'-7"	8'-6"	80	Stress	5'-8"	5'-8"	6'-4"
	Deflection	5'-2"	7'-0"	6'-5"		Deflection	4'-3"	5'-9"	5'-3"
50	Stress	7'-2"	7'-2"	8'-1"	85	Stress	5'-6"	5'-6"	6'-2"
	Deflection	5'-0"	6'-9"	6'-2"		Deflection	4'-2"	5'-8"	5'-2"



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Panel Type: C-37-7/8
 Material/Thickness: ST/20ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.051 in⁴/ft
 Sx: 0.112 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	9'-5"	9'-5"	10'-7"	55	Stress	5'-8"	5'-8"	6'-4"
	Deflection	6'-1"	8'-2"	7'-6"		Deflection	4'-4"	5'-10"	5'-4"
25	Stress	8'-5"	8'-5"	9'-5"	60	Stress	5'-5"	5'-5"	6'-1"
	Deflection	5'-7"	7'-7"	7'-0"		Deflection	4'-2"	5'-8"	5'-3"
30	Stress	7'-9"	7'-9"	8'-7"	65	Stress	5'-3"	5'-3"	5'-10"
	Deflection	5'-4"	7'-2"	6'-7"		Deflection	4'-1"	5'-6"	5'-1"
35	Stress	7'-2"	7'-2"	8'-0"	70	Stress	5'-1"	5'-1"	5'-8"
	Deflection	5'-0"	6'-9"	6'-3"		Deflection	4'-0"	5'-5"	4'-11"
40	Stress	6'-8"	6'-8"	7'-6"	75	Stress	4'-11"	4'-11"	5'-5"
	Deflection	4'-10"	6'-6"	6'-0"		Deflection	3'-11"	5'-3"	4'-10"
45	Stress	6'-4"	6'-4"	7'-0"	80	Stress	4'-9"	4'-9"	5'-3"
	Deflection	4'-7"	6'-3"	5'-9"		Deflection	3'-10"	5'-2"	4'-9"
50	Stress	6'-0"	6'-0"	6'-8"	85	Stress	4'-7"	4'-7"	5'-1"
	Deflection	4'-6"	6'-0"	5'-6"		Deflection	3'-9"	5'-1"	4'-8"



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Panel Type: C-37-7/8
 Material/Thickness: ST/22ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.044 in⁴/ft
 Sx: 0.101 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	9'-0"	9'-0"	10'-1"	55	Stress	5'-5"	5'-5"	6'-1"
	Deflection	5'-9"	7'-10"	7'-2"		Deflection	4'-2"	5'-7"	5'-1"
25	Stress	8'-1"	8'-1"	9'-0"	60	Stress	5'-2"	5'-2"	5'-10"
	Deflection	5'-4"	7'-3"	6'-8"		Deflection	4'-0"	5'-5"	5'-0"
30	Stress	7'-4"	7'-4"	8'-3"	65	Stress	5'-0"	5'-0"	5'-7"
	Deflection	5'-1"	6'-10"	6'-3"		Deflection	3'-11"	5'-3"	4'-10"
35	Stress	6'-10"	6'-10"	7'-7"	70	Stress	4'-10"	4'-10"	5'-5"
	Deflection	4'-10"	6'-6"	5'-11"		Deflection	3'-10"	5'-2"	4'-9"
40	Stress	6'-4"	6'-4"	7'-1"	75	Stress	4'-8"	4'-8"	5'-2"
	Deflection	4'-7"	6'-2"	5'-8"		Deflection	3'-9"	5'-0"	4'-7"
45	Stress	6'-0"	6'-0"	6'-9"	80	Stress	4'-6"	4'-6"	5'-0"
	Deflection	4'-5"	6'-0"	5'-6"		Deflection	3'-8"	4'-11"	4'-6"
50	Stress	5'-8"	5'-8"	6'-4"	85	Stress	4'-4"	4'-4"	4'-11"
	Deflection	4'-3"	5'-9"	5'-3"		Deflection	3'-7"	4'-10"	4'-5"



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Panel Type: C-37-7/8
 Material/Thickness: ST/24ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.034 in⁴/ft
 Sx: 0.075 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	7'-9"	7'-9"	8'-8"	55	Stress	4'-8"	4'-8"	5'-3"
	Deflection	5'-4"	7'-2"	6'-7"		Deflection	3'-9"	5'-1"	4'-8"
25	Stress	6'-11"	6'-11"	7'-9"	60	Stress	4'-6"	4'-6"	5'-0"
	Deflection	4'-11"	6'-8"	6'-1"		Deflection	3'-8"	4'-11"	4'-7"
30	Stress	6'-4"	6'-4"	7'-1"	65	Stress	4'-4"	4'-4"	4'-10"
	Deflection	4'-7"	6'-3"	5'-9"		Deflection	3'-7"	4'-10"	4'-5"
35	Stress	5'-10"	5'-10"	6'-7"	70	Stress	4'-2"	4'-2"	4'-8"
	Deflection	4'-5"	5'-11"	5'-5"		Deflection	3'-6"	4'-8"	4'-4"
40	Stress	5'-6"	5'-6"	6'-2"	75	Stress	4'-0"	4'-0"	4'-6"
	Deflection	4'-2"	5'-8"	5'-3"		Deflection	3'-5"	4'-7"	4'-3"
45	Stress	5'-2"	5'-2"	5'-9"	80	Stress	3'-11"	3'-11"	4'-4"
	Deflection	4'-0"	5'-5"	5'-0"		Deflection	3'-4"	4'-6"	4'-2"
50	Stress	4'-11"	4'-11"	5'-6"	85	Stress	3'-9"	3'-9"	4'-2"
	Deflection	3'-11"	5'-3"	4'-10"		Deflection	3'-3"	4'-5"	4'-1"



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Panel Type: C-37
 Material/Thickness AL/0.032
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.045 in⁴/ft
 Sx: 0.099 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5'-9"	5'-9"	6'-5"	55	Stress	3'-6"	3'-6"	3'-11"
	Deflection	4'-1"	5'-6"	5'-1"		Deflection	2'-11"	3'-11"	3'-7"
25	Stress	5'-2"	5'-2"	5'-9"	60	Stress	3'-4"	3'-4"	3'-9"
	Deflection	3'-9"	5'-1"	4'-8"		Deflection	2'-10"	3'-10"	3'-6"
30	Stress	4'-8"	4'-8"	5'-3"	65	Stress	3'-2"	3'-2"	3'-7"
	Deflection	3'-7"	4'-10"	4'-5"		Deflection	2'-9"	3'-8"	3'-5"
35	Stress	4'-4"	4'-4"	4'-10"	70	Stress	3'-1"	3'-1"	3'-5"
	Deflection	3'-4"	4'-7"	4'-2"		Deflection	2'-8"	3'-7"	3'-4"
40	Stress	4'-1"	4'-1"	4'-7"	75	Stress	3'-0"	3'-0"	3'-4"
	Deflection	3'-3"	4'-4"	4'-0"		Deflection	2'-7"	3'-6"	3'-3"
45	Stress	3'-10"	3'-10"	4'-3"	80	Stress	2'-11"	2'-11"	3'-3"
	Deflection	3'-1"	4'-2"	3'-10"		Deflection	2'-7"	3'-6"	3'-2"
50	Stress	3'-8"	3'-8"	4'-1"	85	Stress	2'-9"	2'-9"	3'-1"
	Deflection	3'-0"	4'-1"	3'-9"		Deflection	2'-6"	3'-5"	3'-1"



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Panel Type: C-37
 Material/Thickness: AL/0.040
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix(perf): 0.057 in⁴/ft
 Sx(perf): 0.13 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6'-7"	6'-7"	7'-4"	55	Stress	4'-0"	4'-0"	4'-5"
	Deflection	4'-5"	5'-11"	5'-5"		Deflection	3'-2"	4'-3"	3'-11"
25	Stress	5'-11"	5'-11"	6'-7"	60	Stress	3'-10"	3'-10"	4'-3"
	Deflection	4'-1"	5'-6"	5'-0"		Deflection	3'-0"	4'-1"	3'-9"
30	Stress	5'-4"	5'-4"	6'-0"	65	Stress	3'-8"	3'-8"	4'-1"
	Deflection	3'-10"	5'-2"	4'-9"		Deflection	2'-11"	4'-0"	3'-8"
35	Stress	5'-0"	5'-0"	5'-7"	70	Stress	3'-6"	3'-6"	3'-11"
	Deflection	3'-8"	4'-11"	4'-6"		Deflection	2'-11"	3'-11"	3'-7"
40	Stress	4'-8"	4'-8"	5'-2"	75	Stress	3'-5"	3'-5"	3'-10"
	Deflection	3'-6"	4'-8"	4'-4"		Deflection	2'-10"	3'-10"	3'-6"
45	Stress	4'-5"	4'-5"	4'-11"	80	Stress	3'-3"	3'-3"	3'-8"
	Deflection	3'-4"	4'-6"	4'-2"		Deflection	2'-9"	3'-9"	3'-5"
50	Stress	4'-2"	4'-2"	4'-8"	85	Stress	3'-2"	3'-2"	3'-7"
	Deflection	3'-3"	4'-4"	4'-0"		Deflection	2'-8"	3'-8"	3'-4"





Panel Type:
Material/Thickness
Perforation:
Hole Pattern:
Deflection Limit:
Ix:
Sx:

0.071 in⁴/ft
0.162 in³/ft

C-37-7/8
AL/0.050
N/A
L/180

Load psf			Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	7.36	7'-4"	7'-4"	8'-3"	55	Stress	4'-5"	4'-5"	5'-0"
	Deflection	4.72	4'-9"	6'-4"	5'-10"		Deflection	3'-4"	4'-7"	4'-2"
25	Stress	6.58	6'-7"	6'-7"	7'-4"	60	Stress	4'-3"	4'-3"	4'-9"
	Deflection	4.38	4'-5"	5'-11"	5'-5"		Deflection	3'-3"	4'-5"	4'-1"
30	Stress	6.01	6'-0"	6'-0"	6'-9"	65	Stress	4'-1"	4'-1"	4'-7"
	Deflection	4.12	4'-1"	5'-7"	5'-1"		Deflection	3'-2"	4'-4"	3'-11"
35	Stress	5.56	5'-7"	5'-7"	6'-3"	70	Stress	3'-11"	3'-11"	4'-5"
	Deflection	3.92	3'-11"	5'-3"	4'-10"		Deflection	3'-1"	4'-2"	3'-10"
40	Stress	5.20	5'-2"	5'-2"	5'-10"	75	Stress	3'-10"	3'-10"	4'-3"
	Deflection	3.75	3'-9"	5'-1"	4'-8"		Deflection	3'-0"	4'-1"	3'-9"
45	Stress	4.91	4'-11"	4'-11"	5'-6"	80	Stress	3'-8"	3'-8"	4'-1"
	Deflection	3.60	3'-7"	4'-10"	4'-6"		Deflection	3'-0"	4'-0"	3'-8"
50	Stress	4.65	4'-8"	4'-8"	5'-2"	85	Stress	3'-7"	3'-7"	4'-0"
	Deflection	3.48	3'-6"	4'-8"	4'-4"		Deflection	2'-11"	3'-11"	3'-7"



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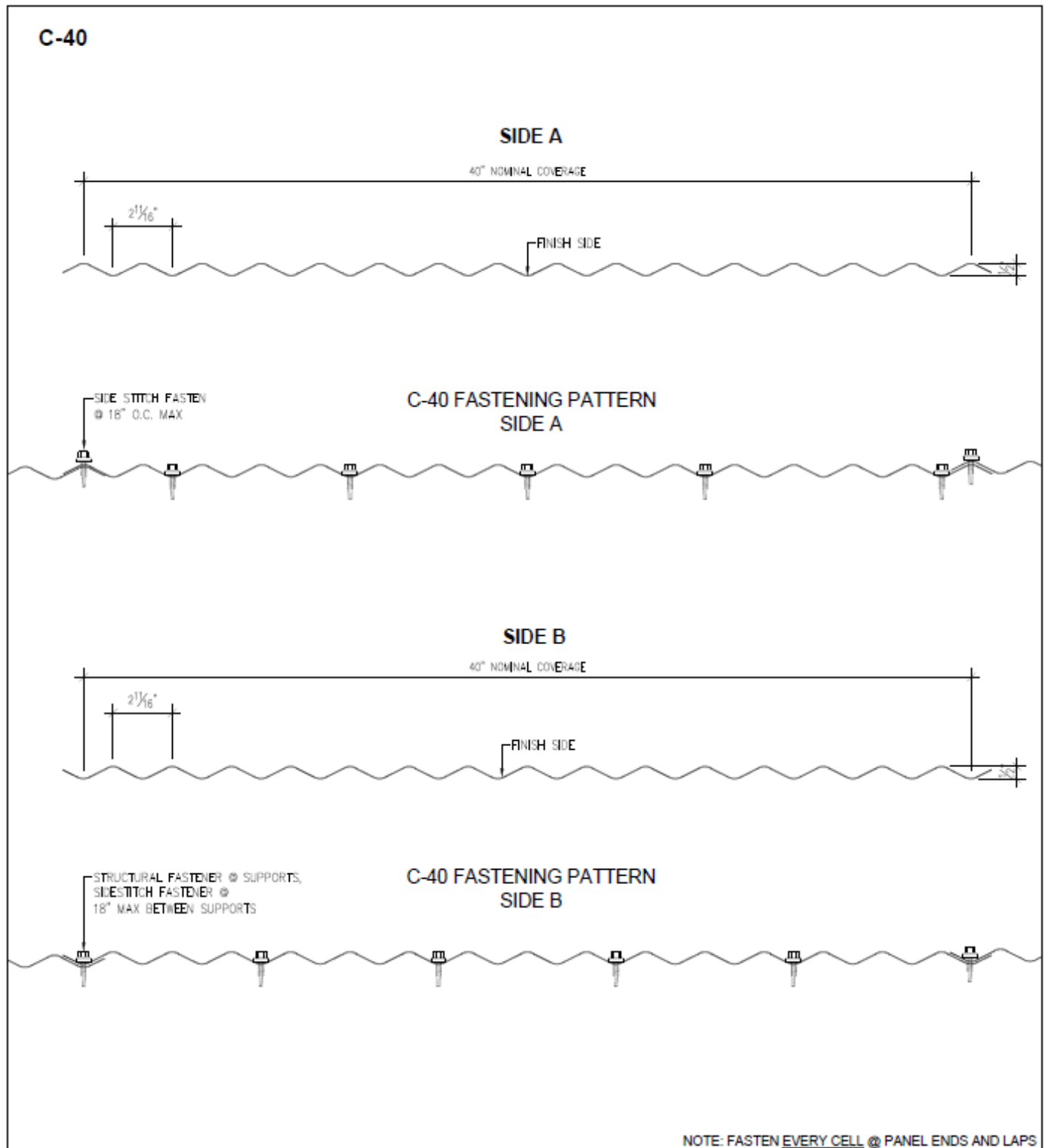
MORIN EXPOSED WALL SERIES SPAN CHARTS

Model C-40 – Panel Profiles and Span Tables

The following notes are applicable to the tables below:

1. Numbers in the tables indicate clear span distance between the structural supports.
2. Section properties listed are for the solid base sheet.
3. Load and span values listed do not include consideration of fastener with washer/oversize washer, to be determined by qualified personnel.
4. This table is intended as a guide to the allowable loads and spans for the panel product, however, actual assembly conditions must be determined by a qualified individual.
5. Refer to Morin install manual for fastening pattern across the panel (along the support) and side lap fastening.







Panel Type: C-40
 Material/Thickness: ST/18ga
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.018 in⁴/ft
 Sx: 0.07 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	7'-6"	7'-6"	8'-4"	55	Stress	4'-6"	4'-6"	5'-1"
	Deflection	4'-3"	5'-9"	5'-3"		Deflection	3'-0"	4'-1"	3'-9"
25	Stress	6'-8"	6'-8"	7'-6"	60	Stress	4'-4"	4'-4"	4'-10"
	Deflection	3'-11"	5'-4"	4'-11"		Deflection	2'-11"	4'-0"	3'-8"
30	Stress	6'-1"	6'-1"	6'-10"	65	Stress	4'-2"	4'-2"	4'-8"
	Deflection	3'-8"	5'-0"	4'-7"		Deflection	2'-10"	3'-10"	3'-7"
35	Stress	5'-8"	5'-8"	6'-4"	70	Stress	4'-0"	4'-0"	4'-6"
	Deflection	3'-6"	4'-9"	4'-4"		Deflection	2'-10"	3'-9"	3'-6"
40	Stress	5'-3"	5'-3"	5'-11"	75	Stress	3'-10"	3'-10"	4'-4"
	Deflection	3'-4"	4'-7"	4'-2"		Deflection	2'-9"	3'-8"	3'-5"
45	Stress	5'-0"	5'-0"	5'-7"	80	Stress	3'-9"	3'-9"	4'-2"
	Deflection	3'-3"	4'-4"	4'-0"		Deflection	2'-8"	3'-7"	3'-4"
50	Stress	4'-9"	4'-9"	5'-3"	85	Stress	3'-8"	3'-8"	4'-1"
	Deflection	3'-2"	4'-3"	3'-11"		Deflection	2'-7"	3'-6"	3'-3"



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Panel Type:
Material/Thickness
Perforation:
Hole Pattern:
Deflection Limit:

C-40
ST/20ga

L/180

Ix: 0.013 in⁴/ft
Sx: 0.052 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6'-6"	6'-6"	7'-3"	55	Stress	3'-11"	3'-11"	4'-4"
	Deflection	3'-10"	5'-2"	4'-9"		Deflection	2'-9"	3'-9"	3'-5"
25	Stress	5'-9"	5'-9"	6'-6"	60	Stress	3'-9"	3'-9"	4'-2"
	Deflection	3'-7"	4'-10"	4'-5"		Deflection	2'-8"	3'-7"	3'-4"
30	Stress	5'-3"	5'-3"	5'-11"	65	Stress	3'-7"	3'-7"	4'-0"
	Deflection	3'-4"	4'-7"	4'-2"		Deflection	2'-7"	3'-6"	3'-3"
35	Stress	4'-11"	4'-11"	5'-6"	70	Stress	3'-6"	3'-6"	3'-10"
	Deflection	3'-2"	4'-4"	4'-0"		Deflection	2'-6"	3'-5"	3'-2"
40	Stress	4'-7"	4'-7"	5'-1"	75	Stress	3'-4"	3'-4"	3'-9"
	Deflection	3'-1"	4'-2"	3'-10"		Deflection	2'-6"	3'-4"	3'-1"
45	Stress	4'-4"	4'-4"	4'-10"	80	Stress	3'-3"	3'-3"	3'-7"
	Deflection	2'-11"	4'-0"	3'-8"		Deflection	2'-5"	3'-3"	3'-0"
50	Stress	4'-1"	4'-1"	4'-7"	85	Stress	3'-2"	3'-2"	3'-6"
	Deflection	2'-10"	3'-10"	3'-6"		Deflection	2'-5"	3'-3"	2'-11"



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Panel Type: C-40
 Material/Thickness: ST/22ga
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.011 in⁴/ft
 Sx: 0.044 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5'-11"	5'-11"	6'-7"	55	Stress	3'-7"	3'-7"	4'-0"
	Deflection	3'-8"	4'-11"	4'-6"		Deflection	2'-7"	3'-6"	3'-3"
25	Stress	5'-3"	5'-3"	5'-11"	60	Stress	3'-5"	3'-5"	3'-10"
	Deflection	3'-4"	4'-7"	4'-2"		Deflection	2'-6"	3'-5"	3'-1"
30	Stress	4'-10"	4'-10"	5'-5"	65	Stress	3'-3"	3'-3"	3'-8"
	Deflection	3'-2"	4'-3"	3'-11"		Deflection	2'-5"	3'-4"	3'-0"
35	Stress	4'-6"	4'-6"	5'-0"	70	Stress	3'-2"	3'-2"	3'-6"
	Deflection	3'-0"	4'-1"	3'-9"		Deflection	2'-5"	3'-3"	3'-0"
40	Stress	4'-2"	4'-2"	4'-8"	75	Stress	3'-1"	3'-1"	3'-5"
	Deflection	2'-11"	3'-11"	3'-7"		Deflection	2'-4"	3'-2"	2'-11"
45	Stress	3'-11"	3'-11"	4'-5"	80	Stress	2'-11"	2'-11"	3'-4"
	Deflection	2'-9"	3'-9"	3'-5"		Deflection	2'-3"	3'-1"	2'-10"
50	Stress	3'-9"	3'-9"	4'-2"	85	Stress	2'-10"	2'-10"	3'-2"
	Deflection	2'-8"	3'-7"	3'-4"		Deflection	2'-3"	3'-0"	2'-9"



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Panel Type:
Material/Thickness
Perforation:
Hole Pattern:
Deflection Limit:

C-40
ST/24ga

L/180

Ix: 0.009 in⁴/ft
Sx: 0.035 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5'-3"	5'-3"	5'-11"	55	Stress	3'-2"	3'-2"	3'-7"
	Deflection	3'-4"	4'-6"	4'-2"		Deflection	2'-5"	3'-3"	3'-0"
25	Stress	4'-9"	4'-9"	5'-3"	60	Stress	3'-1"	3'-1"	3'-5"
	Deflection	3'-1"	4'-3"	3'-10"		Deflection	2'-4"	3'-2"	2'-11"
30	Stress	4'-4"	4'-4"	4'-10"	65	Stress	2'-11"	2'-11"	3'-3"
	Deflection	2'-11"	4'-0"	3'-8"		Deflection	2'-3"	3'-1"	2'-10"
35	Stress	4'-0"	4'-0"	4'-6"	70	Stress	2'-10"	2'-10"	3'-2"
	Deflection	2'-9"	3'-9"	3'-6"		Deflection	2'-3"	3'-0"	2'-9"
40	Stress	3'-9"	3'-9"	4'-2"	75	Stress	2'-9"	2'-9"	3'-1"
	Deflection	2'-8"	3'-7"	3'-4"		Deflection	2'-2"	2'-11"	2'-8"
45	Stress	3'-6"	3'-6"	3'-11"	80	Stress	2'-8"	2'-8"	2'-11"
	Deflection	2'-7"	3'-6"	3'-2"		Deflection	2'-1"	2'-10"	2'-8"
50	Stress	3'-4"	3'-4"	3'-9"	85	Stress	2'-7"	2'-7"	2'-10"
	Deflection	2'-6"	3'-4"	3'-1"		Deflection	2'-1"	2'-10"	2'-7"



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Panel Type: C-40
 Material/Thickness: AL/0.032
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.014 in⁴/ft
 Sx: 0.053 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4'-2"	4'-2"	4'-8"	55	Stress	2'-6"	2'-6"	2'-10"
	Deflection	2'-9"	3'-9"	3'-5"		Deflection	2'-0"	2'-8"	2'-5"
25	Stress	3'-9"	3'-9"	4'-2"	60	Stress	2'-5"	2'-5"	2'-8"
	Deflection	2'-7"	3'-6"	3'-2"		Deflection	1'-11"	2'-7"	2'-4"
30	Stress	3'-5"	3'-5"	3'-10"	65	Stress	2'-4"	2'-4"	2'-7"
	Deflection	2'-5"	3'-3"	3'-0"		Deflection	1'-10"	2'-6"	2'-4"
35	Stress	3'-2"	3'-2"	3'-6"	70	Stress	2'-3"	2'-3"	2'-6"
	Deflection	2'-3"	3'-1"	2'-10"		Deflection	1'-10"	2'-5"	2'-3"
40	Stress	3'-0"	3'-0"	3'-4"	75	Stress	2'-2"	2'-2"	2'-5"
	Deflection	2'-2"	2'-11"	2'-9"		Deflection	1'-9"	2'-5"	2'-2"
45	Stress	2'-9"	2'-9"	3'-1"	80	Stress	2'-1"	2'-1"	2'-4"
	Deflection	2'-1"	2'-10"	2'-7"		Deflection	1'-9"	2'-4"	2'-2"
50	Stress	2'-8"	2'-8"	3'-0"	85	Stress	2'-0"	2'-0"	2'-3"
	Deflection	2'-0"	2'-9"	2'-6"		Deflection	1'-8"	2'-4"	2'-1"



