

**PERFORMANCE TEST REPORT**

**Rendered to:**

**BERRIDGE MANUFACTURING COMPANY**

**SERIES/MODEL: Zee-Lock (Single Lock)**

**PRODUCT TYPE: Roof Panel System**

<b>Title</b>	<b>Summary of Results</b>
Water Resistance to Static Water Pressure Head	Pass

Reference should be made to Architectural Testing, Inc. Report No. 79369.01-801-44 for complete test specimen description and data.

## PERFORMANCE TEST REPORT

Rendered to:

BERRIDGE MANUFACTURING COMPANY  
1720 Maury  
Houston, Texas 77026

Report No.: 79369.01-801-44  
Test Dates: 03/12/08  
Report Date: 03/13/08  
Expiration Date: 03/12/12

**Project Summary:** Architectural Testing, Inc. was contracted by Berridge Manufacturing Company to perform testing on a Series/Model Zee-Lock (Single Lock) roof panel system mockups. at the Architectural Testing, Inc. test facility in Southlake, TX. Test specimen description and results are reported herein. The sample was provided by the client.

**Test Method:** The test specimen was evaluated in accordance with the following:

ASTM E 2140-01, *Standard Test Method for Water Penetration of Metal Roof Panel Systems by Static Water Pressure Head.*

### **Test Specimen Description:**

**Series/Model:** Zee Lock (Single Locked)

**Product Type:** Metal Roof Panel

**Overall Size:** 72" wide by 180" high

**Installation:** Metal roof panels installed over purlins on 5' (60") centers. Zee rib was secured to the metal c-channel purlins with one #12 x 1" hex flange head drill point sheet metal screw at each purlin. Panels were single locked together over the zee rib, the zee rib ran full length of the roof panel. The zee rib featured a factory applied extruded vinyl weatherseal over the horizontal leg of the zee rib. The assembled panel was sealed full perimeter to the test buck.

**Test Results:** The temperature during testing was 77°F. The results are tabulated as follows:

<u>Test Method</u>	<u>Title of Test</u>	<u>Results</u>
ASTM E 2140	Water Resistance (6" water head)	Pass

**General Note:** *All testing was performed in accordance with the referenced standard.*

**Drawing Reference:** The test specimen drawings have been reviewed by Architectural Testing and are representative of the test specimen reported herein.

Detailed drawings, data sheets, representative samples of test specimens, a copy of this report, or other pertinent project documentation will be retained by Architectural Testing, Inc. for a period of four years from the original test date. At the end of this retention period, such materials shall be discarded without notice and the service life of this report will expire.

Results obtained are tested values and were secured by using the designated test methods. No conclusions of any kind regarding the adequacy or inadequacy of the glass in the test specimen can be made. This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. It is the exclusive property of the client so named herein and relates only to the specimen(s) tested. This report may not be reproduced, except in full, without the written approval of Architectural Testing, Inc.

For ARCHITECTURAL TESTING, INC:



Digitally Signed by: James F. Sturdevant

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James Sturdevant  
Laboratory Technician



Digitally Signed by: John H. Waskow

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John Waskow  
Director of Regional Operations

JS:hd

Attachments (pages): This report is complete only when all attachments listed are included.  
Appendix-A: Drawings (3)

### Revision Log

<u>Rev. #</u>	<u>Date</u>	<u>Page(s)</u>	<u>Revision(s)</u>
0	03/13/08	N/A	Original report issue

