

TGKX.449 - 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

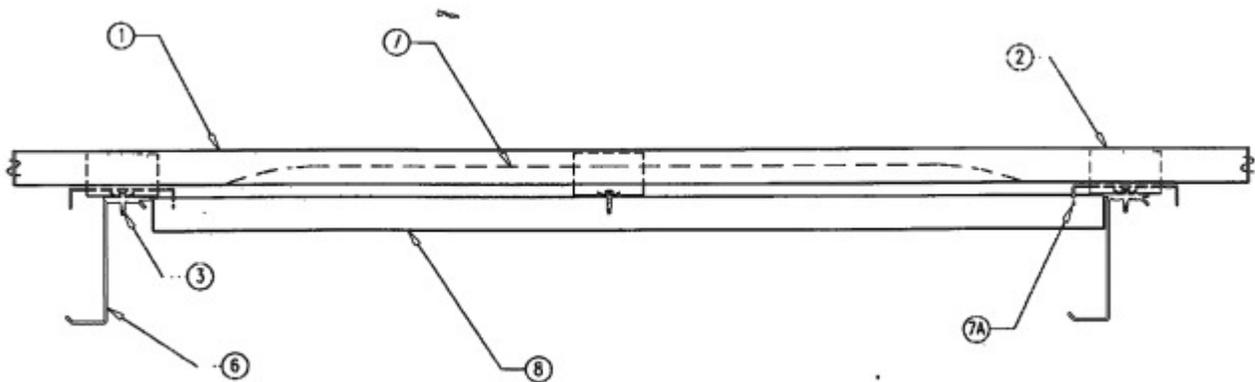
See General Information for Roof Deck Constructions

Construction No. 449

June 28, 2016

Uplift — Class 90

Fire Not Investigated



1. **Metal Roof Deck Panels*** — No. 24 MSG minimum gauge coated steel. Maximum panels width 16 in. and rib height 2 in. Panels continuous over two or more spans. Endlap to occur adjacent to purlin with panels overlapped 6 inches and to include back-up plate (Item 2A). A bead of sealant may be used at panel ends and side joints. Side laps to be tightened and crimped with an electric crimping machine to an angle of 45° minimum. Crimping process to include the upper portion of panel clips (Item 2).
A & S BUILDING SYSTEMS L P (View Classification) — "BattenLok", "BattenLok HS" or "SuperLok"

CENTRAL TEXAS METAL ROLLFORMING INC (View Classification) — "SPANLOC 200"

MBCI (View Classification) — "BattenLok", "BattenLok HS" or "SuperLok"

MESCO METAL BUILDINGS (View Classification) — "BattenLok", "BattenLok HS" or "SuperLok"

NCI BUILDING SYSTEMS L P (View Classification) — "BattenLok", "BattenLok HS" or "SuperLok"

PETERSEN ALUMINUM CORP (View Classification) — "Tite Loc" and "Tite-Loc Plus"

PINNACLE STRUCTURES INC (View Classification) — "PINNACLE BATTENLOK" and "PINNACLE SUPERLOK"

ROLLFAB METAL BUILDING PRODUCTS (View Classification) — "MS-200HP/90" and "MS-200HP/180"

SAN ANTONIO QUALITY METALS (View Classification) — "ML-200"

TAYLOR METAL INC, DBA TAYLOR METAL PRODUCTS (View Classification) — "MS200"

TREMCO INC (View Classification) — "TremLock VP Series II"

UNITED STRUCTURES OF AMERICA INC (View Classification) — "Sure-Lok" or "Supreme-Lok"

2. **Roof Deck Fasteners* — (Panel Clips)** — either of the following: Fixed Clip - one piece assembly fabricated from No. 22 MSG minimum gauge steel, 3 in. wide. Floating Clip - two piece assembly with a base fabricated from No. 16 MSG minimum gauge steel, 1-5/8 in. wide, and a top fabricated from No. 22 MSG minimum gauge steel, 4-1/4 in. wide. Clips are spaced 5 ft. O.C. max along length of panels except 2'-6" O.C. for 2 panel ribs on each side of building unit (Item 7) located at the panel sides with guide holes in bottom to accommodate two screw fasteners (Item 3). Sealant may be used in the top of the clips.

