

PERFORMANCE TEST REPORT

Rendered to:

BERRIDGE MANUFACTURING COMPANY

**PRODUCT: Cee-Lock Standing Seam Metal Roof Panels
with Continuous 24 ga. Cee-Rib Clip**



Texas Firm F-11869



Digitally Signed by: John H. Waskow

2013.07.02 11:22:41 -05'00'

Report No: 87169.01-801-44

Test Dates: 11/14/08

Through: 11/16/08

Report Date: 11/24/08

Revision 1: 07/02/13

Record Retention End Date: 11/19/12



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Rendered to:

BERRIDGE MANUFACTURING COMPANY
1720 Maury
Houston, TX 77026

Report No: 87169.01-801-44
Test Dates: 11/14/08
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Product: Cee-Lock Standing Seam Metal Roof Panels with Continuous 24 ga. Cee-Rib Clip

Project Summary: Architectural Testing, Inc. was contracted by Berridge Manufacturing Company to evaluate their Cee-Lock standing seam metal roof panels for thermal expansion and contraction.

Test Method: The test specimens were evaluated in accordance with the following custom test method – Thermal Expansion and Contraction.

Relative panel motion ≥ 2 " for 100,000 cycles with no indication of material wear or sealant degradation.

Product Description:

Series/Model: Cee-Lock™ with Continuous Cee-Rib™ Clip

Product Type: Standing Seam Metal Roof Panels

Overall Size: 48" wide by 36" long

Individual Panel Size: 16" wide by 36" long

Cee-Lock Panel Thickness: 0.025"

Cee-Rib Clip Thickness: 0.025"

Purlin Thickness: 0.061"

Sample Construction: Sample comprised of three interlocking Cee-Lock steel panels connected by continuous steel Cee-Rib clips. Outer two panels mounted to two steel purlins spaced 2' apart with 3/4" self tapping screws. Purlins were welded along the bottom edge to a steel plate.

Test Procedures: Center panel attached to a pneumatic and cycled over a 2" distance for 100,000 cycles.

Test Results: After 100,000 cycles there was no indication of material wear or sealant degradation.

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 by Architectural Testing will expire. Results obtained are tested values and were secured by using the designed test methods. 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 for: Anthony Brown by Andy Cost

Tony Brown
Technician



Digitally Signed by: John H. Waskow

John Waskow, P.E.
Director – Regional Operations

TB/hd

Attachments

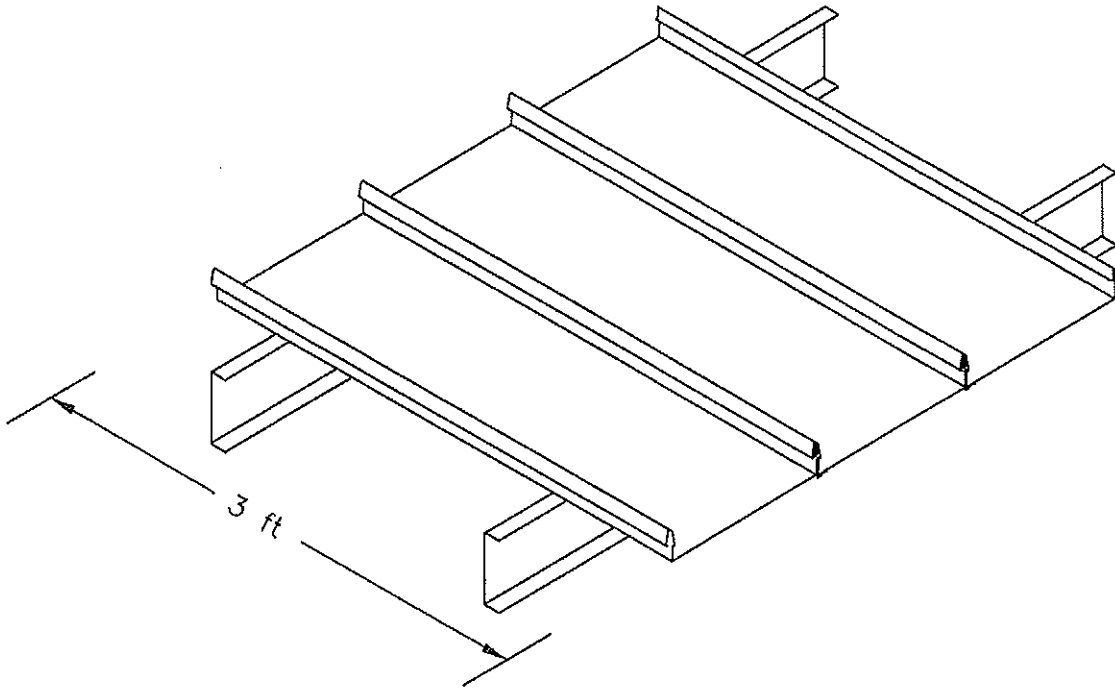
Appendix A – Drawings (3)

Revision Log

<u>Rev. #</u>	<u>Date</u>	<u>Page(s)</u>	<u>Revision(s)</u>
0	11/24/08	N/A	Original report issue.
1	07/02/13	Cover, 1	Changed Expiration Date to Record Retention End Date.

