

Construction No. 638 TGKX.638 Roof Deck Constructions

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- 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.
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Roof Deck Constructions

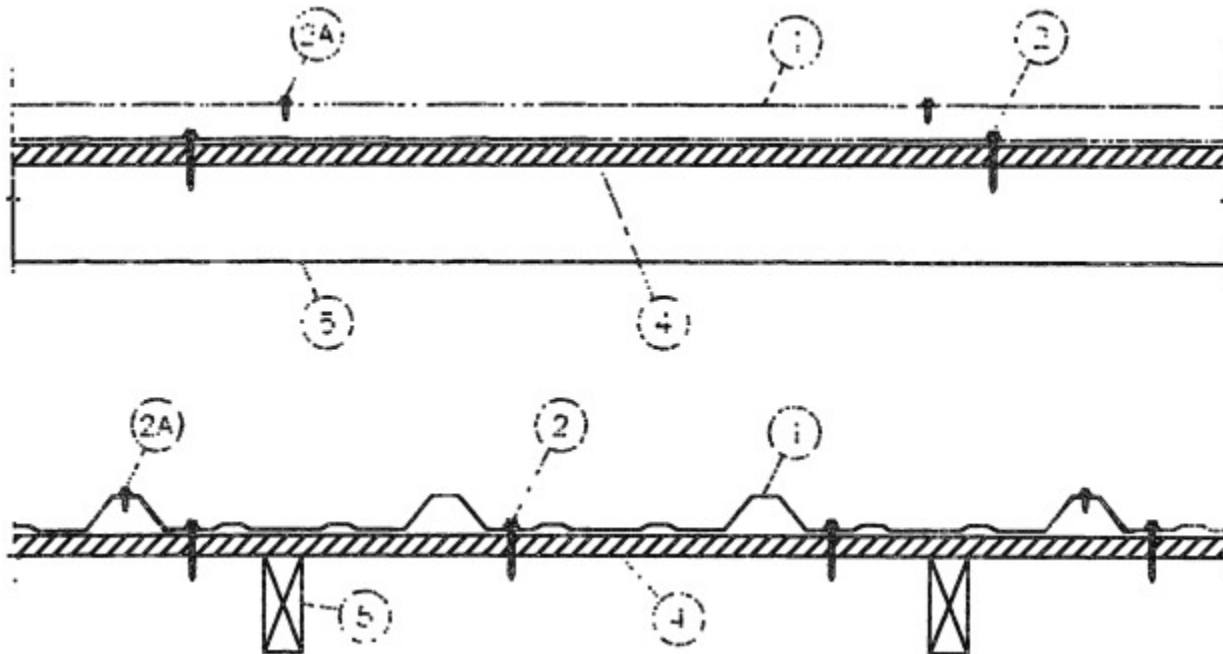
[See General Information for Roof Deck Constructions](#)

Construction No. 638

March 10, 2006

Uplift — Class 90

Fire Not Investigated



1. **Metal Roof Deck Panels*** — No. 26 MSG min gauge coated steel. Max panel width 36 in., rib height 1-1/4 in. Panels continuous over two or more spans. End laps to overlap 4 in. A bead of sealant may be used at panel end lap and side ribs.

UNION CORRUGATING CO ([View Classification](#)) — "PBR-Panel"

2. **Panel Fasteners (Screws)** — Fasteners used to attach panel to plywood decking (Item 4) to be #9-16 x 1-1/2 in. Hex Head wood screw with self sealing washer.

Fastener spacing for panel to deck connection to be 12 in. OC, 2-1/2 in. from center line on one side of each major rib.

Fastener 24 in. spacing at end lap to be 5-7-5-7 in. pattern, 2-1/2 in. from center line on both sides of each major rib.

2A. **Fasteners (Screws)** — Fasteners used to attach panel to panel along the sidelap to be #1/4-14 Hex Head self drilling screw with self sealing washer. Max fastener spacing to be 20 in. OC.

3. **Vapor Barrier** — (Optional) — (Not Shown) - Single ply between the substructure or plywood decking (Item 4) and panels to be min 30 lb. roofing felt.

4. **Plywood Decking** — Plywood decking to be graded per PS83 specifications, min 19/32 in. thick, exposure sheathing span C-D, 40/20 plywood. All joints to occur over supports.

5. **Supports** — Max spacing of 24 in. OC. Any of the following types may be used to support the plywood decking:

- a. Nom 2 in. by 6 in., min No. 2 grade A.F.P.A S-P-F Hemlock Fir, Douglas Fir or Southern Pine or equivalent.
- b. Wood trusses with a nom 2 in. by 4 in. upper chord of the same grade as Item a.
- c. Min No. 22 MSG cold formed coated steel purlin or bar joist (min yield to be 33,000 psi).

6. **Plywood Fasteners** — (Not Shown) - 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. As an alternate to Item a, 8d, 2 in. long galvanized ring shank nails may be used.
- c. 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, a "Hi-Low" thread pattern 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 (TEK/3) point.

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

Refer to general information, Roof Deck Construction, for Items not evaluated.

*Bearing the UL Classification Mark

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