



TECHNICAL BULLETIN

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Air and Water Infiltration Meridian 26 Ga.

On January 27, 2000, McElroy Metal, Inc. tested its Meridian 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. 16 in. wide Meridian Roof Panel over #30 underlayment with 6 inch overlaps. Panels were attached to 5/8" plywood using #10-12 Pancake Head woodgrip fasteners at 21 inches on center. All plywood butt joints were sealed with silicone sealant.

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
*Meridian 12" 26 Ga.	+/-6.24	0.002	0.002	12.00	5	15	None
*Meridian 12" 26 Ga.	+/-1.57	0.002	0.002				
Meridian 16" 26 Ga.	+/-6.24	0.002	0.001	12.00	5	15	None
Meridian 16" 26 Ga.	+/-1.57	0.002	0.001				
*Meridian 18" 26 Ga.	+/-6.24	0.002	0.001	12.00	5	15	None
*Meridian 18" 26 Ga.	+/-1.57	0.002	0.001				

Test Report No. : T124-00

Dated : February 7, 2000

CORPORATE OFFICE
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