

## MID AMERICA TESTING LABORATORY, INC.

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DATE OF REPORT:

March 12, 2003

LOCATION OF TEST:

Mid America Testing Laboratory

DATES OF TESTING:

March 3-5, 2003

PANEL IDENTIFICATION:

Tee-Panel System (with Vinyl Insert)

PROJECT NUMBER:

03003L

CLIENT:

Berridge Manufacturing Company

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

Ms. Cindy Barrow

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 Tee-Panel standing seam roof panel 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 test panel measured a nominal 37" wide X 72" deep and incorporated two (2) 1" high standing seams. The panel specimen was fastened onto a 2" X 4" wood buck with a total of thirty eight (38) fasteners. Eleven (11) were used at each jamb and six (6) across the head and sill. All tests were conducted with the panel in a horizontal position.

## FORMAL TESTING

All tests were conducted on the specimen identified above utilizing typical ASTM standards for weatherization and structural testing.

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

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ALLOWED:

No failure of the system

RESULTS:

No failure of the system

The above result constitutes an acceptable performance.

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.

3. STATIC AIR INFILTRATION (ASTM E 283) at 6.24 PSF (50 MPH wind and 1.2" H<sub>2</sub>0).

ALLOWED:

Air infiltration shall not exceed 1.1 CFM gross

leakage.

RESULTS:

Air infiltration of the specimen measured .8

CFM gross leakage.

The above results constitute an acceptable performance.

4. STATIC AIR INFILTRATION (ASTM E 331) at 6.24 PSF (50 MPH wind and 1.2" H<sub>2</sub>0).

ALLOWED:

No uncontrolled water or visible water to the

underside of the roof panel shall be allowed.

RESULTS:

A minor amount of water was noted dripping

from the center on the seam.

REMEDIAL:

The ends of the seams were resealed with

silicone as was a crease in the center of the seam

corrected.

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4a. STATIC AIR INFILTRATION (ASTM E 331) at 6.24 PSF (50 MPH wind and 1.2"  $H_20$ ).

ALLOWED:

No uncontrolled water leakage or visible water to the underside of the roof panel shall be allowed.

RESULTS:

No uncontrolled water leakage was noted to the

room side.

The above result constitutes an acceptable performance.

5. <u>STATIC WATER INFILTRATION</u> (ASTM E 331) at 8.0 PSF (56 MPH wind and 1.54" H<sub>2</sub>0) with a water spray rate of five (5) gallons per hour per square foot minimum for fifteen (15) minutes.

ALLOWED:

No uncontrolled water leakage or visible water to

the underside of the roof panel 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 document, the Tee-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.

Respectfully Submitted,

Mid America Testing Laboratory

Rick A. Heitmann

President

RAH/slh 03003LTR-Tec-Panel