

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

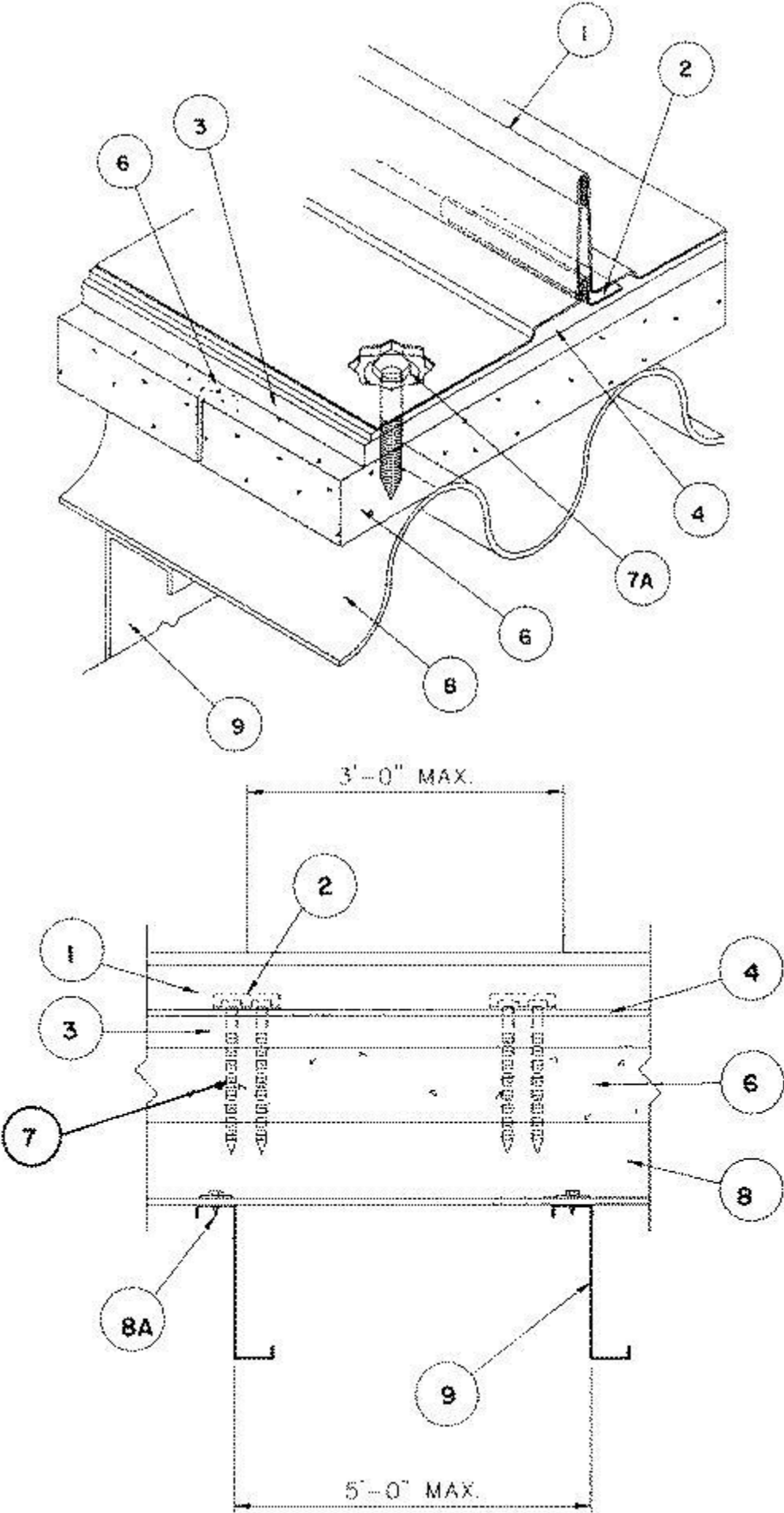
[See General Information for Roof Deck Constructions](#)

Construction No. 319

June 20, 1997

Uplift — Class 90

Fire Not Investigated



1. **Metal Roof-Deck Panels*** — 24 MSG min gauge coated steel or 0.032 in. min thickness coated aluminum panels. The panels are 16 in. wide and 2-1/2 in. high at the ribs. Adjacent panels to be seamed with an electric seamer, with seaming operation to include panel clips (Item 2).

FABRAL INC ([View Classification](#)) — "Stand'N Seam"

2. **Roof Deck Fasteners+*** — (Panel Clips) — Clips fabricated from 18 MSG stainless steel consisting of a one piece assembly 3 in. wide where the upper portion is formed to engage the male side of the metal roof deck panel.

FABRAL INC ([View Classification](#)) — "Stand'N Seam Clip"

3. **Gypsum Board*** — Min thickness 1/2 in. Opposite side edges have a tongue and groove configuration. Butt (end) Joints to be staggered and occur over steel deck crests. Wallboard installed perpendicular to steel deck corrugations.

LOADMASTER SYSTEMS INC ([View Classification](#)) — "Gypsum Board"

4. **Vapor Barrier** — Single ply, used between the wallboard and metal roof deck panels to be a min 30 lb. roofing felt.

5. **Joint Tape** — All wallboard joint shall be taped with 2.5 in. wide joint tape supplied by the manufacturer.

6. **Foamed Plastic** — (Rigid Insulation) — (Optional) — Min thickness 13/16 in. 1.0 pcf min den expanded polystyrene supplied in 4 by 8 ft sheets or (Rigid Insulation) Polyisocyanurate supplied in 4 by 8 ft sheets or (Rigid Insulation) Phenolic supplied in 4 by 8 ft sheets. All end joints to be staggered with respect to adjoining rows. All joints to be offset from joints in mineral board (Item 4).

7. **Fasteners** — For attaching panel clip into steel deck to be two 0.140 in. diam threaded shank Phillips bugle or trumpet head, self-drilling, self-tapping corrosion resistant coated steel screw supplied by roof deck manufacturer. Screws shall penetrate below steel deck min 1/2 in.

7A. **Fasteners** — For attaching wallboard. To be min 0.140 in. diam threaded shank Phillips, bugle or trumpet head, self-drilling, self-tapping, corrosion resistant coated steel screws supplied by the manufacturer. Screws are installed into top corrugations of steel deck through nom 3 by 3 in. corrosion resistant steel roof deck plates, spaced in a 18-3/4 by 12 in. OC pattern. Screws shall penetrate below steel deck min 1/2 in.

8. **Steel Deck** — Corrugated deck, 1 in. deep, 3-1/2 in. OC corrugations. made from 25 MSG Type HD (Heavy Duty) galv or painted steel panels continuous over two or more spans. End laps to occur centered over supports with panels overlapped 3 in. Panels to be lapped one corrugation at side laps.

8A. **Fasteners** — Panels fastened to structural supports using arc spot welds through weld washers supplied by the manufacturer or by 12-24 TEK or TEK 5 self-drilling, self-tapping, hex-head plated steel screws spaced max 7.5 in. OC. Steel deck side laps shall be fastened max 20 in. OC between structural supports by 12-14 by 3/4 in. TEK 1 self-drilling, self-tapping, hex-headed plated steel screws.

9. **Purlins** — 16 MSG min gauge steel (min yield strength 50,000 PSI) or min type H open web joists.

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

*** 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 1997-06-20

Feedback

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