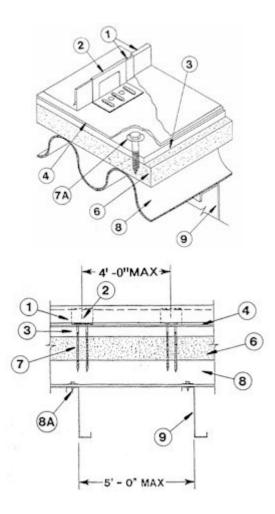


## **Construction No. 342**

Uplift - Class 90

## **Fire Not Investigated**



**1. Metal Roof Deck Panels**\* No. 24 MSG min gauge coated steel. Panel width 18 in. max., 10 in. min. Rib height 1-3/4 in. at female side. A bead of sealant may be used at panel side joints. Panels continuous over three or more clips with no end laps.

- A&S BUILDING SYSTEMS, INC.-"LokSeam"
- AEP-SPAN "18 in. Snap-Seam" , "12 in. Snap-Seam" , "10 in. Snap-Seam"
- CUSTOM PANEL INDUSTRIES LLC "Design-Lok" .

- ENGINEERED METAL SYSTEMS INC "Structural Standing Seam" .
- KOVACH INC "K-Lok Structural Panel" .
- MBCI-"LokSeam".
- MESCO METAL BUILDINGS-"LokSeam"
- METAL SALES MFG CORP "Vertical Seam" .
- NCI BUILDING SYSTEMS LP-"LokSeam".
- ROYAL ALUMINUM INC "Royal RL-16" .
- STEELOX SYSTEMS INC "LS Clip" .
- TOMEN BUILDING COMPONENTS INC "SS-200-12", "SS-200-16", "SS-200-18".

**2. Roof Deck Fasteners\* (Panel Clips)** One piece assembly, No. 24 MSG min thickness, 3-1/2 in. wide, 1-15/16 in. high. Clip spacing to be 48 in. OC.

- AEP-SPAN "Snap Seam Clip"
- CUSTOM PANEL INDUSTRIES LLC "Design-Lok Clip" .
- KOVACH INC "K-Lok Structural Clip" .
- NCI BUILDING SYSTEMS LP-"LokSeam UL 90 Clip"
- METAL SALES MFG CORP "Vertical Seam Clip"
- STEELOX SYSTEMS INC "LS" .
- TOMEN BUILDING COMPONENTS INC "Series 200 Clips" .

**3. Wallboard, Gypsum\* (Mineral 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 - "Duraflex Mineral Board" .

**4. Vapor Barrier** - (Optional)(Not shown) Installed on top of metal deck (Item 8) or on top of gypsum wallboard (Item 3). Minimum 6 mil plastic sheet.

**5. Joint Tape** (not shown) All wallboard joints shall be taped with 2.5 in. wide joint tape supplied by the manufacturer.

**6. Foamed Plastic - (Rigid Insulation)** (Optional) - Expanded polystyrene supplied in 4 by 8 ft sheets, min thickness 13/16 in., min density 1.0 pcf, 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 3).

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

**7A. Fasteners** For attaching wallboard to steel deck (Item 8) 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 pattern as determined by the pitch of the steel deck with the min density of 21 fasteners per 4 by 8 ft sheet (Item 3).

**8. Steel Deck** Fabricated to various profiles, min yield strength 33,000 psi. Steel deck profile, thickness, support spacing and method of positioning (end and side laps) and fastening deck to supports to be per deck manufacturers requirements for uplift loading.

**8A. Deck Fasteners** Steel deck panels to be fastened to structural supports and at laps using ARC spot welds with weld washers or screw fasteners per deck manufacturer's requirements for uplift loading.

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

The following items (not shown) may be used in conjunction with the "AEP SPAN" Metal Roof Deck Panels (Item 1). When used, the panel system is identified as "SNAP-SEAM (SBS)".

**A. Batten Clips\*** Slipped over ribs formed by roof deck panels. One piece assembly, 1-3/4 in. high, 1-3/4 in. max width, with four legs and two arms. Formed to engage ribs of AEP SPAN Panels and Batten Cap (Item 6). Clips spaced 48 in. O.C.

• AEP-SPAN - "SNAP-SEAM (SBS)Clip"

**B. Batten Cap**\* Slipped over batten clip. Two inches high 1-1/2 in. wide at top with sides formed to engage batten clip. Snapped over batten clips.

• AEP-SPAN - "SNAP-SEAM (SBS) Batten"

The following items may be used in conjunction with the "K-Lok Structural Panel" (Item 1).

**A. Batten Clips**\* Slipped over ribs formed by roof deck panels. One piece assembly formed to engage ribs of "K-Lok Structural Panels (Item 1) and Batten Cap (Item B). Spaced 48 in. O.C.

• KOVACH INC - "K-Lok Structural Batten Clip" .

**B. Batten Cap\*** Slipped over batten clip (Item A) and formed to snap and engage batten clip.

• KOVACH INC - "K-Lok Structural Batten" .

The following items may be used in conjunction with the "Design-Lok" panel (Item 1).

**A. Batten Clips**\* Slipped over ribs formed by roof deck panels. One piece assembly formed to engage ribs of "Design-Lok" panels (Item 1) and "Design-Lok Batten Cap" (Item B) spaced 48 in. OC.

• CUSTOM PANEL INDUSTRIES LLC - "Design-Lok Batten Clip" .

**B. Batten Cap\*** Slipped over batten clip (Item A), formed to snap over and engage batten clip.

• CUSTOM PANEL INDUSTRIES LLC - "Design-Lok Batten Cap" .

The following items may be used in conjunction with the "Structural Standing Seam" panel and a Classified Batten Clip as described in this construction.

**A. Snap-on-Batten\*** Slipped over a Classified Batten Clip, formed to snap over and engage batten clip.

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

\*Bearing the UL Classification Marking