

**EVALUATION REPORT OF  
UNION CORRUGATING COMPANY  
'26 GA. PBR PANEL'  
OVER STEEL SUPPORTS**

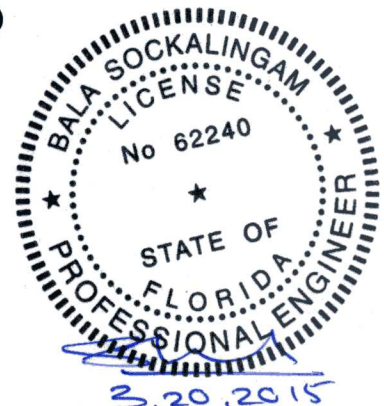
**FLORIDA BUILDING CODE 5<sup>TH</sup> EDITION (2014)  
FLORIDA PRODUCT APPROVAL  
FL 9555.6-R3  
STRUCTURAL COMPONENTS  
ROOF DECK**

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**This report consists of  
Evaluation Report (2 Pages including cover)  
Installation Details (5 Pages)**

**Report No. C1999-8  
Date: 3.20.2015**



Manufacturer: Union Corrugating Company

Product Name: PBR Panel

Panel Description: 36" wide coverage with 1-1/4" high ribs at 12" o.c.

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

Support Description: Min 16 ga., 50 ksi steel. (Must be designed by others)

Slope: 1/2:12 or greater in accordance with FBC 2014 Section 1507.4.2

Design Uplift Pressure: 52.5 psf @ maximum support spacing of 60-3/16" o.c.  
(Factor of Safety = 2)

Support Attachment: #12-14 x 1" long self drilling screws with washers  
At Interior Supports: @ 12" o.c. across panel width  
At Ends Supports: @ 5"-7"-5" o.c. across panel width

Sidelap Attachment: 1/4"-14 x 7/8" long SDS with washer @ 20" o.c.

Test Standards: Roof assembly tested in accordance with UL-580-94 'Uplift Resistance of Roof Assemblies' and FM 4470 Section 5.5 'Resistance to Foot Traffic'.

Code Compliance: The product described herein has demonstrated compliance with FBC 2014 Section 1507.4.

Product Limitations: Design wind loads shall be determined for each project in accordance with FBC 2014 Section 1609 or ASCE 7-10 using allowable stress design. The maximum support spacing listed herein shall not be exceeded. The design uplift pressure for reduced support 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 2014 Section 1505 and current approved roofing materials directory for fire ratings of this product.

Supporting Documents: UL Roof Deck Construction No. 161  
  
FM 4470 Test Report  
ENCON Technology Inc  
C1583-1, Reporting Date 7/24/08



## Construction No. 161 TGKX.161 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

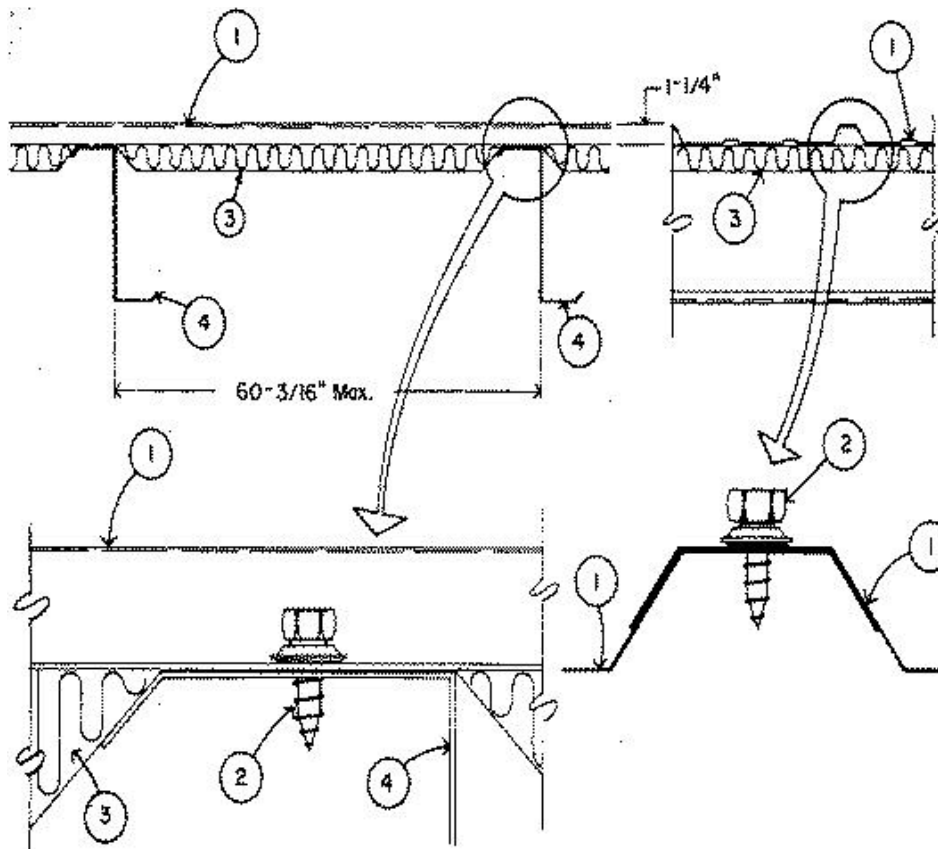
[See General Information for Roof Deck Constructions](#)