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Panel Type: C-40
 Material/Thickness: AL/0.040
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.015 in⁴/ft
 Sx: 0.055 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4'-3"	4'-3"	4'-9"	55	Stress	2'-7"	2'-7"	2'-10"
	Deflection	2'-10"	3'-10"	3'-6"		Deflection	2'-0"	2'-9"	2'-6"
25	Stress	3'-10"	3'-10"	4'-3"	60	Stress	2'-6"	2'-6"	2'-9"
	Deflection	2'-7"	3'-6"	3'-3"		Deflection	1'-11"	2'-8"	2'-5"
30	Stress	3'-6"	3'-6"	3'-11"	65	Stress	2'-4"	2'-4"	2'-8"
	Deflection	2'-5"	3'-4"	3'-1"		Deflection	1'-11"	2'-7"	2'-4"
35	Stress	3'-3"	3'-3"	3'-7"	70	Stress	2'-3"	2'-3"	2'-7"
	Deflection	2'-4"	3'-2"	2'-11"		Deflection	1'-10"	2'-6"	2'-4"
40	Stress	3'-0"	3'-0"	3'-4"	75	Stress	2'-2"	2'-2"	2'-6"
	Deflection	2'-3"	3'-0"	2'-9"		Deflection	1'-10"	2'-5"	2'-3"
45	Stress	2'-10"	2'-10"	3'-2"	80	Stress	2'-2"	2'-2"	2'-5"
	Deflection	2'-2"	2'-11"	2'-8"		Deflection	1'-9"	2'-5"	2'-2"
50	Stress	2'-8"	2'-8"	3'-0"	85	Stress	2'-1"	2'-1"	2'-4"
	Deflection	2'-1"	2'-10"	2'-7"		Deflection	1'-9"	2'-4"	2'-2"



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Panel Type: C-40
 Material/Thickness: AL/0.050
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.019 in⁴/ft
 Sx: 0.067 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4'-9"	4'-9"	5'-3"	55	Stress	2'-10"	2'-10"	3'-2"
	Deflection	3'-0"	4'-1"	3'-9"		Deflection	2'-2"	2'-11"	2'-8"
25	Stress	4'-3"	4'-3"	4'-9"	60	Stress	2'-9"	2'-9"	3'-1"
	Deflection	2'-10"	3'-10"	3'-6"		Deflection	2'-1"	2'-10"	2'-7"
30	Stress	3'-10"	3'-10"	4'-4"	65	Stress	2'-7"	2'-7"	2'-11"
	Deflection	2'-8"	3'-7"	3'-3"		Deflection	2'-1"	2'-9"	2'-6"
35	Stress	3'-7"	3'-7"	4'-0"	70	Stress	2'-6"	2'-6"	2'-10"
	Deflection	2'-6"	3'-5"	3'-1"		Deflection	2'-0"	2'-8"	2'-6"
40	Stress	3'-4"	3'-4"	3'-9"	75	Stress	2'-5"	2'-5"	2'-9"
	Deflection	2'-5"	3'-3"	3'-0"		Deflection	1'-11"	2'-8"	2'-5"
45	Stress	3'-2"	3'-2"	3'-6"	80	Stress	2'-4"	2'-4"	2'-8"
	Deflection	2'-4"	3'-1"	2'-10"		Deflection	1'-11"	2'-7"	2'-4"
50	Stress	3'-0"	3'-0"	3'-4"	85	Stress	2'-4"	2'-4"	2'-7"
	Deflection	2'-3"	3'-0"	2'-9"		Deflection	1'-10"	2'-6"	2'-4"



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MORIN EXPOSED WALL SERIES SPAN CHARTS

Model E-36 – Panel Profiles and Span Tables

The following notes are applicable to the tables below:

1. Numbers in the tables indicate clear span distance between the structural supports.
2. Section properties listed are for the solid base sheet.
3. Load and span values listed do not include consideration of fastener with washer/oversize washer, to be determined by qualified personnel.
4. This table is intended as a guide to the allowable loads and spans for the panel product, however, actual assembly conditions must be determined by a qualified individual.
5. Refer to Morin install manual for fastening pattern across the panel (along the support) and side lap fastening.

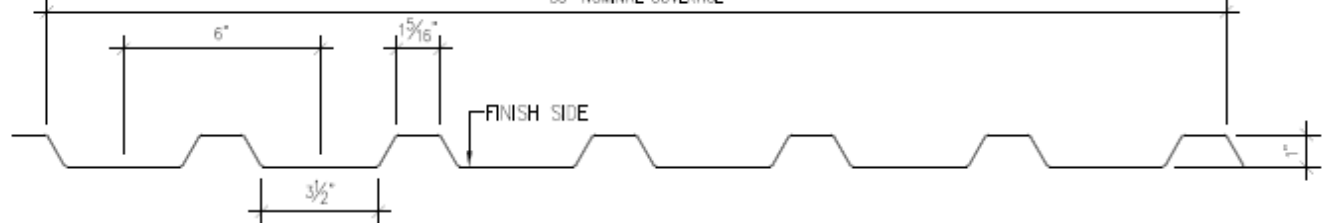


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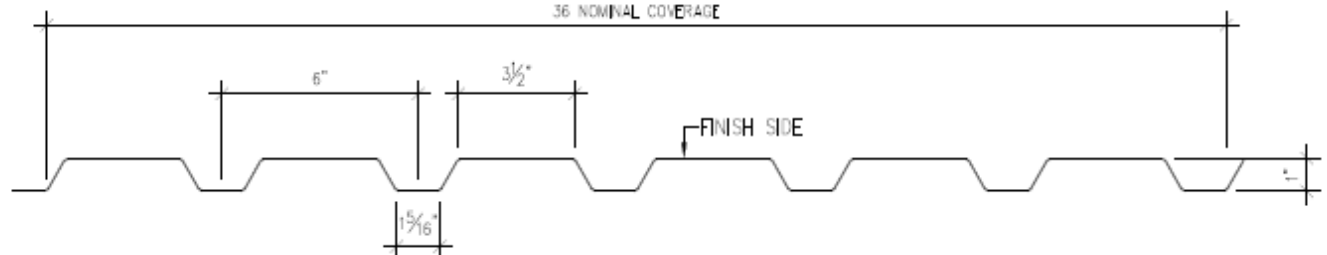


**E-36****SIDE A**

36" NOMINAL COVERAGE

SIDE STITCH FASTEN
@ 18" O.C. MAX**E-36 FASTENING PATTERN
SIDE A****SIDE B**

36" NOMINAL COVERAGE

STRUCTURAL FASTENER @ SUPPORTS,
SIDE STITCH FASTENER @
18" MAX BETWEEN SUPPORTS**E-36 FASTENING PATTERN
SIDE B**

NOTE: FASTEN EVERY CELL @ PANEL ENDS AND LAPS



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PCA-101



Panel Type: E-36
 Material/Thickness: ST/18ga
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.111 in⁴/ft
 Sx: 0.178 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	11'-11"	11'-11"	13'-4"	55	Stress	7'-2"	7'-2"	8'-1"
	Deflection	7'-10"	10'-7"	9'-9"		Deflection	5'-7"	7'-7"	6'-11"
25	Stress	10'-8"	10'-8"	11'-11"	60	Stress	6'-11"	6'-11"	7'-9"
	Deflection	7'-3"	9'-10"	9'-0"		Deflection	5'-5"	7'-4"	6'-9"
30	Stress	9'-9"	9'-9"	10'-11"	65	Stress	6'-8"	6'-8"	7'-5"
	Deflection	6'-10"	9'-3"	8'-6"		Deflection	5'-4"	7'-2"	6'-7"
35	Stress	9'-0"	9'-0"	10'-1"	70	Stress	6'-5"	6'-5"	7'-2"
	Deflection	6'-6"	8'-9"	8'-1"		Deflection	5'-2"	7'-0"	6'-5"
40	Stress	8'-5"	8'-5"	9'-5"	75	Stress	6'-2"	6'-2"	6'-11"
	Deflection	6'-3"	8'-5"	7'-9"		Deflection	5'-1"	6'-10"	6'-3"
45	Stress	8'-0"	8'-0"	8'-11"	80	Stress	5'-12"	5'-12"	6'-8"
	Deflection	6'-0"	8'-1"	7'-5"		Deflection	4'-11"	6'-8"	6'-2"
50	Stress	7'-7"	7'-7"	8'-5"	85	Stress	5'-10"	5'-10"	6'-6"
	Deflection	5'-9"	7'-10"	7'-2"		Deflection	4'-10"	6'-6"	6'-0"



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Panel Type: E-36
 Material/Thickness: ST/20ga
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.083 in⁴/ft
 Sx: 0.135 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	10'-5"	10'-5"	11'-7"	55	Stress	6'-3"	6'-3"	7'-0"
	Deflection	7'-1"	9'-7"	8'-10"		Deflection	5'-1"	6'-10"	6'-4"
25	Stress	9'-3"	9'-3"	10'-5"	60	Stress	5'-12"	5'-12"	6'-8"
	Deflection	6'-7"	8'-11"	8'-2"		Deflection	4'-11"	6'-8"	6'-1"
30	Stress	8'-6"	8'-6"	9'-6"	65	Stress	5'-9"	5'-9"	6'-5"
	Deflection	6'-3"	8'-5"	7'-9"		Deflection	4'-10"	6'-6"	6'-0"
35	Stress	7'-10"	7'-10"	8'-9"	70	Stress	5'-7"	5'-7"	6'-2"
	Deflection	5'-11"	8'-0"	7'-4"		Deflection	4'-8"	6'-4"	5'-10"
40	Stress	7'-4"	7'-4"	8'-3"	75	Stress	5'-4"	5'-4"	6'-0"
	Deflection	5'-8"	7'-8"	7'-0"		Deflection	4'-7"	6'-2"	5'-8"
45	Stress	6'-11"	6'-11"	7'-9"	80	Stress	5'-2"	5'-2"	5'-10"
	Deflection	5'-5"	7'-4"	6'-9"		Deflection	4'-6"	6'-1"	5'-7"
50	Stress	6'-7"	6'-7"	7'-4"	85	Stress	5'-0"	5'-0"	5'-8"
	Deflection	5'-3"	7'-1"	6'-6"		Deflection	4'-5"	5'-11"	5'-5"



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Panel Type: E-36
 Material/Thickness: ST/22ga
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.069 in⁴/ft
 Sx: 0.113 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	9'-6"	9'-6"	10'-8"	55	Stress	5'-9"	5'-9"	6'-5"
	Deflection	6'-8"	9'-1"	8'-4"		Deflection	4'-9"	6'-6"	5'-11"
25	Stress	8'-6"	8'-6"	9'-6"	60	Stress	5'-6"	5'-6"	6'-2"
	Deflection	6'-3"	8'-5"	7'-9"		Deflection	4'-8"	6'-3"	5'-9"
30	Stress	7'-9"	7'-9"	8'-8"	65	Stress	5'-3"	5'-3"	5'-11"
	Deflection	5'-10"	7'-11"	7'-3"		Deflection	4'-6"	6'-1"	5'-7"
35	Stress	7'-2"	7'-2"	8'-0"	70	Stress	5'-1"	5'-1"	5'-8"
	Deflection	5'-7"	7'-6"	6'-11"		Deflection	4'-5"	6'-0"	5'-6"
40	Stress	6'-9"	6'-9"	7'-6"	75	Stress	4'-11"	4'-11"	5'-6"
	Deflection	5'-4"	7'-2"	6'-7"		Deflection	4'-4"	5'-10"	5'-4"
45	Stress	6'-4"	6'-4"	7'-1"	80	Stress	4'-9"	4'-9"	5'-4"
	Deflection	5'-1"	6'-11"	6'-4"		Deflection	4'-3"	5'-8"	5'-3"
50	Stress	6'-0"	6'-0"	6'-9"	85	Stress	4'-7"	4'-7"	5'-2"
	Deflection	4'-11"	6'-8"	6'-2"		Deflection	4'-2"	5'-7"	5'-2"



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Panel Type: E-36
 Material/Thickness: ST/24ga
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.055 in⁴/ft
 Sx: 0.091 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	8'-6"	8'-6"	9'-6"	55	Stress	5'-2"	5'-2"	5'-9"
	Deflection	6'-3"	8'-5"	7'-9"		Deflection	4'-5"	6'-0"	5'-6"
25	Stress	7'-7"	7'-7"	8'-6"	60	Stress	4'-11"	4'-11"	5'-6"
	Deflection	5'-9"	7'-10"	7'-2"		Deflection	4'-4"	5'-10"	5'-4"
30	Stress	6'-11"	6'-11"	7'-9"	65	Stress	4'-9"	4'-9"	5'-3"
	Deflection	5'-5"	7'-4"	6'-9"		Deflection	4'-2"	5'-8"	5'-2"
35	Stress	6'-5"	6'-5"	7'-2"	70	Stress	4'-7"	4'-7"	5'-1"
	Deflection	5'-2"	7'-0"	6'-5"		Deflection	4'-1"	5'-6"	5'-1"
40	Stress	6'-0"	6'-0"	6'-9"	75	Stress	4'-5"	4'-5"	4'-11"
	Deflection	4'-11"	6'-8"	6'-1"		Deflection	4'-0"	5'-5"	5'-0"
45	Stress	5'-8"	5'-8"	6'-4"	80	Stress	4'-3"	4'-3"	4'-9"
	Deflection	4'-9"	6'-5"	5'-11"		Deflection	3'-11"	5'-3"	4'-10"
50	Stress	5'-5"	5'-5"	6'-0"	85	Stress	4'-2"	4'-2"	4'-7"
	Deflection	4'-7"	6'-2"	5'-8"		Deflection	3'-10"	5'-2"	4'-9"



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Panel Type:

E-36

Material/Thickness

AL/032

Perforation:

Hole Pattern:

Deflection Limit:

L/180

Ix: 0.071 in⁴/ftSx: 0.115 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3'-11"	3'-11"	4'-5"	55	Stress	2'-5"	2'-5"	2'-8"
	Deflection	4'-9"	6'-4"	5'-10"		Deflection	3'-4"	4'-6"	4'-2"
25	Stress	3'-6"	3'-6"	3'-11"	60	Stress	2'-3"	2'-3"	2'-7"
	Deflection	4'-4"	5'-11"	5'-5"		Deflection	3'-3"	4'-5"	4'-1"
30	Stress	3'-3"	3'-3"	3'-7"	65	Stress	2'-2"	2'-2"	2'-5"
	Deflection	4'-1"	5'-7"	5'-1"		Deflection	3'-2"	4'-4"	3'-11"
35	Stress	3'-0"	3'-0"	3'-4"	70	Stress	2'-1"	2'-1"	2'-4"
	Deflection	3'-11"	5'-3"	4'-10"		Deflection	3'-1"	4'-2"	3'-10"
40	Stress	2'-10"	2'-10"	3'-2"	75	Stress	2'-1"	2'-1"	2'-3"
	Deflection	3'-9"	5'-1"	4'-8"		Deflection	3'-0"	4'-1"	3'-9"
45	Stress	2'-8"	2'-8"	2'-11"	80	Stress	1'-12"	1'-12"	2'-3"
	Deflection	3'-7"	4'-10"	4'-5"		Deflection	3'-0"	4'-0"	3'-8"
50	Stress	2'-6"	2'-6"	2'-10"	85	Stress	1'-11"	1'-11"	2'-2"
	Deflection	3'-6"	4'-8"	4'-4"		Deflection	2'-11"	3'-11"	3'-7"



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Panel Type: E-36
 Material/Thickness: AL/040
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.088 in⁴/ft
 Sx: 0.143 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4'-5"	4'-5"	4'-11"	55	Stress	2'-8"	2'-8"	3'-0"
	Deflection	5'-1"	6'-10"	6'-4"		Deflection	3'-7"	4'-11"	4'-6"
25	Stress	3'-11"	3'-11"	4'-5"	60	Stress	2'-7"	2'-7"	2'-10"
	Deflection	4'-9"	6'-4"	5'-10"		Deflection	3'-6"	4'-9"	4'-4"
30	Stress	3'-7"	3'-7"	4'-0"	65	Stress	2'-5"	2'-5"	2'-9"
	Deflection	4'-5"	6'-0"	5'-6"		Deflection	3'-5"	4'-7"	4'-3"
35	Stress	3'-4"	3'-4"	3'-9"	70	Stress	2'-4"	2'-4"	2'-8"
	Deflection	4'-3"	5'-8"	5'-3"		Deflection	3'-4"	4'-6"	4'-2"
40	Stress	3'-1"	3'-1"	3'-6"	75	Stress	2'-3"	2'-3"	2'-7"
	Deflection	4'-0"	5'-5"	5'-0"		Deflection	3'-3"	4'-5"	4'-1"
45	Stress	2'-11"	2'-11"	3'-3"	80	Stress	2'-2"	2'-2"	2'-6"
	Deflection	3'-10"	5'-3"	4'-10"		Deflection	3'-2"	4'-4"	4'-0"
50	Stress	2'-9"	2'-9"	3'-1"	85	Stress	2'-2"	2'-2"	2'-5"
	Deflection	3'-9"	5'-1"	4'-8"		Deflection	3'-2"	4'-3"	3'-11"



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Panel Type: E-36
 Material/Thickness: AL/050
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.111 in⁴/ft
 Sx: 0.178 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4'-11"	4'-11"	5'-6"	55	Stress	3'-0"	3'-0"	3'-4"
	Deflection	5'-6"	7'-5"	6'-9"		Deflection	3'-11"	5'-3"	4'-10"
25	Stress	4'-5"	4'-5"	4'-11"	60	Stress	2'-10"	2'-10"	3'-2"
	Deflection	5'-1"	6'-10"	6'-4"		Deflection	3'-10"	5'-1"	4'-8"
30	Stress	4'-0"	4'-0"	4'-6"	65	Stress	2'-9"	2'-9"	3'-1"
	Deflection	4'-9"	6'-5"	5'-11"		Deflection	3'-8"	5'-0"	4'-7"
35	Stress	3'-9"	3'-9"	4'-2"	70	Stress	2'-8"	2'-8"	2'-11"
	Deflection	4'-6"	6'-2"	5'-8"		Deflection	3'-7"	4'-10"	4'-6"
40	Stress	3'-6"	3'-6"	3'-11"	75	Stress	2'-6"	2'-6"	2'-10"
	Deflection	4'-4"	5'-10"	5'-5"		Deflection	3'-6"	4'-9"	4'-4"
45	Stress	3'-3"	3'-3"	3'-8"	80	Stress	2'-6"	2'-6"	2'-9"
	Deflection	4'-2"	5'-8"	5'-2"		Deflection	3'-5"	4'-8"	4'-3"
50	Stress	3'-1"	3'-1"	3'-6"	85	Stress	2'-5"	2'-5"	2'-8"
	Deflection	4'-0"	5'-5"	5'-0"		Deflection	3'-5"	4'-7"	4'-2"



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MORIN EXPOSED WALL SERIES SPAN CHARTS

Model E8-40 – Panel Profiles and Span Tables

The following notes are applicable to the tables below:

1. Numbers in the tables indicate clear span distance between the structural supports.
2. Section properties listed are for the solid base sheet.
3. Load and span values listed do not include consideration of fastener with washer/oversize washer, to be determined by qualified personnel.
4. This table is intended as a guide to the allowable loads and spans for the panel product, however, actual assembly conditions must be determined by a qualified individual.
5. Refer to Morin install manual for fastening pattern across the panel (along the support) and side lap fastening.

