

## TGKX.280 - 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**

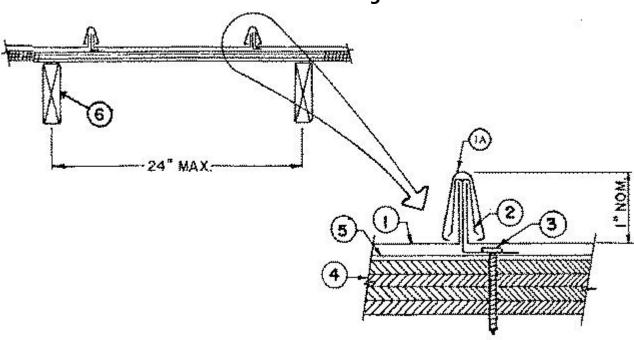
See General Information for Roof Deck Constructions

#### **Construction No. 280**

October 03, 2018

# Uplift — Class 90

## Fire — Not Investigated



1. **Metal Roof Deck Panels\*** — No. 24 MSG min coated steel. Max panel width 22-3/4 in. Panels continuous over two or more spans. End laps to occur adjacent to supports with panels overlapped 4 in. A line of sealant may be used at panel ends and side laps.

**CENTRAL TEXAS METAL ROLLFORMING INC** (View Classification) — "BATTLOC 100" CENTRIA, A DIVISION OF NCI GROUP, INC (View Classification) — "ADP 100" or "ADP 100C" **CUSTOM-BILT METALS** (View Classification) — "Titan Cap Seam" BEACON SALES ACQUISITION INC, DBA COASTAL METAL SERVICE (View Classification) — "LT-100" **HPM BUILDING SUPPLY** (View Classification) — "U-Panel" INNOVATIVE METALS CO INC, DBA IMETCO (View Classification) — "SS-145" or "SS-225". MCELROY METAL MILL INC (View Classification) — " Medallion" or "ABC SL Low Panel" MBCI (View Classification) — " Craftsman Series SB" NCI BUILDING SYSTEMS L P (View Classification) — " Craftsman Series SB" THE BRYER CO (View Classification) — "TBC-CAPLOC" 1A. Metal Roof Deck Panels\* — Panels (coated steel only) may be physically curved at a radius of 20 ft or greater or mechanically curved between 4 ft and a nominal 19 ft. CENTRIA, A DIVISION OF NCI GROUP, INC (View Classification) — "ADP 100C" HPM BUILDING SUPPLY (View Classification) — "Batten Cap" MCELROY METAL MILL INC — "Medallion" MBCI (View Classification) — " Craftsman Series SB " NCI BUILDING SYSTEMS L P (View Classification) — "Craftsman Series SB" 1A1. Metal Roof Deck Panels\* — (Not Shown) Min. .032 aluminum panels. Max panel width 16.5 in. and rib height 3/4 in. End laps to occur adjacent to steel supports with panels overlapped 4 in. min. MBCI (View Classification) — " Craftsman Series SB" NCI BUILDING SYSTEMS L P (View Classification) — "Craftsman Series SB" MCELROY METAL MILL INC — " Medallion" 1B. Metal Roof Deck Panels\* — (Battens) - (Not Shown)— Battens covering panel ribs and clips to be formed from the same type and thickness material as that used to fabricate metal panels (Item 1). CENTRIA, A DIVISION OF NCI GROUP, INC (View Classification) — "ADP 100A Batten" also used with "ADP 100C" Panel.

**INNOVATIVE METALS CO INC, DBA IMETCO** (View Classification) — " SS Batten".

MCELROY METAL MILL INC (View Classification) — " Medallion I Batten"

MBCI (View Classification) — "Small Batten"

NCI BUILDING SYSTEMS L P (View Classification) — "Small Batten"

TREMCO INC — "TremLock Narrow Batten"

2. **Roof Deck Fasteners\*** — (Panel Clips) — One piece, 3/4 in. high, 1-1/2 in. wide. Min 24 gauge coated steel clip. When coated steel metal roof deck panels used (Item 1 and 1A) clips are spaced 24 in. O.C.; when aluminum metal roof deck panels used (Item 1A1) clips are spaced 12 in. O.C. Guide holes in bottom of clip.

CENTRIA, A DIVISION OF NCI GROUP, INC (View Classification) — "ADP 100A Clip" or "ADP100C Clip".

BEACON SALES ACQUISITION INC, DBA COASTAL METAL SERVICE (View Classification) — "LT-100 Clip"

**INNOVATIVE METALS CO INC, DBA IMETCO** (View Classification) — " SS Clip".

MCELROY METAL MILL INC (View Classification) — " Medallion I"

NCI BUILDING SYSTEMS L P (View Classification) — "SB Clip"

3. **Fasteners** — (Screws) — Screws used to attach the panel clips to plywood or OSB to be No. 10 by 1 in. long Pancake head wood screw with a No. 2 Phillips head size. One screw per clip.

Screws used to attach plywood or OSB substructure (Item 4) to wood trusses or joists (Item 6) to be No. 8 by 2 in. Bugle head screws. As an optional fastener, 2-1/2 in. long 8d common deformed shank nails may be used.

When light gauge structural steel joists are used, screws to be No. 12 by 1-5/8 in. long with a Phillips head.

Spacing of screws to be 6 in. OC at plywood or OSB ends and 12 in. OC at interior joists.

- 4. **Substructure(Plywood or OSB)** Plywood decking to be a nom 5/8 in. thick, exposure sheathing span C-D, 40/20 plywood or oriented strand board (OSB), nom 9/16 in. thick. (All butt joints to be sealed against leakage by using tape and/or caulk).
- 5. Waterproof Membrane (Optional) (Not Shown) Used to protect plywood or OSB (Item 4). Installed under panels (Item 1)
- 6. Joists Joists, spaced at 2 ft, 0 in. OC may be one of the following:
  - A. Nom 2 by 6 in. wood joists No. 2 or better.
  - B. Nom 2 by 4 in. wood when used on a top chord of a wood truss, No. 2 or better.
  - C. Light gauge structural steel framing with the member against the plywood or OSB to be a min No. 22 MSG coated steel.
  - D. 16 MSG Purlins with upper flange against the plywood or OSB bottom surface.
- 7. **Insulation** (Optional)(Not Shown) Any compressible blanket insulation 3 in. max thickness before compression. Insulation to be sandwiched between substructure (Item 4) and joists (Item 6).

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.

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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