



## EM Stormproof<sup>®</sup> Panel

SECTION PROPERTIES											
						NEGATIVE BENDING			POSITIVE BENDING		
PANEL	Fy	WEIGHT	Va	Pa, end	Pa, int	Ixe	Sxe	Maxo	Ixe	Sxe	Maxo
GAUGE	(KSI)	(PSF)	(Kips/Ft)	(Kips/Ft)	(Kips/Ft)	(IN.4/FT.)	(IN.3/FT.)	(KIP-IN./Ft.)	(IN.4/FT.)	(IN.3/FT.)	(KIP-IN./Ft.)
29	60*	0.63	0.361	0.139	0.191	0.0042	0.0115	0.459	0.0079	0.0138	0.596
26	60*	0.82	0.494	0.249	0.352	0.0061	0.0162	0.664	0.0110	0.0193	0.854

\*Panels are made from 80-ksi yield material. Flexural effective yield strengths vary by direction of bending. Shear and web crippling capabilities have been determined using an effective yield strength of 60 ksi.

### NOTES:

- 1) All calculations for the properties of EM Stormproof<sup>®</sup> panels are calculated in accordance with the 2012 edition of the North American Specification For Design Of Cold-Formed Steel Structural Members.
- 2) Va = allowable transverse shear per foot of panel width.
- 3) Pa,end = allowable web crippling load at the panel end support per foot of panel width.
- 4) Pa,int = allowable web crippling load at interior panel supports per foot of panel width.
- 5) Ixe = effective moment of inertia per foot of panel width at nominal moment capacity.
- 6) Sxe = effective section modulus per foot of panel width at nominal moment capacity.
- 7) Maxo = allowable bending moment based on initiation of yielding.
- 8) This material is subject to change without notice. Please contact Exceptional<sup>®</sup> Metals at 1-800-248-0280 for most current data.

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. This 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 Exceptional Metals.



## EM Stormproof® Panel

ALLOWABLE UNIFORM LOADS IN POUNDS PER SQUARE FOOT

29 Gauge Thickness								
SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		2.0	2.5	3.0	3.5	4.0	4.5	5.0
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
	Live Load/Deflection- L/240	64.64	33.10	19.15	12.06	8.08	5.67	4.14
2-SPAN	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
	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
3-SPAN	Negative Wind Load	114.79	75.48	53.16	39.06	29.90	23.63	19.14
	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
4-SPAN	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
26 Gauge Thickness								
SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		2.0	2.5	3.0	3.5	4.0	4.5	5.0
1-SPAN	Negative Wind Load	110.60	70.79	49.16	36.12	27.65	21.85	17.70
	Live Load/Deflection- L/60	142.30	91.07	63.24	46.46	35.57	28.11	22.77
	Live Load/Deflection- L/180	120.15	61.52	35.60	22.42	15.02	10.55	7.69
	Live Load/Deflection- L/240	90.11	46.14	26.70	16.81	11.26	7.91	5.77
2-SPAN	Negative Wind Load	133.88	87.51	61.50	45.51	35.01	27.76	22.54
	Live Load/Deflection- L/60	106.51	69.08	48.32	35.66	27.38	21.68	17.59
	Live Load/Deflection- L/180	106.51	69.08	48.32	35.66	27.38	21.68	17.59
	Live Load/Deflection- L/240	106.51	69.08	48.32	35.66	27.38	19.84	14.46
3-SPAN	Negative Wind Load	163.28	107.59	75.97	56.39	43.20	34.14	27.65
	Live Load/Deflection- L/60	131.06	85.45	59.96	44.34	34.09	27.01	21.92
	Live Load/Deflection- L/180	131.06	85.45	59.96	43.78	29.33	20.60	15.02
	Live Load/Deflection- L/240	131.06	85.45	52.14	32.83	22.00	15.45	11.26
4-SPAN	Negative Wind Load	153.71	101.00	71.20	52.79	40.67	32.27	26.22
	Live Load/Deflection- L/60	123.00	80.05	56.11	41.46	31.86	25.24	20.48
	Live Load/Deflection- L/180	123.00	80.05	56.11	41.46	31.20	21.91	15.98
	Live Load/Deflection- L/240	123.00	80.05	55.47	34.93	23.40	16.44	11.98

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NOTES:

- 1) Strength calculations based on the 2012 S100 AISI Standard North American Specification for the Design of Cold-Formed Steel Structural Members.
- 2) Allowable loads are applicable for uniform loading and spans without overhangs.
- 3) LIVE LOAD/DEFLECTION LOAD capacities are for those loads that push the panel against its supports. The applicable limit states are flexure, shear, combined shear and flexure, web crippling at end and interior supports, and the strength-level load deflection limit shown.
- 4) Capacities for LIVE LOAD/DEFLECTION pressure loading are determined as the smaller of the LIVE LOAD/DEFLECTION –Strength and the required deflection limit values listed.
- 5) 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.
- 6) Panel pullover and screw pullout capacities need to be checked separately for the particular fasteners employed using tributary area-based connection loads.
- 7) Effective yield strength has been determined in accordance with section A2.3.3 of the 2012 AISI S100 specification.
- 8) The use of any accessories other than those provided by the manufacturer may damage panels, void all warranties and will void all engineering data.
- 9) This material is subject to change without notice. Please contact Exceptional® Metals at 1-800-248-0280 for the most current data.

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