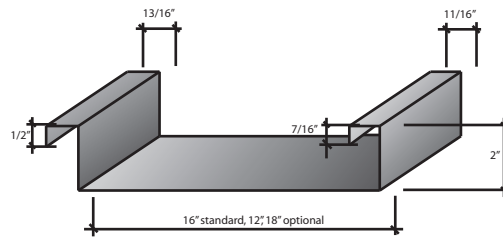




# TECHNICAL DATA SHEET

**ML200**  
MECHANICAL LOCK  
2" Tall Seam  
24 Gauge



## SECTION PROPERTIES per AISI 2007 Edition

Gauge	Thickness (inches)	Weight (psf)	Yield Stress (ksi)	Allowable Shear (kips/ft)	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	1.267	50.0	0.79	0.1421	0.0846	2.533	0.0677	0.0608	1.822

### 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

## SPAN TABLE per ASTM E-1592-95

Purlin Spacing	Seam	Ultimate Load (psf)	Design Load (psf)
5'-0" o.c.	Double Lock (180°)	109.2	54.6
5'-0" o.c.	Single Lock (90°)	55.6	27.8
2'-0" o.c.	Single Lock (90°)	72.6	36.3

### Notes :

1. The design load is calculated by dividing the ultimate load by the factor of safety of 2
2. The design loads have not been increased by 33% for wind load.

## AIR INFILTRATION per ASTM1680-95 (2003)

(supercedes ASTM E-283)

Static Pressure Difference (psf)	Total Air Leakage	Air Infiltration Rate (cfm/ft)
1.57	0.0102	0.0001
6.24	0.0299	0.0006

### Notes :

1. The actual flow is calculated using the regression equation shown on the flowmeter calibration chart
2. Total Air Leakage Q = Q x (1.326 x B / (0.075 x (T + 460)))

## WATER PENETRATION per ASTM1680-95 (2003)

(supercedes ASTM E-331)

Static Pressure Difference (psf)	Rate (gal/hr/ft)	Test Duration (minutes)	Water Penetration
12.0	5	15	No Water Leakage

## U.L. LISTED CONSTRUCTION NUMBERS (Class 90) per U.L. 580

#90, #180, #176, #238, #238A
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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.