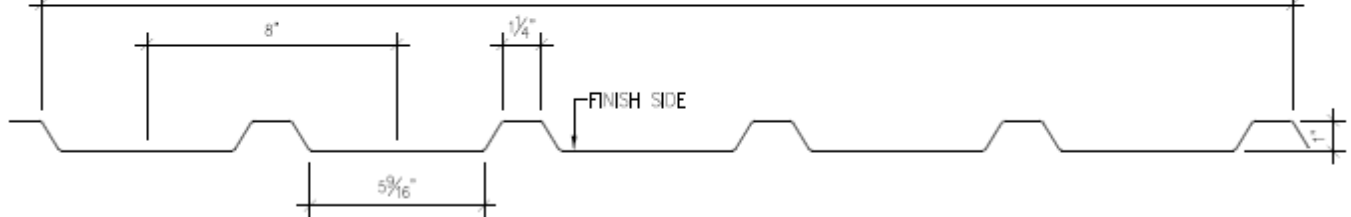




E8-40

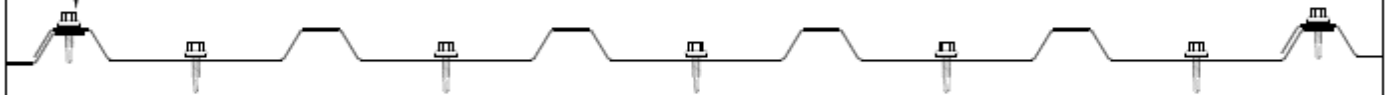
SIDE A

40" NOMINAL COVERAGE



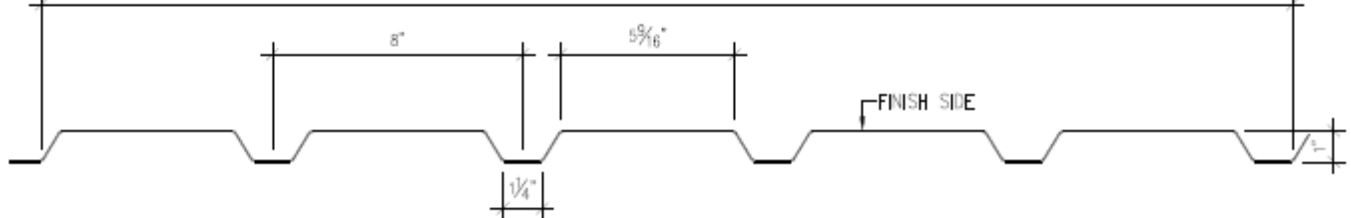
**E8-40 FASTENING PATTERN
SIDE A**

SIDE STITCH FASTEN
@ 18" O.C. MAX



SIDE B

40" NOMINAL COVERAGE



**E8-40 FASTENING PATTERN
SIDE B**

STRUCTURAL FASTENER @ SUPPORTS,
SIDE STITCH FASTENER @
18" MAX BETWEEN SUPPORTS



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Panel Type: E8-40
 Material/Thickness: ST/18ga
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.098 in⁴/ft
 Sx: 0.144 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	10'-9"	10'-9"	12'-0"	55	Stress	6'-6"	6'-6"	7'-3"
	Deflection	7'-6"	10'-2"	9'-4"		Deflection	5'-5"	7'-3"	6'-8"
25	Stress	9'-7"	9'-7"	10'-9"	60	Stress	6'-2"	6'-2"	6'-11"
	Deflection	7'-0"	9'-5"	8'-8"		Deflection	5'-3"	7'-1"	6'-6"
30	Stress	8'-9"	8'-9"	9'-9"	65	Stress	5'-11"	5'-11"	6'-8"
	Deflection	6'-7"	8'-11"	8'-2"		Deflection	5'-1"	6'-10"	6'-4"
35	Stress	8'-1"	8'-1"	9'-1"	70	Stress	5'-9"	5'-9"	6'-5"
	Deflection	6'-3"	8'-5"	7'-9"		Deflection	5'-0"	6'-8"	6'-2"
40	Stress	7'-7"	7'-7"	8'-6"	75	Stress	5'-6"	5'-6"	6'-2"
	Deflection	6'-0"	8'-1"	7'-5"		Deflection	4'-10"	6'-7"	6'-0"
45	Stress	7'-2"	7'-2"	8'-0"	80	Stress	5'-4"	5'-4"	6'-0"
	Deflection	5'-9"	7'-9"	7'-2"		Deflection	4'-9"	6'-5"	5'-11"
50	Stress	6'-9"	6'-9"	7'-7"	85	Stress	5'-2"	5'-2"	5'-10"
	Deflection	5'-7"	7'-6"	6'-11"		Deflection	4'-8"	6'-3"	5'-9"



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Panel Type: E8-40
 Material/Thickness: ST/20ga
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.073 in⁴/ft
 Sx: 0.109 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	9'-4"	9'-4"	10'-5"	55	Stress	5'-7"	5'-7"	6'-3"
	Deflection	6'-10"	9'-3"	8'-6"		Deflection	4'-11"	6'-7"	6'-1"
25	Stress	8'-4"	8'-4"	9'-4"	60	Stress	5'-5"	5'-5"	6'-0"
	Deflection	6'-4"	8'-7"	7'-11"		Deflection	4'-9"	6'-5"	5'-11"
30	Stress	7'-7"	7'-7"	8'-6"	65	Stress	5'-2"	5'-2"	5'-9"
	Deflection	6'-0"	8'-1"	7'-5"		Deflection	4'-7"	6'-3"	5'-9"
35	Stress	7'-1"	7'-1"	7'-11"	70	Stress	5'-0"	5'-0"	5'-7"
	Deflection	5'-8"	7'-8"	7'-1"		Deflection	4'-6"	6'-1"	5'-7"
40	Stress	6'-7"	6'-7"	7'-4"	75	Stress	4'-10"	4'-10"	5'-5"
	Deflection	5'-5"	7'-4"	6'-9"		Deflection	4'-5"	5'-11"	5'-6"
45	Stress	6'-3"	6'-3"	6'-11"	80	Stress	4'-8"	4'-8"	5'-3"
	Deflection	5'-3"	7'-1"	6'-6"		Deflection	4'-4"	5'-10"	5'-4"
50	Stress	5'-11"	5'-11"	6'-7"	85	Stress	4'-6"	4'-6"	5'-1"
	Deflection	5'-1"	6'-10"	6'-3"		Deflection	4'-3"	5'-8"	5'-3"



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Panel Type: E8-40
 Material/Thickness: ST/22ga
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.061 in⁴/ft
 Sx: 0.091 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	8'-6"	8'-6"	9'-6"	55	Stress	5'-2"	5'-2"	5'-9"
	Deflection	6'-5"	8'-8"	8'-0"		Deflection	4'-7"	6'-2"	5'-8"
25	Stress	7'-7"	7'-7"	8'-6"	60	Stress	4'-11"	4'-11"	5'-6"
	Deflection	6'-0"	8'-1"	7'-5"		Deflection	4'-6"	6'-0"	5'-6"
30	Stress	6'-11"	6'-11"	7'-9"	65	Stress	4'-9"	4'-9"	5'-3"
	Deflection	5'-7"	7'-7"	7'-0"		Deflection	4'-4"	5'-10"	5'-5"
35	Stress	6'-5"	6'-5"	7'-2"	70	Stress	4'-7"	4'-7"	5'-1"
	Deflection	5'-4"	7'-3"	6'-7"		Deflection	4'-3"	5'-9"	5'-3"
40	Stress	6'-0"	6'-0"	6'-9"	75	Stress	4'-5"	4'-5"	4'-11"
	Deflection	5'-1"	6'-11"	6'-4"		Deflection	4'-2"	5'-7"	5'-2"
45	Stress	5'-8"	5'-8"	6'-4"	80	Stress	4'-3"	4'-3"	4'-9"
	Deflection	4'-11"	6'-8"	6'-1"		Deflection	4'-1"	5'-6"	5'-0"
50	Stress	5'-5"	5'-5"	6'-0"	85	Stress	4'-2"	4'-2"	4'-7"
	Deflection	4'-9"	6'-5"	5'-11"		Deflection	4'-0"	5'-4"	4'-11"



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Panel Type: E8-40
 Material/Thickness: ST/24ga
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.049 in⁴/ft
 Sx: 0.073 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	7'-8"	7'-8"	8'-6"	55	Stress	4'-7"	4'-7"	5'-2"
	Deflection	6'-0"	8'-1"	7'-5"		Deflection	4'-3"	5'-9"	5'-3"
25	Stress	6'-10"	6'-10"	7'-8"	60	Stress	4'-5"	4'-5"	4'-11"
	Deflection	5'-7"	7'-6"	6'-10"		Deflection	4'-2"	5'-7"	5'-2"
30	Stress	6'-3"	6'-3"	7'-0"	65	Stress	4'-3"	4'-3"	4'-9"
	Deflection	5'-3"	7'-0"	6'-6"		Deflection	4'-0"	5'-5"	5'-0"
35	Stress	5'-9"	5'-9"	6'-5"	70	Stress	4'-1"	4'-1"	4'-7"
	Deflection	4'-11"	6'-8"	6'-2"		Deflection	3'-11"	5'-4"	4'-11"
40	Stress	5'-5"	5'-5"	6'-0"	75	Stress	3'-11"	3'-11"	4'-5"
	Deflection	4'-9"	6'-5"	5'-11"		Deflection	3'-10"	5'-2"	4'-9"
45	Stress	5'-1"	5'-1"	5'-8"	80	Stress	3'-10"	3'-10"	4'-3"
	Deflection	4'-7"	6'-2"	5'-8"		Deflection	3'-9"	5'-1"	4'-8"
50	Stress	4'-10"	4'-10"	5'-5"	85	Stress	3'-8"	3'-8"	4'-2"
	Deflection	4'-5"	5'-11"	5'-5"		Deflection	3'-8"	5'-0"	4'-7"



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Panel Type: E8-40
 Material/Thickness AL/032
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.065 in⁴/ft
 Sx: 0.097 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6'-0"	6'-0"	6'-8"	55	Stress	3'-7"	3'-7"	4'-0"
	Deflection	4'-7"	6'-2"	5'-8"		Deflection	3'-3"	4'-5"	4'-1"
25	Stress	5'-4"	5'-4"	6'-0"	60	Stress	3'-5"	3'-5"	3'-10"
	Deflection	4'-3"	5'-9"	5'-3"		Deflection	3'-2"	4'-4"	3'-11"
30	Stress	4'-10"	4'-10"	5'-5"	65	Stress	3'-4"	3'-4"	3'-8"
	Deflection	4'-0"	5'-5"	5'-0"		Deflection	3'-1"	4'-2"	3'-10"
35	Stress	4'-6"	4'-6"	5'-0"	70	Stress	3'-2"	3'-2"	3'-7"
	Deflection	3'-10"	5'-2"	4'-9"		Deflection	3'-0"	4'-1"	3'-9"
40	Stress	4'-3"	4'-3"	4'-9"	75	Stress	3'-1"	3'-1"	3'-5"
	Deflection	3'-8"	4'-11"	4'-6"		Deflection	2'-11"	4'-0"	3'-8"
45	Stress	4'-0"	4'-0"	4'-5"	80	Stress	2'-12"	2'-12"	3'-4"
	Deflection	3'-6"	4'-9"	4'-4"		Deflection	2'-11"	3'-11"	3'-7"
50	Stress	3'-9"	3'-9"	4'-3"	85	Stress	2'-11"	2'-11"	3'-3"
	Deflection	3'-5"	4'-7"	4'-2"		Deflection	2'-10"	3'-10"	3'-6"



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Panel Type: E8-40
 Material/Thickness AL/040
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.082 in⁴/ft
 Sx: 0.121 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6'-8"	6'-8"	7'-5"	55	Stress	4'-0"	4'-0"	4'-6"
	Deflection	4'-11"	6'-8"	6'-2"		Deflection	3'-6"	4'-9"	4'-5"
25	Stress	5'-11"	5'-11"	6'-8"	60	Stress	3'-10"	3'-10"	4'-4"
	Deflection	4'-7"	6'-2"	5'-8"		Deflection	3'-5"	4'-8"	4'-3"
30	Stress	5'-5"	5'-5"	6'-1"	65	Stress	3'-8"	3'-8"	4'-2"
	Deflection	4'-4"	5'-10"	5'-4"		Deflection	3'-4"	4'-6"	4'-2"
35	Stress	5'-0"	5'-0"	5'-7"	70	Stress	3'-7"	3'-7"	4'-0"
	Deflection	4'-1"	5'-7"	5'-1"		Deflection	3'-3"	4'-5"	4'-0"
40	Stress	4'-8"	4'-8"	5'-3"	75	Stress	3'-5"	3'-5"	3'-10"
	Deflection	3'-11"	5'-4"	4'-10"		Deflection	3'-2"	4'-4"	3'-11"
45	Stress	4'-5"	4'-5"	5'-0"	80	Stress	3'-4"	3'-4"	3'-9"
	Deflection	3'-9"	5'-1"	4'-8"		Deflection	3'-1"	4'-3"	3'-10"
50	Stress	4'-3"	4'-3"	4'-8"	85	Stress	3'-3"	3'-3"	3'-7"
	Deflection	3'-8"	4'-11"	4'-6"		Deflection	3'-1"	4'-1"	3'-9"



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Panel Type: E8-40
 Material/Thickness AL/050
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.103 in⁴/ft
 Sx: 0.15 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	7'-5"	7'-5"	8'-4"	55	Stress	4'-6"	4'-6"	5'-0"
	Deflection	5'-4"	7'-2"	6'-7"		Deflection	3'-10"	5'-2"	4'-9"
25	Stress	6'-8"	6'-8"	7'-5"	60	Stress	4'-3"	4'-3"	4'-10"
	Deflection	4'-11"	6'-8"	6'-2"		Deflection	3'-8"	5'-0"	4'-7"
30	Stress	6'-1"	6'-1"	6'-9"	65	Stress	4'-1"	4'-1"	4'-7"
	Deflection	4'-8"	6'-4"	5'-9"		Deflection	3'-7"	4'-10"	4'-6"
35	Stress	5'-7"	5'-7"	6'-3"	70	Stress	3'-12"	3'-12"	4'-5"
	Deflection	4'-5"	6'-0"	5'-6"		Deflection	3'-6"	4'-9"	4'-4"
40	Stress	5'-3"	5'-3"	5'-10"	75	Stress	3'-10"	3'-10"	4'-3"
	Deflection	4'-3"	5'-9"	5'-3"		Deflection	3'-5"	4'-8"	4'-3"
45	Stress	4'-11"	4'-11"	5'-6"	80	Stress	3'-9"	3'-9"	4'-2"
	Deflection	4'-1"	5'-6"	5'-1"		Deflection	3'-4"	4'-6"	4'-2"
50	Stress	4'-8"	4'-8"	5'-3"	85	Stress	3'-7"	3'-7"	4'-0"
	Deflection	3'-11"	5'-4"	4'-10"		Deflection	3'-4"	4'-5"	4'-1"



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MORIN EXPOSED WALL SERIES SPAN CHARTS

Model MR-36 – Panel Profiles and Span Tables

The following notes are applicable to the tables below:

1. Numbers in the tables indicate clear span distance between the structural supports.
2. Section properties listed are for the solid base sheet.
3. Load and span values listed do not include consideration of fastener with washer/oversize washer, to be determined by qualified personnel.
4. This table is intended as a guide to the allowable loads and spans for the panel product, however, actual assembly conditions must be determined by a qualified individual.
5. Refer to Morin install manual for fastening pattern across the panel (along the support) and side lap fastening.



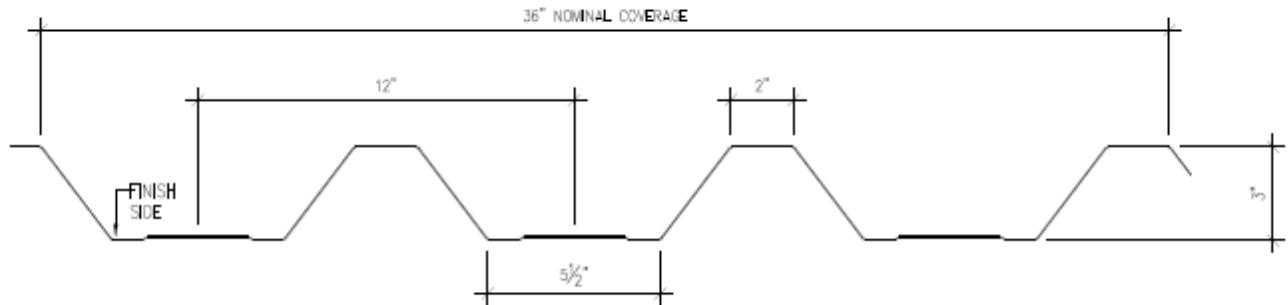
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MR-36

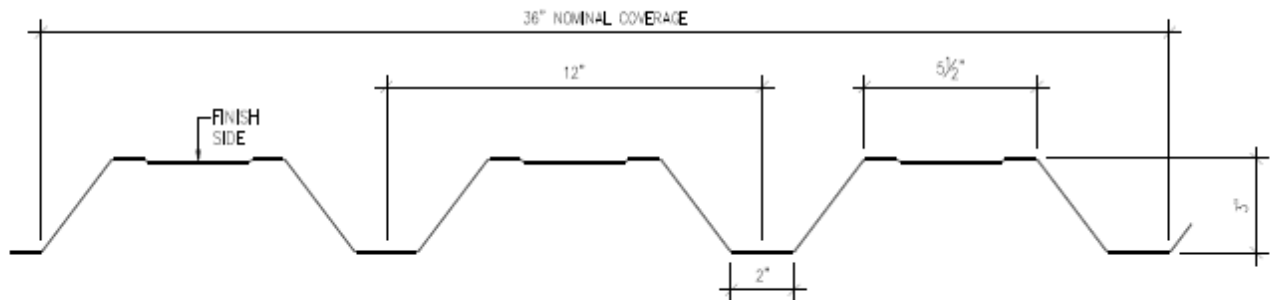
SIDE A



**MR-36 FASTENING PATTERN
SIDE A**

SIDE STITCH FASTEN
@ 18" O.C. MAX

SIDE B



**MR-36 FASTENING PATTERN
SIDE B**

STRUCTURAL FASTENER @ SUPPORTS
SIDE STITCH FASTENER @
18" MAX BETWEEN SUPPORTS



Panel Type: Mr-36
 Material/Thickness: Steel/18ga
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.963 in⁴/ft
 Sx: 0.557 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	21'-1"	21'-1"	23'-7"	55	Stress	12'-9"	12'-9"	14'-3"
	Deflection	16'-2"	21'-10"	20'-0"		Deflection	11'-6"	15'-7"	14'-3"
25	Stress	18'-10"	18'-10"	21'-1"	60	Stress	12'-2"	12'-2"	13'-7"
	Deflection	15'-0"	20'-3"	18'-7"		Deflection	11'-2"	15'-1"	13'-11"
30	Stress	17'-3"	17'-3"	19'-3"	65	Stress	11'-8"	11'-8"	13'-1"
	Deflection	14'-1"	19'-0"	17'-6"		Deflection	10'-11"	14'-9"	13'-6"
35	Stress	15'-11"	15'-11"	17'-10"	70	Stress	11'-3"	11'-3"	12'-7"
	Deflection	13'-5"	18'-1"	16'-7"		Deflection	10'-8"	14'-4"	13'-2"
40	Stress	14'-11"	14'-11"	16'-8"	75	Stress	10'-11"	10'-11"	12'-2"
	Deflection	12'-10"	17'-4"	15'-11"		Deflection	10'-5"	14'-0"	12'-11"
45	Stress	14'-1"	14'-1"	15'-9"	80	Stress	10'-7"	10'-7"	11'-10"
	Deflection	12'-4"	16'-8"	15'-3"		Deflection	10'-2"	13'-9"	12'-7"
50	Stress	13'-4"	13'-4"	14'-11"	85	Stress	10'-3"	10'-3"	11'-5"
	Deflection	11'-11"	16'-1"	14'-9"		Deflection	10'-0"	13'-5"	12'-4"



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Panel Type:

Mr-36

Material/Thickness

S/20ga

Perforation:

Hole Pattern:

Deflection Limit:

L/180

Ix: 0.738 in⁴/ftSx: 0.427 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	18'-6"	18'-6"	20'-8"	55	Stress	11'-2"	11'-2"	12'-5"
	Deflection	14'-9"	19'-11"	18'-4"		Deflection	10'-7"	14'-3"	13'-1"
25	Stress	16'-6"	16'-6"	18'-6"	60	Stress	10'-8"	10'-8"	11'-11"
	Deflection	13'-9"	18'-6"	17'-0"		Deflection	10'-3"	13'-10"	12'-8"
30	Stress	15'-1"	15'-1"	16'-10"	65	Stress	10'-3"	10'-3"	11'-6"
	Deflection	12'-11"	17'-5"	16'-0"		Deflection	10'-0"	13'-6"	12'-4"
35	Stress	14'-0"	14'-0"	15'-7"	70	Stress	9'-11"	9'-11"	11'-1"
	Deflection	12'-3"	16'-7"	15'-2"		Deflection	9'-9"	13'-2"	12'-1"
40	Stress	13'-1"	13'-1"	14'-7"	75	Stress	9'-7"	9'-7"	10'-8"
	Deflection	11'-9"	15'-10"	14'-6"		Deflection	9'-6"	12'-10"	11'-9"
45	Stress	12'-4"	12'-4"	13'-9"	80	Stress	9'-3"	9'-3"	10'-4"
	Deflection	11'-3"	15'-3"	14'-0"		Deflection	9'-4"	12'-7"	11'-6"
50	Stress	11'-8"	11'-8"	13'-1"	85	Stress	8'-12"	8'-12"	10'-0"
	Deflection	10'-11"	14'-8"	13'-6"		Deflection	9'-1"	12'-4"	11'-4"



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Panel Type:

Mr-36

Material/Thickness

Steel/22ga

Perforation:

Hole Pattern:

Deflection Limit:

L/180

Ix: 0.597 in⁴/ftSx: 0.337 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	16'-5"	16'-5"	18'-4"	55	Stress	9'-11"	9'-11"	11'-1"
	Deflection	13'-9"	18'-7"	17'-1"		Deflection	9'-10"	13'-3"	12'-2"
25	Stress	14'-8"	14'-8"	16'-5"	60	Stress	9'-6"	9'-6"	10'-7"
	Deflection	12'-9"	17'-3"	15'-10"		Deflection	9'-7"	12'-11"	11'-10"
30	Stress	13'-5"	13'-5"	15'-0"	65	Stress	9'-1"	9'-1"	10'-2"
	Deflection	12'-0"	16'-3"	14'-11"		Deflection	9'-4"	12'-7"	11'-6"
35	Stress	12'-5"	12'-5"	13'-11"	70	Stress	8'-9"	8'-9"	9'-10"
	Deflection	11'-5"	15'-5"	14'-2"		Deflection	9'-1"	12'-3"	11'-3"
40	Stress	11'-7"	11'-7"	13'-0"	75	Stress	8'-6"	8'-6"	9'-6"
	Deflection	10'-11"	14'-9"	13'-7"		Deflection	8'-10"	12'-0"	11'-0"
45	Stress	10'-11"	10'-11"	12'-3"	80	Stress	8'-3"	8'-3"	9'-2"
	Deflection	10'-6"	14'-2"	13'-0"		Deflection	8'-8"	11'-8"	10'-9"
50	Stress	10'-5"	10'-5"	11'-7"	85	Stress	7'-12"	7'-12"	8'-11"
	Deflection	10'-2"	13'-8"	12'-7"		Deflection	8'-6"	11'-6"	10'-6"



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Panel Type:

Mr-36

Material/Thickness

Steel/24ga

Perforation:

Hole Pattern:

Deflection Limit:

L/180

Ix: 0.491 in⁴/ftSx: 0.285 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	15'-1"	15'-1"	16'-11"	55	Stress	9'-1"	9'-1"	10'-2"
	Deflection	12'-11"	17'-5"	16'-0"		Deflection	9'-2"	12'-5"	11'-5"
25	Stress	13'-6"	13'-6"	15'-1"	60	Stress	8'-9"	8'-9"	9'-9"
	Deflection	12'-0"	16'-2"	14'-10"		Deflection	8'-11"	12'-1"	11'-1"
30	Stress	12'-4"	12'-4"	13'-9"	65	Stress	8'-5"	8'-5"	9'-4"
	Deflection	11'-3"	15'-3"	14'-0"		Deflection	8'-9"	11'-9"	10'-10"
35	Stress	11'-5"	11'-5"	12'-9"	70	Stress	8'-1"	8'-1"	9'-0"
	Deflection	10'-8"	14'-5"	13'-3"		Deflection	8'-6"	11'-6"	10'-6"
40	Stress	10'-8"	10'-8"	11'-11"	75	Stress	7'-10"	7'-10"	8'-9"
	Deflection	10'-3"	13'-10"	12'-8"		Deflection	8'-4"	11'-3"	10'-4"
45	Stress	10'-1"	10'-1"	11'-3"	80	Stress	7'-7"	7'-7"	8'-5"
	Deflection	9'-10"	13'-3"	12'-2"		Deflection	8'-2"	11'-0"	10'-1"
50	Stress	9'-7"	9'-7"	10'-8"	85	Stress	7'-4"	7'-4"	8'-2"
	Deflection	9'-6"	12'-10"	11'-9"		Deflection	8'-0"	10'-9"	9'-11"



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Panel Type: Mr-36
 Material/Thickness AL/0.032
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.658 in⁴/ft
 Sx: 0.381 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	8'-0"	8'-0"	8'-11"	55	Stress	4'-10"	4'-10"	5'-4"
	Deflection	9'-11"	13'-5"	12'-4"		Deflection	7'-1"	9'-7"	8'-9"
25	Stress	7'-2"	7'-2"	8'-0"	60	Stress	4'-7"	4'-7"	5'-2"
	Deflection	9'-2"	12'-5"	11'-5"		Deflection	6'-10"	9'-3"	8'-6"
30	Stress	6'-6"	6'-6"	7'-3"	65	Stress	4'-5"	4'-5"	4'-11"
	Deflection	8'-8"	11'-8"	10'-9"		Deflection	6'-8"	9'-0"	8'-4"
35	Stress	6'-0"	6'-0"	6'-9"	70	Stress	4'-3"	4'-3"	4'-9"
	Deflection	8'-3"	11'-1"	10'-2"		Deflection	6'-6"	8'-10"	8'-1"
40	Stress	5'-8"	5'-8"	6'-4"	75	Stress	4'-1"	4'-1"	4'-7"
	Deflection	7'-10"	10'-7"	9'-9"		Deflection	6'-5"	8'-7"	7'-11"
45	Stress	5'-4"	5'-4"	5'-11"	80	Stress	3'-12"	3'-12"	4'-5"
	Deflection	7'-7"	10'-3"	9'-5"		Deflection	6'-3"	8'-5"	7'-9"
50	Stress	5'-0"	5'-0"	5'-8"	85	Stress	3'-10"	3'-10"	4'-4"
	Deflection	7'-4"	9'-10"	9'-1"		Deflection	6'-1"	8'-3"	7'-7"



