

# TGKX.12 - 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

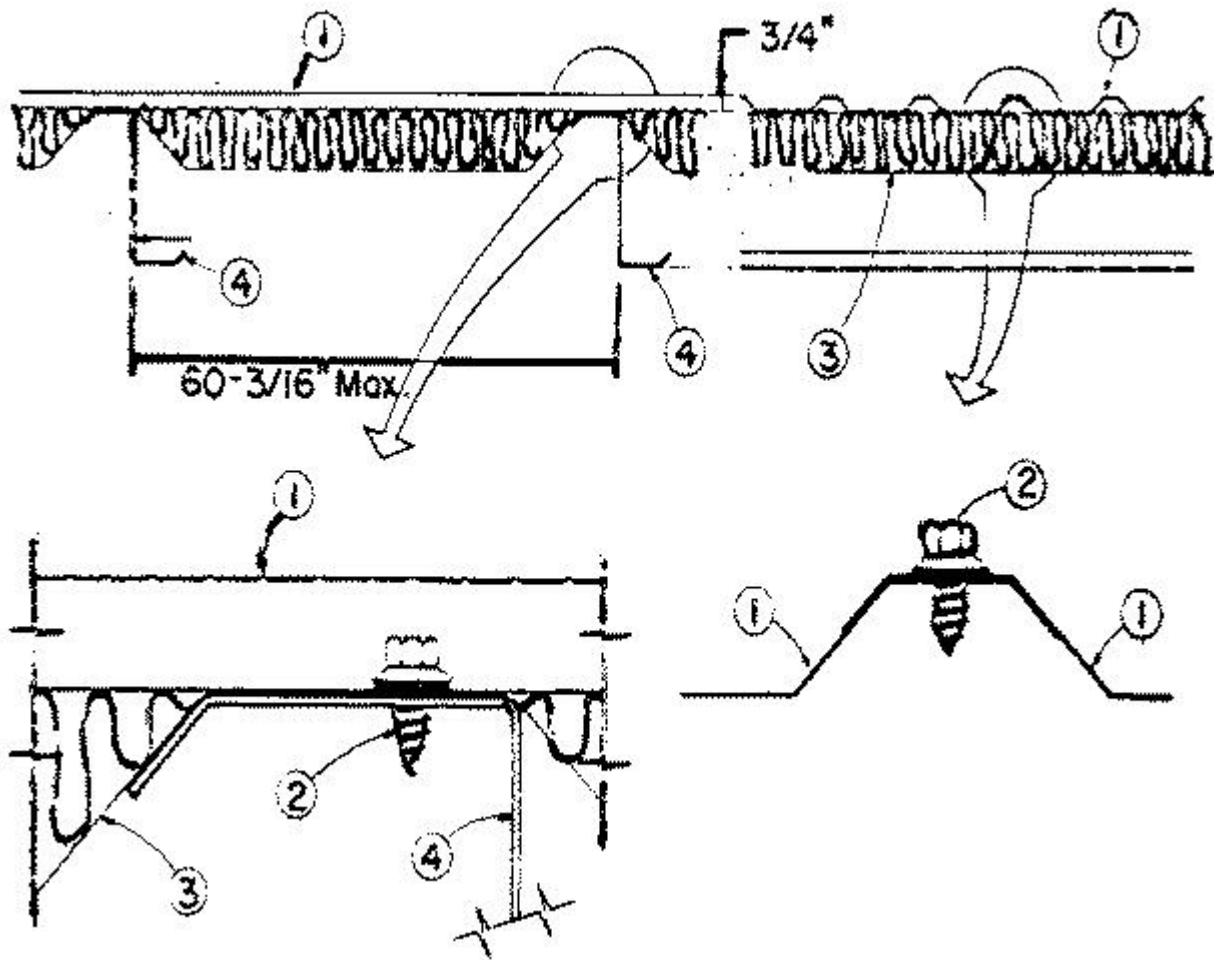
[See General Information for Roof Deck Constructions](#)

### **Construction No. 12**

April 03, 2020

**Uplift — Class 60 or 30 (See Item 4)**

**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 over purlins with panels overlapped 6 in. with lap centered over purlin web. A bead of sealant may be used at panel end and side laps.

