CORPORATE OFFICE | P.O. BOX 1148 SHREVEPORT, LA 71163-1148 | (318)747-8000 | FAX (318)747-8029

# TECHNICAL BULLETIN

**Issue Date: February 5, 2013 Revision Date: June 21, 2018 No. 01-408-18**

## Air and Water Infiltration
## 238T 24 Ga. / 138T 24 Ga.

On April 3, 2009, McElroy Metal, Inc. tested its 238T 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. 16 in. wide 238T Roof Panels were attached to purlins with 6" fixed panel clips using (2) #12-14 x 1 1/4" hex head self drilling fasteners per clip. Factory applied sealant was used in the seam cap. The seam cap was seamed onto the panel ribs.

**TEST RESULTS:** *Results are extrapolated to different panel widths.

| | Air Infiltration | | | Water Penetration | | | |
|---|---|---|---|---|---|---|---|
| Specimen | 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 |
| 238T / 138T 12"* 24** Ga. | +/- 1.57 | 0.0002 | 0.0001 | 20.00 | 5 | 15 | None |
| 238T / 138T 12"* 24** Ga. | +/- 4.0 | 0.0022 | 0.0023 | | | | |
| 238T / 138T 12"* 24** Ga. | +/- 6.24 | 0.0030 | 0.0027 | | | | |
| 238T / 138T 12"* 24** Ga. | +/- 20.0 | 0.0037 | 0.0037 | | | | |

Test Report No. : 32-0090T-09G Dated : May 30, 2009

**Test results are valid for heavier gauges or thicknesses.
**Test results are valid for 138T panels based on identical seam configuration.