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Panel Type: Mr-36
 Material/Thickness AL/0.040
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix(perf): 0.8396 in⁴/ft
 Sx(perf): 0.4825 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	9'-0"	9'-0"	10'-0"	55	Stress	5'-5"	5'-5"	6'-1"
	Deflection	10'-9"	14'-6"	13'-4"		Deflection	7'-8"	10'-4"	9'-6"
25	Stress	8'-0"	8'-0"	9'-0"	60	Stress	5'-2"	5'-2"	5'-9"
	Deflection	10'-0"	13'-6"	12'-5"		Deflection	7'-5"	10'-1"	9'-3"
30	Stress	7'-4"	7'-4"	8'-2"	65	Stress	4'-12"	4'-12"	5'-7"
	Deflection	9'-5"	12'-8"	11'-8"		Deflection	7'-3"	9'-10"	9'-0"
35	Stress	6'-9"	6'-9"	7'-7"	70	Stress	4'-10"	4'-10"	5'-4"
	Deflection	8'-11"	12'-1"	11'-1"		Deflection	7'-1"	9'-7"	8'-9"
40	Stress	6'-4"	6'-4"	7'-1"	75	Stress	4'-8"	4'-8"	5'-2"
	Deflection	8'-6"	11'-6"	10'-7"		Deflection	6'-11"	9'-4"	8'-7"
45	Stress	6'-0"	6'-0"	6'-8"	80	Stress	4'-6"	4'-6"	5'-0"
	Deflection	8'-2"	11'-1"	10'-2"		Deflection	6'-9"	9'-2"	8'-5"
50	Stress	5'-8"	5'-8"	6'-4"	85	Stress	4'-4"	4'-4"	4'-10"
	Deflection	7'-11"	10'-8"	9'-10"		Deflection	6'-8"	9'-0"	8'-3"



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Panel Type:
 Material/Thickness
 Perforation:
 Hole Pattern:
 Deflection Limit:
 Ix(perf): 0.9516 in⁴/ft
 Sx(perf): 0.5197 in³/ft

Mr-36
 AL/0.050

 L/180

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	9'-4"	9'-4"	10'-5"	55	Stress	5'-7"	5'-7"	6'-3"
	Deflection	11'-3"	15'-2"	13'-11"		Deflection	8'-0"	10'-10"	9'-11"
25	Stress	8'-4"	8'-4"	9'-4"	60	Stress	5'-4"	5'-4"	6'-0"
	Deflection	10'-5"	14'-1"	12'-11"		Deflection	7'-9"	10'-6"	9'-8"
30	Stress	7'-7"	7'-7"	8'-6"	65	Stress	5'-2"	5'-2"	5'-9"
	Deflection	9'-10"	13'-3"	12'-2"		Deflection	7'-7"	10'-3"	9'-5"
35	Stress	7'-0"	7'-0"	7'-10"	70	Stress	4'-12"	4'-12"	5'-7"
	Deflection	9'-4"	12'-7"	11'-6"		Deflection	7'-5"	10'-0"	9'-2"
40	Stress	6'-7"	6'-7"	7'-4"	75	Stress	4'-10"	4'-10"	5'-4"
	Deflection	8'-11"	12'-0"	11'-0"		Deflection	7'-3"	9'-9"	8'-11"
45	Stress	6'-2"	6'-2"	6'-11"	80	Stress	4'-8"	4'-8"	5'-2"
	Deflection	8'-7"	11'-7"	10'-7"		Deflection	7'-1"	9'-6"	8'-9"
50	Stress	5'-11"	5'-11"	6'-7"	85	Stress	4'-6"	4'-6"	5'-1"
	Deflection	8'-3"	11'-2"	10'-3"		Deflection	6'-11"	9'-4"	8'-7"



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MORIN EXPOSED WALL SERIES SPAN CHARTS

Model O-24 – Panel Profiles and Span Tables

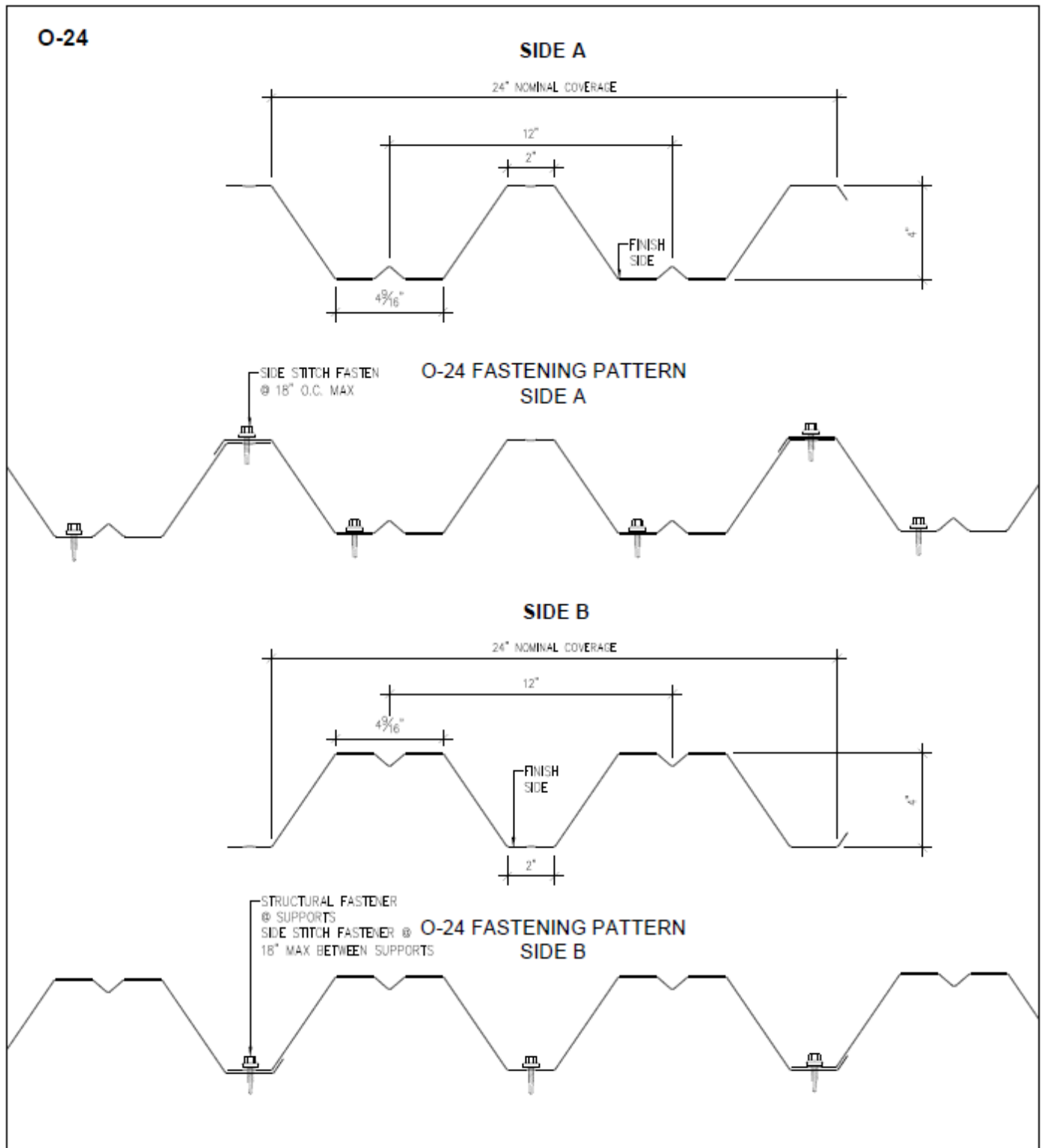
The following notes are applicable to the tables below:

1. Numbers in the tables indicate clear span distance between the structural supports.
2. Section properties listed are for the solid base sheet.
3. Load and span values listed do not include consideration of fastener with washer/oversize washer, to be determined by qualified personnel.
4. This table is intended as a guide to the allowable loads and spans for the panel product, however, actual assembly conditions must be determined by a qualified individual.
5. Refer to Morin install manual for fastening pattern across the panel (along the support) and side lap fastening.



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Panel Type:
Material/Thickness
Perforation:
Hole Pattern:
Deflection Limit:

O-24
ST/18ga

L/180

Ix: 1.902 in⁴/ft
Sx: 1.597 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	35'-9"	35'-9"	40'-0"	55	Stress	21'-7"	21'-7"	24'-1"
	Deflection	20'-3"	27'-4"	25'-1"		Deflection	14'-6"	19'-6"	17'-11"
25	Stress	32'-0"	32'-0"	35'-9"	60	Stress	20'-8"	20'-8"	23'-1"
	Deflection	18'-10"	25'-5"	23'-4"		Deflection	14'-1"	19'-0"	17'-5"
30	Stress	29'-2"	29'-2"	32'-8"	65	Stress	19'-10"	19'-10"	22'-2"
	Deflection	17'-8"	23'-11"	21'-11"		Deflection	13'-8"	18'-6"	17'-0"
35	Stress	27'-0"	27'-0"	30'-3"	70	Stress	19'-1"	19'-1"	21'-4"
	Deflection	16'-10"	22'-8"	20'-10"		Deflection	13'-4"	18'-0"	16'-7"
40	Stress	25'-3"	25'-3"	28'-3"	75	Stress	18'-6"	18'-6"	20'-8"
	Deflection	16'-1"	21'-8"	19'-11"		Deflection	13'-0"	17'-7"	16'-2"
45	Stress	23'-10"	23'-10"	26'-8"	80	Stress	17'-10"	17'-10"	20'-0"
	Deflection	15'-6"	20'-10"	19'-2"		Deflection	12'-9"	17'-3"	15'-10"
50	Stress	22'-7"	22'-7"	25'-3"	85	Stress	17'-4"	17'-4"	19'-5"
	Deflection	14'-11"	20'-2"	18'-6"		Deflection	12'-6"	16'-11"	15'-6"



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Panel Type:

O-24

Material/Thickness

ST/20ga

Perforation:

N/A

Hole Pattern:

Deflection Limit:

L/180

Ix: 1.369 in⁴/ftSx: 0.636 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	22'-7"	22'-7"	25'-3"	55	Stress	13'-7"	13'-7"	15'-2"
	Deflection	18'-2"	24'-6"	22'-6"		Deflection	12'-11"	17'-6"	16'-1"
25	Stress	20'-2"	20'-2"	22'-7"	60	Stress	13'-0"	13'-0"	14'-7"
	Deflection	16'-10"	22'-9"	20'-11"		Deflection	12'-7"	17'-0"	15'-7"
30	Stress	18'-5"	18'-5"	20'-7"	65	Stress	12'-6"	12'-6"	14'-0"
	Deflection	15'-10"	21'-5"	19'-8"		Deflection	12'-3"	16'-7"	15'-2"
35	Stress	17'-1"	17'-1"	19'-1"	70	Stress	12'-1"	12'-1"	13'-6"
	Deflection	15'-1"	20'-4"	18'-8"		Deflection	11'-11"	16'-2"	14'-10"
40	Stress	15'-11"	15'-11"	17'-10"	75	Stress	11'-8"	11'-8"	13'-0"
	Deflection	14'-5"	19'-5"	17'-10"		Deflection	11'-8"	15'-9"	14'-6"
45	Stress	15'-0"	15'-0"	16'-10"	80	Stress	11'-3"	11'-3"	12'-7"
	Deflection	13'-10"	18'-8"	17'-2"		Deflection	11'-5"	15'-5"	14'-2"
50	Stress	14'-3"	14'-3"	15'-11"	85	Stress	10'-11"	10'-11"	12'-3"
	Deflection	13'-4"	18'-1"	16'-7"		Deflection	11'-2"	15'-2"	13'-11"



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Panel Type: O-24
 Material/Thickness: ST/22ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 1.14 in⁴/ft
 Sx: 0.53 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	20'-7"	20'-7"	23'-0"	55	Stress	12'-5"	12'-5"	13'-11"
	Deflection	17'-1"	23'-1"	21'-2"		Deflection	12'-2"	16'-5"	15'-1"
25	Stress	18'-5"	18'-5"	20'-7"	60	Stress	11'-11"	11'-11"	13'-4"
	Deflection	15'-10"	21'-5"	19'-8"		Deflection	11'-10"	16'-0"	14'-8"
30	Stress	16'-10"	16'-10"	18'-10"	65	Stress	11'-5"	11'-5"	12'-9"
	Deflection	14'-11"	20'-2"	18'-6"		Deflection	11'-6"	15'-7"	14'-4"
35	Stress	15'-7"	15'-7"	17'-5"	70	Stress	11'-0"	11'-0"	12'-4"
	Deflection	14'-2"	19'-2"	17'-7"		Deflection	11'-3"	15'-2"	13'-11"
40	Stress	14'-7"	14'-7"	16'-3"	75	Stress	10'-8"	10'-8"	11'-11"
	Deflection	13'-7"	18'-4"	16'-10"		Deflection	11'-0"	14'-10"	13'-8"
45	Stress	13'-9"	13'-9"	15'-4"	80	Stress	10'-4"	10'-4"	11'-6"
	Deflection	13'-0"	17'-7"	16'-2"		Deflection	10'-9"	14'-6"	13'-4"
50	Stress	13'-0"	13'-0"	14'-7"	85	Stress	9'-12"	9'-12"	11'-2"
	Deflection	12'-7"	17'-0"	15'-7"		Deflection	10'-7"	14'-3"	13'-1"



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Panel Type: O-24
 Material/Thickness: ST/24ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.911 in⁴/ft
 Sx: 0.424 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	18'-5"	18'-5"	20'-7"	55	Stress	11'-1"	11'-1"	12'-5"
	Deflection	15'-10"	21'-5"	19'-8"		Deflection	11'-4"	15'-3"	14'-0"
25	Stress	16'-6"	16'-6"	18'-5"	60	Stress	10'-8"	10'-8"	11'-11"
	Deflection	14'-9"	19'-10"	18'-3"		Deflection	11'-0"	14'-10"	13'-8"
30	Stress	15'-0"	15'-0"	16'-10"	65	Stress	10'-3"	10'-3"	11'-5"
	Deflection	13'-10"	18'-8"	17'-2"		Deflection	10'-8"	14'-5"	13'-3"
35	Stress	13'-11"	13'-11"	15'-7"	70	Stress	9'-10"	9'-10"	11'-0"
	Deflection	13'-2"	17'-9"	16'-4"		Deflection	10'-5"	14'-1"	12'-11"
40	Stress	13'-0"	13'-0"	14'-7"	75	Stress	9'-6"	9'-6"	10'-8"
	Deflection	12'-7"	17'-0"	15'-7"		Deflection	10'-2"	13'-9"	12'-8"
45	Stress	12'-3"	12'-3"	13'-9"	80	Stress	9'-3"	9'-3"	10'-4"
	Deflection	12'-1"	16'-4"	15'-0"		Deflection	10'-0"	13'-6"	12'-5"
50	Stress	11'-8"	11'-8"	13'-0"	85	Stress	8'-11"	8'-11"	10'-0"
	Deflection	11'-8"	15'-9"	14'-6"		Deflection	9'-9"	13'-3"	12'-2"



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Panel Type: O-24
 Material/Thickness AL/0.032
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 1.22 in⁴/ft
 Sx: 0.567 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	9'-3"	9'-3"	10'-4"	55	Stress	5'-7"	5'-7"	6'-3"
	Deflection	12'-2"	16'-5"	15'-1"		Deflection	8'-8"	11'-9"	10'-9"
25	Stress	8'-3"	8'-3"	9'-3"	60	Stress	5'-4"	5'-4"	6'-0"
	Deflection	11'-4"	15'-3"	14'-0"		Deflection	8'-5"	11'-5"	10'-6"
30	Stress	7'-7"	7'-7"	8'-5"	65	Stress	5'-2"	5'-2"	5'-9"
	Deflection	10'-8"	14'-4"	13'-2"		Deflection	8'-3"	11'-1"	10'-2"
35	Stress	7'-0"	7'-0"	7'-10"	70	Stress	4'-11"	4'-11"	5'-6"
	Deflection	10'-1"	13'-8"	12'-6"		Deflection	8'-0"	10'-10"	9'-11"
40	Stress	6'-6"	6'-6"	7'-4"	75	Stress	4'-9"	4'-9"	5'-4"
	Deflection	9'-8"	13'-1"	12'-0"		Deflection	7'-10"	10'-7"	9'-9"
45	Stress	6'-2"	6'-2"	6'-11"	80	Stress	4'-7"	4'-7"	5'-2"
	Deflection	9'-4"	12'-7"	11'-6"		Deflection	7'-8"	10'-4"	9'-6"
50	Stress	5'-10"	5'-10"	6'-6"	85	Stress	4'-6"	4'-6"	5'-0"
	Deflection	9'-0"	12'-1"	11'-2"		Deflection	7'-6"	10'-2"	9'-4"



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Panel Type: O-24
 Material/Thickness: AL/0.040
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 1.525 in⁴/ft
 Sx: 0.708 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	10'-4"	10'-4"	11'-7"	55	Stress	6'-3"	6'-3"	7'-0"
	Deflection	13'-1"	17'-9"	16'-3"		Deflection	9'-4"	12'-8"	11'-7"
25	Stress	9'-3"	9'-3"	10'-4"	60	Stress	6'-0"	6'-0"	6'-8"
	Deflection	12'-2"	16'-5"	15'-1"		Deflection	9'-1"	12'-3"	11'-3"
30	Stress	8'-5"	8'-5"	9'-5"	65	Stress	5'-9"	5'-9"	6'-5"
	Deflection	11'-6"	15'-6"	14'-3"		Deflection	8'-10"	12'-0"	11'-0"
35	Stress	7'-10"	7'-10"	8'-9"	70	Stress	5'-6"	5'-6"	6'-2"
	Deflection	10'-11"	14'-8"	13'-6"		Deflection	8'-8"	11'-8"	10'-9"
40	Stress	7'-4"	7'-4"	8'-2"	75	Stress	5'-4"	5'-4"	6'-0"
	Deflection	10'-5"	14'-1"	12'-11"		Deflection	8'-5"	11'-5"	10'-6"
45	Stress	6'-11"	6'-11"	7'-8"	80	Stress	5'-2"	5'-2"	5'-9"
	Deflection	10'-0"	13'-6"	12'-5"		Deflection	8'-3"	11'-2"	10'-3"
50	Stress	6'-6"	6'-6"	7'-4"	85	Stress	5'-0"	5'-0"	5'-7"
	Deflection	9'-8"	13'-1"	12'-0"		Deflection	8'-1"	10'-11"	10'-1"





Panel Type: O-24
 Material/Thickness: AL/0.050
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 1.902 in⁴/ft
 Sx: 0.882 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	11'-6"	11'-6"	12'-11"	55	Stress	6'-11"	6'-11"	7'-9"
	Deflection	14'-1"	19'-1"	17'-6"		Deflection	10'-1"	13'-7"	12'-6"
25	Stress	10'-4"	10'-4"	11'-6"	60	Stress	6'-8"	6'-8"	7'-5"
	Deflection	13'-1"	17'-8"	16'-3"		Deflection	9'-10"	13'-3"	12'-2"
30	Stress	9'-5"	9'-5"	10'-6"	65	Stress	6'-5"	6'-5"	7'-2"
	Deflection	12'-4"	16'-8"	15'-4"		Deflection	9'-6"	12'-10"	11'-10"
35	Stress	8'-9"	8'-9"	9'-9"	70	Stress	6'-2"	6'-2"	6'-11"
	Deflection	11'-9"	15'-10"	14'-6"		Deflection	9'-4"	12'-7"	11'-6"
40	Stress	8'-2"	8'-2"	9'-1"	75	Stress	5'-11"	5'-11"	6'-8"
	Deflection	11'-3"	15'-2"	13'-11"		Deflection	9'-1"	12'-3"	11'-3"
45	Stress	7'-8"	7'-8"	8'-7"	80	Stress	5'-9"	5'-9"	6'-5"
	Deflection	10'-9"	14'-7"	13'-4"		Deflection	8'-11"	12'-0"	11'-0"
50	Stress	7'-3"	7'-3"	8'-2"	85	Stress	5'-7"	5'-7"	6'-3"
	Deflection	10'-5"	14'-1"	12'-11"		Deflection	8'-9"	11'-9"	10'-10"



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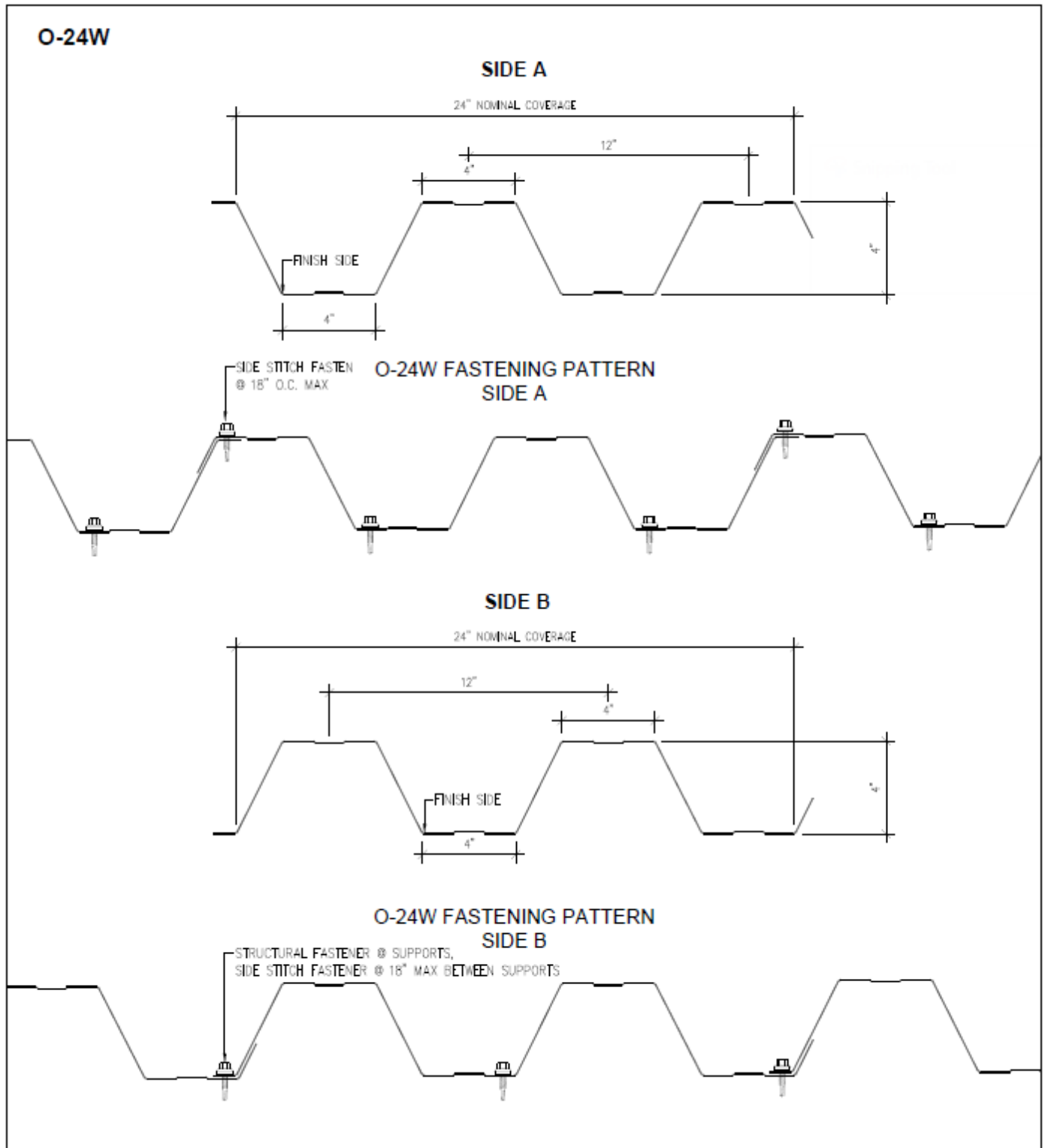
MORIN EXPOSED WALL SERIES SPAN CHARTS

Model O-24-W – Panel Profiles and Span Tables

The following notes are applicable to the tables below:

1. Numbers in the tables indicate clear span distance between the structural supports.
2. Section properties listed are for the solid base sheet.
3. Load and span values listed do not include consideration of fastener with washer/oversize washer, to be determined by qualified personnel.
4. This table is intended as a guide to the allowable loads and spans for the panel product, however, actual assembly conditions must be determined by a qualified individual.
5. Refer to Morin install manual for fastening pattern across the panel (along the support) and side lap fastening.







