

# 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 <sup>®</sup>) 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:

## AMERICAN BUILDINGS COMPANY

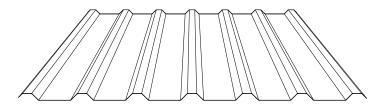
## **10. PRODUCT NOTES**

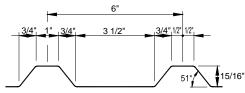
American Buildings Company reserves the right to revise all standard specifications and information. American Buildings Company regularly updates its published "Standard Specifications" on the American Buildings web site, <u>www.americanbuildings.com</u>, which supercede and replace any previously published 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											
Designated	Steel	Base	Total	Panel	Top In			Bottom In			
Gage	Yield	Metal	Thick.	Weight	Compression			Compression			Fb
of	KSI	Thick.	(ln.)	(lbs. / ft.2)	lx	Sx	Ма	lx	Sx	Ma	KSI
Steel		(ln.)			(In.4 / ft.)	(ln. <sup>3</sup> / ft.)	K-IN.	(In. <sup>4</sup> / ft.)	(In. <sup>3</sup> / ft.)	K-IN.	
29 Ga.	80	0.0137	0.0153	0.74	0.025	0.033	1.19	0.017	0.029	1.06	36
26 Ga.	80	0.0177	0.0193	0.94	0.034	0.049	1.77	0.023	0.042	1.51	36
24 Ga.	80	0.0225	0.0241	1.17	0.045	0.067	2.41	0.032	0.059	2.13	36
22 Ga.	50	0.0300	0.0316	1.53	0.060	0.096	2.87	0.050	0.088	2.65	30

Gage	No.	Load	Maximum Total Uniform Load in PSF							
of	of	Туре	Span Lengths, Ft.							
Panel	Spans		1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00
	1	POS	318	198	127	88	65	50	39	32
	'	NEG	-247	-176	-113	-78	-58	-44	-35	-28
	2	POS	179	135	108	77	57	44	35	28
29 Ga.	2	NEG	-99	-74	-59	-49	-42	-37	-33	-30
23 Od.	3	POS	204	153	122	95	70	54	43	35
	3	NEG	-112	-84	-67	-56	-48	-42	-37	-34
	4	POS	196	147	118	89	66	51	40	33
	+	NEG	-108	-81	-65	-54	-46	-40	-36	-32
	1	POS	509	295	189	131	96	74	58	47
	1	NEG	-319	-239	-161	-112	-82	-63	-50	-40
	2	POS	292	219	157	110	81	62	49	40
26 Ga.	2	NEG	-127	-96	-76	-64	-55	-48	-42	-38
20 Od.	3	POS	332	249	195	137	101	78	62	50
	5	NEG	-145	-109	-87	-72	-62	-54	-48	-43
	4	POS	320	240	182	128	94	73	58	47
	7	NEG	-139	-105	-84	-70	-60	-52	-46	-42
	1	POS	715	402	257	179	131	101	79	64
	1	NEG	-405	-304	-227	-158	-116	-89	-70	-57
	2	POS	460	342	222	155	114	88	70	56
24 Ga.	2	NEG	-162	-122	-97	-81	-69	-61	-54	-49
24 Ga.	3	POS	522	392	274	192	142	109	87	70
		NEG	-184	-138	-111	-92	-79	-69	-61	-55
	4	POS	503	377	257	180	133	102	81	66
	4	NEG	-177	-133	-106	-89	-76	-66	-59	-53
	1	POS	850	478	306	212	156	120	94	76
	I	NEG	-572	-429	-283	-196	-144	-111	-87	-71
	2	POS	655	423	275	192	142	109	87	70
22 Ga.	2	NEG	-229	-172	-137	-114	-98	-86	-76	-69
22 Ga.	3	POS	744	518	339	238	177	136	108	87
	3	NEG	-260	-195	-156	-130	-111	-98	-87	-78
	4	POS	716	391	254	223	165	127	101	82
	4	NEG	-250	-188	-150	-125	-107	-94	-83	-75

 The panels are checked for bending, shear, combined bending and shear, deflection, web crippling and panel pullover. 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.

2. Section Properties are calculated in accordance with the 2007 North American Specification for the Design of Cold-Formed Steel Structural Members.

3. 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.

4. Steel panels are either aluminum-zinc alloy or G-90 coated. The base metal thickness is used in determining section properties.

5. 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.