

**EVALUATION REPORT OF  
UNION CORRUGATING COMPANY  
'NOM 0.032" THICK ALUMINUM PERMALOK PANEL'**

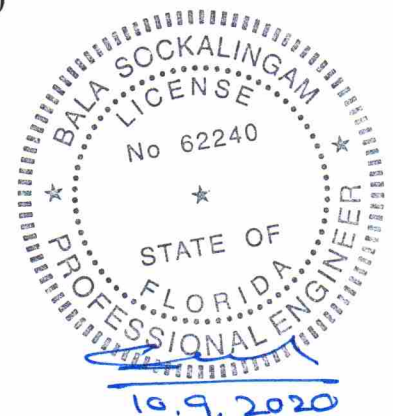
**FLORIDA BUILDING CODE 7TH EDITION (2020)  
FLORIDA PRODUCT APPROVAL  
FL 29467.3-R1  
ROOFING  
METAL ROOFING**

**Prepared For:  
Union Corrugating Company  
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**This report consists of  
Evaluation Report (3 Pages including cover)  
Installation Details (1 Page)**

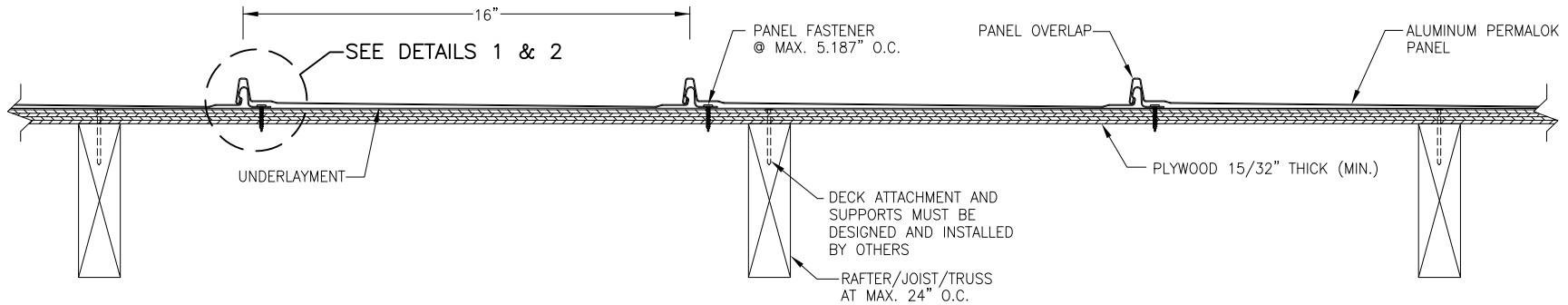
**Report No. C2402-3  
Date: 10.9.2020**



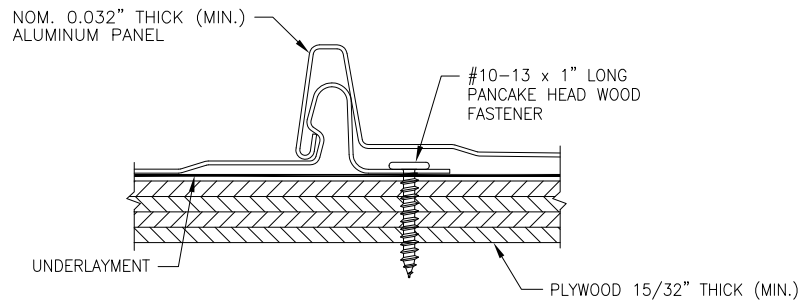
Manufacturer:	Union Corrugating Company
Product Name:	PermaLok
Panel Description:	Standing seam panel with max. 16" wide coverage, 1" high ribs and snap lock seam.
Materials:	Nom. 0.032" thick (min.) 3105-H14 Alloy (ASTM B209) as per FBC 2020 Section 1507.4.3.
Deck Description:	Min. 15/32" thick APA rated plywood or min. 3/4" thick wood plank (min SG of 0.42) for new and existing constructions. Designed by others and installed as per FBC 2020.
Underlayment:	Minimum underlayment as per FBC 2020 Section 1507.4.5.1.
Slope:	1/4:12 or greater in accordance with FBC 2020 Section 1507.4.2. Requires applied lap sealant for roof slopes less than 2:12.
Design Uplift Pressure: (Factor of Safety = 2)	37.5 psf at seam fastener spacing of 5-3/16" o.c. along seam 78.5 psf at seam fastener spacing of 5-3/16" o.c. along seam along seam with 3/16" diameter continuous bead adhesive in panel seam.
Panel Attachment:	#10-13 x 1" long pancake head wood screws along panel seam. Fastener shall be of sufficient length to penetrate through the deck a minimum of 1/4". Fasteners can be located in fastener slots or through solid portion of fastening flange. Fasteners are corrosion resistant as per FBC 2020 Section 1506.7.
Seam Adhesive:	Sika Sikaflex 201. In lieu of Sikaflex 201, adhesive with greater or equal tensile properties may be used.
Test Standards:	Roof assembly tested in accordance with UL580-06 'Uplift Resistance of Roof Assemblies' & UL1897-15 'Uplift Tests for Roof Covering Systems'.
Test Equivalency:	The test procedure in UL 1897-15 comply with test procedures prescribed in UL 1897-12.
Code Compliance:	The product described herein has demonstrated compliance with FBC 2020 Section 1507.4.
Product Limitations:	Design wind loads shall be determined for each project in accordance with FBC 2020 Section 1609 or ASCE 7-16 using allowable stress design. Maximum fastener spacing listed herein shall not be exceeded. The design pressure for reduced fastener spacing may be computed

