

**EVALUATION REPORT OF
THE GARLAND COMPANY, INC.
'0.04" THICK ALUMINUM R-MER SPAN PANEL'**

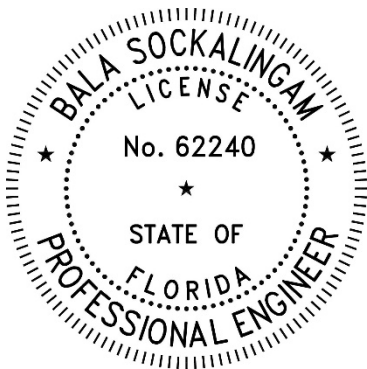
**FLORIDA BUILDING CODE 8TH EDITION (2023)
FLORIDA PRODUCT APPROVAL
FL 12377.1-R5
ROOFING
METAL ROOFING**

**Prepared For:
The Garland Company, Inc.
3800 East 91st Street
Cleveland, OH 44105
Telephone: (216) 641-7500
FAX: (216) 641-0633**

**Prepared By:
Bala Sockalingam, Ph.D., P.E.
Florida Professional Engineer #62240
1216 N Lansing Ave., Suite C
Tulsa, OK 74106
Telephone: (918) 492-5992**

**This report consists of
Evaluation Report (3 Pages including cover)
Installation Details (2 Pages)**

**Report No. C2692-1
Date: 7.24.2023**



This item has been digitally signed and sealed by Bala Sockalingam, PE, on the date indicated.

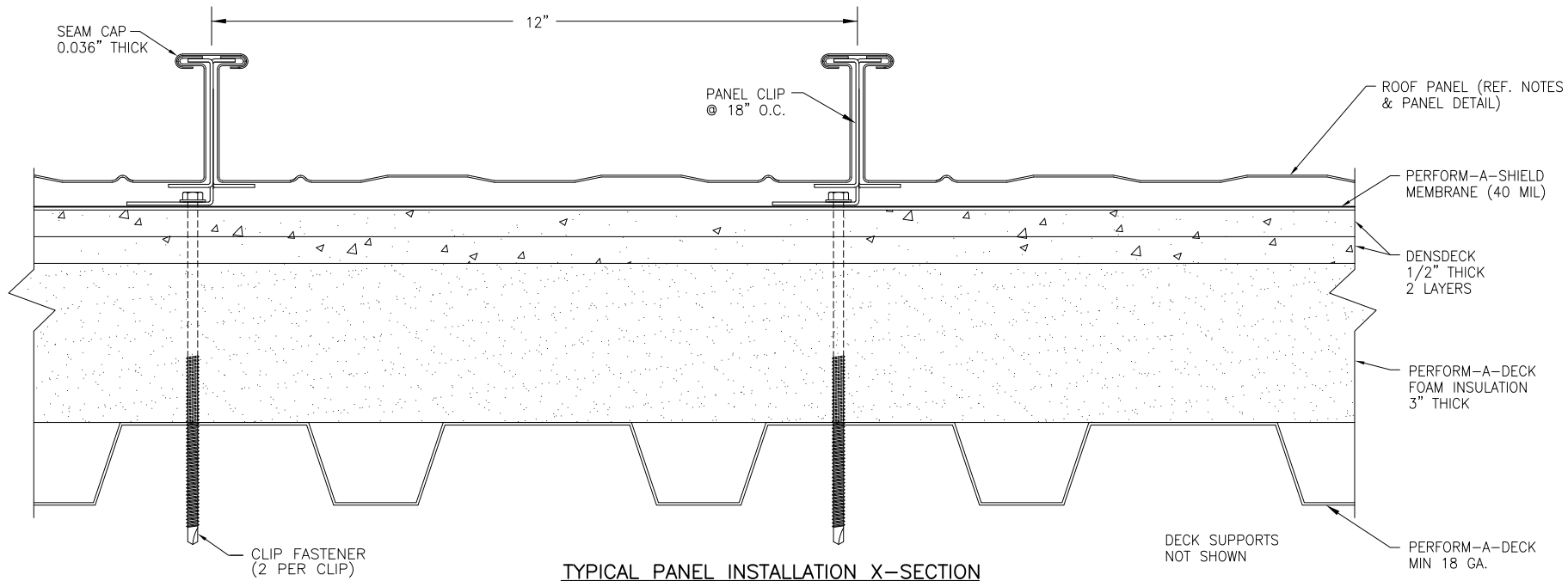
Printed copies of this document are not considered signed and sealed and this signature must be verified on any electronic copies.

