

1. PRODUCT NAME

AMS Long Span III Panel for roof and wall applications.

2. MANUFACTURER

ARCHITECTURAL METAL SYSTEMS

1150 State Docks Road
Eufaula, Alabama 36027
Phone: (334) 688-2650
Fax: (334) 687-0298

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.

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

Materials: Long Span III panels are available in 29, 26, 24 and 22 gage 80,000 psi (22 gage, 50,000 psi), either G90 zinc-coated (galvanized) or AZ50 aluminum-zinc alloy-coated steel. Pre-painted panels have Architectural Metal System's Premium 70 Plus (Kynar 500®) Finish. An embossed finish is available as an option. Architectural Metal Systems 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. Fasteners are applicable for use with fiberglass blanket insulation up to 4" thick. 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.

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 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.

5. INSTALLATION

Installation should be performed in accordance with Architectural Metal System's manuals and roof erection drawings, and should be by a qualified installer using proper tools and equipment. Systems are installed by Architectural Metal Systems Preferred Roofing Contractors.

6. AVAILABILITY

For availability, contact:
Architectural Metal Systems
1150 State Docks Road
Eufaula, Alabama 36027
Phone: (334) 688-2650
Fax: (334) 687-0298

7. WARRANTY

Thirty-five year paint finish warranties are available.

8. MAINTENANCE

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

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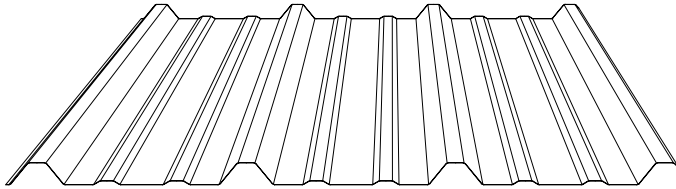
9. TECHNICAL SERVICES

For information, contact:
 Architectural Metal Systems
 1150 State Docks Road
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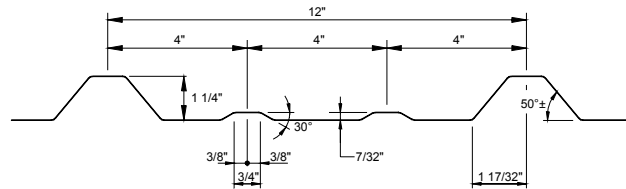
10. PRODUCT NOTES

Architectural Metal Systems reserves the right to revise all standard specifications and information.

Architectural Metal Systems regularly updates its published "Standard Specifications" on the AMS web site, www.ametalsystems.com, which supercede and replace any previously published standard specifications of Architectural Metal Systems.



PANEL PROFILE



PARTIAL CROSS SECTION

Engineering Properties of American's Long Span III Panel								
Designated Gage of Steel	Base Metal Thickness (Inches)	Total Thickness (Inches)	Panel Weight (lbs./ft. ²)	Top In Compression		Bottom In Compression		Fy/1.67 (ksi)
				Ix (In ⁴ /ft.)	Sx (In ³ /ft.)	Ix (In ⁴ /ft.)	Sx (In ³ /ft.)	
29 Gage	0.0137	0.0146	0.71	0.030	0.025	0.026	0.036	36
26 Gage	0.0177	0.0184	0.90	0.043	0.039	0.036	0.047	36
24 Gage	0.0225	0.0230	1.12	0.060	0.054	0.048	0.060	36
22 Gage	0.0300	0.0301	1.47	0.083	0.084	0.070	0.082	30
Designated Gage of Steel	Number of Spans	Maximum Total Uniform Load in PSF						
		L = 3'-0"	3'-4"	4'-0"	4'-6"	5'-0"	6'-0"	7'-0"
29 Gage Steel	1	67 / -95	55 / -75	38 / -43	30 / -30	24 / -22	15 / -13	9 / -8
	2	95 / -67	77 / -55	53 / -38	42 / -30	34 / -24	24 / -17	17 / -12
	3	119 / -84	96 / -68	67 / -47	53 / -37	43 / -30	27 / -21	17 / -15
	4	111 / -79	90 / -64	62 / -44	49 / -35	40 / -28	28 / -20	18 / -14
26 Gage Steel	1	105 / -124	85 / -101	59 / -58	47 / -41	36 / -30	21 / -17	13 / -11
	2	124 / -105	101 / -85	70 / -59	55 / -47	45 / -38	31 / -26	23 / -19
	3	156 / -131	126 / -106	88 / -74	69 / -58	56 / -47	39 / -33	25 / -21
	4	145 / -122	118 / -99	82 / -69	65 / -54	52 / -44	36 / -31	26 / -22
24 Gage Steel	1	145 / -160	118 / -130	82 / -78	65 / -55	50 / -40	29 / -23	18 / -15
	2	160 / -145	130 / -118	90 / -82	71 / -65	58 / -52	40 / -36	29 / -27
	3	200 / -181	162 / -147	113 / -102	89 / -81	72 / -65	50 / -44	34 / -28
	4	187 / -169	151 / -137	105 / -95	83 / -75	67 / -61	47 / -42	34 / -29
22 Gage Steel	1	188 / -182	152 / -147	106 / -102	83 / -81	68 / -59	40 / -34	25 / -21
	2	182 / -188	147 / -152	102 / -106	81 / -83	65 / -68	45 / -47	33 / -34
	3	227 / -235	184 / -190	128 / -132	101 / -104	82 / -84	57 / -59	42 / -40
	4	212 / -219	172 / -177	119 / -123	94 / -97	76 / -79	53 / -55	39 / -40

1. Section properties have been calculated in accordance with the *AISI Specification for the Design of Cold-Formed Steel Structural Members, 1996 Edition, including Supplement No. 1 (1999)*.
2. 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.
3. Steel panels are either aluminum-zinc alloy or G-90 coated. The base metal thickness shown in the minimum design thickness and was used in determining section properties.
4. Positive load is downward load applied to the top of the panel cross section as shown above. Negative load is opposite
5. The loads shown are limited by the more critical of Span/150 deflection or the allowable bending moment with no stress increase.