

# TGKX.535 - 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.

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## Roof Deck Constructions

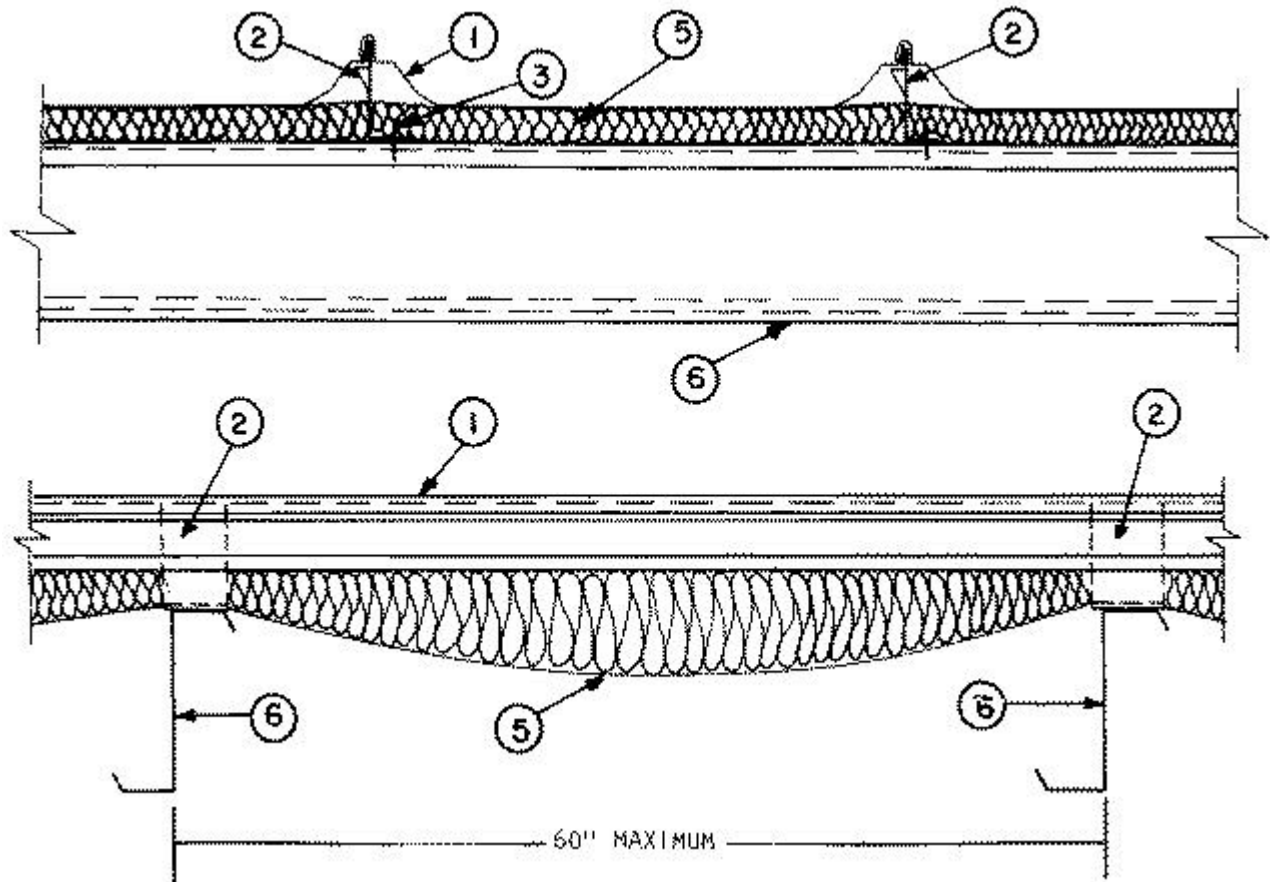
See General Information for Roof Deck Constructions

### **Construction No. 535**

April 19, 2012

**Uplift — Class 90**

**Fire Not Investigated**



1. **Metal Roof Deck Panels\*** — For class 90—No. 24 MSG coated steel, for class 30—No. 26 MSG min. Coated steel. Panels continuous over two or more spans. End laps to occur adjacent to purlins 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"

**B C STEEL BUILDINGS INC** (View Classification) — "BCL-SD"

**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\*** — Clip to engage the metal roof deck panel rib (Item 1). Height to be 3-3/8 in. when no thermal spacer (Item 4) is used and 4-3/8 in. when a thermal spacer is used. Clips are spaced 5 ft OC max along length of panels, located at the

panel ribs with three guide holes in the bottom to accommodate screw fasteners (Item 2A).

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

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

3. **Fasteners (screws)** — Fasteners for panel clip to purlin to be No. 12-14 by 1-1/4 inch long self-drilling, self-tapping, hex-haed screw with separate 5/8 inch O.D. neoprene washer. Two screws used for fixed clips and one screw used for sliding clips. Fasteners used at end lap are the same type spaced in a 3-1/4, 33-1/2, 3-1/2, 3-1/2, 3-1/2, 3-1/4 inch pattern with an additional fastener located at the second slanted segment of the rib on both sides of the end lap panel (Total of 8 fasteners required). 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 is located 3/8 inch from first slanted segment in a 4, 5-1/2, 5-1/2, 4 inch pattern. One additional fastener located 1/2 inch from first slanted segment on opposite side of same rib where first fastener is located (Total of 5 fasteners required).

4. **Thermal Spacer** — (optional)—(Not Shown)—Polystyrene, 1 inch max thickness, 3 inches wide, cut to fit between panel clips.

5. **Insulation** — (optional)—Any compressible blanket insulation, 6 inches max. thickness when located between thermal spacer (Item No. 4) and purlin (Item No. 6) before compression.

6. **Purlin** — No. 16 MSG min. gauge steel (55,000 psi min. yield strength).

7. **Splice Plate Assembly** — (not shown)—Used at panel end laps; Consisting of a lower section, 6 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 of the panel with one end formed to fit over the side rib. Six 5/16 inch diameter guide holes located in the flat with 3 holes located at rib location. Both parts to have ribs formed for reinforcement. Both parts fabricated from No. 16 MSG thick coated steel.

**\* 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

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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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