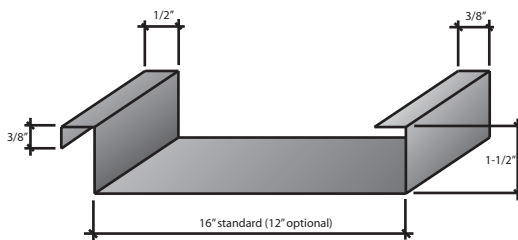




# TECHNICAL DATA SHEET

# ML150

MECHANICAL LOCK  
1-1/2" Tall Seam  
24 Gauge



## SECTION PROPERTIES

Gauge	Thickness (inches)	Weight (psf)	Yield Stress (ksi)	Top in Compression (Positive Bending)			Bottom in Compression (Negative Bending)		
				I in / ft.	I in / ft.	I in / ft.	I in / ft.	I in / ft.	I in / ft.
24	0.0225	1.21	50.0	0.0599	0.0446	1.3340	0.0297	0.0351	1.0480

### Notes on Section Properties:

1. I +/- is for deflection determination, S +/- is for bending determination, M is allowable bending moment and V is allowable shear
2. All values are for one foot panel width
3. Minimum deliverable bare steel thickness should not be less than 0.95 of design thickness

## LOAD TABLE

Span Type	Load Type	Span in Feet								
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0
Single	Live Load	537.8	358.5	222.3	142.3	98.8	72.6	55.6	55.6	49.2
	L/240 Deflection	537.8	358.5	268.9	215.1	145.4	91.6	61.4	61.4	51.2
2-Span	Live Load	398.3	265.5	174.7	111.8	77.6	57.0	43.7	43.7	38.7
	L/240 Deflection	398.3	265.5	199.1	159.3	132.8	113.8	99.6	99.6	93.7
3-Span	Live Load	452.6	301.7	218.3	139.7	97.0	71.3	54.6	54.6	48.4
	L/240 Deflection	452.6	301.7	226.3	181.0	150.9	129.3	113.1	113.1	96.5
4-Span	Live Load	435.6	290.4	203.9	130.5	90.6	66.6	51.0	51.0	45.1
	L/240 Deflection	435.6	290.4	217.8	174.2	145.2	124.4	108.9	108.9	102.5

### Notes on Load Table:

1. Section properties and allowable loads were computed in accordance with the 2001 edition of the North American Specification For Design of Cold-Formed Steel Structural Members
2. Section properties are for one foot panel width
3. Allowable loads are based on uniform span lengths and  $F_y = 50$  ksi
4. The weight of the panel has not been deducted from the allowable loads

## TESTING - For various ML150 panel widths, gauges and substrates

Wind Uplift per ASTM E-1592	Air Infiltration per ASTM 283	Impact Resistance per Dade
Wind Uplift Class 90 per U.L. 580	Water Penetration per ASTM 331	Hail Resistance per U.L. - Class 4
Wind Uplift per Dade - 80/140 MPH	Water Penetration per Dade	Florida Product Approval

Union Corrugating provides ongoing testing to meet project needs. Contact Union for the most current data. The Engineering data contained herein is for the expressed use of customers and design professionals. It is recommended that the design professional use the most current version of the North American Specification for the Design of Cold-Formed Steel Structural Members published by the American Iron and Steel Institute to facilitate design. This Specification contains the design criteria for cold-formed steel components. The designer should also use and reference the most current building code applicable to the project jobsite in order to determine environmental loads. If further information or guidance regarding cold-formed design practices is desired, please contact Union Corrugating.

All information contained herein is subject to updates and may be changed without notice.