

**EVALUATION REPORT OF  
UNION CORRUGATING COMPANY  
'26 GA. 5V PANEL'**

**FLORIDA BUILDING CODE 6TH EDITION (2017)  
FLORIDA PRODUCT APPROVAL  
FL 7271.3-R4  
ROOFING  
METAL ROOFING**

**Prepared For:  
Union Corrugating Company  
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**This report consists of  
Evaluation Report (3 Pages including cover)  
Installation Details (2 Pages)**

**Report No. C2174-3  
Date: 8.23.2017**



Manufacturer: Union Corrugating Company

Product Name: 5V Panel

Panel Description: 24" wide coverage with (5) 1/2" high ribs

Materials: Minimum 26 ga., 80 ksi steel. Galvanized coated steel (ASTM A653) or Galvalume coated steel (ASTM A792) or painted steel (ASTM A755).

Deck Description: Min. 19/32" 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 2017.

Underlayment: Minimum underlayment as per FBC 2017 Section 1507.4.5.1

Slope: 1/2:12 or greater in accordance with FBC 2017 Section 1507.4.2

Design Uplift Pressure: (Factor of Safety = 2)

Fastener pattern 1 120.9 psf @ fastener spacing of 24" o.c.

Fastener pattern 2 85.8 psf @ fastener spacing of 24" o.c.  
113.1 psf @ fastener spacing of 12" o.c.

Panel Attachment:

Fastener pattern 1 #9-15 or #10-14 x 1.5" long wood screw with washer  
At panel ends @ max 6" o.c. across panel width through panel flat  
At interior @ max 12" o.c. across panel width through panel flat

Fastener pattern 2 #9-15 or #10-14 x 2" long wood screw with washer  
At panel ends @ max 6" o.c. across panel width through panel flat and rib  
At interior @ max 12" o.c. across panel width through panel rib

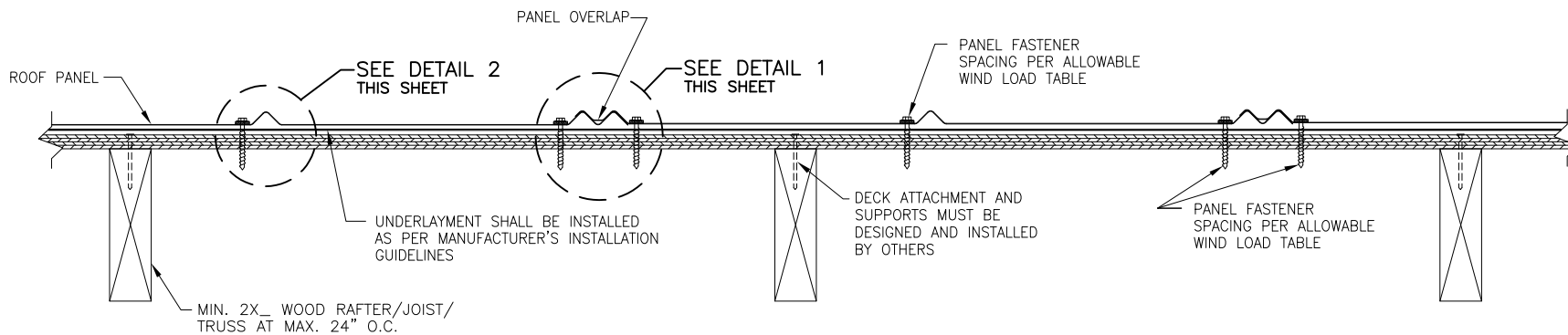
Test Standards: Roof assembly tested in accordance with TAS 125-03 'Standard Requirements for Metal Roofing Systems'.

Code Compliance: The product described herein has demonstrated compliance with FBC 2017 Section 1507.4

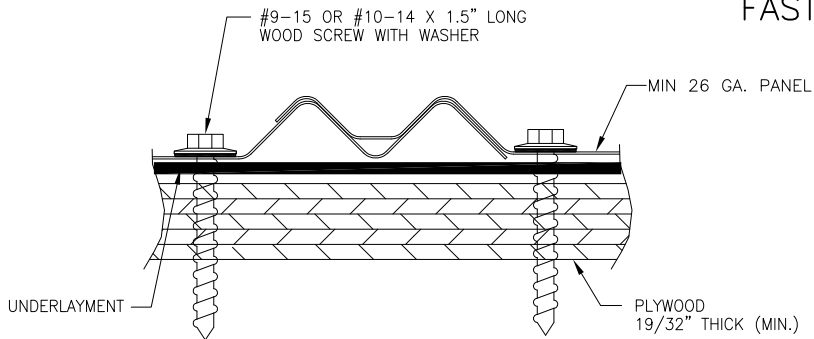
Product Limitations: Design wind loads shall be determined for each project in accordance with FBC 2017 Section 1609 or ASCE 7-10 using allowable stress design. The maximum fastener spacing listed herein shall not be exceeded. This evaluation report is not applicable in High Velocity Hurricane Zone. Refer to current NOA for use of this product in High Velocity Hurricane Zone. Fire classification is not within scope of this Evaluation Report. Refer to FBC 2017 Section 1505 and current

approved roofing materials directory or ASTM E108/UL790 report from an accredited laboratory for fire ratings of this product.

