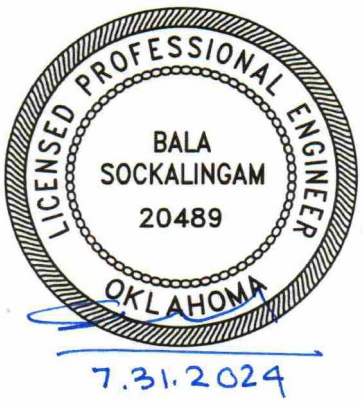
SECTION PROPERTIES - PANEL-LOC PLUS®

Central States Manufacturing, Inc. 36" wide Panel-Loc Plus Panel											
Section Properties & Allowables											
Gauge	Thickness in.	Weight psf	Yield Stress ksi	Allowable Shear V_a kips/ft	Moment of Inertia I_x in^4/ft	Top in Compression (Positive Bending)			Bottom in Compression (Negative Bending)		
						I_{xx} in^4/ft	S_{xx} in^3/ft	M_a in.kips/ft	I_{xx} in^4/ft	S_{xx} in^3/ft	M_a in.kips/ft
26	0.0185	0.866	80	0.66	0.0133	0.0133	0.0221	0.793	0.0083	0.0189	0.678
29	0.0150	0.704	80	0.54	0.0109	0.0110	0.0181	0.651	0.0063	0.0152	0.547

Notes on Section Properties:

1. Section properties and allowables are calculated in accordance with North American Specification for the Design of Cold-Formed Steel Structural Members, 2016 Edition (Reaffirmed 2020), with Supplement 2, 2020 Edition.
2. I_x is full moment of inertia, I_{xe} +/- & S_{xe} +/- are effective moment of inertia and section modulus, M_a is allowable bending moment and V_a is allowable shear. All values are for one foot of panel width.
3. Minimum deliverable bare steel thickness should not be less than 0.95 of design thickness.



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Central States Manufacturing, Inc. 36" wide Panel-Loc Plus Panel													
Ga.	**Span Condition**		**Allowable Live or Inward Loads (lb/ft^2)**										
			Span (ft)										
			1.5	1.75	2	2.25	2.5	2.75	3	3.5	4	4.5	5
26	SS	Stress	234.9	172.6	132.1	104.4	84.6	69.9	58.7	43.1	33.0	26.1	21.1
80 ksi		L/180	343.5	216.3	144.9	101.8	74.2	55.7	42.9	27.0	18.1	12.7	9.3
	DS	Stress	193.1	143.3	110.5	87.7	71.3	59.0	49.7	36.6	28.1	22.2	18.0
		L/180	826.7	520.6	348.7	244.9	178.6	134.2	103.3	65.1	43.6	30.6	22.3
	TS	Stress	222.9	165.9	128.1	101.8	82.8	68.7	57.9	42.7	32.7	25.9	21.0
		L/180	648.1	408.2	273.4	192.0	140.0	105.2	81.0	51.0	34.2	24.0	17.5
29	SS	Stress	192.9	141.7	108.5	85.7	69.4	57.4	48.2	35.4	27.1	21.4	17.4
80 ksi		L/180	282.7	178.0	119.3	83.8	61.1	45.9	35.3	22.3	14.9	10.5	7.6
	DS	Stress	156.1	115.8	89.3	70.8	57.6	47.7	40.1	29.6	22.7	17.9	14.5
		L/180	680.4	428.5	287.1	201.6	147.0	110.4	85.1	53.6	35.9	25.2	18.4
	TS	Stress	180.3	134.1	103.5	82.3	66.9	55.5	46.7	34.4	26.4	20.9	17.0
		L/180	533.5	336.0	225.1	158.1	115.2	86.6	66.7	42.0	28.1	19.8	14.4
Ga.	**Span Condition**		**Allowable Uplift or Outward Loads (lb/ft^2)**										
			Span (ft)										
			1.5	1.75	2	2.25	2.5	2.75	3	3.5	4	4.5	5
26	SS	Stress	200.9	147.6	113.0	89.3	72.3	59.8	50.2	36.9	28.3	22.3	18.1
80 ksi		L/180	343.5	216.3	144.9	101.8	74.2	55.7	42.9	27.0	18.1	12.7	9.3
	DS	Stress	222.6	165.8	128.1	101.9	82.9	68.7	57.9	42.7	32.8	25.9	21.0
		L/180	826.7	520.6	348.7	244.9	178.6	134.2	103.3	65.1	43.6	30.6	22.3
	TS	Stress	256.2	191.4	148.3	118.1	96.2	79.9	67.3	49.7	38.2	30.2	24.5
		L/180	648.1	408.2	273.4	192.0	140.0	105.2	81.0	51.0	34.2	24.0	17.5
29	SS	Stress	162.2	119.1	91.2	72.1	58.4	48.2	40.5	29.8	22.8	18.0	14.6
80 ksi		L/180	282.7	178.0	119.3	83.8	61.1	45.9	35.3	22.3	14.9	10.5	7.6
	DS	Stress	182.9	136.2	105.2	83.7	68.1	56.5	47.6	35.1	26.9	21.3	17.3
		L/180	680.4	428.5	287.1	201.6	147.0	110.4	85.1	53.6	35.9	25.2	18.4
	TS	Stress	210.5	157.3	121.8	97.0	79.0	65.6	55.3	40.8	31.3	24.8	20.1
		L/180	533.5	336.0	225.1	158.1	115.2	86.6	66.7	42.0	28.1	19.8	14.4

Notes on Load Table:

* Allowable load based on stress is the smallest load due to bending, shear and combined bending and shear.
* Allowable load based on deflection limit cannot exceed allowable load based on stress.
* These allowable loads are for panel strength and does not address web crippling, fasteners, support material or load testing. Frames, purlins, fasteners and all connections must be designed to resist all loads imposed on the panel.
* Allowable uplift loads based on stress have not been increased by 33.33 % for wind uplift.
* Allowable loads for deflection are based on deflection limitation of span/180.
* For roof panels, self weight of the panel has to be deducted from the allowable inward load to arrive at the actual 'live load' carrying capacity of the panel.
* SS = Simple span, DS = Double Span and TS = Three or more spans

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