



Engineering Technical Bulletin

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Eco-ficient[™] Air Leakage and Water Penetration Test Data

PRODUCT

MBCI's Grand, Royal, Classic, Vintage and Summit profiles with Non-Skinning Butyl Modified Sealant in the side lap.

TEST PROCEDURES

ASTM E 283-04: Standard Test Method for Rate of Air Leakage through Exterior Windows, Curtain Walls, and Doors.

ASTM E 331-00: Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors.

TEST RESULTS

Air Leakage was conducted with a uniform static air pressure differential of + 12.00 *psf* & + 20.00 *psf*.
Water Penetration was conducted with a uniform static air pressure differential of + 20.00 *psf*.

Water Penetration Test Results: No uncontrollable water leakage at 20 *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

Profile	ASTM E 283-04 Air Leakage		ASTM E 331-00 Water Penetration	
	Pressure Differential	Leakage Rate	Pressure Differential	Infiltration Rate
36ö Eco-ficient Wall Panel	+ 12.00 <i>psf</i>	0.0082 <i>cfm</i> / <i>sq. ft.</i>	20 <i>psf</i>	None
36ö Eco-ficient Wall Panel	+ 20.00 <i>psf</i>	0.0128 <i>cfm</i> / <i>sq. ft.</i>	20 <i>psf</i>	None
42ö Eco-ficient Wall Panel	+ 12.00 <i>psf</i>	0.0070 <i>cfm</i> / <i>sq. ft.</i>	20 <i>psf</i>	None
42ö Eco-ficient Wall Panel	+ 20.00 <i>psf</i>	0.0110 <i>cfm</i> / <i>sq. ft.</i>	20 <i>psf</i>	None

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

Test Report No. T400-09 Dated: 12/29/2009