

TGKX.541 - ROOF DECK CONSTRUCTIONS

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

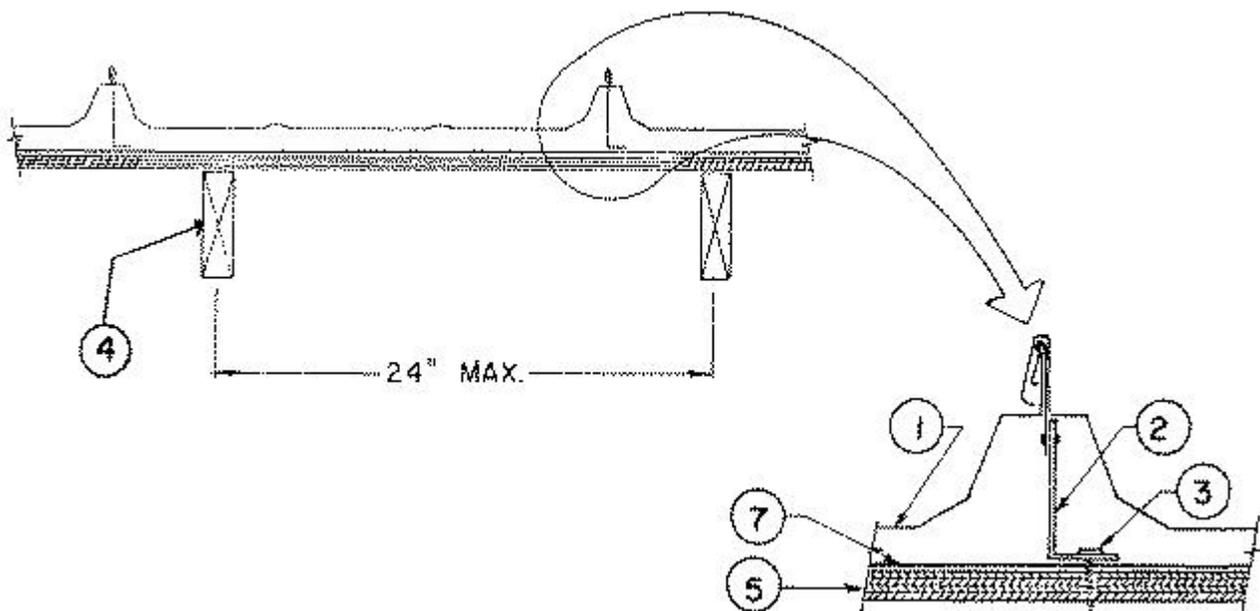
See General Information for Roof Deck Constructions

Construction No. 541

April 19, 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 adjacent to wood joist with panels overlapped 3 inch max. A line of sealant may be used at panel end and side laps.

A & S BUILDING SYSTEMS L P (View Classification) — "Ultra-Dek"

CENTRAL STATES MFG INC (View Classification) — "Central-Loc"

CENTRAL TEXAS METAL ROLLFORMING INC (View Classification) — "Shurloc 300"

MBCI (View Classification) — "Ultra-Dek"

MESCO METAL BUILDINGS (View Classification) — "Ultra-Dek"

NCI BUILDING SYSTEMS L P (View Classification) — "Ultra-Dek"

PINNACLE STRUCTURES INC (View Classification) — "PINNACLE U-DEK"

TEXAS BUILDING AND ROOFING SUPPLIES INC — "Standing Seam" Panel

UNITED STRUCTURES OF AMERICA INC (View Classification) — "Guardian I" or "Guardian II"

WHIRLWIND STEEL BUILDINGS INC (View Classification) — "Super-Seam II"

2. **Roof Deck Fasteners*—(Panel Clips)** — . Clip to engage the metal roof deck panel rib (Item 1). Guide holes in the bottom of clip to accommodate two (2) screw fasteners (Item 3). Clips to be spaced 5'-0" on center along panel sides.

BUILDING PRODUCTS DEVELOPMENT INC (View Classification) — "NC34503", "NC34504"

NCI BUILDING SYSTEMS L P (View Classification) — "Ultra-Dek Floating Clip" or "Ultra-Dek Sliding Clip".

3. **Fasteners (Screws)** — Fasteners for panel clip to plywood to be two (2) No. 10 by 1-1/2 inch long with 1/4 inch hex-head screw with separate 1/2 inch O.D. neoprene and steel washer. As an alternate fastener, the screw used to attach a panel clip to the plywood may be two (2) No. 14 by 1-1/2 inch long , Type A with 3/8 inch hex-head and a separate 5/8 inch neoprene and steel washer. Screws used at the end lap to be 1/4-14 by 1 inch long with 3/8 inch hex-head and separate 5/8 inch neoprene and steel washer. Six (6) fasteners are to be used in the flat section of the end lap panel with the first fastener located 3-1/4 inches from either rib and then spaced in a 3-1/2, 3-1/2, 3-1/2, 3-1/2, 3-1/2 inch pattern. An additional fastener is to be located at the second slanted segment of the rib on both sides of the end lap panel. Fasteners used with alternate 16 MSG min. thick coated steel upper section to be No. 14 by 1 inch long self-tapping fastener. First fastener located 1/2 inch from first slanted segment on opposite side of same rib where first fasteners located. Screws used to attach plywood to wood joists to be No. 8 by 2 inch long bugle-head screws spaced at 12 inches O.C. Spacing at the butted ends of the plywood sections to be 6 inch O.C. 8d nails may be used, as an option for attachment of plywood to wood joist.

4. **Wood Joist** — No. 2 Southern yellow pine or equivalent, spaced at 24 inches O.C. maximum.

5. **Plywood Deck** — Deck to be min. 5/8 thick, exposure 1, sheathing span "C-D", 40/20/ plywood. All butt joints to be sealed against leakage by using tape and/or caulk.

6. **Thermal Spacer** — (optional)—(not shown)—Polystyrene, 1 inch max thickness, 3 inches wide, cut to fit between panel clips.

7. **Moisture Barrier** — (optional) Used to protect plywood (Item 5). Installed under panels (Item 1).

8. **Splice Plate Assembly** — (not shown)—Used at panel end laps; Consisting of a lower section 5-5/8 inches wide, with a 1/8 inch vertical leg, formed to the general profile of the panel and having four 1 inch wide by 3/4 inch long tabs for sliding over the panel end. Upper section (optional) to be 1-1/2 inches wide 24 inches long and also formed to the general profile of the panel. Both parts fabricated form No. 16 MSG thick coated steel. Five 5/16 inch guide holes located in the flat area only.

*** 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 2012-04-19

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL's Follow-Up Service. Always look for the Mark on the product.

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