**2023.07.24
09:22:01 -05'00'**

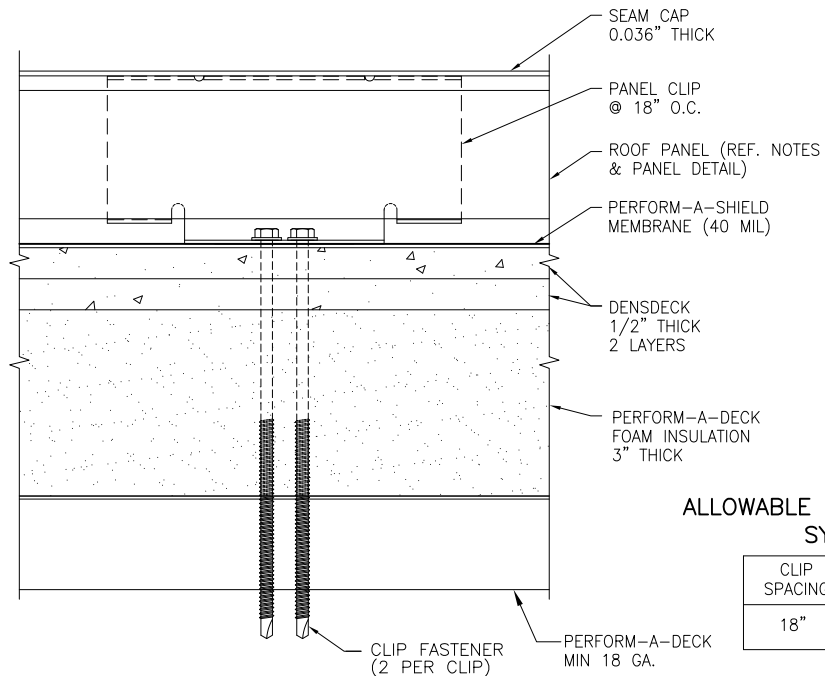
Manufacturer:	The Garland Company, Inc.
Product Name:	R-Mer Span
Panel Description:	Standing seam panel with 12" wide coverage and 2-3/8" high ribs
Materials:	Min 0.04" thick aluminum (ASTM B209) as per FBC 2023 Section 1507.4.3. Minimum yield stress $F_y = 17$ ksi.
Deck Description:	Min 18 ga., 1.5" deep Perform-A-Deck metal deck. The deck and its attachment to supports must be designed by other to carry the panel loads. Deck supports are spaced at max. 5' o.c.
Insulation:	3" thick (max.) Perform-A-Deck Polyisocyanurate foam insulation
Substructure:	2 layers of 1/2" thick reinforced Densdeck mineral board fastened through insulation into deck with 1/4" x 5" long self-tapping screws with metal hexagon compression disc at maximum 22" o.c.
Underlayment:	40 mil Perform-A-Shield membrane
Slope:	1/4:12 or greater in accordance with FBC 2023 Section 1507.4.2.
Design Uplift Pressure:	180 psf with 16 ga. galvanized clip spaced at 18" o.c. (System 1) 210 psf with continuous extruded aluminum clip fastened to deck with two fasteners at 18" o.c. (System 2)
Panel Attachment:	Clips and fasteners are corrosion resistant as per FBC 2023 Section 1506.7 and 1507.4.4, respectively.
System 1	Panels fastened with 16 ga. galvanized clips and (2) 1/4" x 7" long self-tapping screws per clip spaced at 18" o.c. into deck. The panel corrugations are sealed with 0.036" thick aluminum caps. Panels and seam caps are seamed with mechanical seamer.
System 2	Panels fastened with extruded aluminum continuous clips and (2) 1/4" x 7" long self-tapping screws spaced at 18" o.c. into deck. The fasteners are located on either side of the clip. The panel corrugations are sealed with (2) 0.036" thick aluminum caps. Panels and seam caps are seamed with mechanical seamer.
Test Standards:	Roof assembly tested in accordance with TAS 125-03 'Standard Requirements for Metal Roofing Systems'.
Code Compliance:	The product described herein has demonstrated compliance with FBC 2023 Section 1507.4.

Product Limitations: Design wind loads shall be determined for each project in accordance with FBC 2023 Section 1609 or ASCE 7-22 using allowable stress design. The maximum clip spacing listed herein shall not be exceeded. This evaluation report is not applicable in High Velocity Hurricane Zone. Fire classification is not within the scope of this Evaluation Report. Refer to FBC 2023 Section 1505 and current approved roofing materials directory or ASTM E108/UL790 report from an accredited laboratory for fire ratings of this product.