Panel Type: O-24W
 Material/Thickness: ST/18ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 1.996 in⁴/ft
 Sx: 0.955 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	27'-8"	27'-8"	30'-11"	55	Stress	16'-8"	16'-8"	18'-8"
	Deflection	20'-7"	27'-10"	25'-6"		Deflection	14'-8"	19'-10"	18'-3"
25	Stress	24'-9"	24'-9"	27'-8"	60	Stress	15'-12"	15'-12"	17'-10"
	Deflection	19'-1"	25'-10"	23'-8"		Deflection	14'-3"	19'-3"	17'-8"
30	Stress	22'-7"	22'-7"	25'-3"	65	Stress	15'-4"	15'-4"	17'-2"
	Deflection	18'-0"	24'-3"	22'-4"		Deflection	13'-11"	18'-9"	17'-3"
35	Stress	20'-11"	20'-11"	23'-4"	70	Stress	14'-9"	14'-9"	16'-6"
	Deflection	17'-1"	23'-1"	21'-2"		Deflection	13'-7"	18'-4"	16'-10"
40	Stress	19'-7"	19'-7"	21'-10"	75	Stress	14'-3"	14'-3"	16'-0"
	Deflection	16'-4"	22'-1"	20'-3"		Deflection	13'-3"	17'-11"	16'-5"
45	Stress	18'-5"	18'-5"	20'-7"	80	Stress	13'-10"	13'-10"	15'-5"
	Deflection	15'-9"	21'-3"	19'-6"		Deflection	13'-0"	17'-6"	16'-1"
50	Stress	17'-6"	17'-6"	19'-7"	85	Stress	13'-5"	13'-5"	15'-0"
	Deflection	15'-2"	20'-6"	18'-10"		Deflection	12'-9"	17'-2"	15'-9"





Panel Type:
Material/Thickness
Perforation:
Hole Pattern:
Deflection Limit:
Ix: 1.511 in⁴/ft
Sx: 0.725 in³/ft

O-24W
ST/20ga
N/A

L/180

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	24'-1"	24'-1"	26'-11"	55	Stress	14'-6"	14'-6"	16'-3"
	Deflection	18'-9"	25'-4"	23'-3"		Deflection	13'-5"	18'-1"	16'-7"
25	Stress	21'-7"	21'-7"	24'-1"	60	Stress	13'-11"	13'-11"	15'-7"
	Deflection	17'-5"	23'-6"	21'-7"		Deflection	13'-0"	17'-7"	16'-2"
30	Stress	19'-8"	19'-8"	22'-0"	65	Stress	13'-4"	13'-4"	14'-11"
	Deflection	16'-5"	22'-2"	20'-4"		Deflection	12'-8"	17'-1"	15'-8"
35	Stress	18'-2"	18'-2"	20'-4"	70	Stress	12'-10"	12'-10"	14'-5"
	Deflection	15'-7"	21'-0"	19'-4"		Deflection	12'-4"	16'-8"	15'-4"
40	Stress	17'-0"	17'-0"	19'-0"	75	Stress	12'-5"	12'-5"	13'-11"
	Deflection	14'-11"	20'-1"	18'-6"		Deflection	12'-1"	16'-4"	15'-0"
45	Stress	16'-1"	16'-1"	17'-11"	80	Stress	12'-1"	12'-1"	13'-6"
	Deflection	14'-4"	19'-4"	17'-9"		Deflection	11'-10"	15'-11"	14'-8"
50	Stress	15'-3"	15'-3"	17'-0"	85	Stress	11'-8"	11'-8"	13'-1"
	Deflection	13'-10"	18'-8"	17'-2"		Deflection	11'-7"	15'-8"	14'-4"



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Panel Type:
Material/Thickness
Perforation:
Hole Pattern:
Deflection Limit:

O-24W
ST/22ga
N/A
L/180

Ix: 1.2 in⁴/ft
Sx: 0.577 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	21'-6"	21'-6"	24'-0"	55	Stress	12'-11"	12'-11"	14'-6"
	Deflection	17'-4"	23'-5"	21'-7"		Deflection	12'-5"	16'-9"	15'-5"
25	Stress	19'-3"	19'-3"	21'-6"	60	Stress	12'-5"	12'-5"	13'-10"
	Deflection	16'-2"	21'-9"	20'-0"		Deflection	12'-1"	16'-3"	14'-11"
30	Stress	17'-7"	17'-7"	19'-7"	65	Stress	11'-11"	11'-11"	13'-4"
	Deflection	15'-2"	20'-6"	18'-10"		Deflection	11'-9"	15'-10"	14'-7"
35	Stress	16'-3"	16'-3"	18'-2"	70	Stress	11'-6"	11'-6"	12'-10"
	Deflection	14'-5"	19'-6"	17'-11"		Deflection	11'-5"	15'-5"	14'-2"
40	Stress	15'-2"	15'-2"	17'-0"	75	Stress	11'-1"	11'-1"	12'-5"
	Deflection	13'-9"	18'-7"	17'-1"		Deflection	11'-2"	15'-1"	13'-10"
45	Stress	14'-4"	14'-4"	16'-0"	80	Stress	10'-9"	10'-9"	12'-0"
	Deflection	13'-3"	17'-11"	16'-5"		Deflection	10'-11"	14'-9"	13'-7"
50	Stress	13'-7"	13'-7"	15'-2"	85	Stress	10'-5"	10'-5"	11'-8"
	Deflection	12'-10"	17'-3"	15'-10"		Deflection	10'-9"	14'-6"	13'-4"



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Panel Type:
Material/Thickness
Perforation:
Hole Pattern:
Deflection Limit:

O-24W
ST/24ga
N/A

L/180

Ix: 1.006 in⁴/ft
Sx: 0.484 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	19'-8"	19'-8"	22'-0"	55	Stress	11'-10"	11'-10"	13'-3"
	Deflection	16'-5"	22'-1"	20'-4"		Deflection	11'-8"	15'-9"	14'-6"
25	Stress	17'-7"	17'-7"	19'-8"	60	Stress	11'-4"	11'-4"	12'-8"
	Deflection	15'-2"	20'-6"	18'-10"		Deflection	11'-4"	15'-4"	14'-1"
30	Stress	16'-1"	16'-1"	18'-0"	65	Stress	10'-11"	10'-11"	12'-3"
	Deflection	14'-4"	19'-4"	17'-9"		Deflection	11'-1"	14'-11"	13'-9"
35	Stress	14'-11"	14'-11"	16'-8"	70	Stress	10'-6"	10'-6"	11'-9"
	Deflection	13'-7"	18'-4"	16'-10"		Deflection	10'-9"	14'-7"	13'-5"
40	Stress	13'-11"	13'-11"	15'-7"	75	Stress	10'-2"	10'-2"	11'-4"
	Deflection	13'-0"	17'-7"	16'-1"		Deflection	10'-7"	14'-3"	13'-1"
45	Stress	13'-1"	13'-1"	14'-8"	80	Stress	9'-10"	9'-10"	11'-0"
	Deflection	12'-6"	16'-11"	15'-6"		Deflection	10'-4"	13'-11"	12'-10"
50	Stress	12'-5"	12'-5"	13'-11"	85	Stress	9'-7"	9'-7"	10'-8"
	Deflection	12'-1"	16'-4"	15'-0"		Deflection	10'-1"	13'-8"	12'-6"



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Panel Type: O-24W
 Material/Thickness: AL/0.032
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 1.347 in⁴/ft
 Sx: 0.647 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	8'-8"	8'-8"	9'-9"	55	Stress	5'-3"	5'-3"	5'-10"
	Deflection	12'-7"	17'-0"	15'-7"		Deflection	9'-0"	12'-2"	11'-2"
25	Stress	7'-9"	7'-9"	8'-8"	60	Stress	5'-0"	5'-0"	5'-7"
	Deflection	11'-8"	15'-9"	14'-6"		Deflection	8'-9"	11'-9"	10'-10"
30	Stress	7'-1"	7'-1"	7'-11"	65	Stress	4'-10"	4'-10"	5'-5"
	Deflection	11'-0"	14'-10"	13'-8"		Deflection	8'-6"	11'-6"	10'-6"
35	Stress	6'-7"	6'-7"	7'-4"	70	Stress	4'-8"	4'-8"	5'-2"
	Deflection	10'-5"	14'-1"	12'-11"		Deflection	8'-3"	11'-2"	10'-3"
40	Stress	6'-2"	6'-2"	6'-10"	75	Stress	4'-6"	4'-6"	5'-0"
	Deflection	10'-0"	13'-6"	12'-5"		Deflection	8'-1"	10'-11"	10'-1"
45	Stress	5'-10"	5'-10"	6'-6"	80	Stress	4'-4"	4'-4"	4'-10"
	Deflection	9'-7"	13'-0"	11'-11"		Deflection	7'-11"	10'-8"	9'-10"
50	Stress	5'-6"	5'-6"	6'-2"	85	Stress	4'-3"	4'-3"	4'-9"
	Deflection	9'-3"	12'-6"	11'-6"		Deflection	7'-9"	10'-6"	9'-8"



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Panel Type:
Material/Thickness
Perforation:
Hole Pattern:
Deflection Limit:
Ix: 1.682 in⁴/ft
Sx: 0.806 in³/ft

O-24W
AL/0.040

L/180

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	9'-8"	9'-8"	10'-10"	55	Stress	5'-10"	5'-10"	6'-6"
	Deflection	13'-7"	18'-4"	16'-10"		Deflection	9'-8"	13'-1"	12'-0"
25	Stress	8'-8"	8'-8"	9'-8"	60	Stress	5'-7"	5'-7"	6'-3"
	Deflection	12'-7"	17'-0"	15'-7"		Deflection	9'-5"	12'-8"	11'-8"
30	Stress	7'-11"	7'-11"	8'-10"	65	Stress	5'-5"	5'-5"	6'-0"
	Deflection	11'-10"	16'-0"	14'-8"		Deflection	9'-2"	12'-4"	11'-4"
35	Stress	7'-4"	7'-4"	8'-2"	70	Stress	5'-2"	5'-2"	5'-10"
	Deflection	11'-3"	15'-2"	13'-11"		Deflection	8'-11"	12'-1"	11'-1"
40	Stress	6'-10"	6'-10"	7'-8"	75	Stress	5'-0"	5'-0"	5'-7"
	Deflection	10'-9"	14'-6"	13'-4"		Deflection	8'-9"	11'-9"	10'-10"
45	Stress	6'-6"	6'-6"	7'-3"	80	Stress	4'-10"	4'-10"	5'-5"
	Deflection	10'-4"	14'-0"	12'-10"		Deflection	8'-6"	11'-6"	10'-7"
50	Stress	6'-2"	6'-2"	6'-10"	85	Stress	4'-8"	4'-8"	5'-3"
	Deflection	10'-0"	13'-6"	12'-5"		Deflection	8'-4"	11'-4"	10'-5"



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Panel Type:
 Material/Thickness: O-24W
 Perforation: AL/0.050
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 2.1046 in⁴/ft
 Sx: 1.0056 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	14'-2"	14'-2"	15'-10"	55	Stress	8'-7"	8'-7"	9'-7"
	Deflection	14'-7"	19'-9"	18'-1"		Deflection	10'-5"	14'-1"	12'-11"
25	Stress	12'-8"	12'-8"	14'-2"	60	Stress	8'-2"	8'-2"	9'-2"
	Deflection	13'-7"	18'-4"	16'-10"		Deflection	10'-2"	13'-8"	12'-7"
30	Stress	11'-7"	11'-7"	12'-11"	65	Stress	7'-10"	7'-10"	8'-10"
	Deflection	12'-9"	17'-3"	15'-10"		Deflection	9'-10"	13'-4"	12'-3"
35	Stress	10'-9"	10'-9"	12'-0"	70	Stress	7'-7"	7'-7"	8'-6"
	Deflection	12'-1"	16'-4"	15'-0"		Deflection	9'-7"	13'-0"	11'-11"
40	Stress	10'-0"	10'-0"	11'-3"	75	Stress	7'-4"	7'-4"	8'-2"
	Deflection	11'-7"	15'-8"	14'-5"		Deflection	9'-5"	12'-8"	11'-8"
45	Stress	9'-5"	9'-5"	10'-7"	80	Stress	7'-1"	7'-1"	7'-11"
	Deflection	11'-2"	15'-1"	13'-10"		Deflection	9'-2"	12'-5"	11'-5"
50	Stress	9'-0"	9'-0"	10'-0"	85	Stress	6'-11"	6'-11"	7'-8"
	Deflection	10'-9"	14'-6"	13'-4"		Deflection	9'-0"	12'-2"	11'-2"



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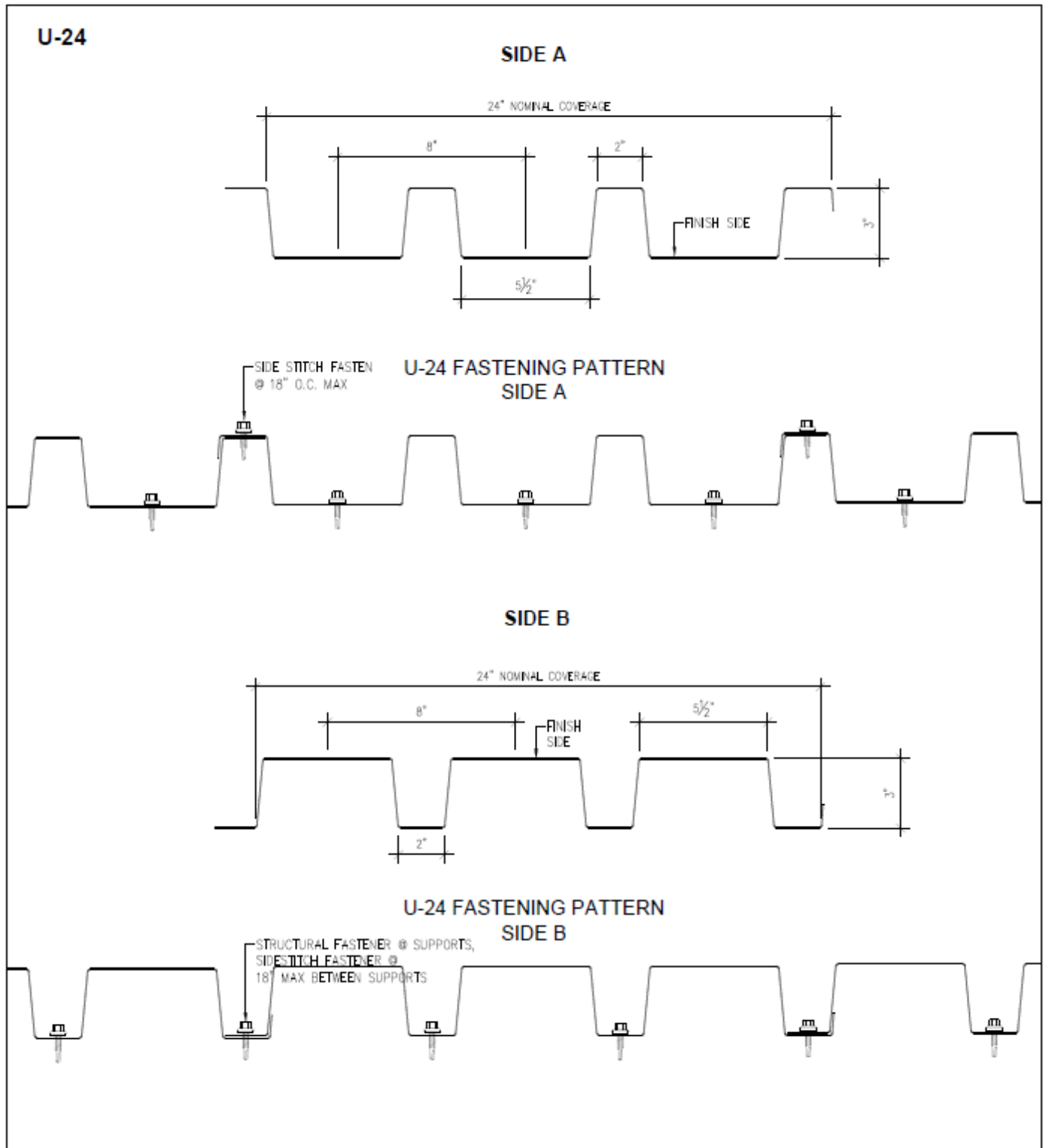
MORIN EXPOSED WALL SERIES SPAN CHARTS

Model U-24 – Panel Profiles and Span Tables

The following notes are applicable to the tables below:

1. Numbers in the tables indicate clear span distance between the structural supports.
2. Section properties listed are for the solid base sheet.
3. Load and span values listed do not include consideration of fastener with washer/oversize washer, to be determined by qualified personnel.
4. This table is intended as a guide to the allowable loads and spans for the panel product, however, actual assembly conditions must be determined by a qualified individual.
5. Refer to Morin install manual for fastening pattern across the panel (along the support) and side lap fastening.







Panel Type:
Material/Thickness

U-24
ST/18ga

Perforation:

Hole Pattern:

Deflection Limit:

L/180

Ix: 1.351 in⁴/ft

Sx: 0.728 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	24'-2"	24'-2"	27'-0"	55	Stress	14'-7"	14'-7"	16'-3"
	Deflection	18'-1"	24'-5"	22'-5"		Deflection	12'-11"	17'-5"	16'-0"
25	Stress	21'-7"	21'-7"	24'-2"	60	Stress	13'-11"	13'-11"	15'-7"
	Deflection	16'-9"	22'-8"	20'-10"		Deflection	12'-6"	16'-11"	15'-6"
30	Stress	19'-8"	19'-8"	22'-0"	65	Stress	13'-5"	13'-5"	15'-0"
	Deflection	15'-9"	21'-4"	19'-7"		Deflection	12'-2"	16'-6"	15'-2"
35	Stress	18'-3"	18'-3"	20'-5"	70	Stress	12'-11"	12'-11"	14'-5"
	Deflection	15'-0"	20'-3"	18'-7"		Deflection	11'-11"	16'-1"	14'-9"
40	Stress	17'-1"	17'-1"	19'-1"	75	Stress	12'-6"	12'-6"	13'-11"
	Deflection	14'-4"	19'-4"	17'-9"		Deflection	11'-8"	15'-8"	14'-5"
45	Stress	16'-1"	16'-1"	18'-0"	80	Stress	12'-1"	12'-1"	13'-6"
	Deflection	13'-10"	18'-7"	17'-1"		Deflection	11'-5"	15'-4"	14'-1"
50	Stress	15'-3"	15'-3"	17'-1"	85	Stress	11'-8"	11'-8"	13'-1"
	Deflection	13'-4"	18'-0"	16'-6"		Deflection	11'-2"	15'-1"	13'-10"



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Panel Type:
Material/Thickness
Perforation:
Hole Pattern:
Deflection Limit:
Ix: 1.016 in⁴/ft
Sx: 0.548 in³/ft

U-24
ST/20ga

L/180

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	20'-11"	20'-11"	23'-5"	55	Stress	12'-8"	12'-8"	14'-1"
	Deflection	16'-5"	22'-2"	20'-5"		Deflection	11'-9"	15'-10"	14'-7"
25	Stress	18'-9"	18'-9"	20'-11"	60	Stress	12'-1"	12'-1"	13'-6"
	Deflection	15'-3"	20'-7"	18'-11"		Deflection	11'-5"	15'-5"	14'-2"
30	Stress	17'-1"	17'-1"	19'-1"	65	Stress	11'-7"	11'-7"	13'-0"
	Deflection	14'-4"	19'-5"	17'-10"		Deflection	11'-1"	15'-0"	13'-9"
35	Stress	15'-10"	15'-10"	17'-8"	70	Stress	11'-2"	11'-2"	12'-6"
	Deflection	13'-8"	18'-5"	16'-11"		Deflection	10'-10"	14'-7"	13'-5"
40	Stress	14'-10"	14'-10"	16'-7"	75	Stress	10'-10"	10'-10"	12'-1"
	Deflection	13'-1"	17'-7"	16'-2"		Deflection	10'-7"	14'-3"	13'-1"
45	Stress	14'-0"	14'-0"	15'-7"	80	Stress	10'-6"	10'-6"	11'-8"
	Deflection	12'-7"	16'-11"	15'-7"		Deflection	10'-4"	14'-0"	12'-10"
50	Stress	13'-3"	13'-3"	14'-10"	85	Stress	10'-2"	10'-2"	11'-4"
	Deflection	12'-1"	16'-4"	15'-0"		Deflection	10'-2"	13'-8"	12'-7"



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Panel Type:
Material/Thickness
Perforation:
Hole Pattern:

U-24
ST/22ga

Deflection Limit:

L/180

Ix: 0.844 in⁴/ft

Sx: 0.456 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	19'-1"	19'-1"	21'-4"	55	Stress	11'-6"	11'-6"	12'-11"
	Deflection	15'-5"	20'-10"	19'-2"		Deflection	11'-0"	14'-11"	13'-8"
25	Stress	17'-1"	17'-1"	19'-1"	60	Stress	11'-0"	11'-0"	12'-4"
	Deflection	14'-4"	19'-4"	17'-9"		Deflection	10'-9"	14'-6"	13'-3"
30	Stress	15'-7"	15'-7"	17'-5"	65	Stress	10'-7"	10'-7"	11'-10"
	Deflection	13'-6"	18'-3"	16'-9"		Deflection	10'-5"	14'-1"	12'-11"
35	Stress	14'-5"	14'-5"	16'-2"	70	Stress	10'-3"	10'-3"	11'-5"
	Deflection	12'-10"	17'-4"	15'-11"		Deflection	10'-2"	13'-9"	12'-7"
40	Stress	13'-6"	13'-6"	15'-1"	75	Stress	9'-10"	9'-10"	11'-0"
	Deflection	12'-3"	16'-7"	15'-2"		Deflection	9'-11"	13'-5"	12'-4"
45	Stress	12'-9"	12'-9"	14'-3"	80	Stress	9'-7"	9'-7"	10'-8"
	Deflection	11'-9"	15'-11"	14'-7"		Deflection	9'-9"	13'-2"	12'-1"
50	Stress	12'-1"	12'-1"	13'-6"	85	Stress	9'-3"	9'-3"	10'-4"
	Deflection	11'-5"	15'-4"	14'-1"		Deflection	9'-6"	12'-11"	11'-10"



