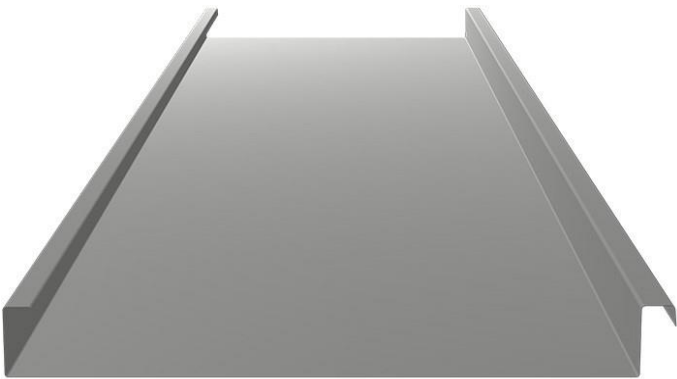


Valley Steel Buildings Group Loc Seam Standing Seam Roof Panel



The Loc Seam Standing Seam Roof System is a vertical rib, flat profile, raised seam metal roof designed to float to accommodate thermal expansion and contraction. Available in both 90 degree and 360 degree mechanically rolled seams, it has been extensively tested to ensure the highest level of performance for weathertightness and structural integrity.



Panel Credentials

- ASTM E108 Test Methods for Fire Tests of Roof Coverings – Class A
- ASTM E1592 Test Method for Wind Uplift Performance of Sheet Metal Roofing Systems
- ASTM E1646 Test Method for Water Penetration of Exterior Roof Systems
- ASTM E1680 Test Method for Rate of Air Leakage Through Exterior Roof Systems
- ASTM E2140 Test Method for Water Penetration of Metal Roof Panel Systems by Static Water Head
- US Army Corps of Engineers – Approved per CEGS 07416 Test Specification
- FM 4471 Class 1 Approval
- UL 580 Class 90 Approval (Const. No’s 331, 332 and 336)
- State of Florida Product Approval
- Miami-Dade County Approved
- SREF (SSTD-97) Impact Testing

Panel Specifications

							TOP IN COMPRESSION	BOTTOM IN COMPRESSION	
Gage	Thickness (in.)	Yield (ksi)	Tensile (ksi)	Panel Wt. (psf)	I _x (Gross) (in ⁴)	S _x (eff.) (in ³)	M _a (kip-in)	S _x (eff.) (in ³)	M _a (kip-in)

90 seam	0.0225	50	65	1.26	0.1673	0.0986	2.9535	0.0806	1.5285	0.1470	0.0783	2.3453
360 seam	0.0225	50	65	1.26	0.0555	1.3868						

Panel Capacity (psf)

SPAN (ft.)	<u>90 SEAM - 24 GAGE</u>		<u>360 SEAM - 24 GAGE</u>	
	Gravity	Uplift	Gravity	Uplift
2.0	290	75	275	115
2.5	192	68	179	97
3.0	135	63	126	87
3.5	101	59	93	77
4.0	78	54	71	68
4.5	62	50	56	58
5.0	50	45	46	48
5.27	45	43	41	42

NOTES

1. Section properties were calculated in accordance with AISI S100/CSA S136, 2016 Edition.
2. Panels were checked for bending, shear, combined bending and shear, and deflection.
3. Deflection is limited to Span/60.
4. Uplift loads shown are achieved using the standard panel clip and either the Loc Seam 90 or Loc Seam 360 degree seaming profile noted.
5. Uplift loads shown do not include increases in wind Zones 2 and 3 as allowed by AISI S100.
6. Thermal load has not been considered.
7. Capacities are based on a 3-span condition with equal length spans.
8. "Gravity" load is applied inward on the outer surface towards supports.
9. "Uplift" load is applied outward on the inner surface away from panel supports.