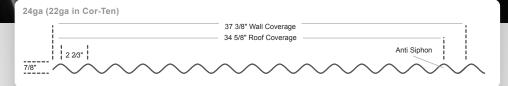
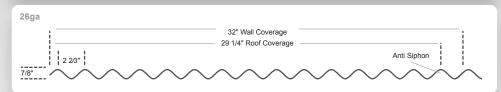
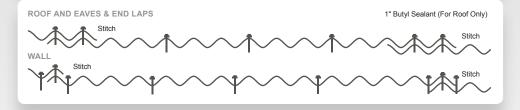
# Corrugated

## MATERIAL SPECIFICATIONS

### **ROOF & WALL PANEL**







#### LOAD TABLES

Refer to Trim Pamphlet for Material Availability

#### 24ga

SPAN TYPE	LOAD TYPE	3	4	5	6	7	8	9
1-span	NEGATIVE WIND LOAD	161.82	91.03	58.26	40.46	29.72	22.76	16.82
	LIVE LOAD/DEFLECTION	105.98	44.71	22.89	13.25	8.34	5.59	3.93
2-span	NEGATIVE WIND LOAD	159.03	90.13	57.89	40.28	29.63	22.7	17.95
	LIVE LOAD/DEFLECTION	159.03	90.13	55.14	31.91	20.1	13.46	9.45
3-span	NEGATIVE WIND LOAD	197.31	112.18	72.16	50.25	36.98	28.34	22.41
	LIVE LOAD/DEFLECTION	197.31	84.37	43.2	25	15.74	10.55	7.41
4-span	NEGATIVE WIND LOAD	18.64	104.86	67.42	46.93	34.53	26.16	20.92
	LIVE LOAD/DEFLECTION	18.64	89.56	45.86	26.54	16.71	11.2	7.86

#### 22ga

SPAN TYPE	LOAD TYPE	3	4	5	6	7	8	9
1-span	NEGATIVE WIND LOAD	206.48	116.15	74.33	51.62	37.93	29.04	21.62
	LIVE LOAD/DEFLECTION	136.17	57.45	29.41	17.02	10.72	7.18	5.04
2-span	NEGATIVE WIND LOAD	202.85	114.99	73.86	51.39	37.8	28.56	22.9
	LIVE LOAD/DEFLECTION	202.85	114.99	70.85	41	25.82	17.3	12.15
3-span	NEGATIVE WIND LOAD	251.65	143.11	92.06	64.11	47.18	36.16	28.6
4-span	LIVE LOAD/DEFLECTION	251.65	108.41	55.51	32.12	20.23	13.55	9.52
	NEGATIVE WIND LOAD	235.5	133.11	86.01	59.88	44.06	33.77	26.7
	LIVE LOAD/DEFLECTION	235.5	115.08	58.92	34.1	21.47	14.39	10.1

#### \*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.\*

Available Gauges: 22ga, 24ga & 26ga

Weight: 5.00lbs/LnFt (22ga), 4.00lbs/LnFt (24ga)

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

Available Materials: Painted, Galvalume, Core-Ten™

Paint Systems: Weather XL (26ga),

Fluropon (PVDF) (24ga)

Warranties: Weather XL (26ga ), Fluropon (PVDF)

(24ga)

**Minimum Slope:** 1:12. Under 3:12 requires 1" Butyl sealant and stitch screws installed 1'0" up the panel at side laps

Testing:

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

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ASTM E1680 ASTM E1646 ASTM E283 ASTM E330 / E330M ASTM E331

#### **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" thickness

Roof Application: Screws are to be installed following the below details, installed no more than 3'6" up the panel. \*\*Predrilling is recommended to ensure water tightness\*\* It is recommended to use 1" Butyl sealant between every panel at the side lap with Stitched Screws installed every 1'0" up the panel. Any slope below a 3:12 must use Bead Seal and Stitch Screws.

**Wall Application:** Screws are to be installed following the below details, installed no more than 3'6" up the panel.

\*\*Predrilling is recommended to ensure water tightness\*\*

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

\*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.

