



# Engineering Technical Bulletin

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## Double-Lok® Air Leakage and Water Penetration Test Data

### PRODUCT

MBCI Double-Lok® Standing Seam Roof System.

### TEST PROCEDURES

ASTM E 1680-95: Standard Test Method for Rate of Air Leakage Through Exterior Metal Roof Panel Systems.

ASTM E 1646-95: Standard Test Method Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference.

### TEST RESULTS

Air Leakage was conducted with a uniform static air pressure differential of  $\pm 6.24$  psf &  $\pm 12.00$  psf.

Water Penetration was conducted with a uniform static air pressure differential of 6.24 psf & 12.00 psf.

Water Penetration Test Results: No uncontrollable water leakage at 12 psf when five gallons per hour of water were sprayed per square foot of roof area.

The following are the test results extrapolated to the different widths to which they apply.

### SUMMARY

24 Ga. Double-Lok	ASTM E 1680-95 Air Leakage		ASTM E 1646-95 Water Penetration	
	Pressure Differential	Leakage Rate	Pressure Differential	Infiltration Rate
24" Wide	$\pm 6.24$ psf	0.013 cfm/sq.ft.	6.24 psf	None
18" Wide	$\pm 6.24$ psf	0.017 cfm/sq.ft.	6.24 psf	None
12" Wide	$\pm 6.24$ psf	0.026 cfm/sq.ft.	6.24 psf	None
24" Wide	$\pm 12.00$ psf	0.020 cfm/sq.ft.	12.00 psf	None
18" Wide	$\pm 12.00$ psf	0.027 cfm/sq.ft.	12.00 psf	None
12" Wide	$\pm 12.00$ psf	0.040 cfm/sq.ft.	12.00 psf	None

Copies of the independent test laboratory reports are available upon request.

Test Report # T116-05      Dated: 2/21/2005