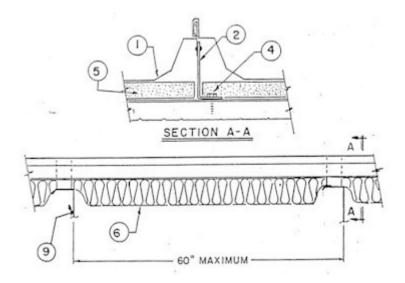


## Construction No. 205A

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, 24 MSG min coated steel. For Class 30, 26 MSG min coated steel. Panels continuous over two or more spans. End laps to occur adjacent to purlin with panels overlapped 3 in. 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 DE C V--"Galvalok I".
  - KIRBY BUILDING SYSTEMS INC--"Kirbylok 2000".
  - KOVACH INC--"K-3000".
  - MBCI-"Ultra-Dek" .
  - MESCO METAL BUILDINGS "Ultra-Dek".
  - NCI BUILDING SYSTEMS LP-"Ultra-Dek".
  - UNITED STRUCTURES OF AMERICA INC--"Guardian I"
- 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. when no thermal spacer (Item 5) is used, and 4-3/8 in. when a thermal spacer is used. Clips are spaced 5 ft OC max along length of panels, located at the panel sides with three guide holes in the bottom to accommodate screw fasteners (Item 4).
  - KIRBY BUILDING SYSTEMS INC--"Kirbylok 2000 Clip" or "Kirbylok 2000 Clip II".

- NCI BUILDING SYSTEMS LP --"Ultra-Dek Articulating Clip".
- UNITED STRUCTURES OF AMERICA INC--"Guardian I".
- **2A.** 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 4) used per clip.
  - BUILDING RESEARCH SYSTEMS INC--"Challenger 400 Series Clip".
- **3. Building Units\*** (Optional) (Not shown) Translucent, reinforced plastic panels. Nom thickness, 1/16 in., formed to the same configuration as the metal roof deck panels, with a metal reinforcement cut from a Classified metal roof deck panel ("Ultra-Dek"). Metal reinforcement attached to translucent, reinforced plastic side segments with aluminum pop rivets. Panels continuous over two spans.
  - KIRBY BUILDING SYSTEMS INC--"Kirbylok 2000".
  - NCI BUILDING SYSTEMS LP -- "Ultra-Dek Light Transmitting Panel" .
  - UNITED STRUCTURES OF AMERICA INC--"Guardian I Skylight".
- **4. Fasteners** (Screws) Screws used to attach the panel clips to purlin to be one (1) 1/4-14 by 1-1/4 in. long, self-drilling, 3/8 in. hex-head, plated steel screws with a separate 5/8 in. O.D. neoprene washer. If no thermal spacer (Item 5) is used, the screws may be 1 in. long. Screws used at end lap are to be 1 in. long and same type as panel clip to purlin attachment. 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 the panel clip to purlin when an optional Light Transmitting Panel is used are to be two (2) No. 12 by 1-1/2 in. long, self-drilling, 3/8 in. hex-head, plated steel screws with a separate 5/8 in. O.D. neoprene washer. If no thermal spacer (Item 5) is used, these screws may be 1 in. long. Screws used to fasten optional Light Transmitting Panel backing plate (Item 8) to be the same type as those used at the panel end lap. These screws are located at second slanted segment adjacent to rib with three screws spaced 1-1/2 in. O.C. and at first slanted segment adjacent to rib with two screws spaced 3 in. O.C.

- **5. Thermal Spacer** (Optional) Polystyrene, 1 in. max thickness, 3 in. wide, cut to fit between panel clips.
- **6. Insulation** (Optional) Any compressible blanket insulation, 6 in. max thickness before compression with 3/8 in. thermal spacers or 5 in. max thickness insulation before compression with max 1 in. thermal spacers when installed between thermal spacer (Item 5) and purlin (Item 9).
- 7. End-Lap 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 to have ribs formed with reinforcement. Both parts min 18 MSG 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.

- **8. Light Transmitting Panel Backing Plate** (Optional) (Not shown) When Light Transmitting Panel is used, backing plate required. Min 18 MSG galv steel, 6 in. wide with two vertical legs on both sides and formed to the configuration of metal roof deck panel (Item 1). Located over purlin and offers support to continuous segment building unit (Item 3).
- 9. Purlin Min No. 16 MSG steel (55,000 psi min yield strength).

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

\*Bearing the UL Classification Marking