

April 27, 2001

Engineering Report 21093-5

Construction Metal Products, Incorporated
CMP Series 2500 16-inch Roof Panel
ASTM E1680 Air Leakage Test
ASTM E1646 Water Penetration Test

SUMMARY

On April 9, 2001, water penetration and air infiltration testing were performed on one assembly of 24 gage, CMP Series 2500 G-90 galvanized steel roof panels manufactured by Construction Metal Products, Incorporated. The panels were assembled on a Cerny & Ivey Engineers, Inc. air chamber using sealant and mechanical fasteners.

The panels were tested in accordance with ASTM E1680, "Standard Test Method for Rate of Air Leakage Through Exterior Metal Roof Panel Systems." The specimen was tested at differential pressures of 1.57 PSF, 6.24 PSF and 12.0 PSF. The test determined that the air infiltration rates for the panel assembly at these pressures were 0.0030 SCFM/SF, 0.0000 SCFM/SF and 0.0029 SCFM/SF, respectively.

The panels were also tested in accordance with ASTM E1646, "Standard Test Method for Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference." The specimen was tested with a water spray of 7.03 gallons per square foot per hour applied and 1/2-inch of water ponding between each panel rib. The specimen was tested at differential pressures of 1.57 PSF, 6.24 PSF and 12.0 PSF. The panel assembly exhibited no evidence of water leakage while being subjected to the test pressures.

If you have any question or need additional information, please contact us.

Respectfully submitted,

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