



Construction No. 167
TGKX.167
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

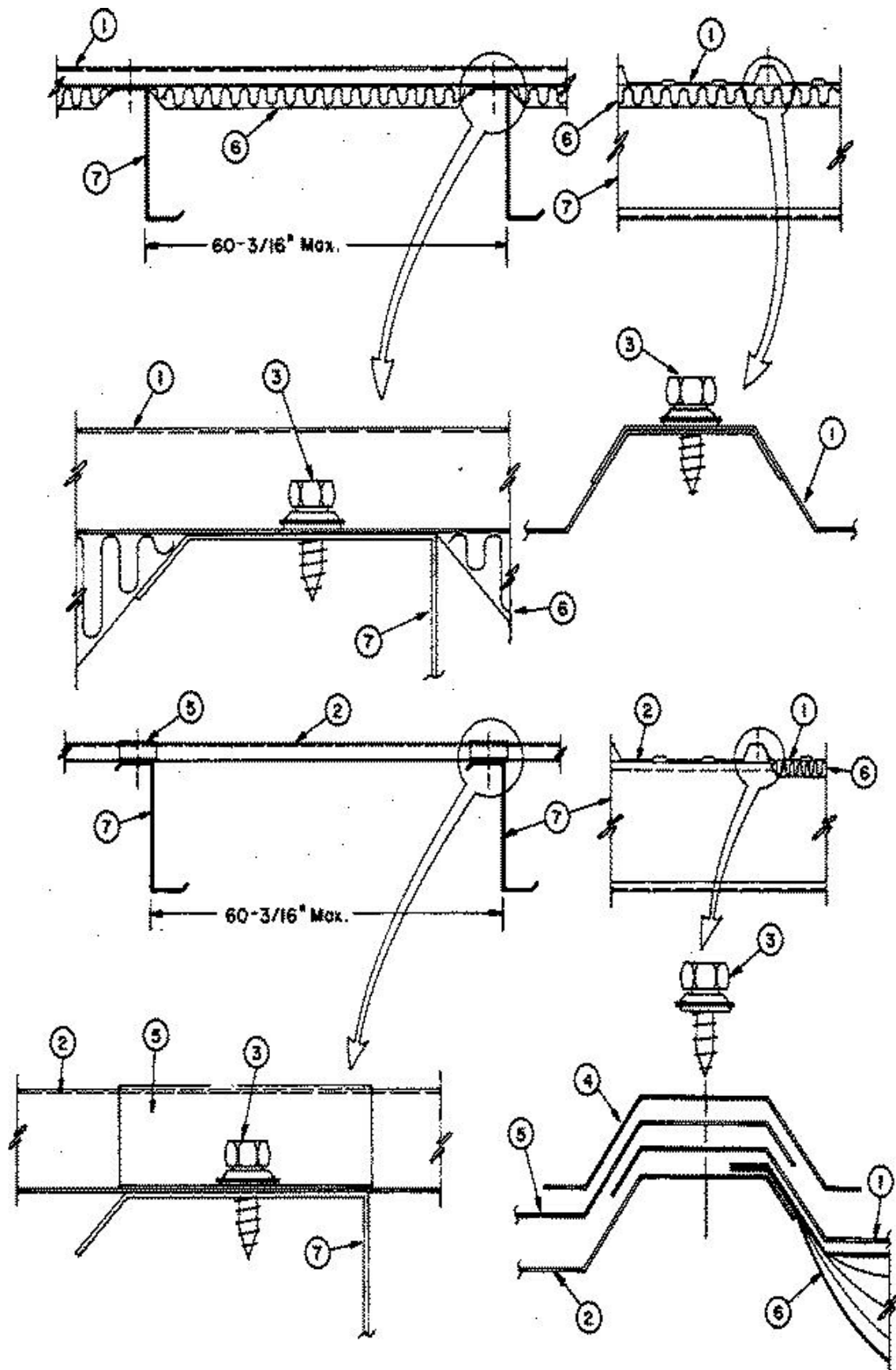
[See General Information for Roof Deck Constructions](#)