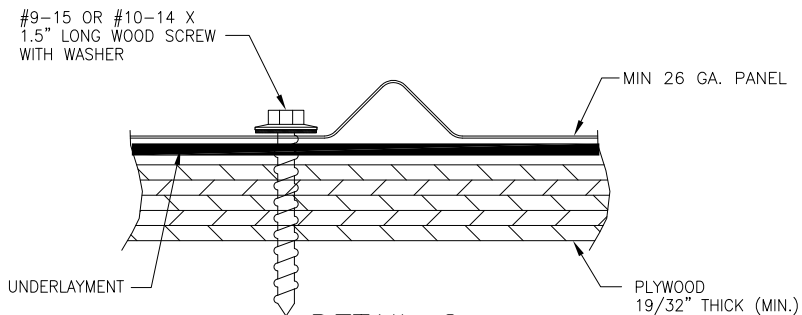
Supporting Documents: TAS 125-03 Test Reports  
Farabaugh Engineering and Testing Inc.  
Project No. T164-06, Reporting Date 6/8/06  
Hurricane Test Laboratory  
Report No. 0293-0202-06, Reporting Date 4/5/06  
Hurricane Test Laboratory  
Report No. 0293-0609-05, Reporting Date 8/31/05



**TYPICAL PANEL INSTALLATION X-SECTION  
FASTENER PATTERN 1**



**DETAIL 1**



**DETAIL 2**

**ALLOWABLE UPLIFT PRESSURE**

FASTENER SPACING (IN)	PRESSURE (PSF)
24	120.9

**GENERAL NOTES:**

1. ARCHITECTURAL ROOF PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
2. ROOF PANELS ARE SHALL BE MINIMUM 26 GA. EFFECTIVE COVERING WIDTH OF PANEL = 24".
3. THE 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:

PLOT: DATE: 3/19/15

NO.	REVISION	DESCRIPTION	DATE

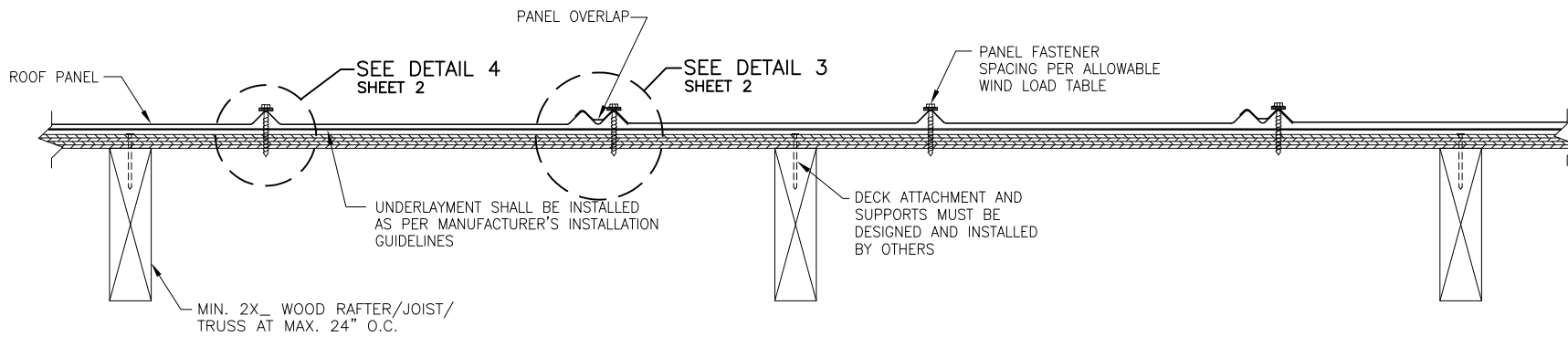
MANUFACTURER  
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DRAWING TITLE  
**5V PANEL**

DRAWING NO. REV.  
**C2174-3A**

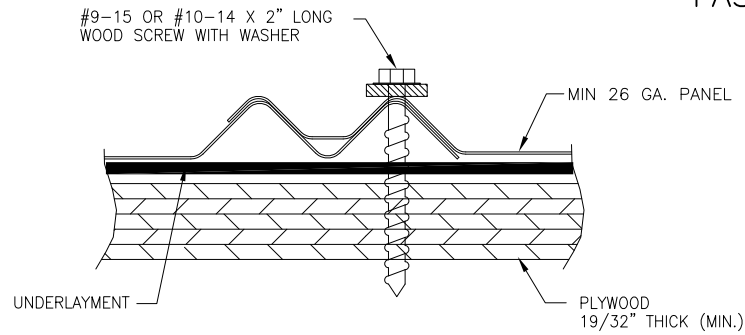
SHEET NO.  
**1 OF 2**



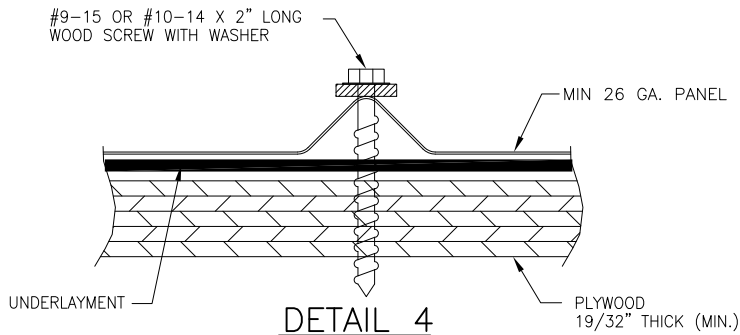
**TYPICAL PANEL INSTALLATION X-SECTION  
FASTENER PATTERN 2**

**ALLOWABLE UPLIFT PRESSURE**

FASTENER SPACING (IN)	PRESSURE (PSF)
24	85.8
12	113.1



**DETAIL 3**



**DETAIL 4**

NO.	REVISION DESCRIPTION	DATE

DRAWN BY: B.S.  
 CHECKED BY:  
 PLOT: DATE: 3/19/15

DRAWING TITLE: **5V PANEL**  
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DRAWING NO.	REV.
<b>C2174-3B</b>	
SHEET NO.	
<b>2</b>	<b>2</b>