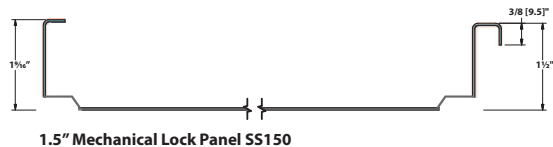


FLATIRON STEEL

MECHANICAL LOCK PANEL

MATERIAL SPECIFICATIONS



LOAD TABLES

Load = Positive Load
DEFp = Positive Deflect

Refer to Trim Pamphlet for Material Availability

DEFP = Positive Deflect
Width : 14" Panels
Alloy : 50 KSI Galvalume
Thickness : 24 GA

Allowable Uniform Live Load (PSF) Span Length (Feet)							
Span Type	Load Type	2.00	2.50	3.00	3.50	4.00	4.50
Simple & Double Span	LOAD	170.8	132.6	120.1	103.7	90.4	78.7
	DEFP	--	1070.5	622.3	391.1	262.8	184.5
Triple Span	LOAD	235.5	188.0	156.5	130.5	100.5	79.0
	DEFP	--	1714.4	966.1	626.3	420.0	295.5
Span Type	Load Type	5.00	5.50	6.00	6.50	7.00	7.50
Simple & Double Span	LOAD	67.8	63.5	53.5	44.7	38.4	33.8
	DEFP	134.2	101.0	77.8	61.1	48.9	39.8
Triple Span	LOAD	64.4	51.8	44.0	40.4	34.7	29.7
	DEFP	214.9	161.8	124.5	97.8	78.3	63.7

1. Allowable load per deflection based on L/180
2. Formula's used for flexure & deflection are as follows;

Simple & double span,
MP = $0.125wl^2/EI$, & $\Delta = 0.013wl^4/EI$

Triple span,
MP = $0.08wl^2/EI$, & $\Delta = 0.069wl^4/EI$

3. Allowable uniform loads are determined per the following;

- Local & overall buckling - AISI C3.1.2
- Allowable shear stress (Fv) - AISI C3.2
- Combined bending & shear - AISI C3.3
- Combined bending & web crippling - AISI C3.5

4. Allowable loads may be increased 33% for wind loads.

5. Min. panel support bearing length = 3 inches.

6. Allowance has been made for panel Dead Weight.

7. For all loads, use LOWEST value between Load & Deflection.

Load Table Designations,

- (p) Positive bending
- (n) Negative bending

Available Widths:

1.5" Mechanical Lock: 12", 16", 20"

2" Mechanical Lock: 14.1875" & 18.1875"

Available Gauges: 22, 24, & 26

Weight: 1.25lbs/SqFt (22), 1.00lbs/SqFt (24), .75lbs/SqFt (26)

Substrate: AZ-50, Grade D, 50,000ksi

Available Materials: Painted, Galvalume, Bonderized®, Core-Ten™, Cold Roll, 16 & 20 oz Copper

Paint Systems: Durapon70™ PVDF, ULTRA CLAD™ Kynar500®/Hylar5000® Valspar Fluropon®

Warranties: Durapon70™ PVDF - 35 year
ULTRA-CLAD™ - 35 year
Zincalume® AZ50 - 20 year
Valspar™ PVDF - 35 year

Production Options: Either factory made to length with protective film to ensure damage free transport or rolled to length on site*

****On site production is subject to order minimums****

APPLICATION DETAILS:

1.5" Mechanical Lock Panel

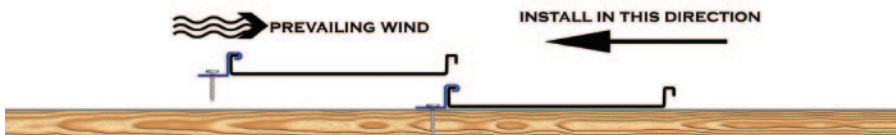
Installation: Can be installed on solid wood decking

Minimum Slope: 2:12 (Hot melt required below 3:12)

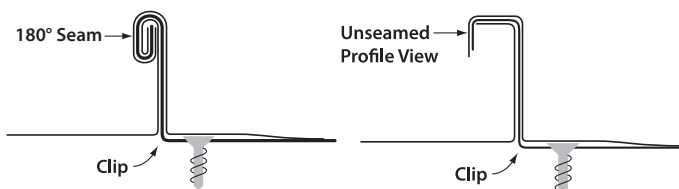
2" Mechanical Lock Panel

Installation: Can be installed over open frame steel purlins, steel decking, steel decking with polyiso board, or solid wood decking

Minimum Slope: 1/2":12 (Hot melt required below 3:12)



***Clip Spacing (solid deck) 2' on center**



- UL 580 Wind Uplift (Class 90)
- UL 2218 Class 4 Hail Impact
- UL 790 Class A Fire Rating

- ASTM E1680
- ASTM E1646
- ASTM E1592

Please Note: It is the responsibility of the builder to ensure that they are compliant with current building codes.



****Flatiron Steel is neither partially or solely responsible for improper installation or defects as a result of installation****

****Oil Canning is not a reason for rejection of panels****

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