

# TGKX.370 - 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

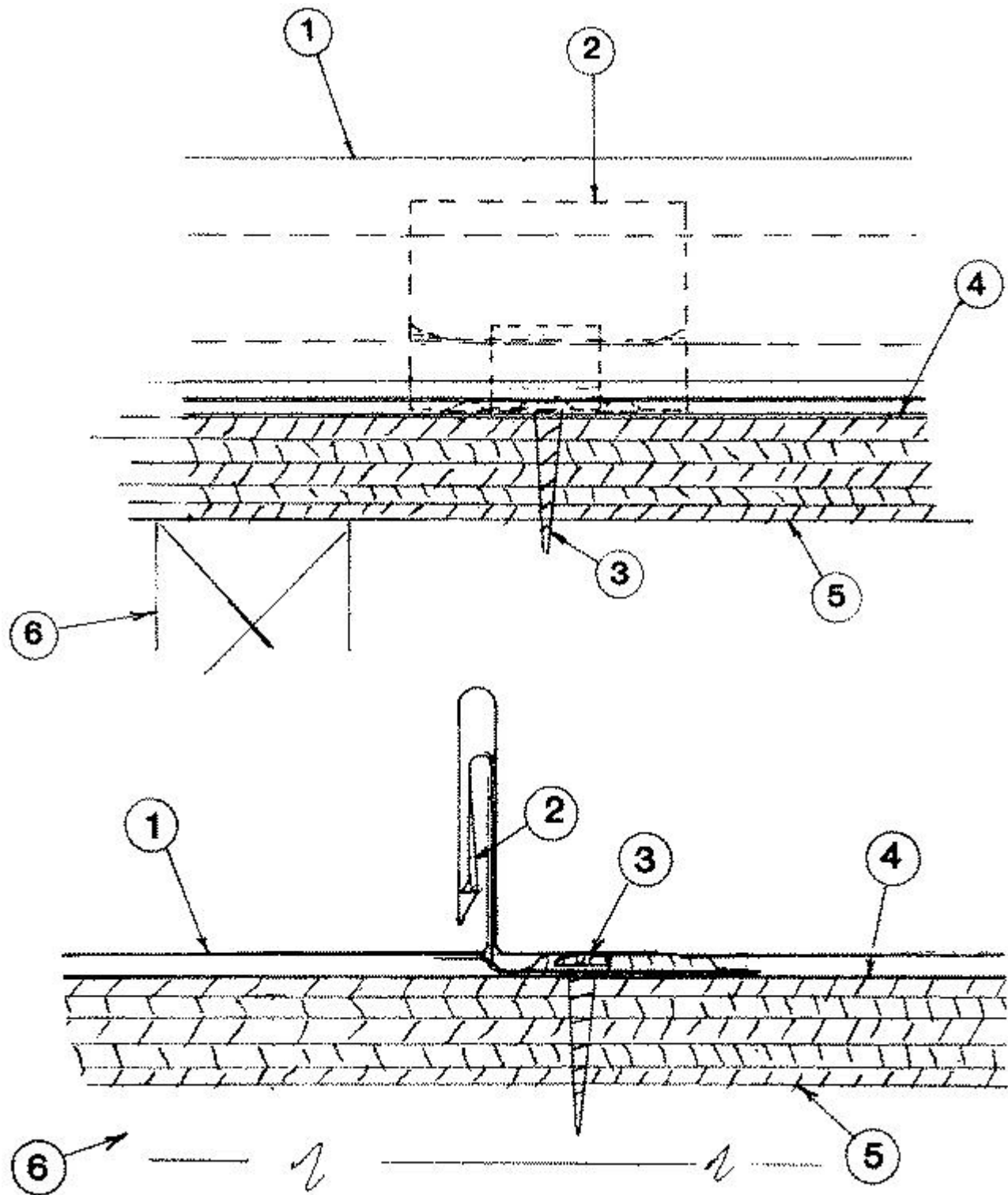
### Roof Deck Constructions

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

## Construction No. 370

June 6, 2022

**Uplift - Class 90**  
**Fire Not Investigated**



1. **Metal Roof Deck Panels\*** — No. 24 MSG min coated steel panels, max 20 in. wide, min 9 in. wide, 1-1/2 in. high at female side rib. Panels continuous over three or more clips with no endlaps. A bead of sealant may be used at panel side joints.

