

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

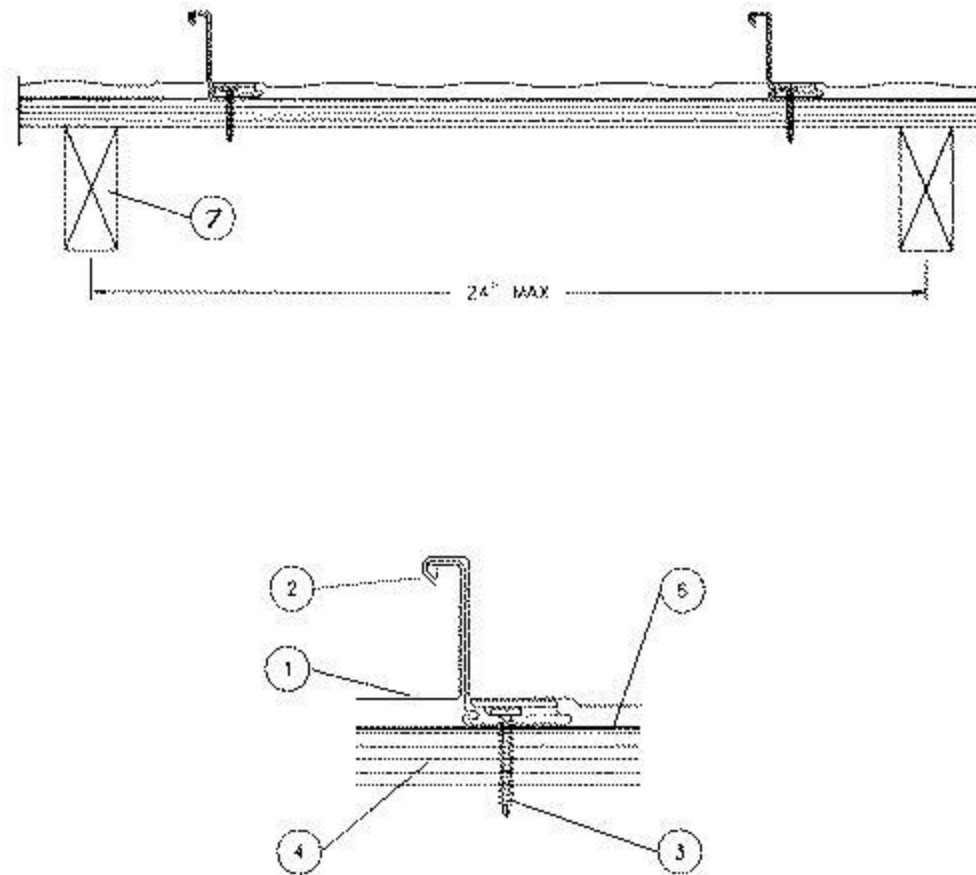
[See General Information for Roof Deck Constructions](#)

Construction No. 549

October 05, 2016

Uplift — Class 90

Fire Not Investigated



1. Metal Roof Deck Panels* — No. 24 MSG min coated steel. Max panel width 16 in., rib height 2 in. Panels continuous over two or more spans. Endlaps to overlap 6 inches. Panels may be physically curved at a radius of 110 ft or greater. A bead of sealant may be used at panel ends and side joints. Side laps to be tightened and crimped with an electronic crimping machine to a min 45 degree angle. Crimping process to include the upper portion of panel clips (Item 2).

FABRAL INC ([View Classification](#)) — "PowerSeam" or "PowerSeam II" (180° Seam)

2. Roof Deck Fasteners* — (Panel clips) Either of the following: Fixed- one piece assembly fabricated from No. 22 MSG min gauge steel, 3 in. wide. Floating Clip- two piece assembly with a base fabricated from No. 16 MSG min gauge steel, 1-5/8 in. wide, and a top fabricated from No. 22 MSG min gauge steel, 4-1/4 in. wide. Clip spacing 60 in. OC max.

2A. Roof Deck Fasteners (Panel Clips) — (Not Shown) — No. 22 MSG min gauge coated steel with a separately formed base fabricated of No. 18 MSG min gauge coated steel. One clip to be used per panel at each purlin.

FABRAL INC ([View Classification](#)) — "AMP-Loc High Fixed", "AMP-Loc Low Fixed", "AMP-Loc High Floating", "AMP-Loc Low Floating", "PowerSeam Low Floating", "PowerSeam High Floating".

3. Fasteners — (Screws) Screws used to attach the panel clips to plywood to be No. 10 by 1 in. long Pancake head wood screws with a No. 2 Philips head size of 10x1 in., 1/4 in. Hex Head Woodgrip. Two screws per clip. Screws used at endlap (high systems only) to be one of the following: 14x1- 1/4 in. Hex Washer Head, self-drilling; 14x1 in. Type AB, Hex Washer Head self-tapping; 14x1- 1/4 in. Hex Washer Head, self-drilling; 14x1 in, Type AB Phillips Stainless Steel, self-tapping. Five screws per panel in a 1, 4, 4, 3 in. pattern. Screws used to attach plywood substructure (Item 4) to wood trusses or joists (Item 8) to be No. 8 by 2 in. Bugle head screws. As an optional fastener, 2-1/2 in. long 8d common deformed shank nails may be used. When light gauge structural steel joists are used, screws to be No. 12 by 1-5/8 in. long with a Phillips head. Spacing of screws to be 6 in. OC at plywood ends and 12 in. OC at interior joists.

Feedback

4. **Endlap Back-up Plate** — (High systems only) Used at panel endlaps, 16 MSG min coated steel, 15-1/2 in. wide with two 1 in. wide by 3/4 in. long tabs for sliding over end of panel.
5. **Moisture Barrier** — (Optional) (not shown) Any suitable membrane to protect substructure (Item 4).
6. **Thermal Spacer (Optional) Polystyrene** — 3/8 in., 5/8 in. or 1 in. nom thickness, 3 in. wide by 15-7/8 in. long.
7. **Joists** — Joists, spaced at 2 ft, 0 in. OC max, may be one of the following:
 - A. Nom 2 by 6 in. wood joists, No. 2 or better.
 - B. Nom 2 by 4 in. wood when used on a top chord of a wood truss, No. 2 or better.
 - C. Light gauge structural steel framing with the member against the plywood to be a min No. 22 MSG coated steel. 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.**

Last Updated on 2016-10-05

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