APPENDIX A

Drawings



CEE LOCK

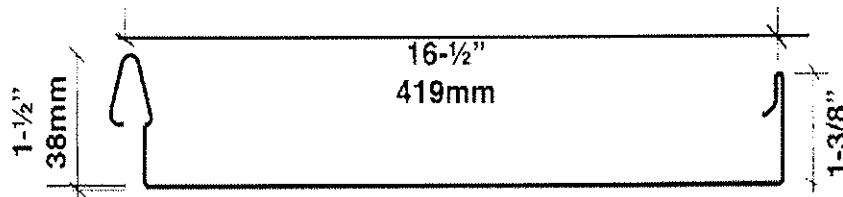
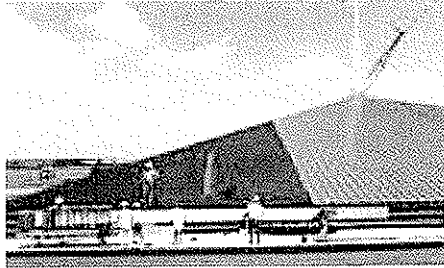
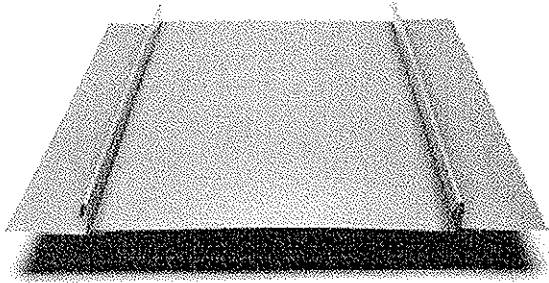


Architectural Testing

Test sample compliant with these details
Discrepancies are noted.

Report# 87169-01
Date 1-7-09 Tech HQ

Berridge Cee-Lock Standing Seam Roof Panel



Cee-Lock Panel Cross Section



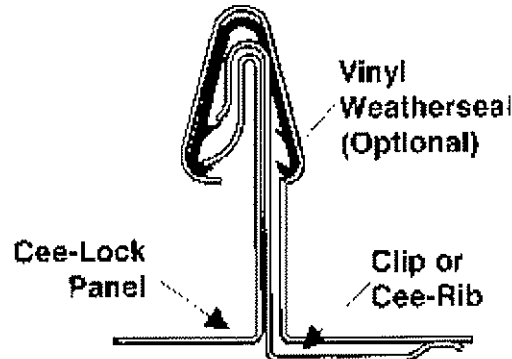
Architectural Testing

Test specimens prepared with these details
shall be used for testing.

Report# 87169.01

Date 1-7-09 Per HD

**INTEGRAL
SNAP-LOCK SEAM
W/PATENTED VINYL
WEATHERSEAL
(REQUIRED OVER
OPEN FRAMING)**



* U.S. Patent No. 4641475

SECTION PROPERTIES BASED ON 24 GAUGE 40 K.S.I.			
Cee-LOCK PANEL WITH CONTINUOUS 24 DEE R B	dl_x (In ⁴ /ft)	M_A (Ft.-lbs/Ft.)	V_A (Lbs)
POSITIVE BENDING	0.0567	87.0	610
NEGATIVE BENDING	0.0286	61.9	610

RECOMMENDED LOAD IN POUNDS PER SQUARE FOOT Panel Weight = 1.3 p.s.f.						
SPAN (Feet)	NET VERTICAL LIVE LOAD			NET VERTICAL WIND UPLIFT		
	1-SPAN	2-SPAN	3-SPAN	1-SPAN	2-SPAN	3-SPAN
2' - 0	60	60	60	90	90	90
2' - 6	60	60	60	80	90	90
3' - 0	60	53	60	55	90	60
3' - 6	55	38	45	40	74	63
4' - 0	42	29	34	30d	57	55d
4' - 6	33	23	27	20d	45	39d
5' - 0	27	18	21	15d	36	28d



Architectural Testing

Test results are based on these details. Loadings are noted.

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NOTES

- All loads meet 1/240 Deflection Criteria. (c) Deflection governs allowances.
- Wind Load Allowables increased by 33%.
- Resists 250 Lbs Point Load without structural failure at center of pan, however, foot traffic on panels during or after installation can cause deformations which may lead to aesthetic failure.
- Values based on 1986 edition of AISI, March 1987 printing & good engineering practice.

The Berridge Cee-Lock Standing Seam Roof System is an architectural and structural panel which carries a UL90 uplift rating and may be installed over solid sheathing. It may be roll formed on site with the Berridge Model CL-21 Portable Roll Former. Panel width is 16-1/2" with a seam height of 1-1/2". The unique integral snap lock batten incorporates the patented Berridge Vinyl Weatherseal.

- Install over solid substrate
- Easy to install, integral snap lock seam
- Vinyl Weatherseal in seam (optional)
- Continuous-length panels