## **Appendix A**

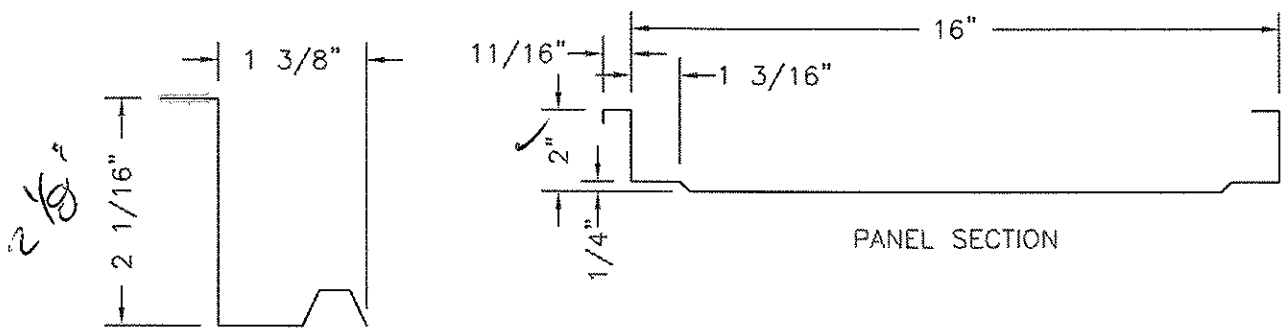
### **Drawings**

BERRIDGE ZEE-LOCK PANEL

CONTINUOUS FACTORY APPLIED VINYL WEATHER SEAL (OPTIONAL)  
US PATENT NO. 5,134,825

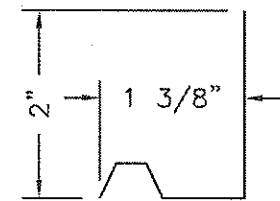
CONTINUOUS ZEE-RIB

FASTENERS; 2 AT EVERY PURLIN FOR OPEN FRAMING CONDITIONS 2 FASTENERS 36" O.C. MAX. FOR SOLID SHEATHING



PANEL SECTION

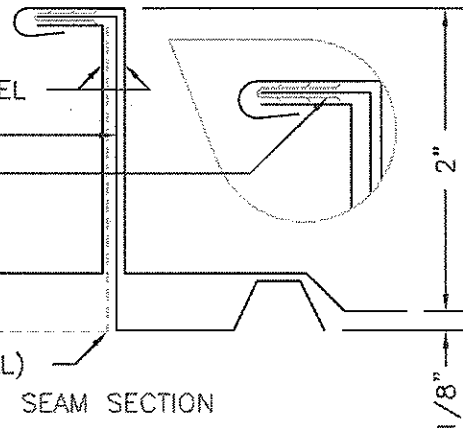
CONTINUOUS ZEE-RIB WITH FACTORY APPLIED VINYL WEATHER SEAL



PANEL SUPPORT

BERRIDGE ZEE-LOCK PANEL  
CONTINUOUS ZEE-RIB  
FACTORY APPLIED EXTRUDED VINYL WEATHERSEAL (OPTIONAL)  
US PATENT NO. 5,134,825

PANEL SUPPORT (OPTIONAL)



SEAM SECTION

DATE: 04-01-97

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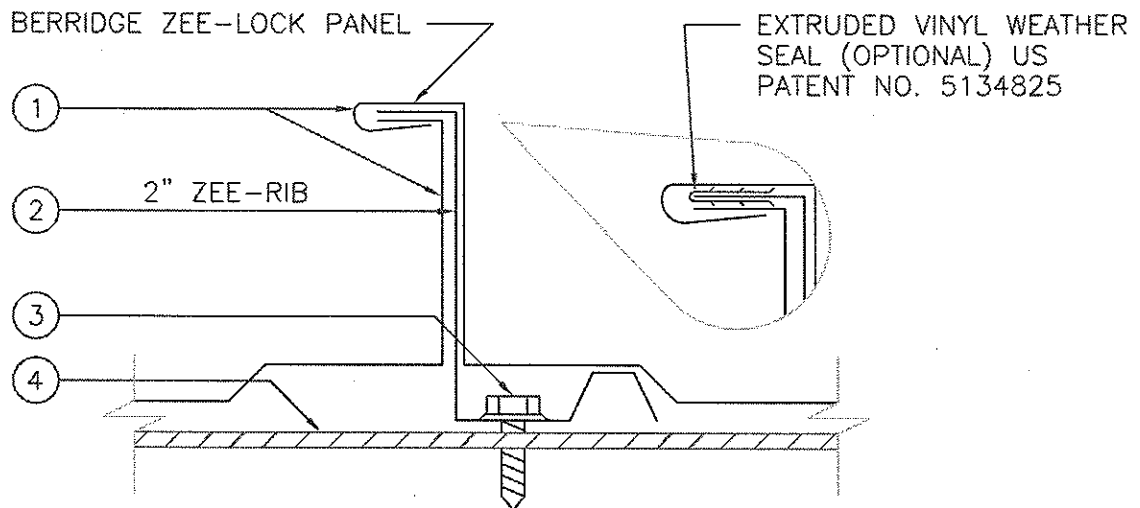
Z-4

