



TECHNICAL BULLETIN

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Air and Water Infiltration Multi-Rib

On October 15, 1999, McElroy Metal, Inc. tested its Multi-Rib 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. 26 Ga. Multi-Rib Roof Panel with 1" x 1/8" Tape Sealer at sidelaps. Panels were attached to purlins using #12-14 x 1-1/4 ZAC fasteners. Sidelaps were fastened at 20" OC with 1/4-14 Lap ZAC fasteners.

TEST RESULTS:

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
Multi-Rib 26 Ga.	-6.24	0.007	0.002	12.0	5	15	None
Multi-Rib 26 Ga.	+6.24	0.004	0.001				
Multi-Rib 26 Ga.	-1.57	0.004	0.001				
Multi-Rib 26 Ga.	+1.57	0.000	0.000				

Test Report No. : T213-99

Dated : October 15, 1999

CORPORATE OFFICE
SHREVEPORT, LOUISIANA