

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

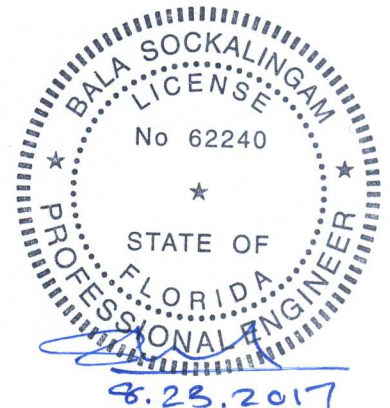
**FLORIDA BUILDING CODE 6TH EDITION (2017)  
FLORIDA PRODUCT APPROVAL  
FL 7271.4-R4  
ROOFING  
METAL ROOFING**

**Prepared For:  
Union Corrugating Company  
701 S. King St.  
Fayetteville, NC 28301  
Telephone: (910) 483-0479  
Fax: (910) 483-1091**

**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  
FAX: (866) 366-1543**

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

**Report No. C2174-4  
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 29 ga., 80 ksi steel. Galvanized coated steel (ASTM A653) or Galvalume coated steel (ASTM A792) or painted steel (ASTM A755).

Deck Description: Min 15/32" thick APA rated plywood or 7/16" thick OSB 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: 52.5 psf @ fastener spacing of 12" o.c.  
(Factor of Safety = 2)

Panel Attachment: #9-15 or #10-14 x 1.5" 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

Test Standards: Roof assembly tested in accordance with UL580-06 'Uplift Resistance of Roof Assemblies' and FM 4470 Section 5.5 'Resistance to Foot Traffic'.

Test Equivalency: The test procedures in FM 4470 (1992) comply with test procedures prescribed in FM 4470 (2012).

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. 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: UL580 Roof Deck Construction No. 579

FM 4470 Test Report  
ENCON Technology Inc.  
C1583-3, Reporting Date 7/24/08



## Construction No. 579 TGKX.579 Roof Deck Constructions

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### Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

### Roof Deck Constructions

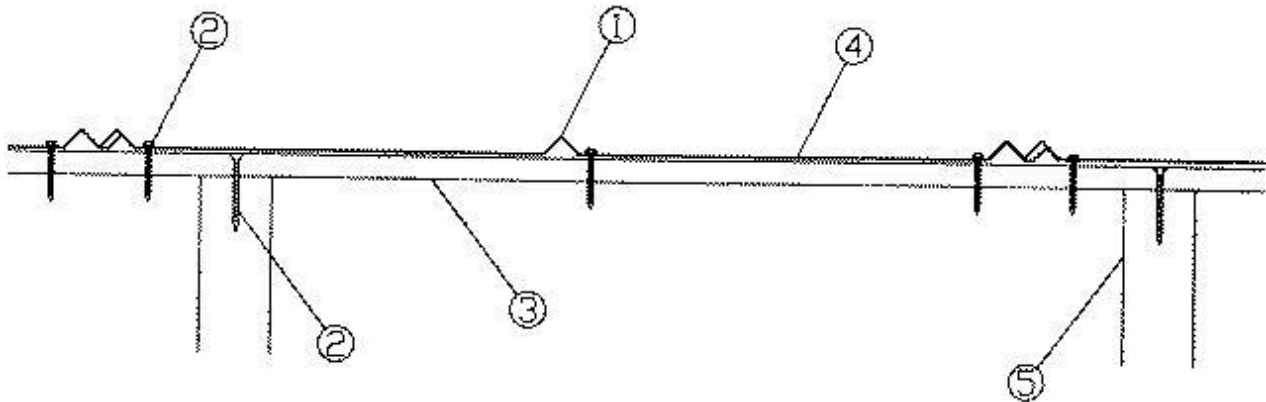
[See General Information for Roof Deck Constructions](#)

## Construction No. 579

October 27, 2016

**Uplift – Class 90**

**Fire Not Investigated**



1. **Metal Roof Deck Panels\*** – No. 29 MSG min thick coated steel. 24 in. cover width (26 in. overall width).

**BENTON METAL DEPOT INC** ([View Classification](#)) – "5V Panel"

**MARLYN METALS INC** ([View Classification](#)) – "5V CRIMP"

**METAL SALES MANUFACTURING CORPORATION** ([View Classification](#)) – "5V-Crimp"

**UNION CORRUGATING CO** ([View Classification](#)) – "5-V"

2. **Fasteners (Screws)** – Fasteners to attach the plywood deck to the joists to be 2 in. long, No. 8 coarse thread screws. Fasteners to attach the panels to the deck to be No. 9-15 x 1-1/2 in. long sharp point screws with a hex-washer head or No. 10-14 x 1-1/2 in. hex-washer head wood screw with bonded neoprene washer. Fasteners to be spaced a maximum of 12 in. OC along one side of each rib.

3. **Deck** — Min 7/16 in. thick APA rated oriented strand board or min 15/32 in. thick, Type C-D, APA rated plywood.
4. **Underlayment** — 30 lb. felt, min 2 in. sidelap, attached per manufacturer's recommendations.
5. **Joists** — Graded dimension lumber, No. 2 or better. Spaced a max of 24 in. OC.

Refer to general information, Roof Deck Construction, for Items not evaluated.

**\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

Last Updated on 2016-10-27

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