

**MID AMERICA TESTING LABORATORY, INC.**

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**DATE OF REPORT:** October 1, 2001  
**LOCATION OF TEST:** Mid America Testing Laboratory  
**DATES OF ERECTION:** February 21, 2001 & July 18, 2001  
**DATES OF TESTING:** February 22, 2001 & July 18, 2001  
**PANEL IDENTIFICATION:** Double Lock Zee-lock Panel System  
**PROJECT NUMBER:** 01016L-B  
**CLIENT:** Berridge Manufacturing Company

The following were present for all or portions of the erection and testing.

Mr. Bobby Marks, Jr.	Berridge Manufacturing Company
Mr. Tim Ponting	Mid America Testing Laboratory
Mr. Travis Swisshelm	Mid America Testing Laboratory
Mr. Rick Heitmann	Mid America Testing Laboratory

**INTRODUCTION**

As requested, Mid America Testing Laboratory performed weatherization and structural testing on the Double Lock Zee-lock Panel System as fabricated and installed by Berridge Manufacturing. The panel was installed onto a testing chamber, which allowed visual viewing of the underside of the panel during the water infiltration testing.

The Double Locked 24 gauge roll formed Zee Panel measured a nominal 37" wide by 6' in length and incorporated three 2" high standing seams. This system's interlocking was double locked with snap in bottom clip male/female interfacing. Center line to center line of the three (3) interlocks were 1'4" with 2 1/2" at each side. All testing on the panel was performed with the panel in a horizontal position.

**FORMAL TESTING**

1. **PRELOAD** +45.0 PSF static pressure (50% of the positive design load for 10 seconds).

**ALLOWED:** No failure of the system

**RESULTS:** No failure of the system

The above result constitutes an acceptable performance.

2. **STATIC AIR INFILTRATION** (ASTM E 283) at 1.57 PSF (25 MPH wind and .3" H<sub>2</sub>O).

**ALLOWED:** Air infiltration shall not exceed 1.1 CFM gross leakage.

**RESULTS:** The specimen measured .8 CFM gross leakage.

The above results constitute an acceptable performance.

3. **STATIC AIR INFILTRATION** (ASTM E 283) at 6.24 PSF (50 MPH wind and 1.2" H<sub>2</sub>O).

**ALLOWED:** Air infiltration shall not exceed 1.1 CFM gross leakage.

**RESULTS:** The specimen measured 1.1 CFM gross leakage.

The above results constitute an acceptable performance.

4. **STATIC WATER INFILTRATION** (ASTM E 331) at 6.24 PSF (50 MPH wind and 1.2" H<sub>2</sub>O) with a water spray rate of five (5) gallons per hour per square foot minimum for fifteen (15) minutes.

**ALLOWED:** No uncontrolled water leakage to the room side shall be allowed.

**RESULTS:** No uncontrolled water leakage was noted to the room side.

The above result constitutes an acceptable performance.

5. **STATIC WATER INFILTRATION** (ASTM E 331) at 12.0 PSF (69 MPH wind and 2.3" H<sub>2</sub>O) with a water spray rate of five (5) gallons per hour per square foot minimum for fifteen (15) minutes.

**ALLOWED:** No uncontrolled water leakage to the room side shall be allowed.

**RESULTS:** No uncontrolled water leakage was noted to the room side.

The above result constitutes an acceptable performance.

6. **STATIC WATER INFILTRATION** (ASTM E 331) at 15.0 PSF (77 MPH wind and 2.88" H<sub>2</sub>O) with a water spray rate of five (5) gallons per hour per square foot minimum for fifteen (15) minutes.

**ALLOWED:** No uncontrolled water leakage to the room side shall be allowed.

**RESULTS:** No uncontrolled water leakage was noted to the room side.

The above result constitutes an acceptable performance.

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7. **STATIC WATER INFILTRATION** (ASTM E 331) at 20.0 PSF (89.5 MPH wind and 3.8" H<sub>2</sub>O) with a water spray rate of five (5) gallons per hour per square foot minimum for fifteen (15) minutes.

**ALLOWED:** No uncontrolled water leakage to the room side shall be allowed.

**RESULTS:** No uncontrolled water leakage was noted to the room side.

The above result constitutes an acceptable performance.

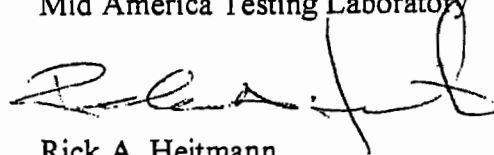
### **SUMMARY**

As can be determined by this brief report, the Double Lock Zee-lock Panel System has met or exceeded the test criteria to which it was subjected. In addition to the ASTM E 283 and ASTM E 331 methods, which were specifically identified, the unit has also met or exceeded ASTM E 1680 and ASTM E 1646 for air and moisture testing.

Should you have any questions regarding the information contained in this report, please feel free to contact the writer.

Respectfully Submitted,

Mid America Testing Laboratory



Rick A. Heitmann  
President

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