

Design/System/Construction/Assembly Usage Disclaimer

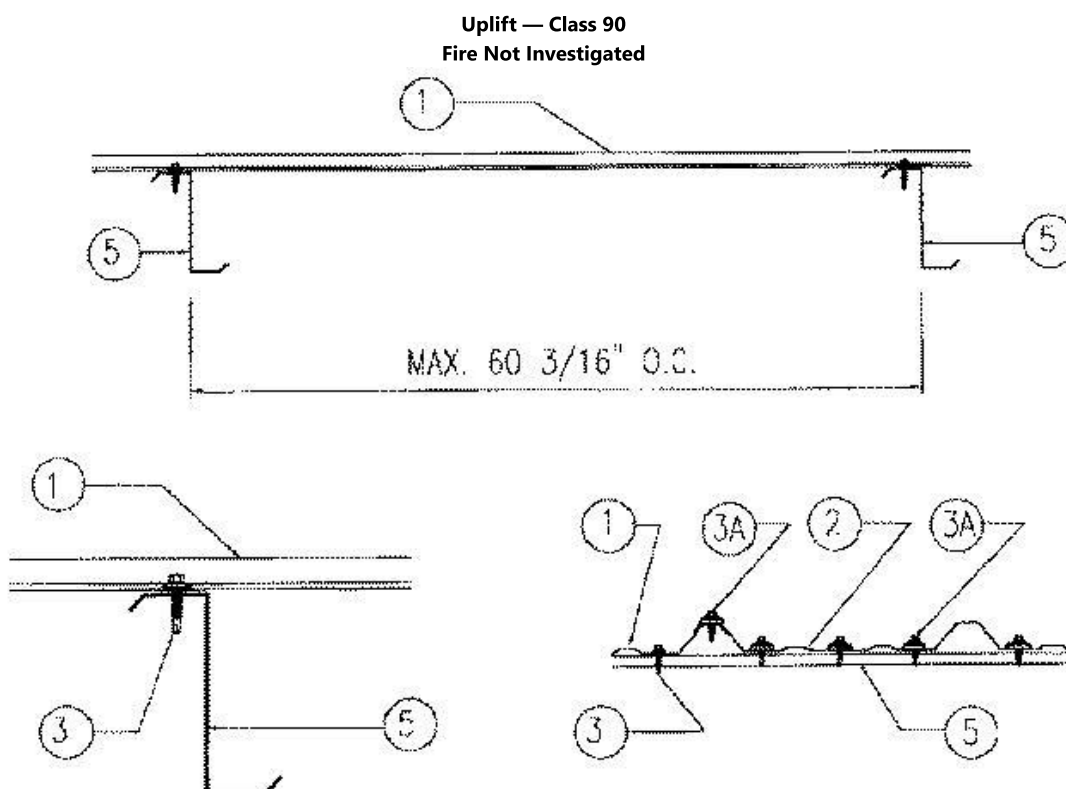
- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies 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. 542

April 24, 2023



1. **Metal Roof Deck Panels*** — No. 26 MSG min 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 beginning 2 in. from purlin and extending across purlin flange. A bead of sealant may be used at panel sidelaps.

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

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

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

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

BORGA STEEL INC ([View Classification](#)) — "BSP"

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

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

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

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

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

ECONOMY METALS INC ([View Classification](#)) — "R Panel"

ENCORE STEEL BUILDING COMPANY ([View Classification](#)) — "PBR"

FLATIRON STEEL ([View Classification](#)) — "PBR"

H&H METAL PRODUCTS INC ([View Classification](#)) — "PBR Panel"

HPM BUILDING SUPPLY ([View Classification](#)) — "Custom 4-Rib"

JAG METALS LLC ([View Classification](#)) — "PBR Panel"

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

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

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

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

METAL ROOFING SUPPLY & MFG ([View Classification](#)) — "PBR Panel"

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

NORTHLAND STEEL AND TRIM ([View Classification](#)) — "R-Panel"

OAKLAND METAL BUILDINGS INC ([View Classification](#)) — "PBR"

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

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

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

SAN ANTONIO QUALITY METALS ([View Classification](#)) — "PBR-Panel"

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

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

TAYLOR METAL INC, DBA TAYLOR METAL PRODUCTS ([View Classification](#)) — "PBR"

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

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

TSB INDUSTRIAL INC ([View Classification](#)) — "R" Panel

WEST TEXAS STEEL & SUPPLY ([View Classification](#)) — "R" or "PBR"

2. **Building Units*** — Translucent, reinforced plastic panels. Thickness 1/16 in. formed to the same configuration as the metal roof deck panels. Panels continuous over two spans.

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

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

SCHULTE BUILDING SYSTEMS INC ([View Classification](#)) — "ACRYLIT"

3. **Fasteners — (Screws)** — For steel panel to purlin, connections to be No. 12-14 by 1 in. self-drilling, self-tapping, hex head, plated steel screws with a separate 5/8 in. O.D. steel washer and a neoprene sealing washer. Spacing at intermediate purlins to be 12 in. on center beginning 2-1/2 in. from centerline on one side of each major rib. Spacing at panel end lap purlins to be in a 5-7-5-7 in. pattern beginning at centerline on both sides of each major rib. For steel panel to panel, connections to be 1/4 in. -14 by 7/8 in. self-drilling, self-tapping, hex head, plated steel lap tek with 5/8 in. O.D. steel washer and a neoprene sealing washer. Spacing to be 20 in. on center.

3A. **Fasteners — (Screws)** — For Building Units (Item 2) to purlin, connections to be No. 12-14 by 1 in. self-drilling, self-tapping, hex head, plated steel screws with a separate 7/8 in. O.D. steel washer and a neoprene sealing washer. Spacing to be 3-1/2 in. on center beginning 2-1/2 in. from centerline on both sides of each major rib. For Building Unit to steel panel, connections to be 1/4 in. -14 by 7/8 in self-drilling, self-tapping, hex head, plated steel lap tek with 7/8 in. O.D. steel washer and a neoprene sealing washer. Spacing to be 10 in. on center with a fastener located at the endlaps.

4. **Insulation** — (Optional) — (Not Shown) — Any compressible blanket insulation, 6 in. max thickness before compression.

5. **Purlin** — No. 16 MSG minimum steel (50,000 psi min. yield strength).

6. **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 2023-04-24

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