

1. PRODUCT NAME

AMS Seam Loc panel for roof applications.

2. MANUFACTURER

ARCHITECTURAL METAL SYSTEMS

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

3. PRODUCT DESCRIPTION

These architectural standing seam panels offer a flat profile with minor striations and are connected with a 1 3/4" high snapped seam and are available in 12", 16" and 18" width coverage. They are designed to be utilized over substrates but can also be used over open structural framing. A minimum slope for the Seam Loc panel is 3:12.

Basic Use: A roof covering system for new or retrofit construction.

Materials: Seam Loc panels are 24 and 22 gage 50,000 psi either G90 zinc-coated (galvanized) or AZ50 aluminum-zinc alloy-coated steel. Pre-painted panels have Architectural Metal Systems' Marquis Series Premium (Kynar 500®) Finish.

Panel clips for the Seam Loc panels are a nominal 1 3/4" in height and 3 3/4" in width (UL 90) and 1 3/4" in height and 2" in width (Std.) die formed 18 gage zinc-coated (galvanized) steel.

Seam Loc roof panel sidelaps have factory applied mastic, SikaLastomer-511 or equal. Its composition is 85% solids by weight. Service temperature range is -60°F to + 220°F.

Roof flashing laps, ridges, and eaves 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 + 212° F.

Caulk: Eaves and ridge are sealed with non-skinning butyl caulk, SikaLastomer-511 or equal. Its composition is 85% solids by weight. Service temperature range is -60°F to + 220°F.

All gutter and downspout joints, and roof accessories are sealed with polyurethane caulk, Sika SikaFlex 219LM or equal. It meets or exceeds Federal specification TT-S-00230C, Type II, Class A.

All fasteners for panel to secondary framing and panel to trim will be one of the following EPDM washer head screws.

A. Premium roof fasteners shall be No. 14 x 1" self-drilling carbon steel screws with a molded zinc alloy or capped stainless steel cupped hex washer head. Premium roof fasteners will be on all warranted roofs and all pre-finished roofs.

B. Standard roof fasteners shall be No. 14 x 1" self-drilling carbon steel screws with an integral hex washer head. Standard roof fasteners shall have a corrosive resistant coating over zinc plating. Standard roof fasteners shall be on unwarranted aluminum-zinc alloy-coated roofs only.

Seam Loc panel clips are attached to the purlins with self-drilling No. 10 x 1" Phillips Pancake Head, cadmium or zinc plated.

Seam Loc panel clips are attached to wood decking with No. 10 x

1" Type A #2 Phillips Pancake Head, cadmium or zinc plated.

4. TECHNICAL DATA

The Seam Loc panel has received a Class 90 Wind Uplift rating by Underwriters Laboratories when tested in accordance with test procedure UL 580. The Seam Loc panel has been tested in accordance with wind uplift ASTM E1592 and CEGS 07416. This panel has also been tested in accordance with Air Infiltration, ASTM E1680 and Water Penetration, ASTM E1646. This panel has received a Class A fire rating when tested in accordance with test procedure ASTM E108.

5. INSTALLATION

Panels are joined at the sidelap with an interlocking seam. Sidelap sealer is factory applied. Roof systems are installed by Architectural Metal Systems' Preferred Roofing Contractors. Installation may be incorporated with a light gage structural system.

6. AVAILABILITY

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

7. WARRANTY

Thirty-five year paint finish warranties are available.

8. MAINTENANCE

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

9. TECHNICAL SERVICES

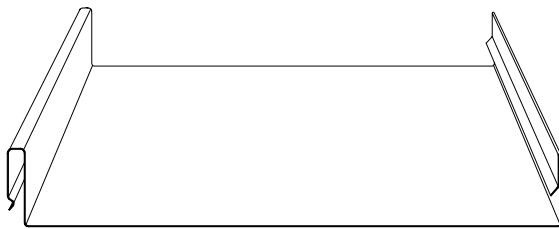
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10. PRODUCT NOTES

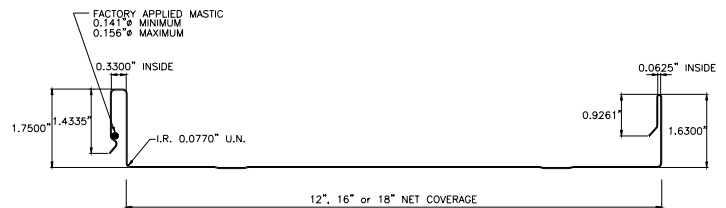
A certain amount of waviness called "oilcanning" may exist in this panel. Minor waviness of the panel is not sufficient cause for rejection, because oilcanning does not affect the structural integrity of the panel.

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.

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PANEL PROFILE



CROSS SECTION

Designated Gage of Steel	Panel Width (Inches)	Base Metal Thickness (Inches)	Total Thickness (Inches)	Panel Weight (lbs./ft. ²)	Top		Bottom		Fy/1.67 (ksi)
					In Compression		In Compression		
					Ix (In ⁴ /ft.)	Sx (In ³ /ft.)	Ix (In ⁴ /ft.)	Sx (In ³ /ft.)	
24 Gage	18	0.0225	0.0230	1.25	0.086	0.055	0.039	0.038	30
	16			1.29	0.095	0.062	0.044	0.043	
	12			1.41	0.118	0.083	0.058	0.057	
22 Gage	18	0.0300	0.0301	1.64	0.112	0.075	0.057	0.053	30
	16			1.69	0.123	0.084	0.065	0.060	
	12			1.84	0.154	0.109	0.086	0.079	
Designated Gage of Steel	Panel Width (Inches)	Number of Spans	Maximum Total Uniform Load in PSF						
			L = 2'-6"	L = 3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	
24 Gage	18	1	175	122	89	69	54	44	
		2	121	84	62	47	37	30	
		3	152	105	77	59	47	38	
		4	142	98	72	55	44	35	
	16	1	198	138	101	77	61	50	
		2	136	95	70	53	42	34	
		3	170	118	87	67	53	43	
		4	159	110	81	62	49	40	
	12	1	264	184	135	103	82	66	
		2	181	126	93	71	56	45	
		3	227	158	116	89	70	57	
		4	212	147	108	83	65	53	
22 Gage	18	1	241	168	123	94	74	60	
		2	169	118	86	66	52	42	
		3	212	147	108	83	65	53	
		4	198	137	101	77	61	49	
	16	1	269	187	137	105	83	67	
		2	190	132	97	74	59	48	
		3	238	165	121	93	73	60	
		4	222	154	113	87	69	56	
	12	1	350	243	178	137	108	87	
		2	253	176	129	99	78	63	
		3	317	220	162	124	98	79	
		4	296	205	151	116	91	74	

1. Section properties have been calculated in accordance with the *AISI specifications for the Design of Cold-Formed Steel Structural Members, 1996 Edition, including Supplement No. 1 (1999)*.

2. Minimum yield strength of steel is 50,000 psi.

3. Steel panels are either aluminum-zinc alloy or G-90 coated. The base metal thickness shown is 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.

S.L.C.-Rev. 07/02, Architectural Metal Systems

5. The loads shown are limited by the more critical of Span/150 deflection or the allowable bending moment with no stress increase.