

EM ShadowRib[™] Panel

SECTION PROPERTIES								
			NEGATIVE BENDING			POSITIVE BENDING		
PANEL	Fy	WEIGHT	Ixe	Sxe	Maxo	Ixe	Sxe	Maxo
GAUGE	(KSI)	(PSF)	(IN.4/FT.)	(IN.3/FT.)	(KIP-IN.)	(IN.4/FT.)	(IN.3/FT.)	(KIP-IN.)
24	50	1.54	0.3497	0.1661	4.972	0.2552	0.1643	4.920
22	50	1.97	0.4892	0.2397	7.176	0.3571	0.2204	6.598

NOTES:

- 1) All calculations for the properties of EM ShadowRib[™] Wall Panels are calculated in accordance with the 2012 edition of the North American Specification For Design Of Cold-Formed Steel Structural Members.
- 2) Ixe is for deflection determination.
- 3) Sxe is for bending.
- 4) Maxo is allowable bending moment.
- 5) All values are for one foot of panel width.
- 6) This material is subject to change without notice. Please contact Exceptional[®] 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.

Duro-Last Issue Date: 9/15/2015

EM ShadowRib™ Panel

ALLOWABLE UNIFORM LOADS IN POUNDS PER SQUARE FOOT

24 Gauge (0.0223"), Fy = 50 ksi, Fu = 60 ksi								
SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		3.0	4.0	5.0	6.0	7.0	8.0	9.0
1-SPAN	Negative Wind Load	137.04	102.78	82.22	68.52	58.73	51.39	40.93
	Live Load/Deflection	133.18	99.89	79.91	66.59	57.08	49.94	40.49
2-SPAN	Negative Wind Load	54.82	41.11	32.89	27.41	23.49	20.56	18.27
	Live Load/Deflection	88.32	66.24	52.99	44.16	37.85	33.12	29.44
3-SPAN	Negative Wind Load	62.29	46.72	37.37	31.15	26.70	23.36	20.76
	Live Load/Deflection	100.36	75.27	60.22	50.18	43.01	37.63	33.45
4-SPAN	Negative Wind Load	59.95	44.97	35.97	29.98	25.69	22.48	19.98
	Live Load/Deflection	96.60	72.45	57.96	48.30	41.40	36.22	32.20

22 Gauge (0.0286"), Fy = 50 ksi, Fu = 60 ksi								
SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		3.0	4.0	5.0	6.0	7.0	8.0	9.0
1-SPAN	Negative Wind Load	199.04	149.28	119.42	99.52	85.30	74.64	59.06
	Live Load/Deflection	212.18	159.14	127.31	106.09	89.77	68.73	54.30
2-SPAN	Negative Wind Load	79.61	59.71	47.77	39.81	34.12	29.86	26.54
	Live Load/Deflection	140.29	105.22	84.17	70.14	60.12	52.61	46.76
3-SPAN	Negative Wind Load	90.47	67.85	54.28	45.24	38.77	33.93	30.16
	Live Load/Deflection	159.42	119.56	95.65	79.71	68.32	59.78	53.14
4-SPAN	Negative Wind Load	87.08	65.31	52.25	43.54	37.32	32.65	29.03
	Live Load/Deflection	153.44	115.08	92.06	76.72	65.76	57.54	51.15

NOTES:

- 1) Strength calculations based on the 2012 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 a deflection limit of L/60 under 10-year wind loading.
- 4) 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.
- 5) Panel pullover and screw pullout capacity must be checked separately using the screws employed for each particular application when utilizing this load chart.
- 6) Effective yield strength has been determined in accordance with section A2.3.2 of the 2012 NAS specification.
- 7) The use of any accessories other than those provided by the manufacturer may damage panels, void all warranties and will void all engineering data.
- 8) This material is subject to change without notice. Please contact Exceptional® Metals at 1-800-248-0280 for the 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.

Duro-Last Issue Date: 9/15/2015