OVERVIEW  
CONTINUOUS ZEE-RIB  
WITH VINYL WEATHERSEAL  
ZEE-LOCK PANEL



Test sample complies with these details.  
Deviations are noted.

Report# 71369.01  
Date 3/13/08 Tech JS



1. METAL ROOF DECK PANELS \* - NO. 24 MSG MINIMUM THICKNESS COATED STEEL. 16 IN. WIDE, 2 IN. HIGH. PANELS CONTINUOUS OVER TWO OR MORE SPANS WITHOUT END LAPS. AN OPTIONAL EXTRUDED VINYL WEATHERSEAL (US PATENT NO. 5,134,825) MAY BE USED AT PANEL SIDE LAPS. ADJACENT PANELS ARE SEAMED TOGETHER ALONG SIDE LAPS TO INCLUDE "ROOF DECK FASTENERS" (ITEM 2) USING AN ELECTRIC SEAMING TOOL.  
BERRIDGE MANUFACTURING CO. - "ZEE-LOCK PANEL"
  2. ROOF DECK FASTENERS \* - (PANEL CLIPS) - ONE PIECE ASSEMBLY FABRICATED FROM NO. 24 MSG COATED STEEL. CLIP LOCATED AT EACH PANEL SIDE LAP WITH CLIP BEING CONTINUOUS AND EQUAL TO LENGTH OF "METAL ROOF DECK PANELS" (ITEM 1)  
BERRIDGE MANUFACTURING CO. - "ZEE-CLIP RIB" (2" ZEE-RIB)
  3. FASTENERS (SCREWS) - FOR ATTACHING "ZEE-CLIP RIB" (ITEM 2) TO PURLINS. USE NO. 12 x 1 IN. SELF-DRILLING, SELF-TAPPING STEEL SCREWS. TWO FASTENERS AT EACH PURLIN LOCATION.
  4. PURLINS - NO. 16 MSG MINIMUM STEEL (MIN. YIELD STRENGTH 50,000 PSI) 5'-0" MAXIMUM SPACING. BERRIDGE MANUFACTURING "CEE" OR "ZEE" PURLINS.
  5. LATERAL BRACING - (NOT SHOWN) REFER TO "GENERAL INFORMATION, ROOF DECK CONSTRUCTION" (BUILDING MATERIAL DIRECTORY) FOR ITEMS NOT EVALUATED.
- \* BEARING THE UL CLASSIFICATION MARKING.



**Architectural Testing**

Test sample complies with these details.  
Deviations are noted.