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Panel Type:
Material/Thickness
Perforation:
Hole Pattern:
Deflection Limit:

U-24
ST/24ga

L/180

Ix: 0.674 in⁴/ft
Sx: 0.365 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	17'-1"	17'-1"	19'-1"	55	Stress	10'-4"	10'-4"	11'-6"
	Deflection	14'-4"	19'-4"	17'-9"		Deflection	10'-3"	13'-10"	12'-8"
25	Stress	15'-3"	15'-3"	17'-1"	60	Stress	9'-10"	9'-10"	11'-0"
	Deflection	13'-4"	18'-0"	16'-6"		Deflection	9'-11"	13'-5"	12'-4"
30	Stress	13'-11"	13'-11"	15'-7"	65	Stress	9'-6"	9'-6"	10'-7"
	Deflection	12'-6"	16'-11"	15'-6"		Deflection	9'-8"	13'-1"	12'-0"
35	Stress	12'-11"	12'-11"	14'-5"	70	Stress	9'-2"	9'-2"	10'-3"
	Deflection	11'-11"	16'-1"	14'-9"		Deflection	9'-5"	12'-9"	11'-9"
40	Stress	12'-1"	12'-1"	13'-6"	75	Stress	8'-10"	8'-10"	9'-10"
	Deflection	11'-5"	15'-4"	14'-1"		Deflection	9'-3"	12'-5"	11'-5"
45	Stress	11'-5"	11'-5"	12'-9"	80	Stress	8'-6"	8'-6"	9'-7"
	Deflection	10'-11"	14'-9"	13'-7"		Deflection	9'-0"	12'-2"	11'-2"
50	Stress	10'-10"	10'-10"	12'-1"	85	Stress	8'-3"	8'-3"	9'-3"
	Deflection	10'-7"	14'-3"	13'-1"		Deflection	8'-10"	11'-11"	11'-0"



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Panel Type: U-24
 Material/Thickness: AL/0.032
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.903 in⁴/ft
 Sx: 0.488 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	8'-1"	8'-1"	9'-0"	55	Stress	4'-10"	4'-10"	5'-5"
	Deflection	11'-0"	14'-11"	13'-8"		Deflection	7'-10"	10'-7"	9'-9"
25	Stress	7'-2"	7'-2"	8'-1"	60	Stress	4'-8"	4'-8"	5'-2"
	Deflection	10'-3"	13'-10"	12'-8"		Deflection	7'-8"	10'-4"	9'-6"
30	Stress	6'-7"	6'-7"	7'-4"	65	Stress	4'-6"	4'-6"	5'-0"
	Deflection	9'-8"	13'-0"	11'-11"		Deflection	7'-5"	10'-1"	9'-3"
35	Stress	6'-1"	6'-1"	6'-10"	70	Stress	4'-4"	4'-4"	4'-10"
	Deflection	9'-2"	12'-4"	11'-4"		Deflection	7'-3"	9'-10"	9'-0"
40	Stress	5'-8"	5'-8"	6'-4"	75	Stress	4'-2"	4'-2"	4'-8"
	Deflection	8'-9"	11'-10"	10'-10"		Deflection	7'-1"	9'-7"	8'-10"
45	Stress	5'-4"	5'-4"	6'-0"	80	Stress	4'-0"	4'-0"	4'-6"
	Deflection	8'-5"	11'-4"	10'-5"		Deflection	6'-11"	9'-4"	8'-7"
50	Stress	5'-1"	5'-1"	5'-8"	85	Stress	3'-11"	3'-11"	4'-4"
	Deflection	8'-1"	11'-0"	10'-1"		Deflection	6'-10"	9'-2"	8'-5"



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Panel Type: U-24
 Material/Thickness: AL/0.040
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 1.113 in⁴/ft
 Sx: 0.61 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	9'-0"	9'-0"	10'-1"	55	Stress	5'-5"	5'-5"	6'-1"
	Deflection	11'-10"	15'-11"	14'-8"		Deflection	8'-5"	11'-5"	10'-5"
25	Stress	8'-1"	8'-1"	9'-0"	60	Stress	5'-2"	5'-2"	5'-10"
	Deflection	11'-0"	14'-10"	13'-7"		Deflection	8'-2"	11'-1"	10'-2"
30	Stress	7'-4"	7'-4"	8'-3"	65	Stress	4'-12"	4'-12"	5'-7"
	Deflection	10'-4"	13'-11"	12'-10"		Deflection	8'-0"	10'-9"	9'-11"
35	Stress	6'-10"	6'-10"	7'-7"	70	Stress	4'-10"	4'-10"	5'-5"
	Deflection	9'-10"	13'-3"	12'-2"		Deflection	7'-9"	10'-6"	9'-8"
40	Stress	6'-4"	6'-4"	7'-1"	75	Stress	4'-8"	4'-8"	5'-2"
	Deflection	9'-5"	12'-8"	11'-8"		Deflection	7'-7"	10'-3"	9'-5"
45	Stress	6'-0"	6'-0"	6'-9"	80	Stress	4'-6"	4'-6"	5'-0"
	Deflection	9'-0"	12'-2"	11'-2"		Deflection	7'-5"	10'-1"	9'-3"
50	Stress	5'-8"	5'-8"	6'-4"	85	Stress	4'-4"	4'-4"	4'-11"
	Deflection	8'-8"	11'-9"	10'-10"		Deflection	7'-4"	9'-10"	9'-1"



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Panel Type:
Material/Thickness
Perforation:
Hole Pattern:
Deflection Limit:
Ix: 1.414 in⁴/ft
Sx: 0.761 in³/ft

U-24
AL/0.050

L/180

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	10'-1"	10'-1"	11'-3"	55	Stress	6'-1"	6'-1"	6'-9"
	Deflection	12'-10"	17'-3"	15'-10"		Deflection	9'-2"	12'-4"	11'-4"
25	Stress	9'-0"	9'-0"	10'-1"	60	Stress	5'-10"	5'-10"	6'-6"
	Deflection	11'-11"	16'-0"	14'-9"		Deflection	8'-10"	12'-0"	11'-0"
30	Stress	8'-3"	8'-3"	9'-2"	65	Stress	5'-7"	5'-7"	6'-3"
	Deflection	11'-2"	15'-1"	13'-10"		Deflection	8'-8"	11'-8"	10'-9"
35	Stress	7'-7"	7'-7"	8'-6"	70	Stress	5'-5"	5'-5"	6'-0"
	Deflection	10'-7"	14'-4"	13'-2"		Deflection	8'-5"	11'-5"	10'-5"
40	Stress	7'-1"	7'-1"	7'-11"	75	Stress	5'-2"	5'-2"	5'-10"
	Deflection	10'-2"	13'-9"	12'-7"		Deflection	8'-3"	11'-1"	10'-3"
45	Stress	6'-8"	6'-8"	7'-6"	80	Stress	5'-0"	5'-0"	5'-7"
	Deflection	9'-9"	13'-2"	12'-1"		Deflection	8'-1"	10'-11"	10'-0"
50	Stress	6'-4"	6'-4"	7'-1"	85	Stress	4'-11"	4'-11"	5'-5"
	Deflection	9'-5"	12'-9"	11'-8"		Deflection	7'-11"	10'-8"	9'-10"



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MORIN EXPOSED WALL SERIES SPAN CHARTS

Model VB-31 – Panel Profiles and Span Tables

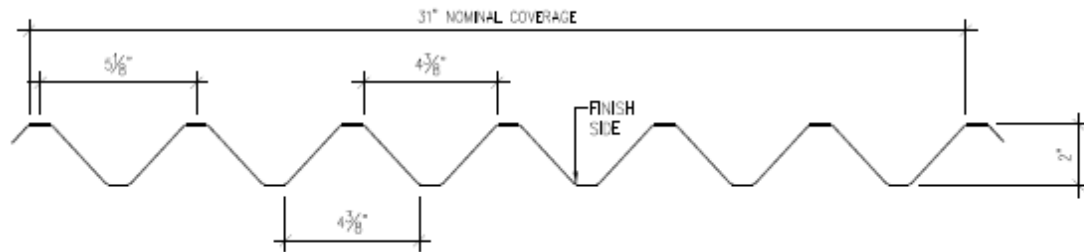
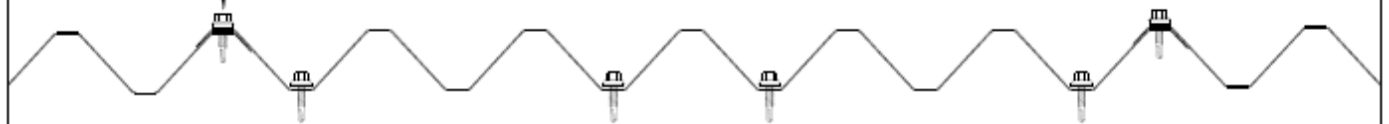
The following notes are applicable to the tables below:

1. Numbers in the tables indicate clear span distance between the structural supports.
2. Section properties listed are for the solid base sheet.
3. Load and span values listed do not include consideration of fastener with washer/oversize washer, to be determined by qualified personnel.
4. This table is intended as a guide to the allowable loads and spans for the panel product, however, actual assembly conditions must be determined by a qualified individual.
5. Refer to Morin install manual for fastening pattern across the panel (along the support) and side lap fastening.

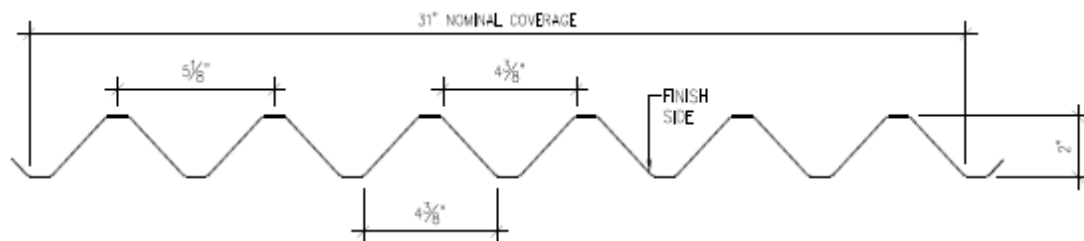


VB-31

SIDE A

VB-31 FASTENING PATTERN
SIDE ASIDE STITCH FASTEN
@ 18" O.C. MAX

SIDE B

VB-31 FASTENING PATTERN
SIDE BSTRUCTURAL FASTENER @ SUPPORTS,
SIDE STITCH FASTENER @
18" MAX BETWEEN SUPPORTS

NOTE: FASTEN EVERY CELL @ PANEL ENDS AND LAPS



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PCA-101



Panel Type: VB-31
 Material/Thickness: ST/18ga
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.394 in⁴/ft
 Sx: 0.394 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	17'-9"	17'-9"	19'-10"	55	Stress	10'-9"	10'-9"	12'-0"
	Deflection	12'-0"	16'-2"	14'-10"		Deflection	8'-7"	11'-7"	10'-7"
25	Stress	15'-11"	15'-11"	17'-9"	60	Stress	10'-3"	10'-3"	11'-6"
	Deflection	11'-2"	15'-0"	13'-10"		Deflection	8'-4"	11'-3"	10'-4"
30	Stress	14'-6"	14'-6"	16'-3"	65	Stress	9'-10"	9'-10"	11'-0"
	Deflection	10'-6"	14'-2"	13'-0"		Deflection	8'-1"	10'-11"	10'-0"
35	Stress	13'-5"	13'-5"	15'-0"	70	Stress	9'-6"	9'-6"	10'-7"
	Deflection	9'-11"	13'-5"	12'-4"		Deflection	7'-11"	10'-8"	9'-10"
40	Stress	12'-7"	12'-7"	14'-1"	75	Stress	9'-2"	9'-2"	10'-3"
	Deflection	9'-6"	12'-10"	11'-10"		Deflection	7'-9"	10'-5"	9'-7"
45	Stress	11'-10"	11'-10"	13'-3"	80	Stress	8'-11"	8'-11"	9'-11"
	Deflection	9'-2"	12'-4"	11'-4"		Deflection	7'-7"	10'-2"	9'-4"
50	Stress	11'-3"	11'-3"	12'-7"	85	Stress	8'-7"	8'-7"	9'-8"
	Deflection	8'-10"	11'-11"	10'-11"		Deflection	7'-5"	10'-0"	9'-2"



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Panel Type: VB-31
 Material/Thickness: ST/20ga
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.296 in⁴/ft
 Sx: 0.296 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	15'-5"	15'-5"	17'-3"	55	Stress	9'-3"	9'-3"	10'-5"
	Deflection	10'-11"	14'-9"	13'-6"		Deflection	7'-9"	10'-6"	9'-8"
25	Stress	13'-9"	13'-9"	15'-5"	60	Stress	8'-11"	8'-11"	9'-11"
	Deflection	10'-1"	13'-8"	12'-7"		Deflection	7'-7"	10'-2"	9'-4"
30	Stress	12'-7"	12'-7"	14'-1"	65	Stress	8'-6"	8'-6"	9'-7"
	Deflection	9'-6"	12'-10"	11'-10"		Deflection	7'-4"	9'-11"	9'-1"
35	Stress	11'-8"	11'-8"	13'-0"	70	Stress	8'-3"	8'-3"	9'-2"
	Deflection	9'-1"	12'-3"	11'-3"		Deflection	7'-2"	9'-8"	8'-11"
40	Stress	10'-11"	10'-11"	12'-2"	75	Stress	7'-11"	7'-11"	8'-11"
	Deflection	8'-8"	11'-8"	10'-9"		Deflection	7'-0"	9'-6"	8'-8"
45	Stress	10'-3"	10'-3"	11'-6"	80	Stress	7'-8"	7'-8"	8'-7"
	Deflection	8'-4"	11'-3"	10'-4"		Deflection	6'-10"	9'-3"	8'-6"
50	Stress	9'-9"	9'-9"	10'-11"	85	Stress	7'-6"	7'-6"	8'-4"
	Deflection	8'-0"	10'-10"	9'-11"		Deflection	6'-9"	9'-1"	8'-4"



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Panel Type: VB-31
 Material/Thickness: ST/22ga
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.247 in⁴/ft
 Sx: 0.247 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	14'-1"	14'-1"	15'-8"	55	Stress	8'-6"	8'-6"	9'-6"
	Deflection	10'-3"	13'-10"	12'-9"		Deflection	7'-4"	9'-11"	9'-1"
25	Stress	12'-7"	12'-7"	14'-1"	60	Stress	8'-1"	8'-1"	9'-1"
	Deflection	9'-6"	12'-10"	11'-10"		Deflection	7'-1"	9'-7"	8'-10"
30	Stress	11'-6"	11'-6"	12'-10"	65	Stress	7'-10"	7'-10"	8'-9"
	Deflection	8'-11"	12'-1"	11'-1"		Deflection	6'-11"	9'-4"	8'-7"
35	Stress	10'-7"	10'-7"	11'-10"	70	Stress	7'-6"	7'-6"	8'-5"
	Deflection	8'-6"	11'-6"	10'-7"		Deflection	6'-9"	9'-1"	8'-4"
40	Stress	9'-11"	9'-11"	11'-1"	75	Stress	7'-3"	7'-3"	8'-1"
	Deflection	8'-2"	11'-0"	10'-1"		Deflection	6'-7"	8'-11"	8'-2"
45	Stress	9'-4"	9'-4"	10'-6"	80	Stress	7'-0"	7'-0"	7'-10"
	Deflection	7'-10"	10'-7"	9'-8"		Deflection	6'-6"	8'-9"	8'-0"
50	Stress	8'-11"	8'-11"	9'-11"	85	Stress	6'-10"	6'-10"	7'-7"
	Deflection	7'-7"	10'-2"	9'-4"		Deflection	6'-4"	8'-7"	7'-10"



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Panel Type:
Material/Thickness
Perforation:
Hole Pattern:
Deflection Limit:

VB-31
ST/24ga

L/180

Ix: 0.197 in⁴/ft
Sx: 0.197 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	12'-7"	12'-7"	14'-1"	55	Stress	7'-7"	7'-7"	8'-6"
	Deflection	9'-6"	12'-10"	11'-10"		Deflection	6'-10"	9'-2"	8'-5"
25	Stress	11'-3"	11'-3"	12'-7"	60	Stress	7'-3"	7'-3"	8'-1"
	Deflection	8'-10"	11'-11"	10'-11"		Deflection	6'-7"	8'-11"	8'-2"
30	Stress	10'-3"	10'-3"	11'-6"	65	Stress	7'-0"	7'-0"	7'-9"
	Deflection	8'-4"	11'-3"	10'-4"		Deflection	6'-5"	8'-8"	8'-0"
35	Stress	9'-6"	9'-6"	10'-7"	70	Stress	6'-9"	6'-9"	7'-6"
	Deflection	7'-11"	10'-8"	9'-10"		Deflection	6'-3"	8'-6"	7'-9"
40	Stress	8'-11"	8'-11"	9'-11"	75	Stress	6'-6"	6'-6"	7'-3"
	Deflection	7'-7"	10'-2"	9'-4"		Deflection	6'-2"	8'-3"	7'-7"
45	Stress	8'-4"	8'-4"	9'-4"	80	Stress	6'-3"	6'-3"	7'-0"
	Deflection	7'-3"	9'-10"	9'-0"		Deflection	6'-0"	8'-1"	7'-5"
50	Stress	7'-11"	7'-11"	8'-11"	85	Stress	6'-1"	6'-1"	6'-10"
	Deflection	7'-0"	9'-6"	8'-8"		Deflection	5'-11"	7'-11"	7'-3"



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Panel Type:

VB-31

Material/Thickness

AL/0.032

Perforation:

Hole Pattern:

Deflection Limit:

L/180

Ix: 0.264 in⁴/ftSx: 0.264 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	9'-10"	9'-10"	11'-0"	55	Stress	5'-11"	5'-11"	6'-8"
	Deflection	7'-4"	9'-10"	9'-1"		Deflection	5'-3"	7'-1"	6'-6"
25	Stress	8'-10"	8'-10"	9'-10"	60	Stress	5'-8"	5'-8"	6'-4"
	Deflection	6'-9"	9'-2"	8'-5"		Deflection	5'-1"	6'-10"	6'-3"
30	Stress	8'-0"	8'-0"	9'-0"	65	Stress	5'-5"	5'-5"	6'-1"
	Deflection	6'-5"	8'-7"	7'-11"		Deflection	4'-11"	6'-8"	6'-1"
35	Stress	7'-5"	7'-5"	8'-4"	70	Stress	5'-3"	5'-3"	5'-11"
	Deflection	6'-1"	8'-2"	7'-6"		Deflection	4'-10"	6'-6"	6'-0"
40	Stress	6'-11"	6'-11"	7'-9"	75	Stress	5'-1"	5'-1"	5'-8"
	Deflection	5'-10"	7'-10"	7'-2"		Deflection	4'-8"	6'-4"	5'-10"
45	Stress	6'-7"	6'-7"	7'-4"	80	Stress	4'-11"	4'-11"	5'-6"
	Deflection	5'-7"	7'-6"	6'-11"		Deflection	4'-7"	6'-3"	5'-9"
50	Stress	6'-3"	6'-3"	6'-11"	85	Stress	4'-9"	4'-9"	5'-4"
	Deflection	5'-5"	7'-3"	6'-8"		Deflection	4'-6"	6'-1"	5'-7"



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Panel Type: VB-31
 Material/Thickness: AL/0.040
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.33 in⁴/ft
 Sx: 0.33 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	11'-0"	11'-0"	12'-4"	55	Stress	6'-8"	6'-8"	7'-5"
	Deflection	7'-11"	10'-8"	9'-9"		Deflection	5'-7"	7'-7"	7'-0"
25	Stress	9'-10"	9'-10"	11'-0"	60	Stress	6'-4"	6'-4"	7'-1"
	Deflection	7'-4"	9'-10"	9'-1"		Deflection	5'-6"	7'-4"	6'-9"
30	Stress	9'-0"	9'-0"	10'-0"	65	Stress	6'-1"	6'-1"	6'-10"
	Deflection	6'-11"	9'-3"	8'-6"		Deflection	5'-4"	7'-2"	6'-7"
35	Stress	8'-4"	8'-4"	9'-4"	70	Stress	5'-11"	5'-11"	6'-7"
	Deflection	6'-6"	8'-10"	8'-1"		Deflection	5'-2"	7'-0"	6'-5"
40	Stress	7'-9"	7'-9"	8'-8"	75	Stress	5'-8"	5'-8"	6'-4"
	Deflection	6'-3"	8'-5"	7'-9"		Deflection	5'-1"	6'-10"	6'-3"
45	Stress	7'-4"	7'-4"	8'-2"	80	Stress	5'-6"	5'-6"	6'-2"
	Deflection	6'-0"	8'-1"	7'-5"		Deflection	5'-0"	6'-8"	6'-2"
50	Stress	6'-11"	6'-11"	7'-9"	85	Stress	5'-4"	5'-4"	6'-0"
	Deflection	5'-10"	7'-10"	7'-2"		Deflection	4'-10"	6'-7"	6'-0"



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Panel Type:
Material/Thickness
Perforation:
Hole Pattern:
Deflection Limit:
Ix: 0.413 in⁴/ft
Sx: 0.413 in³/ft

VB-31
AL/0.050

L/180

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	12'-4"	12'-4"	13'-9"	55	Stress	7'-5"	7'-5"	8'-4"
	Deflection	8'-6"	11'-5"	10'-6"		Deflection	6'-1"	8'-2"	7'-6"
25	Stress	11'-0"	11'-0"	12'-4"	60	Stress	7'-1"	7'-1"	7'-11"
	Deflection	7'-11"	10'-8"	9'-9"		Deflection	5'-11"	7'-11"	7'-4"
30	Stress	10'-1"	10'-1"	11'-3"	65	Stress	6'-10"	6'-10"	7'-8"
	Deflection	7'-5"	10'-0"	9'-2"		Deflection	5'-9"	7'-9"	7'-1"
35	Stress	9'-4"	9'-4"	10'-5"	70	Stress	6'-7"	6'-7"	7'-4"
	Deflection	7'-1"	9'-6"	8'-9"		Deflection	5'-7"	7'-7"	6'-11"
40	Stress	8'-8"	8'-8"	9'-9"	75	Stress	6'-4"	6'-4"	7'-1"
	Deflection	6'-9"	9'-1"	8'-4"		Deflection	5'-6"	7'-4"	6'-9"
45	Stress	8'-2"	8'-2"	9'-2"	80	Stress	6'-2"	6'-2"	6'-11"
	Deflection	6'-6"	8'-9"	8'-0"		Deflection	5'-4"	7'-3"	6'-8"
50	Stress	7'-9"	7'-9"	8'-8"	106	Stress	5'-4"	5'-4"	6'-0"
	Deflection	6'-3"	8'-5"	7'-9"		Deflection	4'-10"	6'-7"	6'-0"



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MORIN EXPOSED WALL SERIES SPAN CHARTS

Model VB-36 – Panel Profiles and Span Tables

The following notes are applicable to the tables below:

1. Numbers in the tables indicate clear span distance between the structural supports.
2. Section properties listed are for the solid base sheet.
3. Load and span values listed do not include consideration of fastener with washer/oversize washer, to be determined by qualified personnel.
4. This table is intended as a guide to the allowable loads and spans for the panel product, however, actual assembly conditions must be determined by a qualified individual.
5. Refer to Morin install manual for fastening pattern across the panel (along the support) and side lap fastening.