### Construction No. 161

February 23, 2015

Uplift – Class 90

Fire Not Investigated



1. **Metal Roof Deck Panels\*** — No. 26 MSG min gauge coated steel. Panels continuous over two or more spans. End laps to occur over purlins with panels overlapped 3 in. min., 6 in. max with lap centered over purlin web. A line of tape sealant may be used at panel side and end laps.

**A & S BUILDING SYSTEMS L P** ([View Classification](#)) — "R" or "PBR" Panel

**ACT BUILDING SYSTEMS INC** ([View Classification](#)) — "R" or "PBR Panel"

**ALL STEEL BUILDINGS & COMPONENTS TUBULAR DIVISION INC** ([View Classification](#)) — "R or PBR panel"

**ALLIANCE STEEL INC** ([View Classification](#)) — "Alliance PBR"

**ALLSOUTH PRE-ENGINEERED COMPONENTS L L C** ([View Classification](#)) — "R" or "PBR" Panel

**AMERICAN BUILDING COMPONENTS** ([View Classification](#)) — "R or PBR Panel"

**AMERICAN BUILDINGS CO** ([View Classification](#)) — Long Span III

**AIM METALS L L C** ([View Classification](#)) — "PBR-Span", "R-Span"

**BERRIDGE MFG CO** ([View Classification](#)) — "R Panel"

**BIGBEE STEEL BUILDINGS INC** ([View Classification](#)) — "Bigbee-RibII"

**BRIDGER STEEL** ([View Classification](#)) — "PBR Panel"

**BUILDING COMPONENTS INC** ([View Classification](#)) — "R-PANEL" or "PBR-PANEL"

**BURROW CONSTRUCTION INC** ([View Classification](#)) — "R Panel"

**BBM STEEL BUILDINGS INC** ([View Classification](#)) — "R-Panel"

**B C STEEL BUILDINGS INC** ([View Classification](#)) — B C Steel Building "R/PBR"

**CENTRAL STATES MFG INC** ([View Classification](#)) — "R Loc"

**CENTRAL TEXAS METAL ROLLFORMING INC** ([View Classification](#)) — "R-Panel" or "PBR-Panel"

**CENTRIA** ([View Classification](#)) — "R" or "PBR"

**CO BUILDING SYSTEMS** ([View Classification](#)) — "R" or "PBR"

**COMMERCIAL BUILDING COMPONENTS INC** ([View Classification](#)) — "R"

**CONSOLIDATED SYSTEMS INC** ([View Classification](#)) — "R-Panel" or "PBR-Panel"

**FAB TECH INC, DBA CORLE BUILDING SYSTEMS** ([View Classification](#)) — "R Panel"

**CREGO METAL SYSTEMS** ([View Classification](#)) — "CMR"

**DAKOTA STEEL & TRIM INC** ([View Classification](#)) — "R Panel"

**EAST TEXAS ARCHITECTURAL SHEETMETAL L L C, DBA ETAS INC** ([View Classification](#)) — "R Panel"

**FLORIDA PRE-FAB INC** ([View Classification](#)) — "Florida Rib Panel"

**GIDEON STEEL PANEL CO L L C** ([View Classification](#)) — "Gideon R-Panel" or "Gideon PBR"

**GRABER POST BLDS INC** ([View Classification](#)) — "R-Panel"

**GULF STATES MFRS L L C** ([View Classification](#)) — "Classic R"

**HORIZON STRUCTURAL SYSTEMS** ([View Classification](#)) — "R" or "PBR"

**IDEAL STEEL L L C** ([View Classification](#)) — "PBR Panel"

**INDACO METALS L L C** ([View Classification](#)) — "Indaco R" or "Indaco PBR"

**JNL STEEL COMPONENTS INC** ([View Classification](#)) — "R-PANEL" or "PBR-PANEL"

**KIRBY BUILDING SYSTEMS INC** ([View Classification](#)) — "Kirby-Rib II"

**MARLYN METALS INC** ([View Classification](#)) — "R" or "PBR"

**MBCI** ([View Classification](#)) — "R" or "PBR" Panel

**MCELROY METAL MILL INC** ([View Classification](#)) — "R Panel"

**MESCO METAL BUILDINGS** ([View Classification](#)) — "R" or "PBR" Panel

**METALLION INDUSTRIES INC** ([View Classification](#)) — "PBR"

**METALMAX L L C** ([View Classification](#)) — "R Panel" or "PBR Panel"

**METAL SALES MANUFACTURING CORPORATION** ([View Classification](#)) — "R Panel", "PBR Panel".

