# TECHNICAL BULLETIN 

## Issue Date : March 29, 2000

## Air and Water Infiltration <br> Medallion-Lok 24 Ga.

On December 27, 1999, McElroy Metal, Inc. tested its Medallion-Lok 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 Medallion-Lok Roof Panel over \#30 underlayment with 6 inch overlaps. Panels were attached to 5/8" (nominal) plywood using (1) \#10-12 Pancake Head woodgrip fastener per clip, with clips at 3 feet on center.

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 $(\mathrm{cfm} / \mathrm{sf})$ | Static Pressure Differential (psf) | $\begin{aligned} & \text { Rate } \\ & \text { (gal./hr/sf) } \end{aligned}$ | Test Duration (min) | Water Infiltration |
| *Medallion-Lok 12" $24^{* *}$ Ga. | +/-6.24 | 0.006 | 0.006 | 12.00 | 5 | 15 | None |
| $\begin{gathered} \text { *Medallion-Lok } \\ 12 " 24^{* *} \mathrm{Ga} . \end{gathered}$ | +/-1.57 | 0.004 | 0.004 |  |  |  |  |
| $\begin{gathered} \text { Medallion-Lok } \\ 16^{\prime \prime} 24^{* *} \mathrm{Ga} . \end{gathered}$ | +/-6.24 | 0.006 | 0.004 | 12.00 | 5 | 15 | None |
| $\begin{gathered} \text { Medallion-Lok } \\ 16 " 24^{* *} \mathrm{Ga} . \\ \hline \end{gathered}$ | +/-1.57 | 0.004 | 0.003 |  |  |  |  |
| $\begin{aligned} & \text { *Medallion-Lok } \\ & 18 " 24^{* *} \mathrm{Ga} \text {. } \end{aligned}$ | +/-6.24 | 0.006 | 0.004 | 12.00 | 5 | 15 | None |
| $\begin{gathered} \text { *Medallion-Lok } \\ 18 " 24^{* *} \mathrm{Ga} . \end{gathered}$ | +/-1.57 | 0.004 | 0.003 |  |  |  |  |

Test Report No. : T101-00
Dated : January 5, 2000
**Test results are valid for heavier gauges or thicknesses.

