## Nucor Buildings Group CFR Standing Seam Roof Panel



The CFR Standing Seam Roof System is a raised seam metal roof, designed to float to accommodate thermal expansion & contraction. It has been extensively tested to ensure the highest level of performance for weathertightness and structural integrity, and approved for wind uplift, hail and fire resistance.



- ASTM E108 Test Methods for Fire Tests of Roof Coverings Class A
- ASTM E1592 Test Method for Wind Uplift Performance of Sheet Metal Roofing Systems
- ASTM E1646 Test Method for Water Penetration of Exterior Roof Systems
- ASTM E1680 Test Method for Rate of Air Leakage Through Exterior Roof Systems
- ASTM E2140 Test Method for Water Penetration of Metal Roof Panel Systems by Static Water Head
- US Army Corps of Engineers Approved per CEGS 07416 Test Specification
- FM 4471 Class 1 Approval
- UL 580 Class 90 Approval (Const. No's 552, 552A, 552B, 590)
- State of Florida Product Approval
- Miami-Dade County Approved



## **Panel Specifications**

						TOP IN COMPRESSION		BOTTOM IN COMPRESSION	
Gage	Thickness (in.)	Yield (ksi)	Tensile (ksi)	Panel Wt. (psf)	Ix (Gross) (in <sup>4</sup> )	S <sub>x</sub> (eff.) (in <sup>3</sup> )	M₃ (kip-in)	S <sub>x</sub> (eff.) (in <sup>3</sup> )	Ma (kip-in)
24	0.0222	50	65	1.14	0.3520	0.1400	3.5005	0.0894	2.6760

## Panel Capacity (psf)

	<u>24 GAGE</u>				
SPAN (ft.)	Gravity	Uplift			
2.0	468	107			
2.5	317	98			
3.0	227	89			
3.5	171	80			
4.0	133	71			
4.5	106	62			
5.0	86	53			
5.5	72	44			

## **NOTES**

- 1. Section properties were calculated in accordance with AISI S100/CSA S136, 2016 Edition.
- 2. Panels were checked for bending, shear, combined bending and shear, and deflection.
- 3. Deflection is limited to Span/60.
- Uplift loads shown are achieved using the standard panel clip and the Vise-Lock 360 seaming profile.
- Uplift loads shown do not include increases in wind Zones 2 and 3 as allowed by AISI S100.
- 6. Thermal load has not been considered.
- 7. Capacities are based on a 3-span condition with equal length spans.
- 8. "Gravity" load is applied inward on the outer surface towards supports.
- 9. "Uplift" load is applied outward on the inner surface away from panel supports.