**MUELLER INC** ([View Classification](#)) — "R" or "PBR"

**NCI BUILDING SYSTEMS L P** ([View Classification](#)) — "R" or "PBR" Panel

**NUCOR BUILDING SYSTEMS, DIV OF NUCOR CORP** ([View Classification](#)) — "Classic"

**PINNACLE STRUCTURES INC** ([View Classification](#)) — "PBR"

**PRIME BUILDING COMPONENTS L L C** ([View Classification](#)) — "R Panel"

**REEDS METALS OF BENTON** ([View Classification](#)) — "PBR"

**RIGID GLOBAL BUILDINGS L L C** ([View Classification](#)) — "R" or "PBR"

**RUFFIN BUILDING SYSTEMS INC** ([View Classification](#)) — "R" or "PBR"

**S&S STEEL BUILDINGS INC** ([View Classification](#)) — "RR" or "PRR"

**SAN ANTONIO QUALITY METALS** ([View Classification](#)) — "R-Panel", "PBR-Panel" or "AG Panel"

**SCHULTE BUILDING SYSTEMS INC** ([View Classification](#)) — "R" or "PBR" Panel

**SOUTHWEST METAL COMPONENTS AND SUPPLY LP** ([View Classification](#)) — "R-Panel" or "PBR"

**SPIRKO MANUFACTURING** ([View Classification](#)) — "R Panel"

**STANDARD STRUCTURES INC** ([View Classification](#)) — "PBR Panel" or "R Panel"

**STEEL BUILDING SUPPLY INC** ([View Classification](#)) — "R" or "PBR" Panel

**STEEL BUILT CORP** ([View Classification](#)) — "SBC PBR Panel"

**STEEL SERVICE BUILDING CO** ([View Classification](#)) — "R" or "PBL" Panel

**TAYLOR & SONS PIPE & STEEL INC** ([View Classification](#)) — "R-Panel"

**TERRY BUILDING CO INC** ([View Classification](#)) — "R" Panel

**TEXAS BUILDING AND ROOFING SUPPLIES INC** — "R" or "PBR" Panel

**TEXOMA STEEL BUILDINGS INC** ([View Classification](#)) — "R" Panel.

**TREMCO INC** ([View Classification](#)) — "TremLock "R" Panel"

**UNION CORRUGATING CO** ([View Classification](#)) — "R-Panel" or "PBR-Panel"

**UNITED STRUCTURES OF AMERICA INC** ([View Classification](#)) — "U. S. A. R"

**WHEELER METALS INC** ([View Classification](#)) — "R-Panel"

**WHIRLWIND STEEL BUILDINGS INC** ([View Classification](#)) — "Super Span (X)"

2. **Panel Fasteners** — For panel to panel and panel to purlin connections to be No. 12-14 by 1 in. self-drilling, self-tapping, hex head, plated steel screws with a 5/8 in. OD formed steel washer and a neoprene sealing washer.

As alternate Fasteners — For panel to purlin connections, 1/4 - 14 HHAB self-tapping, plating steel screws, with a separate 5/8 in. OD dome shaped steel washer and a neoprene sealing washer may be used.

Or: No. 14-10HHA, self-tapping, plating steel screws, with a separate, 5/8 in. OD dome shaped steel washer and a neoprene sealing washer may be used.

Spacing, for panel — to — purlin connections to be 12 in. on center beginning 2 — 1/2 in. from center line on one side of each major rib. Spacing at end lap to be in a 5 — 7 — 5 — 7 in. pattern beginning 2 — 1/2 in. from the center line on both sides of each major rib.

Fastener for panel to purlin connection to be 1-1/4 or 1-1/2 in. long when insulation (Item 3) is greater than 4-1/2 in.

Spacing for panel — to — panel connections to be 20 in. on center with a fastener located in line with the purlin fasteners.

3. **Insulation** — (Optional) — Any compressible blanket insulation 6 in. max thickness before compression.

4. **Purlin** — No. 16 MSG min gauge steel (50,000 psi min yield).

5. **Lateral Bracing** — (Not shown) — As required.

Refer to General Information, Roof Deck Construction, (Roofing Materials and Systems Directory) 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 2015-02-23

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