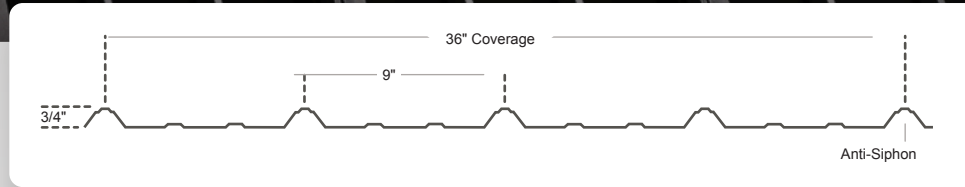


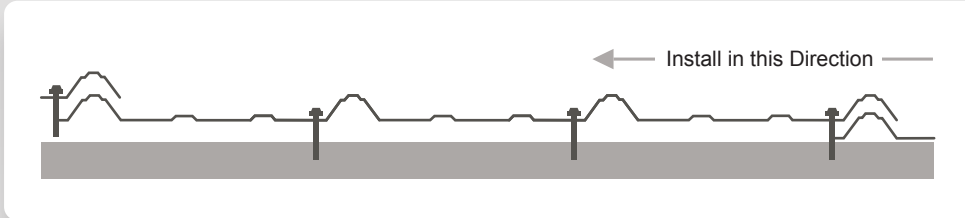
Tuff Rib

MATERIAL SPECIFICATIONS

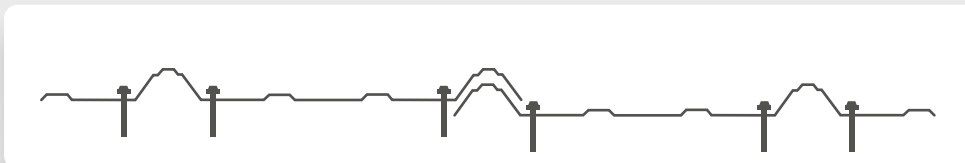
ROOF & WALL PANEL



SCREW PATTERN



EAVES & END LAPS



LOAD TABLES

Refer to Trim Pamphlet for Material Availability

29 GAUGE		SUPPORT SPACING						
SPAN TYPE	LOAD TYPE	2'	2.5'	3'	3.5'	4'	4.5'	5'
1-span	NEGATIVE WIND LOAD	76.55	48.99	34.02	25.00	19.14	15.12	12.25
	LIVE LOAD/DEFLECTION - L/60	99.36	63.59	44.16	32.45	24.84	19.63	15.90
	LIVE LOAD/DEFLECTION - L/180	86.19	44.13	25.54	16.08	10.77	7.57	5.52
2-span	LIVE LOAD/DEFLECTION - L/240	64.64	33.10	19.15	12.06	8.08	5.67	4.14
	NEGATIVE WIND LOAD	93.95	61.31	43.04	31.84	24.48	19.40	15.75
	LIVE LOAD/DEFLECTION - L/60	73.99	47.92	33.50	24.71	18.97	15.02	12.18
3-span	LIVE LOAD/DEFLECTION - L/180	73.99	47.92	33.50	24.71	18.97	15.02	12.18
	LIVE LOAD/DEFLECTION - L/240	73.99	47.92	33.50	24.71	18.97	14.32	10.44
	NEGATIVE WIND LOAD	114.79	75.48	53.16	39.06	29.90	23.63	19.14
4-span	LIVE LOAD/DEFLECTION - L/60	86.59	59.35	41.60	30.74	23.62	18.71	15.19
	LIVE LOAD/DEFLECTION - L/180	86.59	59.35	41.60	30.74	21.00	14.75	10.75
	LIVE LOAD/DEFLECTION - L/240	86.59	59.35	37.34	23.51	15.75	11.06	8.07
	NEGATIVE WIND LOAD	107.99	70.82	49.86	36.95	28.44	22.56	18.33
	LIVE LOAD/DEFLECTION - L/60	83.35	55.57	38.92	28.74	22.08	17.49	14.19
	LIVE LOAD/DEFLECTION - L/180	83.35	55.57	38.92	28.74	22.08	15.73	11.47
	LIVE LOAD/DEFLECTION - L/240	83.35	55.57	38.92	25.07	16.80	11.80	8.60

The Engineering data contained herein is for the expressed use of customers and design professionals. Along with this data, it is recommended that the design professional have a copy of 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. The Specification contains the design criteria for cold formed steel components.

Along with the Specification, the designer should 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 the manufacturer.

Available Gauges: 29ga

Weight: 1.98lbs/LnFt (29ga)

Substrate: G-90, Grade 80

Available Materials: Painted & Galvalume

Paint Systems: Weather XL

Warranties: Weather XL

Minimum Slope: 3:12

Testing:

UL 580 Wind Uplift (Class 90)

UL 2218 Class 4 Hail Impact

UL 790 Class A Fire Rating

APPLICATION DETAILS

Fastener Guide:

#10 Woodfast screws are designed for use with dimensional lumber

#14 Wafer screws are designed for use with plywood sheeting, OSB, and wafer wood (7/16" minimum thickness)

#12 Tek Screws are designed to be used with structural steel up to 3/16" in thickness

Fastener Application: Screws are to be applied next to every rib and then up the panel, no more than 2'0". On low slope roofs, Mastic Tape must be applied between the panel side laps with Stitch Screws installed every 1'0" up the panel. **At the eave or end laps, a double screw pattern should be used with screws applied to both sides of the rib**

Please Note: It is the responsibility of the builder to ensure that purlins are adequately spaced to meet specific engineering requirements.

Notes:

- Strength Calculations based on the 2012 AISI Standard North American Specification for the Design of Cold-formed Steel Structural Members.
- Allowable loads are applicable for uniform loading and spans without overhangs.
- LIVE LOAD/DEFLECTION load capacities are for those loads that push the panel against its support. The applicable limit states are flexure, shear, combined shear and flexure, web crippling at end and interior supports, and a deflection limit of L/180 under strength-level loads.
- NEGATIVE WIND LOAD capacities are for those loads that pull the panel away from its supports. The applicable limit states are flexure, shear, combined shear and flexure, and a deflection limit of L/60 under 10-year wind loading.
- Panel pullover and Screw pullout capacity must be checked separately using the screws employed for each particular application when utilizing this load chart.
- Effective yield strength has been determined in accordance with section A2.3.2 of the 2012 NAS specification.
- The use of any accessories other than those provided by the manufacturer may damage panels, void all warranties and will void all engineering data.
- This material is subject to change without notice please contact Metal America for most current data.