

KirbyRib II Wall / Roof Panel Specifications

PRODUCT NAME

KirbyRib II Panel for roof and wall applications.

MANUFACTURER

Kirby Building Systems
www.kirbybuildingsystems.com

PRODUCT DESCRIPTION

These wall and roof panels have 1 ¼” ribs on 12” centers for an even, shadowed appearance. They offer 36” width coverage and are reinforced between the ribs for added strength.

Basic Use: A roof and wall covering system for new or retrofit construction.

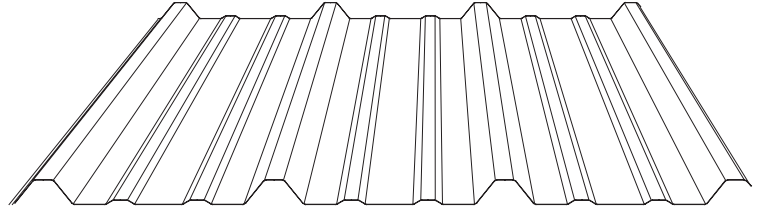
Materials: KirbyRib II panels are available in 26, and 24 gauge 80,000 psi, 22 gauge 50,000 psi, either G90/G60 zinc coated (galvanized) or AZ55 aluminum zinc alloy coated steel. Prepainted panels have Polyvinylidene Difluoride (PVDF) or Silicone-Polyester (SP) Finish..

KirbyRib II wall panels are attached to the secondary framing members by self-drilling carbon steel screws, No. 12 x 1 1/4” hex washer head, cadmium or zinc plated. Fasteners are applicable for use with fiber-glass blanket insulation up to 4” thick. KirbyRib II wall side laps are stitched with self-drilling carbon steel screws, No. 14 x 7/8” Type A or AB, cadmium or zinc plated. Fasteners are normally color coordinated with a premium coating system that protects against corrosion and weathering.

KirbyRib II roof panels are attached to secondary framing members by 12 x 1 1/4” self-drilling carbon steel screws with a molded zinc alloy or capped stainless steel cupped hex washer head. Roof fasteners shall be assembled with an EPDM washer.

KirbyRib II roof side laps are stitched with No. 14 x 7/8”, Type “AB” self drilling carbon steel screws with a molded zinc alloy or capped stainless steel cupped hex washer head. Roof fasteners shall be assembled with an EPDM washer.

KirbyRib II panel roof side laps, end laps, roof flashing laps, ridges and eaves are sealed with tape mastic.



TECHNICAL DATA

The KirbyRib II panel has received a Class 90 Wind Uplift rating by Underwriters Laboratories Inc. when tested in accordance with test procedure UL 580. This panel has also been tested in accordance with Air Infiltration ASTM E283 and Water Penetration ASTM E331. This panel has received a Class A fire rating when tested in accordance with test procedure ASTM E108.

INSTALLATION

Installation should be performed in accordance with Kirby Building Systems’ manuals and building erection drawings, and should be done by a qualified installer using proper tools and equipment. Systems are installed by Kirby Building Systems’ Authorized Builders.

WARRANTY

35 & 25 year paint finish warranties are available.

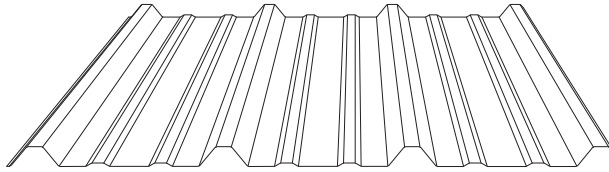
MAINTENANCE

Only normal routine maintenance is required over the life of the panels.

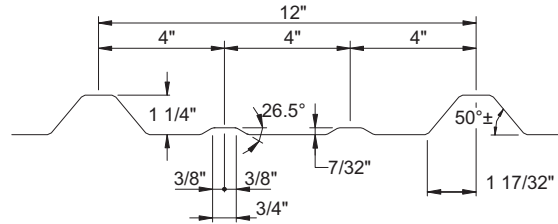
PRODUCT NOTES

Descriptions and specifications contained herein were in effect at the time this publication was approved for printing. In a continuing effort to refine and improve products, Kirby Building Systems reserves the right to discontinue products at any time or change specifications and/or designs without incurring obligation.

BETTER SOLUTIONS. BETTER BUILDINGS.