Supporting Documents: TAS 125-03 Test Report
Intertek Testing Services (Formerly Architectural Testing Inc.)
Project No. 84206.02-109-44, Reporting Date 3/25/2009, Revision 1
3/30/2009
(The Garland Company are authorized to use Garland Industries Test Report)



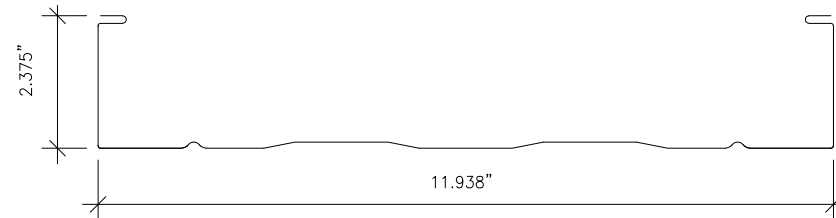
TYPICAL PANEL INSTALLATION X-SECTION



CLIP SIDE VIEW

**ALLOWABLE UPLIFT PRESSURE
SYSTEM 1**

CLIP SPACING	PRESSURE (PSF)
18"	180.0

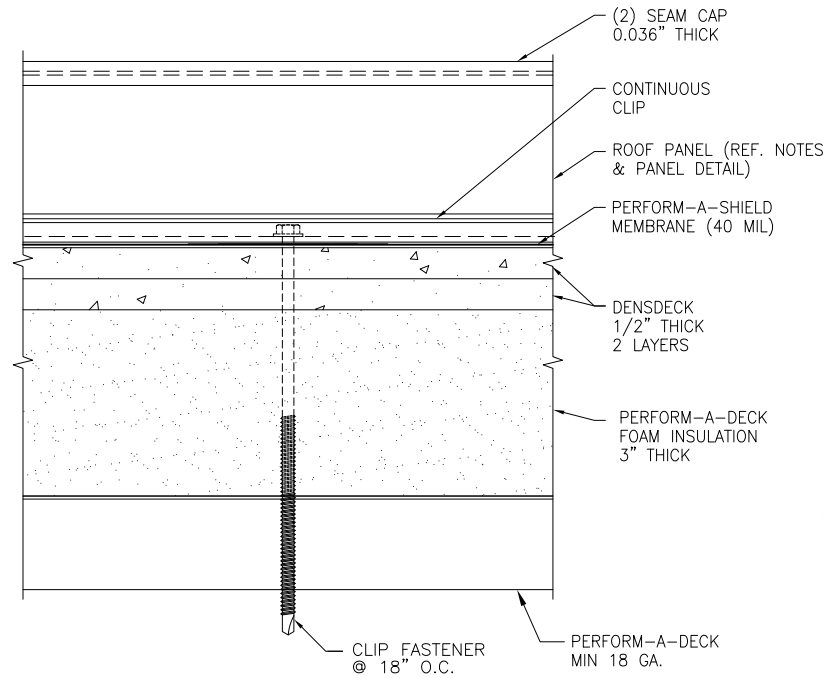
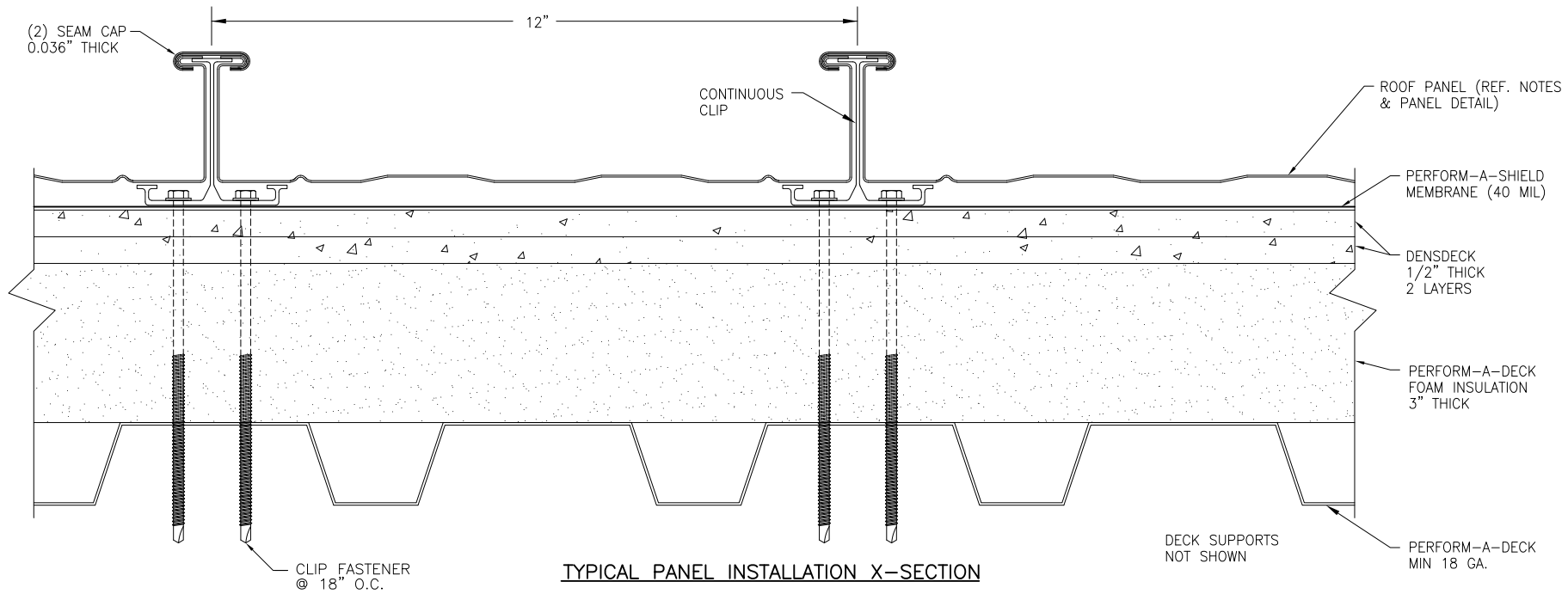


