

**EVALUATION REPORT OF
UNION CORRUGATING COMPANY
'26 GA. PBR OR R PANEL'**

**FLORIDA BUILDING CODE 7TH EDITION (2020)
FLORIDA PRODUCT APPROVAL
FL 20484.8-R2
ROOFING
METAL ROOFING**

**Prepared For:
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**This report consists of
Evaluation Report (3 Pages including cover)
Installation Details (1 Page)
Load Span Table (1 Page)**

**Report No. C2401-8
Date: 10.10.2020**



Manufacturer: Union Corrugating Company

Product Name: PBR or R Panel

Panel Description: 36" wide coverage with (4) 1-1/4" high ribs

Materials: Min. 26 ga., 80 ksi steel or min. 24 ga., 50 ksi steel. Galvanized coated steel (ASTM A653) or Galvalume coated steel (ASTM A792) or painted steel (ASTM A755). Corrosion resistant as per FBC 2020 Section 1507.4.3.

Deck Description: Min. 15/32" thick 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: 1/2:12 or greater in accordance with FBC 2020 Section 1507.4.2

Design Uplift Pressure: 30.0 psf at fastener spacing of 48" o.c.
(Factor of Safety = 2) 161.5 psf at fastener spacing of 6" o.c.

Panel Attachment:
Type: #9-15 or #10-14 hex head wood screws with sealed washer. Fasteners are corrosion resistant as per FBC 2020 Section 1507.4.4. Fastener shall be of sufficient length to penetrate through the deck a minimum of 1/4".

At intermediate 12" o.c. across panel width
At panel ends 7"-5"-7" o.c. across panel width

Sidelap Attachment: 1/4"-14 x 7/8" long SDS with washer at 18" o.c. Fasteners are corrosion resistant as per FBC 2020 Section 1507.4.4.

Test Standards: Roof assembly tested in accordance with UL580-06 'Uplift Resistance of Roof Assemblies' & UL1897-04 'Uplift Tests for Roof Covering Systems'.

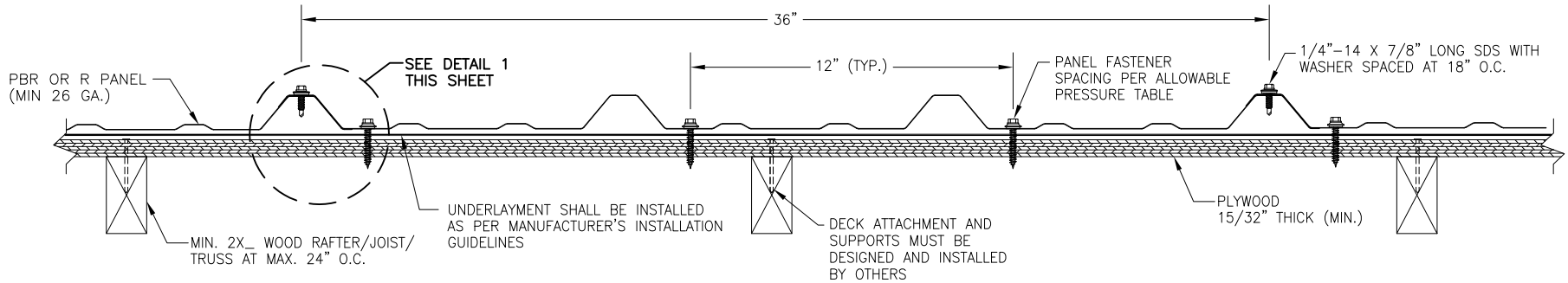
Test Equivalency: The test procedures in UL 1897-04 comply with test procedures prescribed in UL 1897-12.

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. The 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 or based on Union load span table. This evaluation report is not applicable in 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.

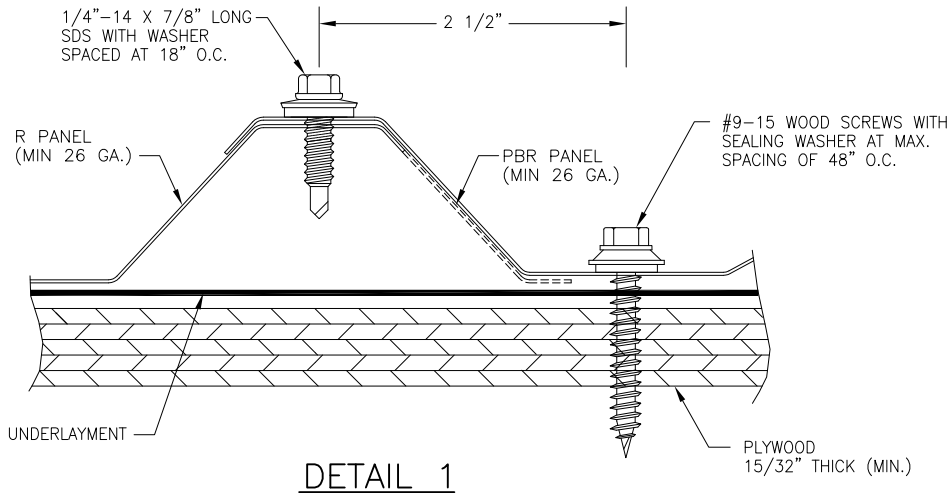
Supporting Documents: UL 580 & UL 1897 Test Report
Farabaugh Engineering and Testing Inc.
Project No. T278-15, Reporting Date 10/9/15



TYPICAL PANEL INSTALLATION X-SECTION

ALLOWABLE UPLIFT PRESSURE

PANEL FASTENERS SPACING ALONG RIB (IN)	PRESSURE (PSF)
48"	30.0
6"	161.5



DETAIL 1

GENERAL NOTES:

1. ARCHITECTURAL ROOF PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
2. ROOF PANELS SHALL BE MIN. 26 GA. EFFECTIVE COVERING WIDTH OF PANEL = 36".
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: J.S.
PLOT:	DATE: 10/24/15
DATE	
BY	
REVISION DESCRIPTION	
NO.	

DRAWING TITLE PBR OR R PANEL	UNION CORRUGATING CO. 701 S. KING STREET FAYETTEVILLE, NC 28301 COMPANY PHONE NUMBER?
	CONSULTANTS BALA SOCKALINGAM, PH.D., P.E. 1216 N. LANSING AVE., SUITE C TULSA, OK 74106 PHONE: 918-492-5992 FAX: 866-366-1543

DRAWING NO. C2401-8	REV.
PAGE NO. 1	OF 1

Union Corrugating Company
PBR or R Panel Uplift Loads
(Min 26 ga.)

Description	Fastener Spacing along panel length (in)	Uplift Design Load (psf)
Coverage width: 36" Panel fasteners spaced at 12" o.c. across width	6	161.5
	9	152.1
	12	120.0
	15	96.0
	18	80.0
	21	68.6
	24	60.0
	27	53.3
	30	48.0
	33	43.6
	36	40.0
	39	36.9
	42	34.3
	45	32.0
	48	30.0

Notes:

1. The bold numbers indicate design loads calculated from test data with safety factor of 2.
2. Panels must be installed as per Evaluation Report FL 20484.8 and Union current installation procedure.



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