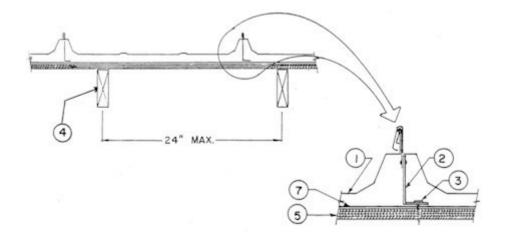


## **Construction No. 286**

Uplift - Class 90 Fire Not Investigated



- **1. Metal Roof Deck Panels\*** No. 26 MSG min coated steel. Panels continuous over two or more spans. End laps to occur adjacent to wood joist with panels overlapped 3 in. A line of sealant may be used at panel ends and side laps.
  - A&S BUILDING SYSTEMS, INC.-"Ultra-Dek"
  - CHIEF INDUSTRIES INC--"STC".
  - GALVAK S A DE C V--"Galvalok I" .
  - KIRBY BUILDING SYSTEMS INC--"Kirbylok 2000".
  - MBCI-"Ultra-Dek".
  - MESCO METAL BUILDINGS "Ultra-Dek"
  - NCI BUILDING SYSTEMS LP-"Ultra-Dek".
  - UNITED STRUCTURES OF AMERICA INC--"Guardian I", "Guardian II" (seamed only).
- 2. Roof Deck Fasteners\* (Panel Clips) Articulating clip used with an upper tab clip formed to engage the metal roof deck panel rib (Item 1). Height of the clip to be 3-3/8 in. or "Utility Clip", one piece assembly fabricated from No. 22 MSG min. coated steel, 3 in. wide and nominal 2 11/16 in. height, when no thermal spacer (Item 5) is used, and 4-3/8 in. when a thermal spacer is used. Clips are spaced 60 in. OC, located at the panel sides with guide holes in bottom to accommodate one screw fastener (Item 4).
  - CHIEF INDUSTRIES INC--"STC".
  - GARCO BUILDING SYSTEMS--"Garco-Standing-Seam-Clip" .
  - KIRBY BUILDING SYSTEMS INC--"Kirbylok 2000 Clip" or "Kirbylok 2000 Clip II".
  - NCI BUILDING SYSTEMS LP--"Ultra-Dek Articulating Clip" or "Ultra-Dek Utility Clip"
  - UNITED STRUCTURES OF AMERICA INC--"Guardian I"

**3. Fasteners** (Screws) - Screws used to attach each panel clip to plywood to be one (1) No. 10 by 1-1/2 in. long with 1/4 in. hex-head washer and a separate 1/2 in. neoprene and steel washer. As an alternate fastener, the screw used to attach a panel clip to plywood may be one (1) No. 14 by 1-1/2 in. long Type A with 3/8 in. hex-head and a separate 5/8 in. neoprene and steel washer.

When Items 9 (foamed plastic, rigid insulation) and Item 10 (bearing plate) are used, No. 12 Dekfast fastener to be used and installed through clip (Item 2), bearing plate (Item 10), foamed plastic, rigid insulation (Item 9) and deck (Item 5). Length of fastener to be equal to total thickness plus 7/8 in.

Screws used at the end lap to be 1/4-14 by 1 in. long with 3/8 in. hex-head washer and a separate 5/8 in. neoprene and steel washer. Five (5) fasteners are to be used in the flat section of the end lap panel with the first fastener located 3 in. from either rib, and then spaced in a 3-6-6-3 in. pattern. An additional fastener is to be located at the second slanted segment of the rib on both sides of the end lap panel, and one additional fastener located at the first slanted segment on both sides of one rib. Fasteners used with alternate 16 MSG min thick coated steel upper section to be No. 14 by 1 in long self-tapping fastener. First fastener located 3/8 in. from first slanted segment in a 4-5-1/2-5-1/2-4 in. pattern. One additional fastener located 1/2 in. from first slanted segment on opposite side of same rib where first fastener is located.

Screws used to attach plywood to wood joists to be No. 8 by 2 in. long bugle-head screws spaced at 12 in. O.C. Spacing at the butted ends of the plywood sections to be 6 in. O.C. 8d nails may be used, as an option, for the attachment of plywood to wood joist.

- 4. Wood Joists No. 2 Southern Yellow Pine or equivalent, spaced 24 in. O.C. max.
- **5. Deck** Deck to be min 5/8 in. thick, Exposure 1, Sheathing Span "C-D", 40/20 plywood. (All butt joints to be sealed against leakage by using tape and/or caulk).
- **6. Thermal Spacer** (Optional) (Not Shown) Polystyrene, 1 in. nom thickness, 3 in. wide, cut to fit between panel clips.
- **7. Waterproof Membrane** (Optional) (Not Shown) Used to protect plywood (Item 5). Installed under panels (Item 1).
- **8. Splice Plate Assembly** (Not shown) Used at panel end laps consisting of a lower section, 5-5/8 in. wide, with a 1 in. leg and formed to the general profile of the panel and having four 1 in. wide by 3/4 in. long tabs for sliding over the end panel. Upper section to be 2 in. wide and also formed to the general profile of the panel. Both parts 18 MSG in. min thick coated steel. Alternate 16 MSG min thick coated steel upper section 1-1/2 in. wide formed to the general profile of the panel with one end formed to fit over 2 side rib. Six 5/16 in. diam guide holes located in the flat area only.
- **9. Foamed Plastic (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.
- **10. Bearing plates** (Optional, not shown) To be used with Item 9. Bearing plates to be minimum 16 MSG coated steel. Located under each clip (Item 2) for support.

Refer to General Information, Roof Deck Construction, (Roofing Materials and Systems Directory) for Items Not Evaluated.

\*Bearing the UL Classification Marking