PANEL PROFILE



PARTIAL CROSS SECTION

Engineering Properties of Kirby Building Systems' KirbyRib II Panel

Designated Gage of Steel	Steel Yield KSI	Base Metal Thick. (In.)	Total Thick. (In.)	Panel Base Metal Weight (lbs. / ft. ²)	Top In Compression			Bottom In Compression			Fb KSI
					I _x (In. ⁴ / ft.)	S _x (In. ³ / ft.)	M _a K-IN.	I _x (In. ⁴ / ft.)	S _x (In. ³ / ft.)	M _a K-IN.	
26 Ga.	80	0.0177	0.0193	0.86	0.043	0.037	1.34	0.035	0.046	1.66	36
24 Ga.	80	0.0225	0.0241	1.09	0.060	0.054	1.95	0.047	0.059	2.14	36
22 Ga.	50	0.0300	0.0316	1.45	0.083	0.085	2.56	0.070	0.081	2.44	30

Gage of Panel	No. of Spans	Load Type	Maximum Total Uniform Load in PSF									
			Span Lengths, Ft.									
			3.00	3.50	4.00	4.50	5.00	6.00	7.00	7.50		
26 Ga.	1	POS	99 B	73 B	56 B	44 B	36 B	25 B	18 B	16 B		
		NEG	-123 B	-91 B	-69 B	-55 B	-44 B	-31 B	-23 B	-20 B		
	2	POS	75 C	64 C	56 C	50 C	43 B+S	30 B+S	22 B+S	19 B+S		
		NEG	-64 P	-55 P	-48 P	-42 P	-35 B+S	-24 B+S	-18 B+S	-16 B+S		
	3	POS	85 C	73 C	64 C	57 C	51 C	37 B+S	28 B+S	24 B+S		
		NEG	-72 P	-62 P	-54 P	-48 P	-43 P	-30 B+S	-22 B+S	-20 B+S		
	4	POS	82 C	70 C	61 C	55 C	49 C	35 B+S	26 B+S	23 B+S		
		NEG	-70 P	-60 P	-52 P	-46 P	-41 B+S	-28 B+S	-21 B+S	-18 B+S		
24 Ga.	1	POS	145 B	106 B	81 B	64 B	52 B	36 B	27 B	23 B		
		NEG	-158 B	-116 B	-89 B	-70 B	-57 B	-40 B	-29 B	-25 B		
	2	POS	117 C	100 C	87 B+S	69 B+S	56 B+S	39 B+S	29 B+S	25 B+S		
		NEG	-81 P	-63 P	-61 P	-54 P	-49 P	-36 B+S	-26 B+S	-23 B+S		
	3	POS	133 C	114 C	100 C	86 B+S	70 B+S	49 B+S	36 B+S	31 B+S		
		NEG	-92 P	-79 P	-69 P	-61 P	-55 P	-45 B+S	-33 B+S	-29 B+S		
	4	POS	128 C	110 C	96 C	80 B+S	65 B+S	46 B+S	34 B+S	29 B+S		
		NEG	-89 P	-76 P	-66 P	-59 P	-53 P	-42 B+S	-31 B+S	-27 B+S		
22 Ga.	1	POS	189 B	139 B	107 B	84 B	68 B	47 B	35 B	30 B		
		NEG	-180 B	-133 B	-102 B	-80 B	-65 B	-45 B	-33 B	-29 B		
	2	POS	166 C	130 B+S	100 B+S	79 B+S	64 B+S	45 B+S	33 B+S	29 B+S		
		NEG	-114 P	-98 P	-86 P	-76 P	-67 B+S	-47 B+S	-35 B+S	-30 B+S		
	3	POS	188 C	161 C	124 B+S	99 B+S	80 B+S	56 B+S	41 B+S	36 B+S		
		NEG	-130 P	-111 P	-98 P	-87 P	-78 P	-59 B+S	-43 B+S	-38 B+S		
	4	POS	181 C	151 B+S	116 B+S	92 B+S	75 B+S	52 B+S	38 B+S	34 B+S		
		NEG	-125 P	-107 P	-94 P	-83 P	-75 P	-55 B+S	-40 B+S	-35 B+S		

- The panels are checked for bending (B), shear (S), combined bending and shear (B+S), deflection (D), web crippling (C), and panel pullover (P). The controlling check is noted in the table. Deflection is limited to span/60, with the wind load permitted to be taken as 0.7 times the "component & cladding" loads as noted in footnote f of IBC Table 1604.3.
- Section Properties are calculated in accordance with the 2007 *North American Specification for the Design of Cold-Formed Steel Structural Members*.
- Minimum yield strength of 26 and 24 gage steel is 80,000 psi. Minimum yield strength of 22 gage steel is 50,000 psi.
- Steel panels are either aluminum-zinc alloy or G90/G60 coated. The base metal thickness is used in determining section properties.
- Positive load (POS) is applied inward toward the panel supports, and is applied to the outer surface of the full panel cross-section. Negative load (NEG) is in the opposite direction.