**ALLIANCE STEEL INC** ([View Classification](#)) — "Alliance M"

**AMERICAN BUILDINGS CO** ([View Classification](#)) — Type "Multi-Rib"

**BUILDING COMPONENTS INC** ([View Classification](#)) — "U-Panel"

**BBM STEEL BUILDINGS INC** ([View Classification](#)) — "M-Panel"

**CENTRAL TEXAS METAL ROLLFORMING INC** ([View Classification](#)) — "U-Panel" or "PBU"

**DEAN STEEL BUILDINGS INC** ([View Classification](#)) — Type "RIB-6"

**EAST TEXAS ARCHITECTURAL SHEETMETAL L L C, DBA ETAS INC** ([View Classification](#)) — Type "U" or "PBU"

**JNL STEEL COMPONENTS INC** ([View Classification](#)) — Type "U-PANEL" or "PBU-PANEL"

**MBCI** ([View Classification](#)) — Type "U" or "PBU"

**MCELROY METAL MILL INC** ([View Classification](#)) — "U" or "PBU".

**METAL PANELS INC** ([View Classification](#)) — "Stongseam M Panel".

**MUELLER INC** ([View Classification](#)) — Type "PBU" or "UPN" or "U"

**NCI BUILDING SYSTEMS L P** ([View Classification](#)) — Type "U" or "PBU"

**PRIME BUILDING COMPONENTS L L C** ([View Classification](#)) — "U Panel" or "PBU Panel"

**SAN ANTONIO QUALITY METALS** ([View Classification](#)) — Type "U" or "PBU"

**SCHULTE BUILDING SYSTEMS INC** ([View Classification](#)) — "U" or "PBU" Panel

**SOUTHWEST METAL COMPONENTS AND SUPPLY LP** ([View Classification](#)) — "U-Panel" or "PBU"

**TERRY BUILDING CO INC** ([View Classification](#)) — "M" Panel

**TEXAS BUILDING AND ROOFING SUPPLIES INC** — "U" or "PBU" Panel

**TREMCO INC** — "TremLock "U" Panel"

**TSB INDUSTRIAL INC** ([View Classification](#)) — "U/M" Panel

**WEST TEXAS STEEL & SUPPLY** ([View Classification](#)) — Type "U" or "PBU"

**2. Panel Fasteners** — For panel to purlin and panel to panel connections to be No. 14 self-tapping, hex-head, plated steel or stainless steel screws with a separate 5/8 in. OD steel or aluminum washer and a separate neoprene sealing washer. Length: For panel to purlin fasteners to be 3/4 in. for insulation up to 3 in. and 1 1/4 in. for insulation over 3 in. For panel to panel fasteners to be 3/4 in. Spacing for panel to purlin fasteners to be 12 in. OC. with fasteners located adjacent to the major ribs. At end laps spacing to be 6 in. OC with fasteners located adjacent to major ribs. Spacing for panel to panel fasteners to be 12 in. OC.

Pilot holes: For panel to purlin fasteners to be 13/64 in. diam.

For panel to panel fasteners to be 1/4 in diam.

As An Alternate Fastener — No. 12-14 self-drilling, self-tapping, 1/2 in. hex-washer head Type B steel or stainless steel screws with a neoprene sealing washer may be used. Length: For panel to purlin fasteners to be 1 in. for insulation up to 3 in. and 1-1/2 in. for insulation over 3 in. For panel to panel fasteners to be 1 in. Spacing to be the same.

**3. Insulation** — (Optional) — Any compressible blanket insulation 4 in. max thickness before compression.

**4. Purlin — For Class 60** — No. 14 MSG min gauge steel.  
(50,000 psi min yield strength).

For Class 30 — No. 16 MSG min gauge steel.

(40,000 psi min yield strength).

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 Solutions' Follow - Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL Solutions' Follow - Up Service. Always look for the Mark on the product.

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