Construction No. 167

February 22, 2012

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 laps beginning even with purlin web and extending

across purlin flange. A bead of 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"

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

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"

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

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

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"

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

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

NUCOR BUILDING SYSTEMS, DIV OF NUCOR

CORP ([View Classification](#)) — "Classic" Panel

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

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

ROYAL METAL BUILDING COMPONENTS ([View Classification](#)) — "Royal Span" or "Royal Span X"

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

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

SOUTHWEST METAL COMPONENTS AND SUPPLY

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

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"

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

TEXAS BUILDING AND ROOFING SUPPLIES

INC — "R" 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"

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

1A. **Metal Roof Deck Panels*** — (not shown) No. 26 MSG min gauge coated steel. Panels continuous over two or more spans. End laps to occur over purlins with panels overlapped min 4 in. to max 6 in. with laps beginning even with purlin web and extending across purlin flange. A bead of sealant may be used at panel side and end laps.

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

2. **Building Units*** — Translucent, reinforced plastic panels. Thickness 1/16 in. formed to the same configuration as the metal roof deck panels. Also, 1/32- in thick translucent polycarbonate plastic panels as noted below, formed to the same configuration as the metal roof deck panels. Panels continuous over two spans.

ACI BUILDING SYSTEMS INC ([View Classification](#)) — "R Skylight"

ALLIANCE STEEL INC ([View Classification](#)) — "Type Skylight"

ALL STEEL BUILDINGS & COMPONENTS

TUBULAR DIVISION INC ([View Classification](#)) — "R or PBR panel"

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

B C STEEL BUILDINGS INC ([View Classification](#)) — "B Panel Skylight"

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

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

NCI BUILDING SYSTEMS L P ([View Classification](#)) — "R" Light Transmitting Panel

NUCOR BUILDING SYSTEMS, DIV OF NUCOR

CORP ([View Classification](#)) — "Classic"

PALRAM AMERICAS INC ([View Classification](#)) — Polycarbonate plastic panels, 1/32-in thick, "Sunsky" or "Dynaglas" or "Suntuf" or "Suntop"

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

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

WHIRLWIND STEEL BUILDINGS INC ([View Classification](#)) — "Superspan Skylight"

3. **Panel Fasteners** — For steel panel to purlin and for translucent panel to purlin connections to be No. 12-14 by 1 in. self-drilling, self-tapping, hex head, plated steel screws with a separate or integral 9/16 in. to 5/8 in. O.D. formed steel or combination zinc and steel washer and a neoprene/EPDM sealing washer. Fasteners for panel connections to be same type and length.

Fastener for panel to purlin connection to be 1-1/4 or 1-1/2 in. long when insulation (Item 6) is greater than 4-1/2 in.

Spacing — For steel panel to purlin fasteners, spacing to be 12 in. on center beginning 2-1/2 in. from the 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.

For translucent panel — to — purlin fasteners, spacing to be in a 5, 3 1/2, 3 1/2, 5 in. pattern beginning 2 1/2 in. from the center line on both sides of each major rib.

For steel panel — to — panel fasteners, spacing to be 20 in. on center. For translucent panel — to — steel panel fasteners, spacing to be 12 in. on center driven into rib reinforcement (Item 4).

4. Translucent Panel Rib Reinforcement — For side support — hat — shaped section fabricated from No. 26 MSG steel to the configuration of the steel panel major rib.

5. Translucent Panel Purlin Reinforcement — For translucent panel reinforcement over purlins, 3 in. wide by No. 26 MSG thick steel strips fabricated in the shape of the metal panel.

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

7. Purlins — No. 16 MSG min gauge steel (50,000 psi min yield strength).

8. Lateral Bracing — Not shown. As required.

Refer to general information, Roof Deck Constructions, (Roofing Materials and Systems Directory) for items not evaluated.

*Bearing the UL Classification Mark

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