

MULTI RIB PANEL SPECIFICATIONS

1. PRODUCT NAME

American Multi-Rib panels for liner applications.

2. MANUFACTURER

AMERICAN BUILDINGS COMPANY

1150 State Docks Road
Eufaula, Alabama 36027
Phone: (334) 687-2032

3. PRODUCT DESCRIPTION

These panels have 15/16" ribs with major corrugations on 6" centers. They offer 36" width coverage.

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

Materials: Multi-Rib liner panels are available in 29, 26, 24 gage 80,000 psi or 22 gage 50,000 psi using G90 zinc-coated (galvanized) steel, aluminum-zinc alloy-coated (AZ50 or AZ55) steel or 26 gage perforated steel. Pre-painted panels have American Buildings Company's SmartKote (Kynar 500®) or Silicone Modified Polyester Finish.

Multi-Rib 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 normally color coordinated with a premium coating system that protects against corrosion and weathering. Multi-Rib sidelaps are stitched with self-drilling carbon steel screws, No. 14 x 3/4" cadmium or zinc plated.

4. TECHNICAL DATA

The Multi-Rib panel has received a Class 90 Wind Uplift rating by Underwriters Laboratories when tested in accordance with test procedure UL 580. This panel has received a Class A fire rating when tested in accordance with test procedure ASTM E108.

5. INSTALLATION

Installation should be performed in accordance with American Buildings Company's manuals and building erection drawings, and should be by a qualified installer using proper tools and equipment. Systems are installed by American Buildings Company Authorized Builders.

6. AVAILABILITY

For availability, contact:

AMERICAN BUILDINGS COMPANY

7. WARRANTY

Thirty-five year material warranties are available.

8. MAINTENANCE

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

9. TECHNICAL SERVICES

For information, contact:

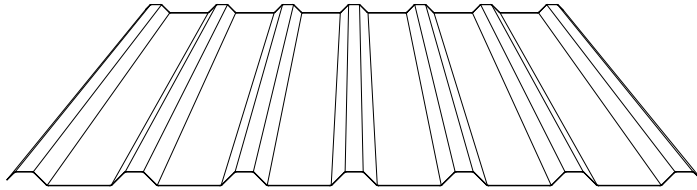
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10. PRODUCT NOTES

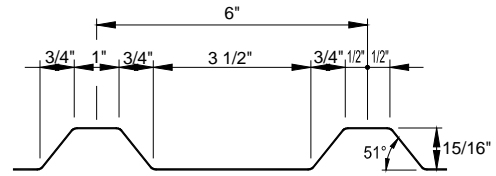
American Buildings Company reserves the right to revise all standard specifications and information. American Buildings Company regularly updates its published "Standard Specifications" on the American Buildings web site, www.americanbuildings.com, which supercede and replace any previously published standard specifications of American Buildings Company.

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MULTI RIB PANEL SPECIFICATIONS



PANEL PROFILE



PARTIAL CROSS SECTION

Engineering Properties of American Buildings Company Multi-Rib Panel (ASD)											
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
					lx (In. ⁴ / ft.)	Sx (In. ³ / ft.)	Ma K-IN. / ft.	lx (In. ⁴ / ft.)	Sx (In. ³ / ft.)	Ma K-IN. / ft.	
29 Ga.	80	0.0137	0.0153	0.66	0.023	0.030	1.08	0.016	0.028	1.00	36
26 Ga.	80	0.0177	0.0193	0.86	0.034	0.049	1.77	0.023	0.042	1.51	36
24 Ga.	80	0.0225	0.0241	1.09	0.045	0.067	2.41	0.032	0.059	2.13	36
22 Ga.	50	0.0300	0.0316	1.45	0.060	0.096	2.87	0.050	0.088	2.65	30

