

Construction No. 350

Fire Not Investigated

Uplift-Class 90

ALTERNATE CONSTRUCTION



1. **Metal Roof Deck Panels*** - No. 24 MSG min thick coated steel, width, min 12 in., max 18 in. or No. 26 MSGmin thick coated steel width 12 in. max. Panel may be with or without offsets at ribs. Rib height with offsets 1-9/16 in. at female rib and 1-3/8 in. at male rib. Rib height without offsets 1-7/16 in. at female rib and 1-1/16 in. at male rib. Panels continuous over three or more clips with end laps. A bead of sealant may be used at panel side joints.

Petersen Aluminum Corp. – "Redi-Roof Standing Seam"

 Roof Deck Fasteners* (Panel Clips) – One piece assembly, 2-1/4 in. wide, 1-3/8 in. high. No. 24 MSG min thick coated steel. Clips spaced 18 in. OC., fastened to plywood deck (Item 5).

Petersen Aluminum Corp. – "Redi-Roof Clip"

- Fasteners (Screws) Fasteners used to attach panel clips (Item 2) to plywood (Item 5) to be No. 10-12 by 1-5/8 in. long truss head, No. 2 Phillips drive coated steel screws. Min two fasteners per clip to be used.
- 4. **Underlayment** Underlayment used over plywood deck to be 30 lb organic felt. Sides overlapped min 8 in. end laps per manufacturer's instructions. Felt nailed to plywood deck with staples at a random spacing.
- 5A **Nailable Insulation** Consisting of 1 in. min to 3-1/2 in. max nom thickness Classified Polyisocyanurate foamed plastic with a factory laminated 7/16 in. thick APA rated O.S.B. Density of foamed plastic to be 2 pcf.
- 6A. **Supports (Purlins)** Not Shown Purlins used for liner panel support to be cold formed steel sections. As alternatives, structural steel components (hot rolled beams, channels, open web joists, etc.) may be used. Min gauge and yield to depend on design considerations for uplift loading. Max spacing to depend on design considerations for uplift loading.
- 7A. Fasteners (Screws) Fasteners used to attach nailable insulation to steel deck (Item 8) to be No. 11-13, No. 3 Phillips drive, truss head, painted steel screws. Length to depend on overall thickness of deck and to Penetrate steel deck _ in. min. A 2 in. diam formed pressure plate fabricated from No. 22 MSG coated steel to be used with each screw. Fasteners located in three rows along the 8 ft. length of the nailable insulation beginning 6 in. from the 8 ft edges with a row down the center and spaced 21 in. beginning 6 in. from the 4 ft. edges OC. A total of 15 fasteners used for each 4 by 8 ft board.
- Liner Panel (Steel Deck) No. 22 MSG min thickness coated steel. Min depth 1-1/2 in. max pitch 6 in. fabricated to various profiles. Min yield strength 33,000 psi. Fastened to supports (Item 6A) with fastener with fastener type and spacing per liner panel manufacturer's instructions for uplift loading.
- Gypsum Board (Optional) Max thickness 5/8 in. supplied in 4 by 8 ft sheets. Butt joints located over crests of steel deck. Fastened to deck with same fasteners used for nailable insulation. Refer to General Information, Roof Deck Construction (Roofing Materials and Systems Directory for items not evaluated.

*Bearing the UL Classification marking