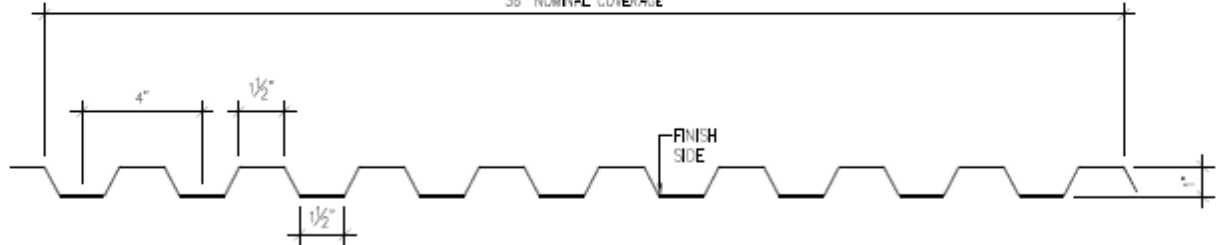




VB-36

SIDE A

36" NOMINAL COVERAGE



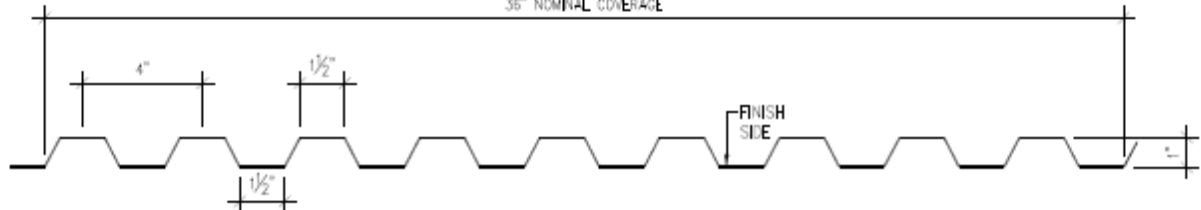
SIDE STITCH FASTEN
@ 18" O.C. MAX

**VB-36 FASTENING PATTERN
SIDE A**



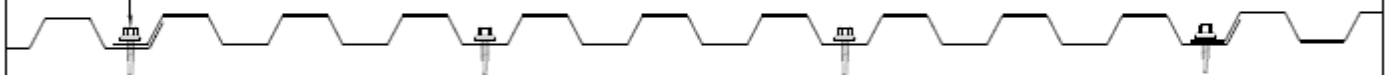
SIDE B

36" NOMINAL COVERAGE



STRUCTURAL FASTENER @ SUPPORTS,
SIDE STITCH FASTENER @
18" MAX BETWEEN SUPPORTS

**VB-36 FASTENING PATTERN
SIDE B**



NOTE: FASTEN EVERY CELL @ PANEL ENDS AND LAPS



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Panel Type: VB-36
 Material/Thickness: ST/18ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.114 in⁴/ft
 Sx: 0.23 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	13'-7"	13'-7"	15'-2"	55	Stress	8'-2"	8'-2"	9'-2"
	Deflection	7'-11"	10'-9"	9'-10"		Deflection	5'-8"	7'-8"	7'-0"
25	Stress	12'-1"	12'-1"	13'-7"	60	Stress	7'-10"	7'-10"	8'-9"
	Deflection	7'-4"	9'-11"	9'-2"		Deflection	5'-6"	7'-5"	6'-10"
30	Stress	11'-1"	11'-1"	12'-4"	65	Stress	7'-6"	7'-6"	8'-5"
	Deflection	6'-11"	9'-4"	8'-7"		Deflection	5'-4"	7'-3"	6'-8"
35	Stress	10'-3"	10'-3"	11'-5"	70	Stress	7'-3"	7'-3"	8'-1"
	Deflection	6'-7"	8'-11"	8'-2"		Deflection	5'-3"	7'-1"	6'-6"
40	Stress	9'-7"	9'-7"	10'-9"	75	Stress	7'-0"	7'-0"	7'-10"
	Deflection	6'-4"	8'-6"	7'-10"		Deflection	5'-1"	6'-11"	6'-4"
45	Stress	9'-0"	9'-0"	10'-1"	80	Stress	6'-9"	6'-9"	7'-7"
	Deflection	6'-1"	8'-2"	7'-6"		Deflection	5'-0"	6'-9"	6'-2"
50	Stress	8'-7"	8'-7"	9'-7"	85	Stress	6'-7"	6'-7"	7'-4"
	Deflection	5'-10"	7'-11"	7'-3"		Deflection	4'-11"	6'-7"	6'-1"



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Panel Type: VB-36
 Material/Thickness: ST/20ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.086 in⁴/ft
 Sx: 0.175 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	11'-10"	11'-10"	13'-3"	55	Stress	7'-2"	7'-2"	8'-0"
	Deflection	7'-3"	9'-9"	8'-11"		Deflection	5'-2"	6'-11"	6'-5"
25	Stress	10'-7"	10'-7"	11'-10"	60	Stress	6'-10"	6'-10"	7'-8"
	Deflection	6'-8"	9'-0"	8'-4"		Deflection	5'-0"	6'-9"	6'-2"
30	Stress	9'-8"	9'-8"	10'-10"	65	Stress	6'-7"	6'-7"	7'-4"
	Deflection	6'-4"	8'-6"	7'-10"		Deflection	4'-10"	6'-7"	6'-0"
35	Stress	8'-11"	8'-11"	10'-0"	70	Stress	6'-4"	6'-4"	7'-1"
	Deflection	6'-0"	8'-1"	7'-5"		Deflection	4'-9"	6'-5"	5'-11"
40	Stress	8'-4"	8'-4"	9'-4"	75	Stress	6'-1"	6'-1"	6'-10"
	Deflection	5'-9"	7'-9"	7'-1"		Deflection	4'-8"	6'-3"	5'-9"
45	Stress	7'-11"	7'-11"	8'-10"	80	Stress	5'-11"	5'-11"	6'-7"
	Deflection	5'-6"	7'-5"	6'-10"		Deflection	4'-7"	6'-2"	5'-8"
50	Stress	7'-6"	7'-6"	8'-4"	85	Stress	5'-9"	5'-9"	6'-5"
	Deflection	5'-4"	7'-2"	6'-7"		Deflection	4'-5"	6'-0"	5'-6"



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Panel Type: VB-36
 Material/Thickness: ST/22ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.072 in⁴/ft
 Sx: 0.145 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	10'-9"	10'-9"	12'-1"	55	Stress	6'-6"	6'-6"	7'-3"
	Deflection	6'-10"	9'-2"	8'-5"		Deflection	4'-10"	6'-7"	6'-0"
25	Stress	9'-8"	9'-8"	10'-9"	60	Stress	6'-3"	6'-3"	6'-11"
	Deflection	6'-4"	8'-6"	7'-10"		Deflection	4'-9"	6'-4"	5'-10"
30	Stress	8'-10"	8'-10"	9'-10"	65	Stress	6'-0"	6'-0"	6'-8"
	Deflection	5'-11"	8'-0"	7'-4"		Deflection	4'-7"	6'-2"	5'-8"
35	Stress	8'-2"	8'-2"	9'-1"	70	Stress	5'-9"	5'-9"	6'-5"
	Deflection	5'-8"	7'-7"	7'-0"		Deflection	4'-6"	6'-0"	5'-7"
40	Stress	7'-7"	7'-7"	8'-6"	75	Stress	5'-7"	5'-7"	6'-3"
	Deflection	5'-5"	7'-3"	6'-8"		Deflection	4'-4"	5'-11"	5'-5"
45	Stress	7'-2"	7'-2"	8'-0"	80	Stress	5'-5"	5'-5"	6'-0"
	Deflection	5'-2"	7'-0"	6'-5"		Deflection	4'-3"	5'-9"	5'-4"
50	Stress	6'-10"	6'-10"	7'-7"	85	Stress	5'-3"	5'-3"	5'-10"
	Deflection	5'-0"	6'-9"	6'-2"		Deflection	4'-2"	5'-8"	5'-2"



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Panel Type: VB-36
 Material/Thickness: ST/24ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.067 in⁴/ft
 Sx: 0.136 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	10'-5"	10'-5"	11'-8"	55	Stress	6'-3"	6'-3"	7'-0"
	Deflection	6'-8"	8'-11"	8'-3"		Deflection	4'-9"	6'-5"	5'-10"
25	Stress	9'-4"	9'-4"	10'-5"	60	Stress	6'-0"	6'-0"	6'-9"
	Deflection	6'-2"	8'-4"	7'-8"		Deflection	4'-7"	6'-3"	5'-8"
30	Stress	8'-6"	8'-6"	9'-6"	65	Stress	5'-9"	5'-9"	6'-6"
	Deflection	5'-10"	7'-10"	7'-2"		Deflection	4'-6"	6'-1"	5'-7"
35	Stress	7'-11"	7'-11"	8'-10"	70	Stress	5'-7"	5'-7"	6'-3"
	Deflection	5'-6"	7'-5"	6'-10"		Deflection	4'-4"	5'-11"	5'-5"
40	Stress	7'-4"	7'-4"	8'-3"	75	Stress	5'-5"	5'-5"	6'-0"
	Deflection	5'-3"	7'-1"	6'-6"		Deflection	4'-3"	5'-9"	5'-4"
45	Stress	6'-11"	6'-11"	7'-9"	80	Stress	5'-3"	5'-3"	5'-10"
	Deflection	5'-1"	6'-10"	6'-3"		Deflection	4'-2"	5'-8"	5'-2"
50	Stress	6'-7"	6'-7"	7'-4"	85	Stress	5'-1"	5'-1"	5'-8"
	Deflection	4'-11"	6'-7"	6'-1"		Deflection	4'-1"	5'-6"	5'-1"



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Panel Type: VB-36
 Material/Thickness: AL/0.032
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.077 in⁴/ft
 Sx: 0.156 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6'-5"	6'-5"	7'-3"	55	Stress	3'-11"	3'-11"	4'-4"
	Deflection	4'-10"	6'-6"	6'-0"		Deflection	3'-5"	4'-8"	4'-3"
25	Stress	5'-9"	5'-9"	6'-5"	60	Stress	3'-9"	3'-9"	4'-2"
	Deflection	4'-6"	6'-1"	5'-7"		Deflection	3'-4"	4'-6"	4'-2"
30	Stress	5'-3"	5'-3"	5'-11"	65	Stress	3'-7"	3'-7"	4'-0"
	Deflection	4'-3"	5'-8"	5'-3"		Deflection	3'-3"	4'-5"	4'-1"
35	Stress	4'-11"	4'-11"	5'-5"	70	Stress	3'-5"	3'-5"	3'-10"
	Deflection	4'-0"	5'-5"	5'-0"		Deflection	3'-2"	4'-4"	3'-11"
40	Stress	4'-7"	4'-7"	5'-1"	75	Stress	3'-4"	3'-4"	3'-9"
	Deflection	3'-10"	5'-2"	4'-9"		Deflection	3'-1"	4'-2"	3'-10"
45	Stress	4'-4"	4'-4"	4'-10"	80	Stress	3'-3"	3'-3"	3'-7"
	Deflection	3'-8"	5'-0"	4'-7"		Deflection	3'-1"	4'-1"	3'-9"
50	Stress	4'-1"	4'-1"	4'-7"	85	Stress	3'-2"	3'-2"	3'-6"
	Deflection	3'-7"	4'-10"	4'-5"		Deflection	3'-0"	4'-0"	3'-8"



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Panel Type: VB-36
 Material/Thickness: AL/0.040
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.096 in⁴/ft
 Sx: 0.191 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6'-2"	6'-2"	6'-11"	55	Stress	3'-9"	3'-9"	4'-2"
	Deflection	5'-3"	7'-0"	6'-6"		Deflection	3'-9"	5'-0"	4'-7"
25	Stress	5'-6"	5'-6"	6'-2"	60	Stress	3'-7"	3'-7"	4'-0"
	Deflection	4'-10"	6'-6"	6'-0"		Deflection	3'-7"	4'-11"	4'-6"
30	Stress	5'-1"	5'-1"	5'-8"	65	Stress	3'-5"	3'-5"	3'-10"
	Deflection	4'-7"	6'-2"	5'-8"		Deflection	3'-6"	4'-9"	4'-4"
35	Stress	4'-8"	4'-8"	5'-3"	70	Stress	3'-4"	3'-4"	3'-8"
	Deflection	4'-4"	5'-10"	5'-4"		Deflection	3'-5"	4'-8"	4'-3"
40	Stress	4'-4"	4'-4"	4'-11"	75	Stress	3'-2"	3'-2"	3'-7"
	Deflection	4'-2"	5'-7"	5'-2"		Deflection	3'-4"	4'-6"	4'-2"
45	Stress	4'-1"	4'-1"	4'-7"	80	Stress	3'-1"	3'-1"	3'-5"
	Deflection	4'-0"	5'-4"	4'-11"		Deflection	3'-3"	4'-5"	4'-1"
50	Stress	3'-11"	3'-11"	4'-4"	85	Stress	3'-0"	3'-0"	3'-4"
	Deflection	3'-10"	5'-2"	4'-9"		Deflection	3'-3"	4'-4"	4'-0"



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Panel Type:
Material/Thickness
Perforation:
Hole Pattern:
Deflection Limit:

VB-36
AL/0.050

L/180

Ix: 0.104 in⁴/ft
Sx: 0.209 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	7'-5"	7'-5"	8'-4"	55	Stress	4'-6"	4'-6"	5'-0"
	Deflection	5'-4"	7'-3"	6'-8"		Deflection	3'-10"	5'-2"	4'-9"
25	Stress	6'-8"	6'-8"	7'-5"	60	Stress	4'-4"	4'-4"	4'-10"
	Deflection	5'-0"	6'-9"	6'-2"		Deflection	3'-9"	5'-0"	4'-7"
30	Stress	6'-1"	6'-1"	6'-10"	65	Stress	4'-2"	4'-2"	4'-7"
	Deflection	4'-8"	6'-4"	5'-10"		Deflection	3'-7"	4'-11"	4'-6"
35	Stress	5'-8"	5'-8"	6'-4"	70	Stress	3'-12"	3'-12"	4'-5"
	Deflection	4'-5"	6'-0"	5'-6"		Deflection	3'-6"	4'-9"	4'-5"
40	Stress	5'-3"	5'-3"	5'-11"	75	Stress	3'-10"	3'-10"	4'-4"
	Deflection	4'-3"	5'-9"	5'-3"		Deflection	3'-5"	4'-8"	4'-3"
45	Stress	5'-0"	5'-0"	5'-7"	80	Stress	3'-9"	3'-9"	4'-2"
	Deflection	4'-1"	5'-6"	5'-1"		Deflection	3'-5"	4'-7"	4'-2"
50	Stress	4'-9"	4'-9"	5'-3"	85	Stress	3'-7"	3'-7"	4'-1"
	Deflection	3'-11"	5'-4"	4'-11"		Deflection	3'-4"	4'-6"	4'-1"



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MORIN EXPOSED WALL SERIES SPAN CHARTS

Model Y-29 – Panel Profiles and Span Tables

The following notes are applicable to the tables below:

1. Numbers in the tables indicate clear span distance between the structural supports.
2. Section properties listed are for the solid base sheet.
3. Load and span values listed do not include consideration of fastener with washer/oversize washer, to be determined by qualified personnel.
4. This table is intended as a guide to the allowable loads and spans for the panel product, however, actual assembly conditions must be determined by a qualified individual.
5. Refer to Morin install manual for fastening pattern across the panel (along the support) and side lap fastening.



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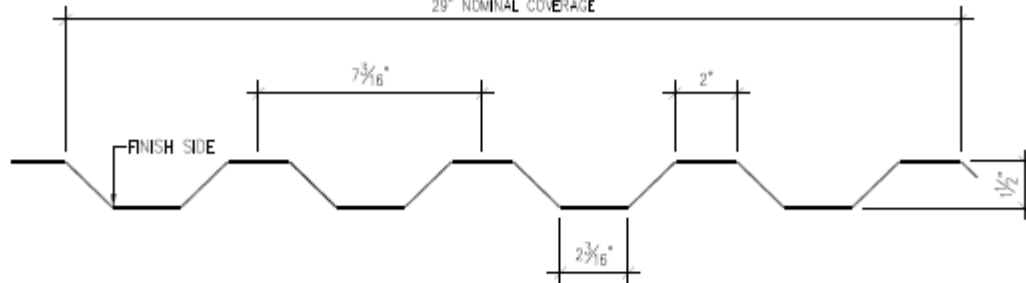




Y-29

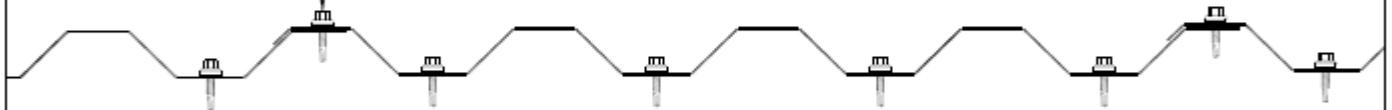
SIDE A

29" NOMINAL COVERAGE



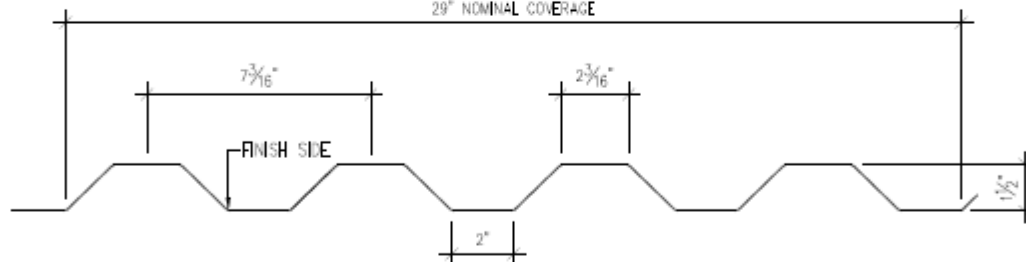
SIDE STITCH FASTEN
@ 18" O.C. MAX

Y-29 FASTENING PATTERN
SIDE A



SIDE B

29" NOMINAL COVERAGE



SIDE STITCH FASTEN
@ 18" O.C. MAX

Y-29 FASTENING PATTERN
SIDE B



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Panel Type:

Y-29

Material/Thickness

ST/18ga

Perforation:

Hole Pattern:

Deflection Limit:

L/180

Ix: 0.248 in⁴/ftSx: 0.301 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	15'-6"	15'-6"	17'-4"	55	Stress	9'-4"	9'-4"	10'-6"
	Deflection	10'-3"	13'-10"	12'-9"		Deflection	7'-4"	9'-11"	9'-1"
25	Stress	13'-11"	13'-11"	15'-6"	60	Stress	9'-0"	9'-0"	10'-0"
	Deflection	9'-6"	12'-10"	11'-10"		Deflection	7'-1"	9'-7"	8'-10"
30	Stress	12'-8"	12'-8"	14'-2"	65	Stress	8'-7"	8'-7"	9'-8"
	Deflection	9'-0"	12'-1"	11'-2"		Deflection	6'-11"	9'-4"	8'-7"
35	Stress	11'-9"	11'-9"	13'-1"	70	Stress	8'-4"	8'-4"	9'-3"
	Deflection	8'-6"	11'-6"	10'-7"		Deflection	6'-9"	9'-2"	8'-5"
40	Stress	11'-0"	11'-0"	12'-3"	75	Stress	8'-0"	8'-0"	9'-0"
	Deflection	8'-2"	11'-0"	10'-1"		Deflection	6'-7"	8'-11"	8'-2"
45	Stress	10'-4"	10'-4"	11'-7"	80	Stress	7'-9"	7'-9"	8'-8"
	Deflection	7'-10"	10'-7"	9'-9"		Deflection	6'-6"	8'-9"	8'-0"
50	Stress	9'-10"	9'-10"	11'-0"	85	Stress	7'-6"	7'-6"	8'-5"
	Deflection	7'-7"	10'-3"	9'-5"		Deflection	6'-4"	8'-7"	7'-10"



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Panel Type: Y-29
 Material/Thickness: ST/20ga
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.186 in⁴/ft
 Sx: 0.228 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	13'-6"	13'-6"	15'-1"	55	Stress	8'-2"	8'-2"	9'-1"
	Deflection	9'-4"	12'-7"	11'-7"		Deflection	6'-8"	9'-0"	8'-3"
25	Stress	12'-1"	12'-1"	13'-6"	60	Stress	7'-10"	7'-10"	8'-9"
	Deflection	8'-8"	11'-8"	10'-9"		Deflection	6'-6"	8'-9"	8'-0"
30	Stress	11'-0"	11'-0"	12'-4"	65	Stress	7'-6"	7'-6"	8'-5"
	Deflection	8'-2"	11'-0"	10'-1"		Deflection	6'-4"	8'-6"	7'-10"
35	Stress	10'-3"	10'-3"	11'-5"	70	Stress	7'-3"	7'-3"	8'-1"
	Deflection	7'-9"	10'-6"	9'-7"		Deflection	6'-2"	8'-4"	7'-7"
40	Stress	9'-7"	9'-7"	10'-8"	75	Stress	7'-0"	7'-0"	7'-10"
	Deflection	7'-5"	10'-0"	9'-2"		Deflection	6'-0"	8'-1"	7'-5"
45	Stress	9'-0"	9'-0"	10'-1"	80	Stress	6'-9"	6'-9"	7'-7"
	Deflection	7'-1"	9'-7"	8'-10"		Deflection	5'-11"	7'-11"	7'-4"
50	Stress	8'-6"	8'-6"	9'-7"	85	Stress	6'-7"	6'-7"	7'-4"
	Deflection	6'-11"	9'-3"	8'-6"		Deflection	5'-9"	7'-9"	7'-2"





Panel Type: Y-29
 Material/Thickness: ST/22ga
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.155 in⁴/ft
 Sx: 0.191 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	12'-4"	12'-4"	13'-10"	55	Stress	7'-5"	7'-5"	8'-4"
	Deflection	8'-9"	11'-10"	10'-11"		Deflection	6'-3"	8'-6"	7'-9"
25	Stress	11'-1"	11'-1"	12'-4"	60	Stress	7'-2"	7'-2"	8'-0"
	Deflection	8'-2"	11'-0"	10'-1"		Deflection	6'-1"	8'-3"	7'-7"
30	Stress	10'-1"	10'-1"	11'-3"	65	Stress	6'-10"	6'-10"	7'-8"
	Deflection	7'-8"	10'-4"	9'-6"		Deflection	5'-11"	8'-0"	7'-4"
35	Stress	9'-4"	9'-4"	10'-5"	70	Stress	6'-7"	6'-7"	7'-5"
	Deflection	7'-3"	9'-10"	9'-0"		Deflection	5'-9"	7'-10"	7'-2"
40	Stress	8'-9"	8'-9"	9'-9"	75	Stress	6'-5"	6'-5"	7'-2"
	Deflection	7'-0"	9'-5"	8'-8"		Deflection	5'-8"	7'-8"	7'-0"
45	Stress	8'-3"	8'-3"	9'-2"	80	Stress	6'-2"	6'-2"	6'-11"
	Deflection	6'-8"	9'-1"	8'-4"		Deflection	5'-6"	7'-6"	6'-10"
50	Stress	7'-10"	7'-10"	8'-9"	85	Stress	6'-0"	6'-0"	6'-8"
	Deflection	6'-6"	8'-9"	8'-0"		Deflection	5'-5"	7'-4"	6'-9"



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Panel Type:
Material/Thickness
Perforation:
Hole Pattern:
Deflection Limit:

Y-29
ST/24ga

L/180

Ix: 0.124 in⁴/ft
Sx: 0.153 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	11'-1"	11'-1"	12'-4"	55	Stress	6'-8"	6'-8"	7'-6"
	Deflection	8'-2"	11'-0"	10'-1"		Deflection	5'-10"	7'-10"	7'-3"
25	Stress	9'-11"	9'-11"	11'-1"	60	Stress	6'-5"	6'-5"	7'-2"
	Deflection	7'-7"	10'-3"	9'-5"		Deflection	5'-8"	7'-8"	7'-0"
30	Stress	9'-0"	9'-0"	10'-1"	65	Stress	6'-2"	6'-2"	6'-10"
	Deflection	7'-1"	9'-7"	8'-10"		Deflection	5'-6"	7'-5"	6'-10"
35	Stress	8'-4"	8'-4"	9'-4"	70	Stress	5'-11"	5'-11"	6'-7"
	Deflection	6'-9"	9'-2"	8'-5"		Deflection	5'-4"	7'-3"	6'-8"
40	Stress	7'-10"	7'-10"	8'-9"	75	Stress	5'-9"	5'-9"	6'-5"
	Deflection	6'-6"	8'-9"	8'-0"		Deflection	5'-3"	7'-1"	6'-6"
45	Stress	7'-5"	7'-5"	8'-3"	80	Stress	5'-6"	5'-6"	6'-2"
	Deflection	6'-3"	8'-5"	7'-9"		Deflection	5'-2"	6'-11"	6'-4"
50	Stress	7'-0"	7'-0"	7'-10"	85	Stress	5'-4"	5'-4"	6'-0"
	Deflection	6'-0"	8'-1"	7'-5"		Deflection	5'-0"	6'-10"	6'-3"



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Panel Type: Y-29
 Material/Thickness: AL/0.032
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.166 in⁴/ft
 Sx: 0.204 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6'-1"	6'-1"	6'-10"	55	Stress	3'-8"	3'-8"	4'-1"
	Deflection	6'-3"	8'-5"	7'-9"		Deflection	4'-6"	6'-0"	5'-7"
25	Stress	5'-5"	5'-5"	6'-1"	60	Stress	3'-6"	3'-6"	3'-11"
	Deflection	5'-10"	7'-10"	7'-3"		Deflection	4'-4"	5'-10"	5'-5"
30	Stress	5'-0"	5'-0"	5'-7"	65	Stress	3'-4"	3'-4"	3'-9"
	Deflection	5'-6"	7'-5"	6'-9"		Deflection	4'-3"	5'-9"	5'-3"
35	Stress	4'-7"	4'-7"	5'-2"	70	Stress	3'-3"	3'-3"	3'-8"
	Deflection	5'-2"	7'-0"	6'-5"		Deflection	4'-2"	5'-7"	5'-1"
40	Stress	4'-4"	4'-4"	4'-10"	75	Stress	3'-2"	3'-2"	3'-6"
	Deflection	5'-0"	6'-9"	6'-2"		Deflection	4'-0"	5'-5"	5'-0"
45	Stress	4'-1"	4'-1"	4'-6"	80	Stress	3'-1"	3'-1"	3'-5"
	Deflection	4'-9"	6'-5"	5'-11"		Deflection	3'-11"	5'-4"	4'-11"
50	Stress	3'-10"	3'-10"	4'-4"	85	Stress	2'-11"	2'-11"	3'-4"
	Deflection	4'-7"	6'-3"	5'-9"		Deflection	3'-10"	5'-3"	4'-10"



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Panel Type: Y-29
 Material/Thickness: AL/0.040
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.208 in⁴/ft
 Sx: 0.255 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6'-10"	6'-10"	7'-7"	55	Stress	4'-1"	4'-1"	4'-7"
	Deflection	6'-9"	9'-1"	8'-4"		Deflection	4'-10"	6'-6"	6'-0"
25	Stress	6'-1"	6'-1"	6'-10"	60	Stress	3'-11"	3'-11"	4'-5"
	Deflection	6'-3"	8'-5"	7'-9"		Deflection	4'-8"	6'-4"	5'-10"
30	Stress	5'-7"	5'-7"	6'-3"	65	Stress	3'-9"	3'-9"	4'-3"
	Deflection	5'-11"	8'-0"	7'-4"		Deflection	4'-7"	6'-2"	5'-8"
35	Stress	5'-2"	5'-2"	5'-9"	70	Stress	3'-8"	3'-8"	4'-1"
	Deflection	5'-7"	7'-7"	6'-11"		Deflection	4'-5"	6'-0"	5'-6"
40	Stress	4'-10"	4'-10"	5'-5"	75	Stress	3'-6"	3'-6"	3'-11"
	Deflection	5'-4"	7'-3"	6'-8"		Deflection	4'-4"	5'-10"	5'-5"
45	Stress	4'-6"	4'-6"	5'-1"	80	Stress	3'-5"	3'-5"	3'-10"
	Deflection	5'-2"	6'-11"	6'-5"		Deflection	4'-3"	5'-9"	5'-3"
50	Stress	4'-4"	4'-4"	4'-10"	85	Stress	3'-4"	3'-4"	3'-8"
	Deflection	5'-0"	6'-9"	6'-2"		Deflection	4'-2"	5'-7"	5'-2"



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Panel Type: Y-29
 Material/Thickness: AL/0.050
 Perforation:
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.259 in⁴/ft
 Sx: 0.314 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	7'-7"	7'-7"	8'-5"	55	Stress	4'-7"	4'-7"	5'-1"
	Deflection	7'-3"	9'-10"	9'-0"		Deflection	5'-2"	7'-0"	6'-5"
25	Stress	6'-9"	6'-9"	7'-7"	60	Stress	4'-4"	4'-4"	4'-11"
	Deflection	6'-9"	9'-1"	8'-4"		Deflection	5'-0"	6'-10"	6'-3"
30	Stress	6'-2"	6'-2"	6'-11"	65	Stress	4'-2"	4'-2"	4'-8"
	Deflection	6'-4"	8'-7"	7'-10"		Deflection	4'-11"	6'-7"	6'-1"
35	Stress	5'-9"	5'-9"	6'-5"	70	Stress	4'-0"	4'-0"	4'-6"
	Deflection	6'-0"	8'-2"	7'-6"		Deflection	4'-9"	6'-6"	5'-11"
40	Stress	5'-4"	5'-4"	6'-0"	75	Stress	3'-11"	3'-11"	4'-4"
	Deflection	5'-9"	7'-9"	7'-2"		Deflection	4'-8"	6'-4"	5'-10"
45	Stress	5'-0"	5'-0"	5'-8"	80	Stress	3'-9"	3'-9"	4'-3"
	Deflection	5'-7"	7'-6"	6'-11"		Deflection	4'-7"	6'-2"	5'-8"
50	Stress	4'-9"	4'-9"	5'-4"	85	Stress	3'-8"	3'-8"	4'-1"
	Deflection	5'-4"	7'-3"	6'-8"		Deflection	4'-6"	6'-1"	5'-7"



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MORIN EXPOSED WALL SERIES SPAN CHARTS

Model Y-36 – Panel Profiles and Span Tables

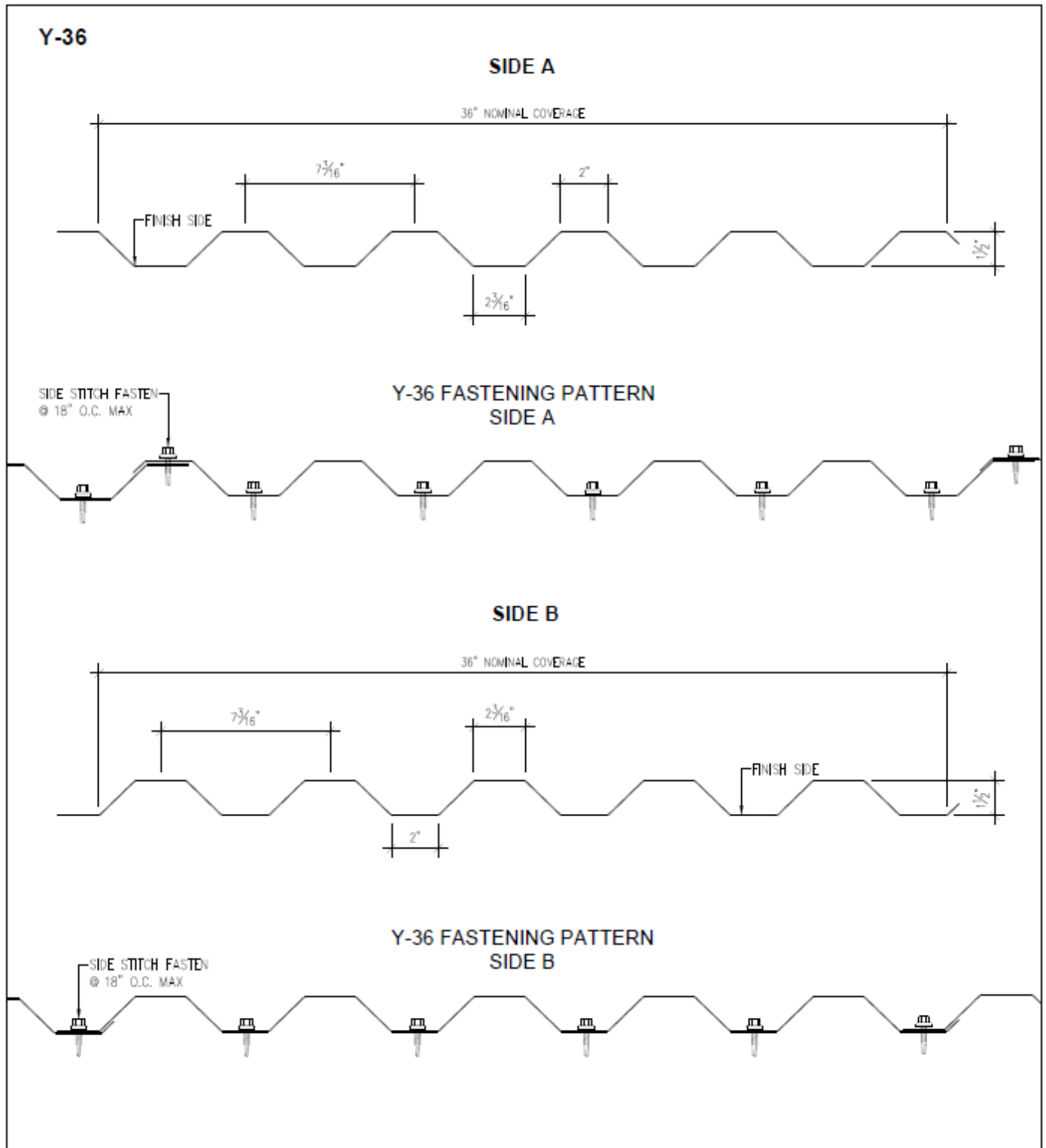
The following notes are applicable to the tables below:

1. Numbers in the tables indicate clear span distance between the structural supports.
2. Section properties listed are for the solid base sheet.
3. Load and span values listed do not include consideration of fastener with washer/oversize washer, to be determined by qualified personnel.
4. This table is intended as a guide to the allowable loads and spans for the panel product, however, actual assembly conditions must be determined by a qualified individual.
5. Refer to Morin install manual for fastening pattern across the panel (along the support) and side lap fastening.



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Panel Type: Y-36
 Material/Thickness: ST/18ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.2305 in⁴/ft
 Sx: 0.2971 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	15'-5"	15'-5"	17'-3"	55	Stress	9'-4"	9'-4"	10'-5"
	Deflection	10'-0"	13'-6"	12'-5"		Deflection	7'-2"	9'-8"	8'-10"
25	Stress	13'-9"	13'-9"	15'-5"	60	Stress	8'-11"	8'-11"	9'-11"
	Deflection	9'-4"	12'-7"	11'-6"		Deflection	6'-11"	9'-5"	8'-7"
30	Stress	12'-7"	12'-7"	14'-1"	65	Stress	8'-7"	8'-7"	9'-7"
	Deflection	8'-9"	11'-10"	10'-10"		Deflection	6'-9"	9'-2"	8'-5"
35	Stress	11'-8"	11'-8"	13'-0"	70	Stress	8'-3"	8'-3"	9'-3"
	Deflection	8'-4"	11'-3"	10'-4"		Deflection	6'-7"	8'-11"	8'-2"
40	Stress	10'-11"	10'-11"	12'-2"	75	Stress	7'-12"	7'-12"	8'-11"
	Deflection	7'-11"	10'-9"	9'-10"		Deflection	6'-5"	8'-9"	8'-0"
45	Stress	10'-3"	10'-3"	11'-6"	80	Stress	7'-9"	7'-9"	8'-7"
	Deflection	7'-8"	10'-4"	9'-6"		Deflection	6'-4"	8'-6"	7'-10"
50	Stress	9'-9"	9'-9"	10'-11"	85	Stress	7'-6"	7'-6"	8'-4"
	Deflection	7'-5"	10'-0"	9'-2"		Deflection	6'-2"	8'-4"	7'-8"



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Panel Type: Y-36
 Material/Thickness: ST/20ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.166 in⁴/ft
 Sx: 0.22 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	13'-3"	13'-3"	14'-10"	55	Stress	8'-0"	8'-0"	8'-11"
	Deflection	9'-0"	12'-1"	11'-2"		Deflection	6'-5"	8'-8"	7'-11"
25	Stress	11'-10"	11'-10"	13'-3"	60	Stress	7'-8"	7'-8"	8'-7"
	Deflection	8'-4"	11'-3"	10'-4"		Deflection	6'-3"	8'-5"	7'-9"
30	Stress	10'-10"	10'-10"	12'-1"	65	Stress	7'-4"	7'-4"	8'-3"
	Deflection	7'-10"	10'-7"	9'-9"		Deflection	6'-1"	8'-2"	7'-6"
35	Stress	10'-0"	10'-0"	11'-3"	70	Stress	7'-1"	7'-1"	7'-11"
	Deflection	7'-5"	10'-1"	9'-3"		Deflection	5'-11"	8'-0"	7'-4"
40	Stress	9'-5"	9'-5"	10'-6"	75	Stress	6'-10"	6'-10"	7'-8"
	Deflection	7'-2"	9'-7"	8'-10"		Deflection	5'-9"	7'-10"	7'-2"
45	Stress	8'-10"	8'-10"	9'-11"	80	Stress	6'-8"	6'-8"	7'-5"
	Deflection	6'-10"	9'-3"	8'-6"		Deflection	5'-8"	7'-8"	7'-0"
50	Stress	8'-5"	8'-5"	9'-5"	85	Stress	6'-5"	6'-5"	7'-2"
	Deflection	6'-7"	8'-11"	8'-2"		Deflection	5'-7"	7'-6"	6'-10"



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Panel Type: Y-36
 Material/Thickness: ST/22ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.138 in⁴/ft
 Sx: 0.184 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	12'-2"	12'-2"	13'-7"	55	Stress	7'-4"	7'-4"	8'-2"
	Deflection	8'-5"	11'-5"	10'-6"		Deflection	6'-0"	8'-2"	7'-6"
25	Stress	10'-10"	10'-10"	12'-2"	60	Stress	7'-0"	7'-0"	7'-10"
	Deflection	7'-10"	10'-7"	9'-9"		Deflection	5'-10"	7'-11"	7'-3"
30	Stress	9'-11"	9'-11"	11'-1"	65	Stress	6'-9"	6'-9"	7'-6"
	Deflection	7'-5"	9'-11"	9'-2"		Deflection	5'-8"	7'-8"	7'-1"
35	Stress	9'-2"	9'-2"	10'-3"	70	Stress	6'-6"	6'-6"	7'-3"
	Deflection	7'-0"	9'-5"	8'-8"		Deflection	5'-7"	7'-6"	6'-11"
40	Stress	8'-7"	8'-7"	9'-7"	75	Stress	6'-3"	6'-3"	7'-0"
	Deflection	6'-8"	9'-1"	8'-4"		Deflection	5'-5"	7'-4"	6'-9"
45	Stress	8'-1"	8'-1"	9'-0"	80	Stress	6'-1"	6'-1"	6'-9"
	Deflection	6'-5"	8'-8"	8'-0"		Deflection	5'-4"	7'-2"	6'-7"
50	Stress	7'-8"	7'-8"	8'-7"	85	Stress	5'-11"	5'-11"	6'-7"
	Deflection	6'-3"	8'-5"	7'-9"		Deflection	5'-3"	7'-0"	6'-6"



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Panel Type: Y-36
 Material/Thickness: ST/24ga
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.11 in⁴/ft
 Sx: 0.148 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	10'-10"	10'-10"	12'-2"	55	Stress	6'-7"	6'-7"	7'-4"
	Deflection	7'-10"	10'-7"	9'-9"		Deflection	5'-7"	7'-7"	6'-11"
25	Stress	9'-9"	9'-9"	10'-10"	60	Stress	6'-3"	6'-3"	7'-0"
	Deflection	7'-3"	9'-10"	9'-0"		Deflection	5'-5"	7'-4"	6'-9"
30	Stress	8'-10"	8'-10"	9'-11"	65	Stress	6'-0"	6'-0"	6'-9"
	Deflection	6'-10"	9'-3"	8'-6"		Deflection	5'-3"	7'-2"	6'-7"
35	Stress	8'-3"	8'-3"	9'-2"	70	Stress	5'-10"	5'-10"	6'-6"
	Deflection	6'-6"	8'-9"	8'-1"		Deflection	5'-2"	7'-0"	6'-5"
40	Stress	7'-8"	7'-8"	8'-7"	75	Stress	5'-7"	5'-7"	6'-3"
	Deflection	6'-3"	8'-5"	7'-9"		Deflection	5'-1"	6'-10"	6'-3"
45	Stress	7'-3"	7'-3"	8'-1"	80	Stress	5'-5"	5'-5"	6'-1"
	Deflection	6'-0"	8'-1"	7'-5"		Deflection	4'-11"	6'-8"	6'-1"
50	Stress	6'-10"	6'-10"	7'-8"	85	Stress	5'-3"	5'-3"	5'-11"
	Deflection	5'-9"	7'-10"	7'-2"		Deflection	4'-10"	6'-6"	6'-0"



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Panel Type: Y-36
 Material/Thickness: AL/032
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.147 in⁴/ft
 Sx: 0.197 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6'-0"	6'-0"	6'-8"	55	Stress	3'-7"	3'-7"	4'-0"
	Deflection	6'-0"	8'-2"	7'-6"		Deflection	4'-4"	5'-10"	5'-4"
25	Stress	5'-4"	5'-4"	6'-0"	60	Stress	3'-5"	3'-5"	3'-10"
	Deflection	5'-7"	7'-7"	6'-11"		Deflection	4'-2"	5'-8"	5'-2"
30	Stress	4'-11"	4'-11"	5'-5"	65	Stress	3'-4"	3'-4"	3'-8"
	Deflection	5'-3"	7'-1"	6'-6"		Deflection	4'-1"	5'-6"	5'-0"
35	Stress	4'-6"	4'-6"	5'-1"	70	Stress	3'-2"	3'-2"	3'-7"
	Deflection	5'-0"	6'-9"	6'-2"		Deflection	4'-0"	5'-4"	4'-11"
40	Stress	4'-3"	4'-3"	4'-9"	75	Stress	3'-1"	3'-1"	3'-5"
	Deflection	4'-9"	6'-5"	5'-11"		Deflection	3'-11"	5'-3"	4'-10"
45	Stress	4'-0"	4'-0"	4'-5"	80	Stress	2'-12"	2'-12"	3'-4"
	Deflection	4'-7"	6'-2"	5'-8"		Deflection	3'-10"	5'-1"	4'-8"
50	Stress	3'-9"	3'-9"	4'-3"	85	Stress	2'-11"	2'-11"	3'-3"
	Deflection	4'-5"	6'-0"	5'-6"		Deflection	3'-9"	5'-0"	4'-7"



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Panel Type: Y-36
 Material/Thickness: AL/040
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.184 in⁴/ft
 Sx: 0.244 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6'-8"	6'-8"	7'-5"	55	Stress	4'-0"	4'-0"	4'-6"
	Deflection	6'-6"	8'-9"	8'-1"		Deflection	4'-8"	6'-3"	5'-9"
25	Stress	6'-0"	6'-0"	6'-8"	60	Stress	3'-10"	3'-10"	4'-4"
	Deflection	6'-0"	8'-2"	7'-6"		Deflection	4'-6"	6'-1"	5'-7"
30	Stress	5'-5"	5'-5"	6'-1"	65	Stress	3'-8"	3'-8"	4'-2"
	Deflection	5'-8"	7'-8"	7'-0"		Deflection	4'-5"	5'-11"	5'-5"
35	Stress	5'-0"	5'-0"	5'-8"	70	Stress	3'-7"	3'-7"	4'-0"
	Deflection	5'-5"	7'-3"	6'-8"		Deflection	4'-3"	5'-9"	5'-4"
40	Stress	4'-9"	4'-9"	5'-3"	75	Stress	3'-5"	3'-5"	3'-10"
	Deflection	5'-2"	6'-11"	6'-5"		Deflection	4'-2"	5'-8"	5'-2"
45	Stress	4'-5"	4'-5"	5'-0"	80	Stress	3'-4"	3'-4"	3'-9"
	Deflection	4'-11"	6'-8"	6'-2"		Deflection	4'-1"	5'-6"	5'-1"
50	Stress	4'-3"	4'-3"	4'-9"	85	Stress	3'-3"	3'-3"	3'-7"
	Deflection	4'-9"	6'-5"	5'-11"		Deflection	4'-0"	5'-5"	5'-0"



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Panel Type: Y-36
 Material/Thickness: AL/050
 Perforation: N/A
 Hole Pattern:
 Deflection Limit: L/180
 Ix: 0.23 in⁴/ft
 Sx: 0.303 in³/ft

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	9'-4"	9'-4"	10'-5"	55	Stress	5'-7"	5'-7"	6'-3"
	Deflection	7'-0"	9'-5"	8'-8"		Deflection	5'-0"	6'-9"	6'-2"
25	Stress	8'-4"	8'-4"	9'-4"	60	Stress	5'-4"	5'-4"	6'-0"
	Deflection	6'-6"	8'-9"	8'-0"		Deflection	4'-10"	6'-6"	6'-0"
30	Stress	7'-7"	7'-7"	8'-6"	65	Stress	5'-2"	5'-2"	5'-9"
	Deflection	6'-1"	8'-3"	7'-7"		Deflection	4'-9"	6'-4"	5'-10"
35	Stress	7'-0"	7'-0"	7'-10"	70	Stress	4'-12"	4'-12"	5'-7"
	Deflection	5'-10"	7'-10"	7'-2"		Deflection	4'-7"	6'-3"	5'-8"
40	Stress	6'-7"	6'-7"	7'-4"	75	Stress	4'-10"	4'-10"	5'-4"
	Deflection	5'-7"	7'-6"	6'-10"		Deflection	4'-6"	6'-1"	5'-7"
45	Stress	6'-2"	6'-2"	6'-11"	80	Stress	4'-8"	4'-8"	5'-2"
	Deflection	5'-4"	7'-2"	6'-7"		Deflection	4'-5"	5'-11"	5'-5"
50	Stress	5'-11"	5'-11"	6'-7"	85	Stress	4'-6"	4'-6"	5'-1"
	Deflection	5'-2"	6'-11"	6'-5"		Deflection	4'-4"	5'-10"	5'-4"

END OF REPORT



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