PANEL SECTION
(MIN 0.04" THICK ALUMINUM)

GENERAL NOTES:

1. ARCHITECTURAL STANDING SEAM ROOF PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
2. ROOF PANELS SHALL BE 0.04" THICK ALUMINUM). EFFECTIVE COVERING WIDTH OF PANEL = 12".
3. ROOF PANELS SHALL BE INSTALLED OVER STRUCTURE AS SPECIFIED ON THESE DRAWINGS.
4. REQUIRED DESIGN WIND LOADS SHALL BE DETERMINED FOR EACH PROJECT. THIS PANEL SYSTEM MAY NOT BE INSTALLED WHEN THE REQUIRED DESIGN WIND LOADS ARE GREATER THAN THE ALLOWABLE WIND LOADS SPECIFIED ON THESE DRAWINGS.
5. CLIPS AND FASTENERS MUST BE IN ACCORDANCE WITH THESE DRAWINGS & FLORIDA BUILDING CODE. IF A DIFFERENCE OCCURS BETWEEN THE MINIMUM REQUIREMENTS OF THESE DRAWINGS & THE CODE, THE CODE SHALL CONTROL.
6. DECK AND SUPPORTS MUST BE DESIGNED TO WITHSTAND WIND LOADS AS REQUIRED FOR EACH APPLICATION AND ARE THE RESPONSIBILITY OF OTHERS.

DRAWN BY: B.S.		CHECKED BY: G.J.	
PLOT:		DATE: 4/17/15	
NO.	DATE	BY	REVISION DESCRIPTION
DRAWING TITLE 0.04" THICK R-MER SPAN STANDING SEAM ROOF PANEL			
CONSULTANTS BALA SOCKALINGAM, PH.D., P.E.		MANUFACTURER THE GARLAND COMPANY, INC.	
1216 N LANSING AVE, SUITE C TULSA, OK 74106 PHONE: 918-492-5992 FAX: 966-366-1543		3800 East 91st Street Cleveland, OH 44105 216-641-7500	
DRAWING NO. 2692-1		REV. 	
PAGE NO. 1		OF 2	



**ALLOWABLE UPLIFT PRESSURE
SYSTEM 2**

FASTENER SPACING	PRESSURE (PSF)
18"	210.0

DRAWN BY: B.S.		CHECKED BY: G.J.	
PLOT: DATE: 4/17/15			
NO.	DATE	BY	REVISION DESCRIPTION
DRAWING TITLE 0.04" THICK R-MER SPAN STANDING SEAM ROOF PANEL			
CONSULTANTS BALA SOCKALINGAM, PH.D., P.E. 1216 N LANSING AVE, SUITE C TULSA, OK 74106 PHONE: 918-492-5992 FAX: 918-366-1543		MANUFACTURER THE GARLAND COMPANY, INC. 3800 East 91st Street Cleveland, OH 44105 216-641-7500	
DRAWING NO. 2692-1		REV.	
PAGE NO. 2		OF 2	