



TECHNICAL BULLETIN

Issue Date: February 6, 2013**No. 01-343-13**

Air and Water Infiltration Maxima 1.5 24 Ga.

On May 11, 2010, McElroy Metal, Inc. tested its Maxima 1.5 Panel for air leakage and water penetration.

TEST METHODS:

Air Leakage: ASTM E1680-95, "Rate of Air Leakage Through Exterior Metal Roof Panel Systems"

Water Penetration: ASTM E1646-95, "Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference"

TEST SPECIMEN:

McElroy Metal, Inc. 24 Ga. 18 in. wide Maxima 1.5 Roof Panels were attached to purlins with low floating panel clips using (2) #1/4-14 x 1 1/4" hex head self drilling fasteners per clip. Factory applied sealant was used in the panel seam. The panel seam was seamed to 180 degrees.

TEST RESULTS:

*Results are extrapolated to different panel widths.

Specimen	Air Infiltration			Water Penetration			
	Static Pressure Differential (psf)	Air Infiltration rate (cfm/lf)	Air Infiltration rate (cfm/sf)	Static Pressure Differential (psf)	Rate (gal./hr/sf)	Test Duration (min)	Water Infiltration
Maxima 1.5 16** 24** Ga.	+1.57	0.0000	0.0000	12.00	5	15	None
Maxima 1.5 16** 24** Ga.	- 1.57	0.0060	0.0045				
Maxima 1.5 16** 24** Ga.	+6.24	0.0000	0.0000				
Maxima 1.5 16** 24** Ga.	-6.24	0.0120	0.0090				
Maxima 1.5 18** 24** Ga.	+1.57	0.0000	0.0000	12.00	5	15	None
Maxima 1.5 18** 24** Ga.	- 1.57	0.0060	0.0040				
Maxima 1.5 18** 24** Ga.	+6.24	0.0000	0.0000				
Maxima 1.5 18** 24** Ga.	-6.24	0.0120	0.0080				

Test Report No. : T218-10

Dated : May 18, 2010

**Test results are valid for heavier gauges or thicknesses.

**CORPORATE OFFICE
SHREVEPORT, LOUISIANA**

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