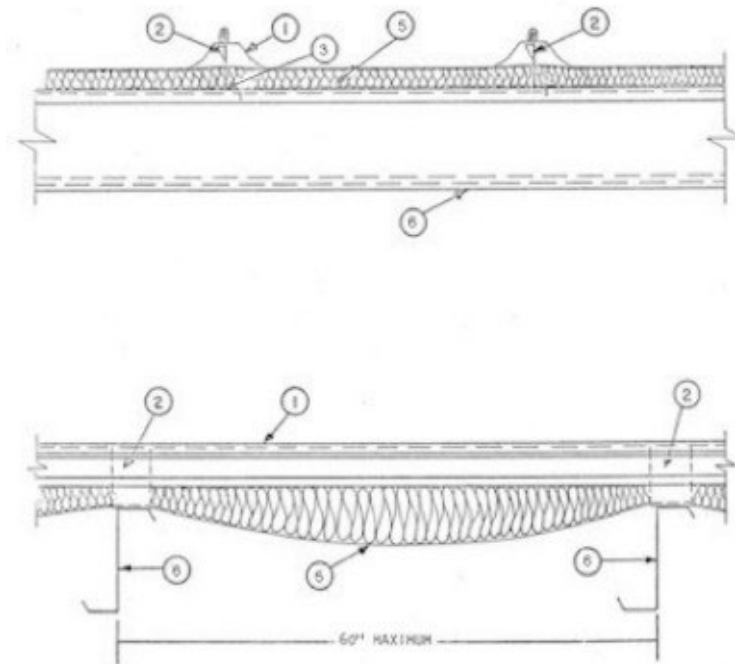


**Construction No. 205**

July 09, 2001

**Uplift — Class 90 or 30 (See item No. 1)**

**Fire Not Investigated**



**1. Metal Roof Deck Panels\*** Maximum width 24 in., height at female rib 2-13/16 in. For Class 90 - No. 24 MSG min coated steel, for Class 30 No. 26 MSG min coated steel. Panels continuous over two or more spans. End laps to occur adjacent to purlins with panels overlapped 3 in. max. A line of sealant may be used at panel end laps and side joints.

- A&S BUILDING SYSTEMS, INC.--"Ultra-Dek"
- CHIEF INDUSTRIES INC--"STC" .
- GALVAK S A D E C V--"Galvalok I" .
- DEAN STEEL BUILDINGS INC--Pro Seam Panel.
- KIRBY BUILDING SYSTEMS INC--"Kirbylok 2000" .
- KOVACH INC--"K-3000" .
- MBCI--"Ultra-Dek"
- MCELROY METAL MILL INC--Master-Lok 90
- MESCO METAL BUILDINGS - "Ultra-Dek"
- NCI BUILDING SYSTEMS L P--"Ultra-Dek"

- UNITED STRUCTURES OF AMERICA INC--"Guardian I" , "Guardian II" (seamed only).

**2. Roof Deck Fasteners\* - (Panel Clips)** Fixed or sliding type fabricated from 0.032 in. thick steel. Width to be 3 in., height to be 3 3/8 in. when no thermal spacer (Item No. 4) is used and 4-3/8 in. when thermal spacer is used. Clips spaced 5 ft. on center, located at panel sides and over purlins.

- DEAN STEEL BUILDINGS INC--Pro Seam CLIPS
- KIRBY BUILDING SYSTEMS INC--"Kirbylok 2000 Fixed Clip" .
- NCI BUILDING SYSTEMS LP--"Ultra-Dek Fixed Clip" or "Ultra-Dek Sliding Clip" .
- UNITED STRUCTURES OF AMERICA INC--"Guardian" .

**2A. Roof Deck Fasteners\* - (Panel Clips)** (Not shown) - Fixed or sliding type. Fixed clips fabricated from 0.031 in. thick spring steel. Width approximately 3-1/4 in., height approximately 4-1/4 in. Sliding clip base approximately 5 in. wide fabricated from 0.060 in. thick steel. Tab 2-1/2 in. wide fabricated from 0.031 in. thick spring steel. Maximum height approximately 4-1/4 in.

- MCELROY METAL MILL INC--"ML90RS"

**2B. Roof Deck Fasteners\* - (Panel Clips)** (Not shown) - Two part assembly. Base 4-1/4 in. wide, max height 3.3 in. Fabricated from No. 17 MSG min thick coated steel. Tab 3 in. wide at top, approximately 2 in. high. Parts formed to interlock. Max assembled height approximately 4-1/2 in. Two Fasteners (Item 3) used per clip.

- BUILDING RESEARCH SYSTEMS INC--"Challenger 400 Series Clip"

**3. Fasteners (Screws)** Fasteners for panel clip to purlins to be No. 12-14 by 1-1/4 in. long self-drilling, self-tapping, hex-head screw with a separate 5/8 in. O.D. neoprene washer. Two screws used for fixed type clip and one screw used for sliding type.

Fasteners used at end lap are the same type spaced in a 5, 3-1/2, 3-1/2, 3-1/2, 3-1/2, 5 in. pattern with an additional fastener located at the second slanted segment of the rib on both sides of the end lap panel. 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.

**3A. Fasteners (Screws)** Fasteners, used for "ML90RS" panel clip to purlin connections to be No. 14 by 1-1/4 in. long self-drilling, self-tapping, hex-head, plated steel screws used without separate washers. A minimum of one screw to be used for either fixed or sliding clips.

Fasteners used at end-lap to be same type, spaced in a 5, 3-1/2, 3-1/2, 3-1/2, 3-1/2, 5 in. pattern with an additional fastener located at the second slanted segment of the rib on both sides of the end lap panel.

**4. Thermal Spacer** (Optional) (Not Shown) - Polystyrene, 1 in. max thickness, 3 in. wide, cut to fit between panel clips.

**5. Insulation** (Optional) - Any compressible blanket insulation, 6 in. max thickness when located between thermal spacer (Item 4) and purlin (Item 6) before compression.

**6. Purlin** No. 16 MSG min gauge steel (55,000 psi min yield strength).

**7. Splice Plate Assembly** (Not Shown) - Used at panel end laps; consisting of a lower section, 6 in. wide, with a 1 in. vertical leg, formed to the general profile of the panel, and having four 1 in. wide by 3/4 in. long tabs for sliding over the panel end. Upper section to be 2 1/4 in. wide 24 in. long and also formed to the general profile of the panel with one end formed to fit over a side rib. Six 3/16 in. diameter guide holes located in flat areas with 3 holes located at rib location. Both parts to have ribs formed for reinforcement. Both parts fabricated from No. 18 MSG 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 a side rib. Six 5/16 in. diam guide holes located in the flat area only.

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

\*Bearing the UL Classification Marking