BUILDING PRODUCTS DEVELOPMENT INC (View Classification) — "NC3300", "NCF-3300", "NCF-3300-SS" Series Clip

NCI BUILDING SYSTEMS L P (View Classification) — "BattenLok High or Low, Fixed or Floating Clip"; "BattenLok Utility Clip" — "SuperLok High or Low, Fixed or Floating Clip", "SuperLok Utility Clip"

2A. **Endlap Back-Up Plate** — (Not Shown) No. 16 MSG minimum gauge coated steel, width of back-up plate to correspond to width of panel. With two 1 in. wide by 3/4 in. long tabs for sliding over end of panels.

2B. **Roof Deck Fasteners* (Panel Clips)** — (Not Shown) Used with "Tite-Loc" or "Tite-Loc Plus" Panels.

One piece assembly; 3 in. wide, approximately 2 in. high with two or three guide holes in base. Fabricated from No. 22 MSG coated steel.

PETERSEN ALUMINUM CORP (View Classification) — "Tite-Loc Utility Clip", "Tite-Loc Plus Utility Clip"

One piece assembly; 3 in. wide, approximately 2-3/8 in. or 3 in. high, with three guide holes in base. Fabricated from No. 22 MSG coated steel.

PETERSEN ALUMINUM CORP (View Classification) — "Tite-Loc Low/High Fixed Clip", "Tite-Loc Plus Low/High Fixed Clip"

Two piece assembly; base approximately 2 in. wide, 1-11/16 in. long formed to engage upper tab. Fabricated from No. 16 MSG coated steel. Tab approximately 4-5/16 in. wide; 2-3/8 in. or 2-7/8 in. high, formed to engage base. Fabricated from No. 22 MSG coated steel. Base to have two guide holes.

PETERSEN ALUMINUM CORP (View Classification) — "Tite-Loc Sliding Clip", "Tite-Loc Plus Sliding Clip", "Tite-Loc AR Fixed Clip" and "Tite-Loc AR Sliding Clip", "Tite-Loc Plus AR Fixed Clip" and "Tite-Loc Plus AR Sliding Clip".

3. **Panel Fasteners — (Screws)** — Screws used to attach the panel clips to purlins (Item 6) to be No. 12 by 1 in. long minimum, Hex Washer Head, self-driller. Two screws per clip.

Screws used at endlap to be one of the following: 14x1 in. Type AB, Hex Washer Head self-tapping; 14x1-1/4 in. Hex Washer Head, self-drilling; 14x1 in. Type AB Phillips Stainless Steel, self-tapping. Five screws per panel in a 1,3,4,4,3 inch pattern for 16 in. wide panel and four screws per panel in a 1-1/2, 3,3,3 inch pattern for a 12 in. wide panel.

4. **Thermal Spacer** — (Optional) Polystyrene, 3 in. wide by 15-7/8 in. long, maximum thickness 1 in.

5. **Insulation** — (Optional) Any compressible blanket insulation 6 in. maximum thickness before compression, or 5 in. maximum thickness when located between thermal spacer (Item 4) and purlin (Item 6).

6. **Purlins** — No. 14 MSG minimum gauge steel, minimum yield strength 40 KSI. Maximum spacing 60-1/16 in. O.C.

7. **Building Units** — (Optional) Translucent, plastic, insulated dome installed in classified metal roof deck panel ("BattenLok").
NCI BUILDING SYSTEMS L P (View Classification) — "BL Insulated Dome LTP"

7A. **Stiffener Plate** — Factory installed on building units (Item 7). No. 16 MSG minimum gauge coated steel. 5-3/4 in. wide with two 1 in. vertical legs. Stiffener plate to be located over purlin at each end of building unit.

8. **Angle** — 2x2 min 1/8 in. MSG coated steel (36,000 psi min yield strength) for use with building units (Item 7). Place one angle at first two panel ribs on each side of building unit (Item 7) for mid clip attachment.

Refer to general information, Roof Deck Construction, 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 2016-06-28

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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