

# Kirby Reversed Roll Panel Specifications

## PRODUCT NAME

KRP Panels for wall applications.

## MANUFACTURER

Kirby Building Systems

[www.kirbybuildingsystems.com](http://www.kirbybuildingsystems.com)

## PRODUCT DESCRIPTION

These wall panels provide 36" width coverage with a decorative shadow line and semi-concealed fasteners. Rib depth is 1 1/4" on 12" centers.

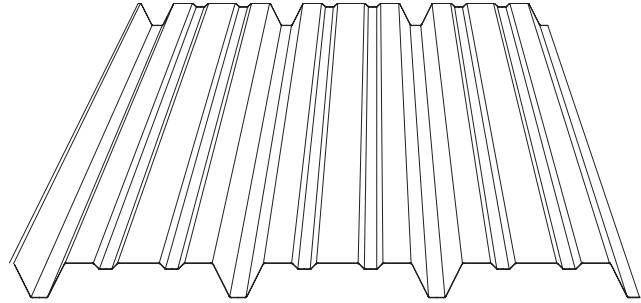
Basic Use: A wall panel system for new or retrofit construction.

Materials: KRP wall 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.

KRP 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 fiberglass blanket insulation up to 4" thick. KRP panel sidelaps are stitched with self-drilling carbon steel screws, No. 14 x 7/8" cadmium or zinc plated. Fasteners are normally color coordinated with a premium coating system that protects against corrosion and weathering.

## TECHNICAL DATA

The KRP panel has 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

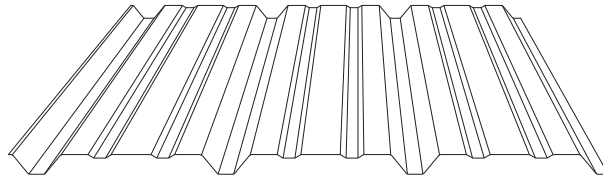
35 & 25 year paint finish warranties are available.

## MAINTENANCE

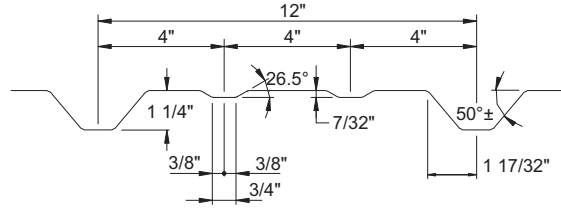
Only normal routine maintenance is required over the life of the panels.

## 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.



PANEL PROFILE



PARTIAL CROSS SECTION

Designated Gage of Steel	Steel Yield KSI	Base Metal Thick. (in.)	Total Thick. (in.)	Panel Base Metal Weight (lbs. / ft. <sup>2</sup> )	Engineering Properties of Kirby Building Systems' KRP Panel						
					Top In Compression			Bottom In Compression			Fb KSI
					Ix (in. <sup>4</sup> / ft.)	Sx (in. <sup>3</sup> / ft.)	Ma K-IN.	Ix (in. <sup>4</sup> / ft.)	Sx (in. <sup>3</sup> / ft.)	Ma K-IN.	
26 Ga.	80	0.0177	0.0193	0.86	0.035	0.046	1.66	0.043	0.037	1.34	36
24 Ga.	80	0.0225	0.0241	1.09	0.047	0.059	2.14	0.060	0.054	1.95	36
22 Ga.	50	0.0300	0.0316	1.45	0.070	0.081	2.44	0.083	0.085	2.56	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	122	C	91	B	69	B	55	B	44	B	31	B	23	B	20	
		NEG	-99	B	-73	B	-56	B	-44	B	-36	B	-25	B	-18	B	-16	
	2	POS	75	C	64	C	54	B+S	43	B+S	35	B+S	24	B+S	18	B+S	16	B+S
		NEG	-64	P	-55	P	-48	P	-42	P	-38	P	-30	B+S	-22	B+S	-19	B+S
	3	POS	85	C	73	C	64	C	53	B+S	44	B+S	30	B+S	22	B+S	20	B+S
		NEG	-72	P	-62	P	-54	P	-48	P	-43	P	-36	P	-28	B+S	-24	B+S
	4	POS	82	C	70	C	61	C	50	B+S	41	B+S	28	B+S	21	B+S	18	B+S
		NEG	-70	P	-60	P	-52	P	-46	P	-42	P	-35	P	-26	B+S	-23	B+S
24 Ga.	1	POS	158	B	116	B	89	B	70	B	57	B	40	B	29	B	25	B
		NEG	-145	B	-106	B	-81	B	-64	B	-52	B	-36	B	-27	B	-23	B
	2	POS	117	C	100	C	80	B+S	63	B+S	52	B+S	36	B+S	26	B+S	23	B+S
		NEG	-81	P	-69	P	-61	P	-54	P	-49	P	-39	B+S	-29	B+S	-25	B+S
	3	POS	133	C	114	C	99	B+S	79	B+S	64	B+S	45	B+S	33	B+S	29	B+S
		NEG	-92	P	-79	P	-69	P	-61	P	-55	P	-46	P	-36	B+S	-31	B+S
	4	POS	128	C	110	C	93	B+S	74	B+S	60	B+S	42	B+S	31	B+S	27	B+S
		NEG	-89	P	-76	P	-66	P	-59	P	-53	P	-44	P	-34	B+S	-29	B+S
22 Ga.	1	POS	180	B	133	B	102	B	80	B	65	B	45	B	33	B	28	B
		NEG	-189	B	-139	B	-107	B	-84	B	-68	B	-47	B	-35	B	-30	B
	2	POS	166	C	136	B+S	105	B+S	83	B+S	67	B+S	47	B+S	35	B+S	30	B+S
		NEG	-114	P	-98	P	-86	P	-76	P	-64	B+S	-45	B+S	-33	B+S	-29	B+S
	3	POS	188	C	161	C	130	B+S	103	B+S	84	B+S	59	B+S	43	B+S	38	B+S
		NEG	-130	P	-111	P	-98	P	-87	P	-78	P	-56	B+S	-41	B+S	-36	B+S
	4	POS	181	C	155	C	122	B+S	97	B+S	79	B+S	55	B+S	40	B+S	35	B+S
		NEG	-125	P	-107	P	-94	P	-83	P	-75	B+S	-52	B+S	-38	B+S	-34	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.