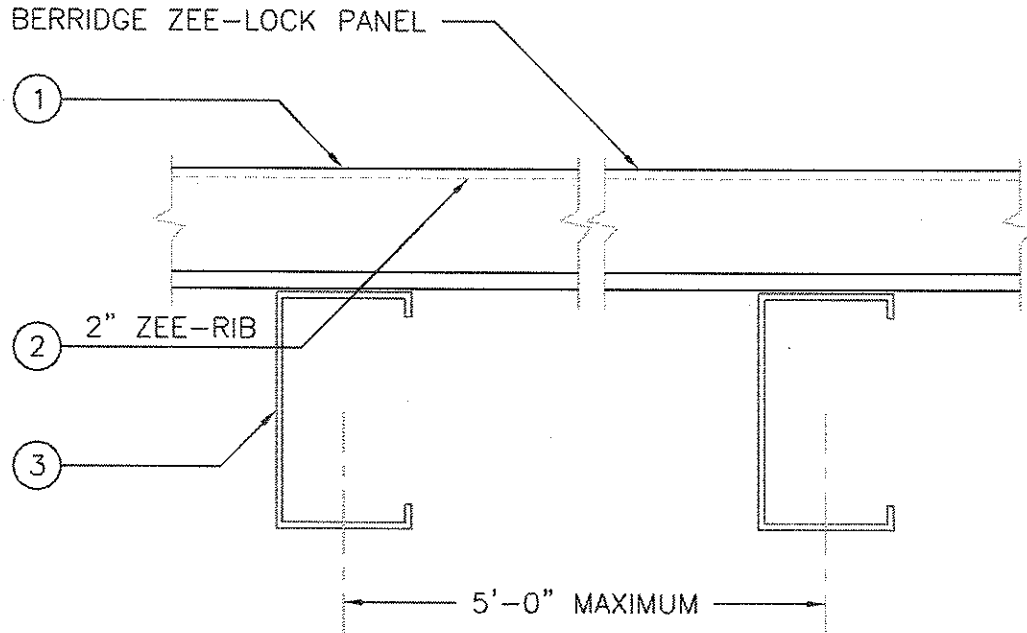
Report# 79369.01  
Date 3/13/88 Tech JS

UL 90 APPROVED ASSEMBLY  
SEAM SECTIONS AND FASTENER SPECS DATE: 04-01-97  
CONSTRUCTION NO. 312

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ZEE-LOCK PANEL

Z-90



1. METAL ROOF DECK PANELS \* - NO. 24 MSG MINIMUM THICKNESS COATED STEEL, 16 IN. WIDE, 2 IN. HIGH. PANELS CONTINUOUS OVER TWO OR MORE SPANS WITHOUT END LAPS. AN OPTIONAL EXTRUDED VINYL WEATHERSEAL (US PATENT NO. 5,134,825) MAY BE USED AT PANEL SIDE LAPS. ADJACENT PANELS ARE SEAMED TOGETHER ALONG SIDE LAPS TO INCLUDE "ROOF DECK FASTENERS" (ITEM 2) USING AN ELECTRIC SEAMING TOOL.  
BERRIDGE MANUFACTURING CO. - "ZEE-LOCK PANEL"
2. ROOF DECK FASTENERS \* - (PANEL CLIPS) - ONE PIECE ASSEMBLY FABRICATED FROM NO. 24 MSG COATED STEEL. CLIP LOCATED AT EACH PANEL SIDE LAP WITH CLIP BEING CONTINUOUS AND EQUAL TO LENGTH OF "METAL ROOF DECK PANELS" (ITEM 1)  
BERRIDGE MANUFACTURING CO. - "ZEE-CLIP RIB" (2" ZEE-RIB)
3. PURLINS - NO. 16 MSG MINIMUM STEEL (MIN. YIELD STRENGTH 50,000 PSI) 5'-0" MAXIMUM SPACING. BERRIDGE MANUFACTURING "CEE" OR "ZEE" PURLINS.

\* BEARING THE UL CLASSIFICATION MARKING.

**Architectural Testing**  
 Test sample complies with these details.  
 Deviations are noted.

DATE: 04-01-97

UL 90 APPROVED ASSEMBLY  
 PURLING SPACING  
 CONSTRUCTION NO. 312

Report# 79389.07  
 Date 3/13/08 Tech JS

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Z-91

ZEE-LOCK PANEL