Nucor Buildings Group R-Panel Metal Wall Panel System



BOTTOM IN COMPRESSION

The R-Panel wall is a strong, attractive wall panel ideal for commercial, community, and industrial applications. This panel delivers what most builders, contractors, and owners have come to expect from us in a versatile and attractive building system.



Panel Credentials

- ASTM E283 Test Method for Determining Air Leakage Through Wall Systems
- ASTM E331 Test Method for Water Penetration of Exterior Wall Systems
- State of Florida Product Approval
- UL263 Fire Tests of Building Construction and Materials

Panel Specifications

Gage	Thickness (in.)	Yield (ksi)	Tensile (ksi)	Panel Wt. (psf)	Ix (Gross) (in ⁴)	S _x (eff.) (in ³)	M₁ (kip-in)	S _x (eff.) (in ³)	Ma (kip-in)	
26	0.0177	80	82	0.86	0.0490	0.0378	1.3590	0.0462	1.6593	
24	0.0222	80	82	1.08	0.0633	0.0543	1.9520	0.0588	2.1133	

Panel Capacity (psf)

	<u>26 GAGE</u>			<u>24 GAGE</u>		
SPAN (ft.)	Pressure ⁷	Suction ^{4,8}		Pressure ⁷	Suction ^{4,8}	
3.0	79	72		120	75	
3.5	68	62		103	64	
4.0	59	54		90	56	
4.5	53	48		80	50	
5.0	47	43		69	45	
5.5	43	37		57	41	
6.0	37	31		48	38	
6.5	32	26		41	35	
7.0	28	23		36	32	
7.5	24	20		31	29	

NOTES

 Section properties were calculated in accordance with AISI S100/CSA S136, 2016 Edition.

TOP IN COMPRESSION

- Panels were checked for bending, shear, combined bending and shear, web crippling, deflection and panel pullover.
- 3. Deflection is limited to Span/60.
- 4. Panel pullover limits are based on d'w = 0.44".
- 5. Thermal load has not been considered.
- 6. Capacities are based on a 3-span condition with equal length spans.
- 7. "Pressure" load is applied inward on the outer surface towards supports.
- 8. "Suction" load is applied outward on the inner surface away from panel supports.