**AUSTIN SNAP LOC SUPPLY** ([View Classification](#)) — "ASL 150"

**CONSTRUCTION METAL PRODUCTS INC** ([View Classification](#)) — "CMP Series 1000"

**DREXEL METALS INC** ([View Classification](#)) — "DMC 150SL"

**ENGLERT INC** ([View Classification](#)) — "Series 1000"

**FABRAL INC** ([View Classification](#)) — "High Seam"

**METAL PANELS INC** ([View Classification](#)) — "SSSL15"

**NEW TECH MACHINERY CORP** ([View Classification](#)) — "SS450"

**SHEFFIELD METALS INTERNATIONAL** ([View Classification](#)) — "SMI 1-1/2" SnapLock 450"

**WESTERN STATES METAL ROOFING** ([View Classification](#)) — "Thin Lock®"

**2. Roof Deck Fasteners\* (Panel Clips)** — One piece assembly, No. 24 MSG min coated steel, 1-3/4 in. wide, 1-1/4 in. high. Min thickness 0.025 in. (No. 24 MSG). Clips spaced 18 in. OC fastened to plywood deck.

**ENGLERT INC** ([View Classification](#)) — "Series 1000 Interlocking Clip"

**FABRAL INC** ([View Classification](#)) — "High Seam Roof Clip"

**3. Fasteners (Screws)** — Fasteners used to attach panel clips (Item 2) to plywood to be No. 10-12 by 1 in. long pancake head, No. 2 Phillips drive, A-point, coated steel screw. Min one fastener per clip to be used.

**4. Underlayment** — Underlayment used over plywood deck to be type 30 organic felt. Sides overlapped min 2 in., end laps per manufacturer's instructions. Felt nailed to plywood deck with 1 in. long galv steel roofing nails, located per manufacturer's instructions. Nail spacing to be max 12 in. OC at the side lap and max 24 in. OC in interior rows.

**5. Plywood Decking** — Plywood decking to be graded per PS83 specifications, 19/32 in. thick min, exposure 1, APA rated, sq edged. Butt ends not blocked. All butt and side joints to be sealed with a one part urethane caulk sealant troweled smooth.

**6. Supports** — Spaced max of 24 in. OC. Any of the following types may be used to support the plywood decking:

a) 2 by 6 in. min, No. 2 grade or better A.F.P.A. S-P-F Hemlock Fir, Douglas Fir, Southern Pine or equivalent.

b) Wood trusses with a nom 2 by 4 in. upper chord of the same grade as Item a.

c) No. 22 MSG min cold formed coated steel (min yield to be 33,000 psi).

**7. Plywood Fasteners** — Fasteners used to attach the plywood deck to the supports to be as follows:

a) For plywood-to-wood supports No. 8-18 by 1-7/8 in. long bugle-head steel screws with a No. 2 Phillips drive, a "Hi-Low" thread pattern and an "S-Point."

b) For plywood-to-steel supports for a steel thickness less than No. 20 MSG, No. 7-19 by 1-1/4 in. long bugle-head steel screws with a No. 2 Phillips head drive "Hi-Low" threads and an "S-Point." For a steel thickness greater than No. 20 MSG to No. 16 MSG, No. 6-20 by 1-1/4 in. long bugle-head steel screws with a No. 2 Phillips drive and an S12 (TEKS/3)® point.

Spacing: Fastener spacing for all fastener types to be 6 in. OC at the plywood butt edges and 12 in. OC in the interior.

Refer to General Information, Roof Deck Construction ( Roofing Materials & 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.**

Last Updated on 2022-06-06

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