

## TGKX.544 - 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.

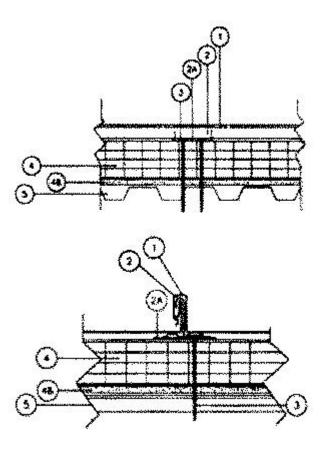
## **Roof Deck Constructions**

See General Information for Roof Deck Constructions

**Construction No. 544** 

April 02, 2019

Uplift — Class 90
Fire Not Investigated



1. **Metal Roof Deck Panels\*** — No. 24 MSG min. Coated steel. Max. panel width 18 inches and rib height 1-3/4 inches. Panels continuous over two or more spans. Endlap for panels to be overlapped 6 in. A bead of sealant may be used at panel ends and side joints.

A & S BUILDING SYSTEMS L P (View Classification) — "LokSeam"

ACI BUILDING SYSTEMS INC (View Classification) — "SnapLok"

ALLIANCE STEEL INC (View Classification) — "NFS16"

AMERICAN BUILDING COMPONENTS (View Classification) — "LokSeam"

**BERRIDGE MFG CO** (View Classification) — "Snaplock Panel"

BORGA STEEL INC (View Classification) — "Vertical Lock"

FIRESTONE METAL PRODUCTS, A DIV OF FIRESTONE BUILDING PRODUCTS CO LLC (View Classification) — "UC-14"

MBCI (View Classification) — "LokSeam"

METAL FORMING INC (View Classification) — "1.75 Snap Lock Steel Panel"

METAL ROOFING SYSTEMS INC (View Classification) — "MRS System 2000"

NCI BUILDING SYSTEMS L P (View Classification) — "LokSeam"

NORTHWEST ROOF TILE & METAL L L C (View Classification) — "LT175"

P S M L V INC DOING BUSINESS AS PENN SHEET METAL (View Classification) — "PSM175SL"

ROLLFAB METAL BUILDING PRODUCTS (View Classification) — "SL-175" or "1.75 Snap Lock Steel Panel"

**SHEET METAL WORKS OF ARIZONA** (View Classification) — "SL175"

**STANDARD STRUCTURES INC** (View Classification) — "SnapSeam"

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

WHIRLWIND STEEL BUILDINGS INC (View Classification) — "Weather Snap-12" or "Weather Snap-16"

2. **Roof Deck Fasteners\*** — (**Panel Clips**) — One piece assembly, 3-1/2 inches wide, 1-7/8 inches high. Minimum thickness No. 18 MSG. One clip to be used at each purlin. Maximum clip spacing to be 48 inches O.C. Clips to interface with bearing plates (Item No. 2A).

AMERICAN BUILDING COMPONENTS (View Classification) — "LokSeam"

**EXCEL STAMPING & MFG INC** (View Classification) — "LS-178-18 Clip"

LOGAN STAMPINGS INC — "Snap Lock Clip No. 675"

NCI BUILDING SYSTEMS L P (View Classification) — "LokSeam UL 90 Clip"

- 2A. **Bearing Plate** No. 24 MSG minimum gauge coated steel, 5 inches wide by 3-7/8 inches long (50,000 psi minimum yield strength).
- 2B. **Roof Deck Fasteners\*** (Panel Clips) One piece assembly, 3-1/2 in. wide by 1-7/8 in. high. Clip spacing to be 48 in. OC. Clips to interface with bearing plates (Item No. 2C).

FIRESTONE METAL PRODUCTS, A DIV OF FIRESTONE BUILDING PRODUCTS CO LLC (View Classification) — "UC-14 Clip"

2C. **Roof Deck Fasteners\*** — (Bearing Plates) — Plates to be 4 in by 4 in. by No. 26 MSG min galvanized steel. Two 1/4 in. guide holes located in line with panel clip (Item 2) guide holes.

FIRESTONE METAL PRODUCTS, A DIV OF FIRESTONE BUILDING PRODUCTS CO LLC (View Classification) — "UC Bearing Plate"

- 3. **Panel Fasteners (Screws)** Fasteners used to attach panel clips (Item No. 2) and bearing plates (Item No. 2A) through rigid board insulation (Item No. 4), light gauge steel deck (Item No. 5) and into purlins (Item No. 7) to be No. 14 self-tapper. Two screws per clip to be used. Length to be a minimum of 1/2 inch longer than the combined thickness of the liner panel (Item No. 5), rigid insulation (Item No. 4), gypsum wall board (Item No. 4B) and plywood or oriented strand board (Item No. 4A).
- 4. **Foamed Plastic** (Rigid Insulation) Minimum thickness 1 inch, maximum thickness 10 inches. Density to be a minimum of 1.5 pcf.
- 4A. **Foamed Plastic\*** (Rigid Insulation Optional) In lieu of Item 4, applied flat or tapered to maximum 10-in thick combination of Item 4B. Bearing plates required under panel attachment points. Optional if Cover Board (Item 4D) is used. **FIRESTONE BUILDING PRODUCTS CO L L C** (View Classification) "ISO 95+ GL" or "Resista"
- 4B. **Foamed Plastic** (Rigid Insulation Optional Not Shown) Placed on top of Item 4A. Maximum 10-in thick combination of Item 4A. Bearing plates required under panel attachment points. Optional if Cover Board (Item 4D) is used.

4C. **Roof Deck Fasteners\*** — (Bearing Plates) — Plates to be 4 in by 4 in. by No. 26 MSG min galvanized steel. Two 1/4 in. guide holes located in line with panel clip (Item 2) guide holes.

FIRESTONE METAL PRODUCTS, A DIV OF FIRESTONE BUILDING PRODUCTS CO LLC (View Classification) — "UC Bearing Plate"

- 4D. **Cover Board** (Optional Not Shown) Min 1/2 in. thick (15/32 in. actual) plywood, DOC PS-1 rated (square edged may be used) or min 7/16 in thick OSB, DOC PS-2 rated, 1/2 in. thick gypsum board, 1/2 in. wood fiberboard, 1/4 in. min thickness G-P Gypsum "DensDeck", 1/4 in. min thick USG "SECUROCK Glass Mat Board" or "SECUROCK Roof Board" applied over the liner panel (Item 5) in lieu of Foamed Plastic (Item 4) or over Foamed Plastic (Items 4, 4A and/or 4B). When used or used over Foamed Plastic bearing plate not required.
- 5. Liner Panel (Optional) (Required when Items 4, 4A, 4B, 4C and 4D are used) No. 29 MSG minimum steel. Minimum yield strength 80,000 psi, minimum depth 9/16 inches, maximum pitch 2.6667 inches O.C.
- 6. **Underlayment** (Optional Not Shown) Underlayment attached over Foamed Plastic (Item 4, 4A or 4B), Liner Panel (Item 5) or Cover Board (Item 4D) installed per manufacturer's recommendations.
- 7. **Supports (Purlins)** (Not Shown) No. 16 MSG minimum thickness coated steel with a minimum yield strength of 50,000 psi. Or minimum "H" series open-web joists. Maximum spacing "48" O.C.
  - \* 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 2019-04-02

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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