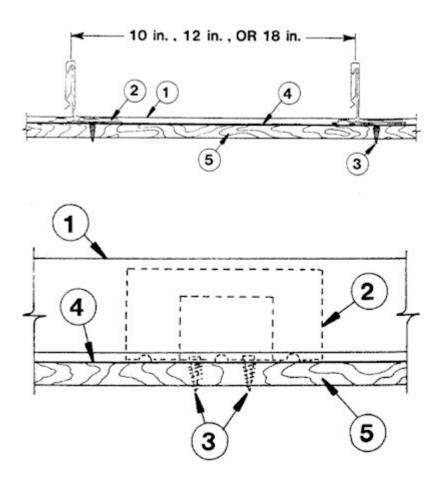


## **Construction No. 343**

**Uplift - Class 90** 

## Fire Not Investigated



- **1. Metal Roof Deck Panels\*** No. 24 MSG min coated steel. Panel width 18 in. max., 10 in. min. Rib height 1-3/4 in. at female side. Panels continuous over three or more clips with no endlaps. A bead of sealant may be used at panel side joints.
  - A&S Building Systems, Inc.-"LokSeam"
  - AEP SPAN&No. "10 in. Snap-Seam", "12 in. Snap-Seam",
  - "18 in. Snap-Seam"
  - American Buildings Co. "SeamLoc 12, 16, 18
  - Atlanta Metal Products Inc. "Thin Seam"
  - Centria "SDP 175-12, -16, -18"

- Custom Panel Industries, LLC "Design-Lok"
- Engineered Metal Systems Inc. "Structural Standing Seam"
- Kovach Inc. "K-Lok Structural Panel"
- McElroy Metal Mill Inc. "Medallion-Lok"
- MBCI--"LokSeam"
- Mesco Metal Buildings-"LokSeam"
- Metal Sales Manufacturing Corp. "Vertical Seam"
- NCI Building Systems LP-"LokSeam"
- Petersen Aluminum Corp. "Snap-Clad"
- Royal Aluminum Inc. "Royal RL-16"
- Steelox System, Inc. "LS Clip"
- Tomen Building Components, Inc. "SS-200-12", "SS-200-16", "SS-200-18"
- Zimmerman Metals, Inc. "SL1750"
- 2. Roof Deck Fasteners\* (Panel Clips) One piece assembly, 3-1/2 in. wide by 1-7/8 in. high. Minimum thickness No. 18 MSG. Clips spaced 36 in. O.C., max, fastened to plywood deck.
  - AEP Span "Snap Seam Clip"
  - Centria "C175"
  - Custom Panel Industries, LLC "Design-Lok Clip"
  - Englert Inc. "Series 2000 Clip"
  - Kovach Inc. "K-Lok Structural Clip"
  - McElroy Metal Mill Inc. "Medallion-Lok Clip"
  - NCI Building Systems LP "LokSeam UL 90 Clip"
  - Petersen Aluminum Corp. "Snap-Clad Clip"
  - Steelox System, Inc. "LS Clip"
  - Tomen Building Components, Inc. "Series 200 Clips"
- **3. Fasteners (Screws)** Fasteners used to attach panel clips (Item 2) to plywood to be No. 10-12 by 1 in. long pancake head, No. 2 Phillips drive, A-point, coated steel screw. Min two fasteners per clip to be used. When Items 5A (Rigid Insulation) and 5B (Bearing Plate) are used, No. 12 Dekfast fastener to be used and installed through clip (Item 2), bearing plate (Item 5B), rigid insulation (Item 5A) and plywood decking (Item 5A). Length of fastener to be equal to total thickness plus 7/8 in.
- **4. Underlayment** Underlayment used over plywood deck to be Type 15 or 30 organic felt. Sides overlapped min 2 in., end laps per manufacturer's instructions. Felt nailed to plywood deck with 1-1/4 in. long steel cap nails, located per manufacturer's instructions. Nail spacing to be max 12 in. O.C. at the side lap and max 24 in. O.C. in interior rows.
- **As An Alternate** A self-adhering modified bitumen water proofing membrane may be used, installed per manufacturer's instructions. Note when alternate is used the plywood joints need not be sealed.
- **5. Plywood Decking** Plywood decking to be graded per PS83 specifications, 19/32 in. thick, exposure 1, APA Rated Sheathing (42/20) square edged. Butt ends not blocked. All butt and side joints to be sealed with a one part urethane caulk sealant applied with a caulking gun and feathered outward from the joint. (Note exception under Item No. 4, Alternate).
  - **5A. Rigid Insulation** (Optional) (Not Shown) Maximum thickness 1-1/2 in. Any rigid type having a minimum compressive strength of 25 psi or minimum density of 2 pcf. Supplied in 4 ft. wide sheets.

- **5B. Bearing Plate** (Optional) (Not Shown) To be used with Item 5A. Bearing plates to be minimum 16 MSG coated steel. Located under each clip (Item 2) for support.
- **5C. Oriented Strand Board** (OSB) (Not Shown) As an alternate decking, nom. 5/8 in. thick (19/32 in. actual) APA rated OSB may be substituted for plywood decking (Item 5). Installation procedures to be same as for plywood.
- **6. Supports** (not shown) Spaced max of 24 in. O.C. Any of the following types may be used to support the plywood decking:
  - a) Nom 2 by 6 in., No. 2 grade or better S-P-F, Hemlock Fir, Douglas Fir or Southern Yellow Pine or equivalent.
  - b) Wood trusses with a nom 2 by 4 in. upper chord of the same grade as item a.
  - c) No. 22 MSG min cold formed coated steel (min yield to be 33,000 psi).
- **7. Plywood Fasteners** (not shown) Fasteners used to attach the plywood deck to the supports to be as follows:
  - a) For plywood-to-wood supports No. 8-18 by 1-7/8 in. long bugle-head steel screws with a No. 2 Phillips drive, a "Hi-Low" thread pattern and an "S-Point".
  - b) As an alternate to Item a, 8d common nails may be used.
  - c) For plywood-to-steel supports for a steel thickness less than No. 20 MSG No. 7-19 by 1-1/4 in. long bugle-head steel screws with a No. 2 Phillips head drive "Hi-Low" threads and an "S-Point". For a steel thickness greater than No. 20 MSG to No. 16 MSG, No. 6-20 by 1-1/4 in. long bugle-head steel screws with a No. 2 Phillips drive and a S12 (TEKS/3)supR point.

Spacing: Fastener spacing for all fastener types to be 6 in. O.C. at the plywood edges and 12 in. O.C. in the interior.

The following items 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,k 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. O.C.
  - 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 Clip"

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.

The following items may be used in conjunction with the "SDP 175-12, -16, -18" panels. (Item 1).

- **A. Batten Clips\*** Slipped over ribs formed by roof deck panels. One piece assembly formed to engage ribs of "SDP-12, -16, -18" panels (Item 1) and "SDP 175B" battens (Item B). Spaced 48 in. O.C.
  - Centria "175B"
  - RollCom "175B"
- **B. Batten Cap-**Slipped over batten clip. (Item A) and formed to snap and engage batten clip.
  - Centria "SDP 175B"
  - RollCom "175B"

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

\*Bearing the UL Classification Marking