



**Construction No. 453  
TGKX.453  
Roof Deck Constructions**

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**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 Listed or Classified 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 as Classified, Listed, or Recognized.
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**Roof Deck Constructions**

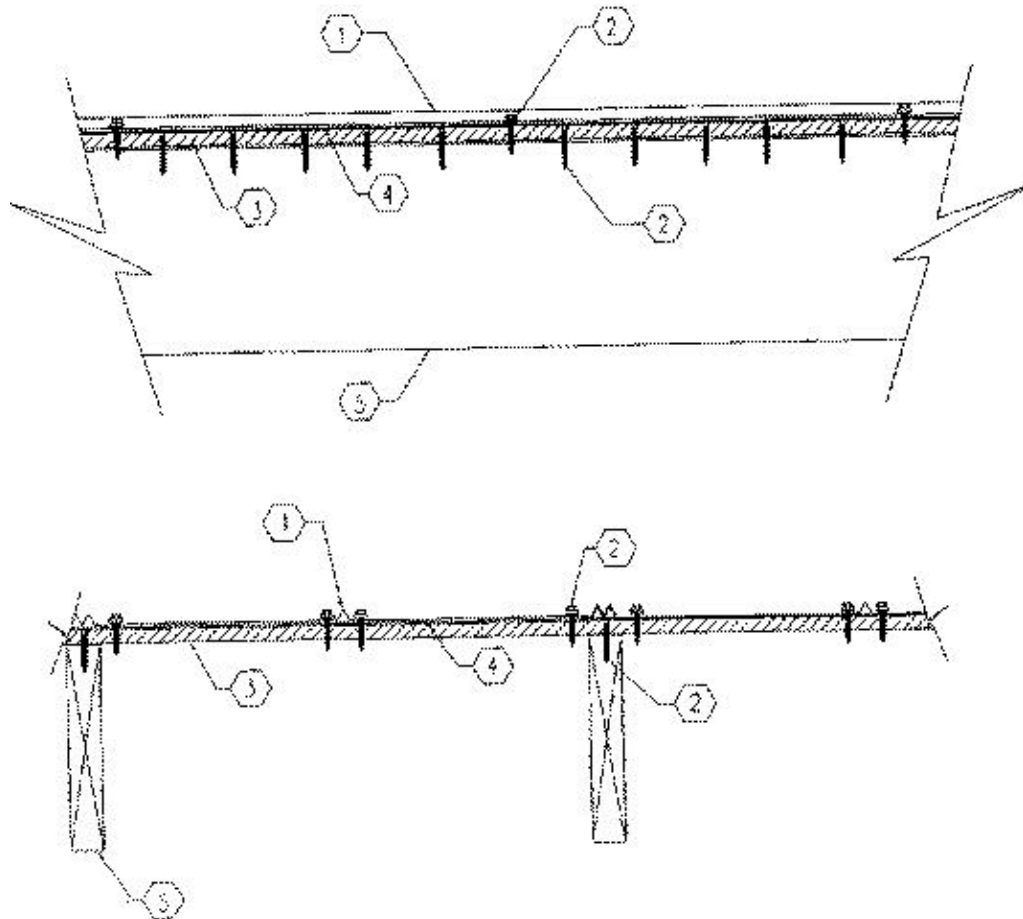
[See General Information for Roof Deck Constructions](#)

**Construction No. 453**

February 17, 2010

**Uplift — Class 90**

**Fire Not Investigated**



1. **Metal Roof Deck Panels\*** — No. 26 MSG minimum coated steel. Maximum panel width 24 in. Rib height maximum 1/2 in. Panels continuous over two or more spans. A bead of sealant may be used at panel sidelaps.

**ALL STEEL BUILDINGS & COMPONENTS**

**TUBULAR DIVISION INC** ([View Classification](#)) — "5V-Crimp"

**AMERICAN BUILDING COMPONENTS** ([View Classification](#)) — "5V Crimp"

**AMERICAN CONSTRUCTION METALS** ([View Classification](#)) — "5V Crimp"

**BUILDING COMPONENTS INC** ([View Classification](#)) — "5-V Panel"

**CENTRAL TEXAS METAL ROLLFORMING INC** ([View Classification](#)) — "5-VEE PANEL"

**BEACON SALES ACQUISITION INC, DBA**

**COASTAL METAL SERVICE** ([View Classification](#)) — "5V"

**DREXEL METALS INC** ([View Classification](#)) — "DMC 5-V"

**FABRAL INC** ([View Classification](#)) — "5V Crimp"

**MARLYN METALS INC** ([View Classification](#)) — "5V CRIMP"

**MBCI** ([View Classification](#)) — "5V Crimp"

**MCELROY METAL MILL INC** ([View Classification](#)) — "5V-Crimp".

**METAL SALES MFG CORP** ([View Classification](#)) — "5V Crimp"

**NCI BUILDING SYSTEMS L P** ([View Classification](#)) — "5V Crimp"

**RIFFE METALS L L C** ([View Classification](#)) — "Riffe 5V"

**BERRIDGE MFG CO** ([View Classification](#)) — "Double-Rib Panel"

2. **Fasteners — (Screws)** — For panel attachment to wood deck (Item 3), fasteners to be #14-10 x 1-1/2 in. Type A, Hex-head with separate 5/8 in. OD steel washer and a bonded neoprene washer or 9-15 x 1-1/2 in. longlife or #1 x 1-1/2 in. Woodmac with sealing washer. Fastener spacing is as follows: a line of fasteners is to be installed, beginning from the center of the double V at the sidlap in 2-9-2-9 in. pattern for a total of four fasteners across the width of the panel. This fastener spacing to be 3 feet on center along the length of the panel is 3 feet on center.

For attachment of plywood deck (Item 3) to joists (Item 5), fasteners to be minimum No. 6x1-7/8 in. bugle head screw or annular ring-shank nails. Spacing to be 6 in. OC at plywood edges and 12 in. OC at intermediate supports.

When light gauge structural steel joists are used, fasteners to be No. 12x1-5/8 in. long with a Phillips head.

3. **Substructure — (Plywood)** — Plywood decking to be a nom 5/8 in. thick, exposure sheathing span C-D, 40/20 plywood. All butt joints to be sealed against leakage by using tape and/or caulk or with one-part urethane sealant.

4. **Moisture Barrier** — (Optional) Any suitable membrane to protect substructure (Item 3).

5. **Joists** — Joists spaced at 2 ft , 0 in. OC; may be one of the following:

A. Nom 2 by 6 in. or 2 by 10 in. wood joists No. 2 or better.

B. Nom 2 by 4 in. wood when used on a top cord of a wood truss, No. 2 or better.

C. Light gauge structural steel framing with the member against the plywood to be a minimum No. 22 MSG coated steel.

Refer to General Information, Roof Deck Construction, (Roofing Materials and Systems Directory) for Items Not Evaluated.

\*Bearing the UL Classification Mark

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