



Construction No. 268A TGKX.268A 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 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

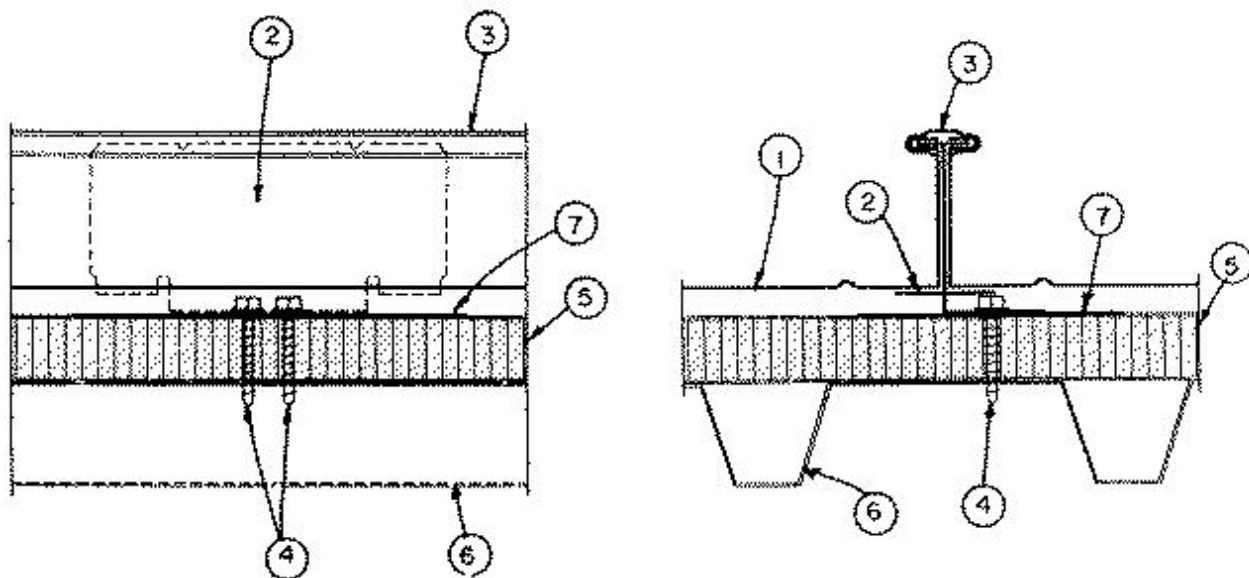
[See General Information for Roof Deck Constructions](#)

Construction No. 268A

July 15, 2013

Wind Uplift — Class 90

Fire Not Investigated



1. **Metal Roof Deck Panels*** — Min No. 24 MSG steel or stainless steel or 0.030 in. thick aluminum, nom 18 in. wide, 2-3/8 in. high standing seams. Heavier gauges or narrower panels acceptable. Panels continuous over two or more spans. Floating end laps to occur over purlins with panels overlapped 8 in. End lap to begin 3 in. from purlin web and to extend across purlin flange. A bead of mastic sealant may be used at panel end and side laps.

INNOVATIVE METALS CO INC, DBA IMETCO ([View Classification](#)) — "Series 300 Standard Seam"

MCELROY METAL MILL INC ([View Classification](#)) — "ABC 238T Roof Panel "

METAL SALES MANUFACTURING CORPORATION ([View Classification](#)) — "T-Armor Roof Panel"

THE GARLAND CO ([View Classification](#)) — " R-MER Span"

TREMCO INC ([View Classification](#)) — "TremLock T-238"

2. **Roof Deck Fasteners* (Panel Clips)** — No. 16 MSG min coated steel or stainless steel, 5-3/8 in. long by 2-5/8 in. high. Base to have two 1/4 in. diam guide holes to accommodate screw fasteners (Item 4). Max spacing 48 in.

INNOVATIVE METALS CO INC, DBA IMETCO ([View Classification](#)) — " 301016GS or 301016SS Clips"

2A. **Panel Clips*** — (Not Shown) - No. 16 MSG min gauge coated steel or stainless steel, 6 in. long by 2.718 in. high. Base to have two or four .281 in. dia. guide holes to accommodate screw fasteners (Item 4).

MCELROY METAL MILL INC ([View Classification](#)) — "ABC 238T Roof Clip"

METAL SALES MANUFACTURING CORPORATION ([View Classification](#)) — "T-Armor Roof Clip"

3. **Cap** — Used at seam, nom 1 in. wide, 1/2 in. deep fabricated from min No. 24 MSG steel, stainless steel or 0.030 in. thick aluminum. Cap continuously seamed over panel seams with a special motorized seaming tool. Seaming process to include panel clips (Item 2).

4. **Fasteners — (Screws)** — Fasteners used to attach panel clips (Item 2) to liner panel to be No. 12 self-tapping, hex-head, plated or stainless steel screws without washers or 1/4 - 13 with No. 3 Phillips head Deck Screw. Two fasteners per clip to be used. Fasteners used to attach thermal spacer (Item 9) to purlins to be same type spaced 18 in. OC. Fastener used at end lap to be an expanding bolt type with an aluminum sleeve having a 5/8 in. diam cap with a 1/4-20 by 1-7/16 in. long stainless steel bolt. Spacing at end lap to be 1, 3, 3, 4, 3, 3 in. pattern. Length to depend on thickness of insulation and/or thermal spacers and to be 3/4 in. longer than overall depth of deck assembly.

5. **Foamed Plastic** — (Optional) — Extruded foamed plastic (rigid Insulation) min density 2.00 pcf supplied in min thickness 1 in., max thickness 4 in.

6. **Liner Panel** — Fabricated from No. 22 MSG min thickness coated steel. Min depth 15/16 in., max pitch 7.2 in., min yield strength 33 ksi. or 18/20 MSG thickness (No. 22 MSG min) coated steel, 4-1/2 in. deep, (24 in. coverage), min yield strength 33 ksi. Max span of panel units to be per manufacturer's instructions. Panels attached to structural supports with screws or welds per liner panel manufacturer's instructions.

7. **Bearing Plate** — (Optional) — No. 22 MSG steel, 6 in. by 6 in. Used with rigid insulation only.

8. **Supports (Purlins)** — (Not Shown) Purlins used for liner panels to be cold formed steel sections. As alternates, structural steel components (hot rolled beams, channels, open web joists etc.) may be used. Min gauge and yield to depend on design considerations. Max spacing to depend on design considerations.

9. **Thermal Spacer** — (Optional) — (Not Shown) — Located over liner panel at panel clip locations. Continuous nom wood 2 in. by 4 in. Not used when foamed plastic (Item 5) is used.

Refer to General Information, Roof Deck Construction (Roofing Materials and Systems Directory) for items not evaluated.

10. **Plywood or OSB** — (Optional) (Not Shown) Min APA Rated plywood, nom 1/2 in. thick or oriented strand board (OSB), nom 7/16 in. thick, 4 x 8 ft. Sheets to be installed on top of Foamed Plastic (Item 5) in lieu of bearing plates (Item 7).

*Bearing the UL Classification Mark

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