

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

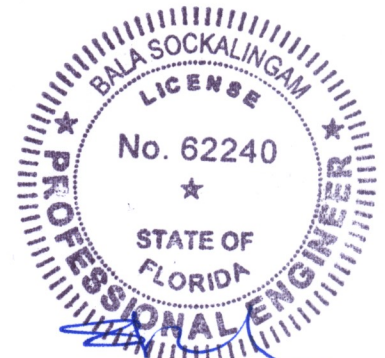
**FLORIDA PRODUCT APPROVAL
FL 9555.6-R2
STRUCTURAL COMPONENTS
ROOF DECK**

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

**Report No. C1805-8
Date: 11.25.2011**



11.25.11

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

Slope: 1/2:12 or greater in accordance with FBC 2010 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 SDS 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 @ 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 2010 Section 1507.4.

Product Limitations: Design wind loads shall be determined for each project in accordance with FBC 2010 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 2010 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 Listed or Classified 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 as Classified, Listed, or Recognized.
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Roof Deck Constructions

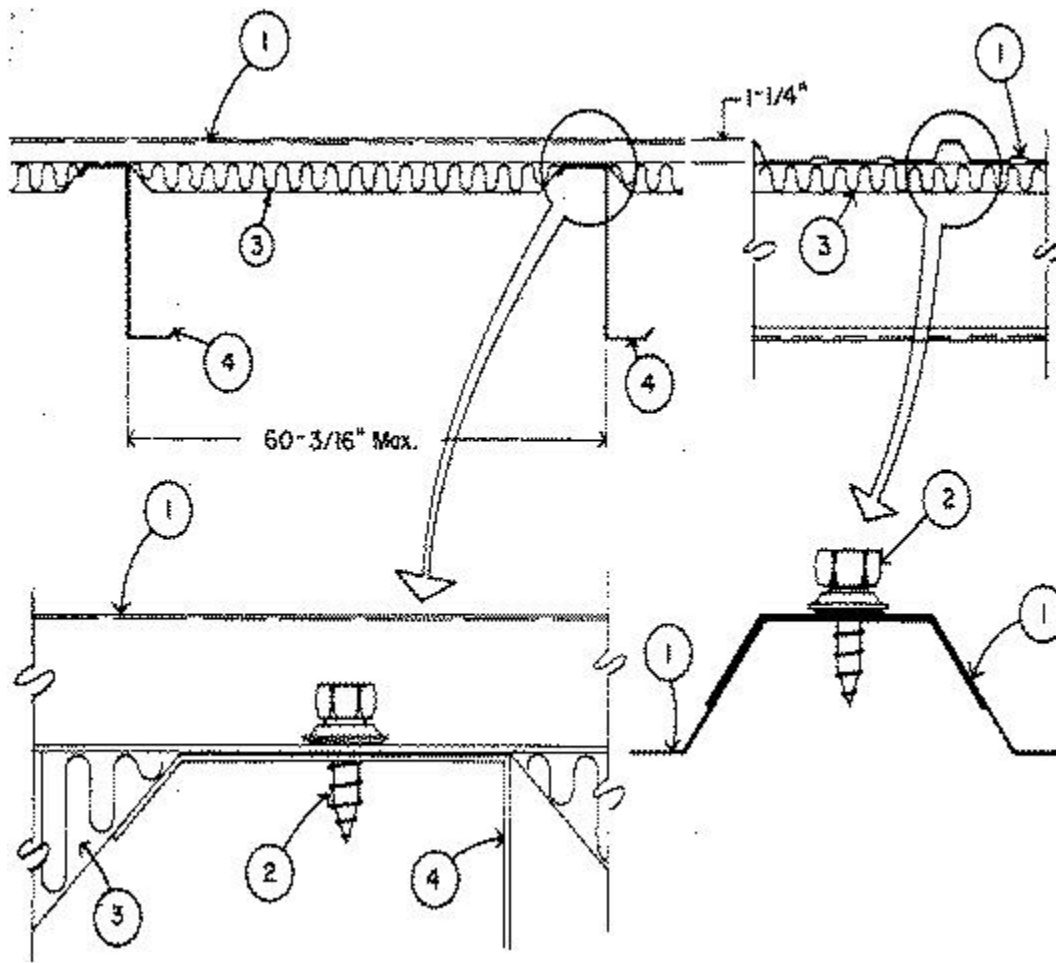
[See General Information for Roof Deck Constructions](#)

Construction No. 161

June 08, 2011

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

ACI 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"

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

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

ARCHITECTURAL INTEGRATED METALS INC ([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"

BUILDINGS BY MADDEN ([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"

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

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

CORLE BUILDING SYSTEMS ([View Classification](#)) — "R Panel"

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

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 ([View Classification](#)) — "Gideon R-Panel" or "Gideon 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

METAL SALES MFG CORP ([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"

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

RIGID BUILDING SYSTEMS LTD ([View Classification](#)) — "R" or "PBR"

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

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

SCHULTE BUILDING SYSTEMS LP ([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 "R Panel PBL"

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

TEXAS BUILDING AND ROOFING SUPPLIES

INC — "R" or "PBR" Panel

TEXARKANA METAL BUILDING SUPPLY ([View Classification](#)) — "R Panel" or "PBR Panel"

TEXOMA STEEL BUILDINGS INC ([View Classification](#)) — "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"

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.

*Bearing the UL Classification Mark

Last Updated on 2011-06-08

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