using rational analysis prepared by a Florida Professional Engineer. This product is not approved for use in the High Velocity Hurricane Zone. Fire classification is not within scope of this Evaluation Report. Refer to FBC 2020 Section 1505 and current approved roofing materials directory or ASTM E108/UL790 report from an accredited laboratory for fire ratings of this product.

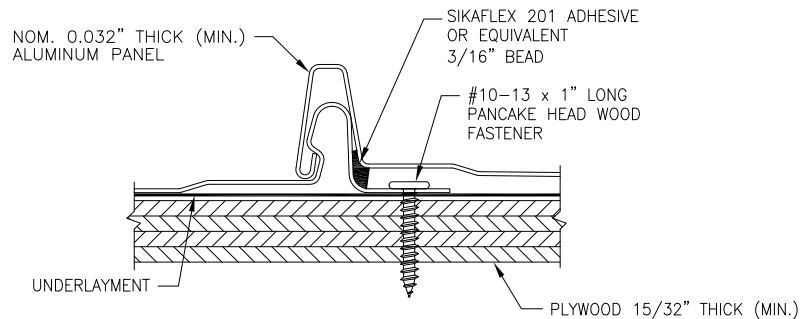
Supporting Documents: UL580 & UL1897 Test Reports  
Intertek B&C  
Project No. J8331.02-450-44 R0, Reporting Date 10/15/19



### TYPICAL PANEL INSTALLATION X-SECTION



**DETAIL 1**



**DETAIL 2**

### ALLOWABLE UPLIFT PRESSURE

FASTENER SPACING ALONG RIB (IN)	SEAM ADHESIVE DIAMETER (IN)	PRESSURE (PSF)
5.187	NONE	37.5
5.187	3/16	78.5

### GENERAL NOTES:

1. ARCHITECTURAL ROOF PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
2. ROOF PANELS ARE SHALL BE NOM. 0.032" THICK (MIN.) ALUMINUM. EFFECTIVE COVERING WIDTH OF PANEL = 16".
3. ROOF PANELS SHALL BE INSTALLED OVER SHEATHING & STRUCTURE AS SPECIFIED ON THIS DRAWING.
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 LOAD TABLE.
5. ALL FASTENERS MUST BE IN ACCORDANCE WITH THIS DRAWING & THE FLORIDA BUILDING CODE. IF A DIFFERENCE OCCURS BETWEEN THE MINIMUM REQUIREMENTS OF THIS DRAWING & THE CODE, THE CODE SHALL CONTROL.
6. RAFTERS/JOISTS/TRUSSES MUST BE DESIGNED TO WITHSTAND WIND LOADS AS REQUIRED FOR EACH APPLICATION AND ARE THE RESPONSIBILITY OF OTHERS.

DRAWN BY: B.S.	CHECKED BY: R.B.	PLOT:	DATE: 10/7/20
NO.	REVISION	DESCRIPTION	DATE
<b>DRAWING TITLE: PERMALOK ALUMINUM PANEL</b> <small>CONSULTANTS</small> <b>BALA SOCKALINGAM, PH.D., P.E.</b> 1216 N LANSING AVE, SUITE C TULSA, OK 74106 PHONE: 918-492-5992 FAX: 866-366-1543			
<small>MANUFACTURER</small> <b>UNION CORRUGATING CO.</b> 701 S. KING STREET FAYETTEVILLE, NC 28301 910-483-2195			
DRAWING NO. <b>D2402-3</b>	REV.	SHEET NO. <b>1</b> OF <b>1</b>	