Gage of Panel	No. of Spans	Load Type	Maximum Total Uniform Load in PSF															
			Span Lengths, Ft.															
			1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00								
29 Ga.	1	POS	318	C	179	B	115	B	80	B	59	B	45	B	35	B	29	B
		NEG	-247	P	-166	B	-106	B	-74	B	-54	B	-42	B	-35	B	-27	B
	2	POS	179	C	135	C	103	B+S	72	B+S	53	B+S	41	B+S	33	B+S	26	B+S
		NEG	-99	P	-74	P	-59	P	-49	P	-42	P	-37	P	-33	P	-28	B+S
	3	POS	204	C	153	C	122	C	90	B+S	66	B+S	51	B+S	41	B+S	33	B+S
		NEG	-112	P	-84	P	-67	P	-56	P	-48	P	-42	P	-37	P	-34	P
	4	POS	196	C	147	C	118	C	84	B+S	62	B+S	48	B+S	38	B+S	31	B+S
		NEG	-108	P	-81	P	-65	P	-54	P	-46	P	-40	P	-36	P	-32	P
26 Ga.	1	POS	509	C	295	B	189	B	131	B	96	B	74	B	58	B	47	B
		NEG	-319	P	-239	P	-161	B	-112	B	-82	B	-63	B	-50	B	-40	B
	2	POS	292	C	219	C	157	B+S	110	B+S	81	B+S	62	B+S	49	B+S	40	B+S
		NEG	-127	P	-96	P	-76	P	-64	P	-55	P	-48	P	-42	P	-38	P
	3	POS	332	C	249	C	195	B+S	137	B+S	101	B+S	78	B+S	62	B+S	50	B+S
		NEG	-145	P	-109	P	-87	P	-72	P	-62	P	-54	P	-48	P	-43	P
	4	POS	320	C	240	C	182	B+S	128	B+S	94	B+S	73	B+S	58	B+S	47	B+S
		NEG	-139	P	-105	P	-84	P	-70	P	-60	P	-52	P	-46	P	-42	P
24 Ga.	1	POS	715	B	402	B	257	B	179	B	131	B	101	B	79	B	64	B
		NEG	-405	P	-304	P	-227	B	-158	B	-116	B	-89	B	-70	B	-57	B
	2	POS	460	C	342	B+S	222	B+S	155	B+S	114	B+S	88	B+S	70	B+S	56	B+S
		NEG	-162	P	-122	P	-97	P	-81	P	-69	P	-61	P	-54	P	-49	P
	3	POS	522	C	392	C	274	B+S	192	B+S	142	B+S	109	B+S	87	B+S	70	B+S
		NEG	-184	P	-138	P	-111	P	-92	P	-79	P	-69	P	-61	P	-55	P
	4	POS	503	C	377	C	257	B+S	180	B+S	133	B+S	102	B+S	81	B+S	66	B+S
		NEG	-177	P	-133	P	-106	P	-89	P	-76	P	-66	P	-59	P	-53	P
22 Ga.	1	POS	850	B	478	B	306	B	212	B	156	B	120	B	94	B	76	B
		NEG	-572	P	-429	P	-283	B	-196	B	-144	B	-111	B	-87	B	-71	B
	2	POS	655	C	423	B+S	275	B+S	192	B+S	142	B+S	109	B+S	87	B+S	70	B+S
		NEG	-229	P	-172	P	-137	P	-114	P	-98	P	-86	P	-76	P	-69	P
	3	POS	744	C	518	B+S	339	B+S	238	B+S	177	B+S	136	B+S	108	B+S	87	B+S
		NEG	-260	P	-195	P	-156	P	-130	P	-111	P	-98	P	-87	P	-78	P
	4	POS	716	C	487	B+S	318	B+S	223	B+S	165	B+S	127	B+S	101	B+S	82	B+S
		NEG	-250	P	-188	P	-150	P	-125	P	-107	P	-94	P	-83	P	-75	P

- 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, and includes the permitted wind load reduction factor of 0.7 times the "component and cladding" loads as noted in footnote f of IBC Table 1604.3.
- Section Properties are calculated in accordance with the 2012 *North American Specification for the Design of Cold-Formed Steel Structural Members*.
- Minimum yield strength of 29, 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 G-90 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.