



LONG SPAN III PANEL SPECIFICATIONS

1. PRODUCT NAME

American Long Span III Panel for roof and wall applications.

2. MANUFACTURER

AMERICAN BUILDINGS COMPANY

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

3. 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. Minimum roof slope for Long Span III roof panels is ½ to 12.

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

Materials: Long Span III panels are available in 29, 26, 24 gage 80,000 psi or 22 gage 50,000 psi and either G90 zinc-coated (galvanized) steel or aluminum-zinc alloy-coated (AZ50 or AZ55) steel. Pre-painted panels have American Buildings Company's Premium 70 Plus (Kynar 500®) Finish. An embossed finish is available as an option. American Buildings Company Painted Long Life available in Reflective White only. Long Span III 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. Long Span III wall sidelaps 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.

Long Span III roof panels are attached to secondary framing members by the following:

A. Premium roof fasteners shall be No. 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. Premium roof fasteners shall be used on all warranted roofs and all pre-finished roofs.

B. Standard roof fasteners shall be No. 12 x 1 1/4" self-drilling carbon steel screws with an integral hex washer head. Roof fasteners shall be assembled with an EPDM washer. Standard roof fasteners shall have a corrosive resistant coating over zinc plating. Standard fasteners shall be used on unwarranted aluminum-zinc alloy-coated roofs only.

Fasteners for roof panel sidelaps and flashing connection shall be stitched by the following:

A. Premium roof fasteners shall be 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. Premium roof fasteners shall be used on all warranted roofs and all pre-finished roofs.

B. Standard roof fasteners shall be No. 14 x 7/8" self-drilling carbon steel screws with an integral hex washer head. Roof fasteners shall be assembled with an EPDM washer. Standard roof fasteners shall have a corrosive resistant coating over zinc

plating. Standard fasteners shall be used on unwarranted aluminum-zinc alloy-coated roofs only. Long Span III panel roof sidelaps, endlaps, roof flashing laps; ridge and eave are sealed with tape mastic, Sika Sika-Tape TC-95 or equal. The material is non-staining, non-corrosive, non-toxic and non-volatile. Composition is 100% solid ethylene propylene copolymer tape. Service temperature is -60°F to +250°F. Maximum insulation thickness allowed with these panels is 4" .

4. TECHNICAL DATA

The Long Span III panel has received a Class 90 Wind Uplift rating by Underwriters Laboratories when tested in accordance with test procedure UL 580. This panel has been Factory Mutual and Miami-Dade County approved and 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.

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

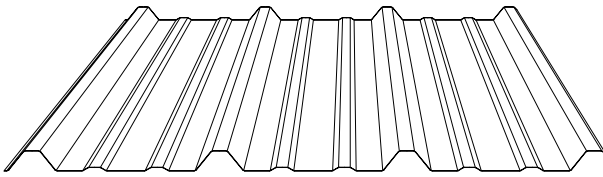
10. PRODUCT NOTES

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, www.americanbuildings.com, which supercede and replace any previously published standard specifications of American Buildings Company.

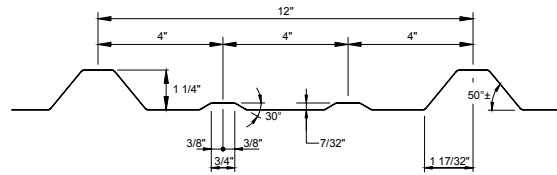
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LONG SPAN III PANEL SPECIFICATIONS



PANEL PROFILE



PARTIAL CROSS SECTION

Engineering Properties of American Buildings Company Long Span III Panel											
Designated Gage of Steel	Steel Yield KSI	Base Metal Thick. (In.)	Total Thick. (In.)	Panel Weight (lbs. / ft. ²)	Top In Compression			Bottom In Compression			Fb KSI
					Ix (In. ⁴ / ft.)	Sx (In. ³ / ft.)	Ma K-IN.	Ix (In. ⁴ / ft.)	Sx (In. ³ / ft.)	Ma K-IN.	
29 Ga.	80	0.0137	0.0153	0.75	0.030	0.025	0.90	0.027	0.036	1.30	36
26 Ga.	80	0.0177	0.0193	0.94	0.043	0.039	1.40	0.036	0.047	1.69	36
24 Ga.	80	0.0225	0.0241	1.17	0.060	0.054	1.94	0.048	0.060	2.16	36
22 Ga.	50	0.0300	0.0316	1.54	0.083	0.085	2.55	0.070	0.082	2.46	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	7.33
29 Ga.	1	POS	57	47	36	29	23	15	9	8
		NEG	-85	-64	-44	-31	-22	-13	-8	-7
	2	POS	54	46	40	36	32	23	17	16
		NEG	-49	-42	-35	-28	-23	-16	-12	-11
	3	POS	61	53	46	41	37	27	17	15
		NEG	-56	-48	-42	-35	-28	-20	-15	-13
	4	POS	59	51	44	39	35	26	18	16
		NEG	-54	-46	-40	-33	-27	-19	-14	-13
26 Ga.	1	POS	100	74	57	46	36	21	13	11
		NEG	-119	-88	-59	-41	-30	-17	-11	-10
	2	POS	87	75	66	54	44	31	23	21
		NEG	-64	-55	-48	-42	-37	-26	-19	-17
	3	POS	99	85	74	66	54	38	25	21
		NEG	-72	-62	-54	-48	-43	-32	-21	-18
	4	POS	96	82	72	62	51	36	26	23
		NEG	-70	-60	-52	-46	-42	-30	-22	-19
24 Ga.	1	POS	141	104	80	63	50	29	18	16
		NEG	-156	-115	-79	-55	-40	-23	-15	-13
	2	POS	136	114	88	70	57	40	29	27
		NEG	-81	-69	-61	-54	-49	-36	-26	-24
	3	POS	155	133	109	87	71	49	34	30
		NEG	-92	-79	-69	-61	-55	-44	-28	-24
	4	POS	149	128	102	81	66	46	34	31
		NEG	-89	-76	-66	-59	-53	-42	-29	-26
22 Ga.	1	POS	186	137	105	83	68	40	25	22
		NEG	-179	-132	-102	-80	-59	-34	-21	-19
	2	POS	178	131	101	80	65	45	33	30
		NEG	-114	-98	-86	-76	-67	-47	-35	-31
	3	POS	220	163	126	100	81	56	42	38
		NEG	-130	-111	-98	-87	-78	-58	-40	-35
	4	POS	206	153	117	93	76	53	39	35
		NEG	-125	-107	-94	-83	-75	-55	-40	-37

- The panels were checked for bending, shear, combined bending and shear, deflection, web crippling, and panel pullover. Deflection was limited to span/150
- Section Properties have been calculated in accordance with the 2001 *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 was 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.