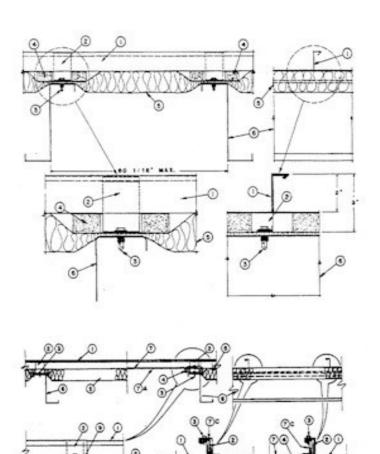
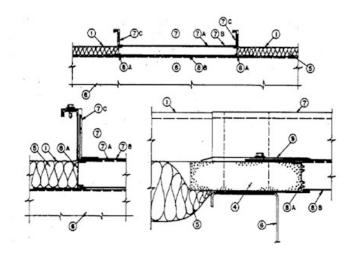


Construction No. 90

Uplift - Class 90 or 30 Fire Not Investigated





- 1. Metal Roof Deck Panels* No. 24 MSG min gauge coated steel, max width 16 in. Panels continuous over two or more spans. End lap to occur over purlins and to include End Lap Back-up Plate (Item 2B or 2C.) Ends of panels overlapped 6 in. Side laps to be tightened and crimped with a special motorized crimping machine at a minimum 45 degree angle with crimping process to include tabs of Panel Clips (Item 2). A bead of sealing compound may be used at panel end and side laps.
 - A&S BUILDING SYSTEMS, INC.-"BattenLok" or "SuperLok"
 - A-LERT STANDING SEAM ROOF SYSTEMS--"A-Lert Loc"
 - AEP-SPAN--"SL-216"
 - ALLWINE ROOFING & CONSTRUCTION INC--"A2-16", "A2-16 Fluted" and "A2-16 with Clip Offset"
 - ATLANTA METAL PRODUCTS INC--"AMP Lok"
 - CECO BUILDING SYSTEMS, DIV OF--"CRP 16"
 - CENTURION INDUSTRIES INC, DBA--"Centurion 1624M"
 - CONSOLIDATED METALS OF FLORIDA, DIV OF--"CSS-210A"
 - CUSTOM PANEL INDUSTRIES LLC--"T-Span"
 - HCI STEEL PRODUCTS INC--"Mark 1622" and "Mark 1624"
 - KNUDSON MFG INC--"ULTRALOK"
 - MBCI-"BattenLok" or "SuperLok"
 - METAL-FAB INC--"Met-Fab III"
 - METAL SALES MFG CORP--"Master-Span"
 - MESCO METAL BUILDINGS-"BattenLok" or "SuperLok"
 - NCI BUILDING SYSTEMS LP--"BattenLok" or "SuperLok"
 - NEW TECH MACHINERY CORP--"Panel 210A"
 - NORTH COAST COMMERCIAL--"Series 2500"
 - ROL-TEC SYSTEMS INC--"UltraLok"
 - ROOSEVELT BUILDING PRODUCTS CO INC--"CFSR2-12, -14, -16"
 - STEELOX SYSTEMS INC--"264 or 262 Steelox", "264 or 262 Steelox Lock-Rib," "264 or 262 Steelox Pencil-Rib"
 - SUPERIOR METAL SYSTEMS INC--"SMS 416"
 - ZIMMERMAN METALS INC--"SS2000"
- **2. Roof Deck Fasteners* (Panel clips)** No. 24 MSG min gauge coated steel with a separate formed reinforcement fabricated of No. 24 MSG min gauge heat treated coated steel. One clip to be used per panel at each purlin.

- STEELOX SYSTEMS INC--"CF Clip" or "CF Sliding Clip"
- **2A. Roof Deck Fasteners*** (Panel Clips)(Not Shown) No. 22 MSG min coated steel. Clips located at panel sides. Guide Holes in bottom of clip to accommodate two screw fasteners (Item 3).
 - ATLANTA METAL PRODUCTS INC--"AMP High Fixed" or "AMP Low Fixed" or "AMP High Floating" or "AMP Low Floating"
 - CECO BUILDING SYSTEMS, DIV OF--"CL3, CL4, CL7, CL8 Series" "CRP16 Panel Clips"
 - HCI STEEL PRODUCTS INC--"SS16 High or Low Stationary Clip" or "SS16 High or Low Expansion Clip"
 - NCI BUILDING SYSTEMS LP-"BattenLok High or Low, Fixed or Floating Clip";
 "BattenLok Utility Clip" -"SuperLok High or Low, Fixed or Floating Clip";
 "SuperLok Utility Clip"
- **2B. End Lap Back-Up Plate*** (Not shown) No. 18 MSG min gauge coated steel. Max length 48 in. Width varies with type of purlin with a max of 6-1/2 in.
 - STEELOX SYSTEMS INC--"Joint Backing Plate".
- 2C. End Lap Back-Up Plate* (Not shown) No. 16 MSG min coated steel.
 - NCI BUILDING SYSTEMS LP -- BattenLok Back-Up Plate or "SuperLok Back-Up Plate".
- **2D. Roof Deck Fasteners* (Panel Clips)**(Not Shown) No. 24 MSG min gauge coated steel with a separate formed reinforcement fabricated of No. 17 MSG min gauge coated steel. One clip to be used per panel at each purlin.
 - METAL SALES MFG CORP--"Master-Span Floating Clip" or "Master-Span Fixed Clip".
- **2E. Roof Deck Fasteners*** (End Lap Back-up Plate) (Not shown) Used with "Master-Span" panels. Width 15-7/8 in., length 5-5/8 in. with three 3/4 in. by 3/4 in. tabs. Fabricated from No. 16 MSG coated steel.
 - METAL SALES MFG CORP--"Master-Span Compression Plate".
- **2F. End Lap Back up Plate** (Not shown) used with HCI Steel Products' Panels 6 in. wide, 15-1/2 in. long, fabricated from 16 MSG min thick steel (50,000 psi min yield strength).
- **2G. Roof Deck Fastener*** (End Lap Back up Plate) (Not Shown) Used with AEP-Span "SL-216" panels. Length 10-1/2 in., width 15-3/4 in., No. 16 MSG min thick coated steel. Slipped under lower panel at end lap. Panels fastened together using four No. 1/4-14 by 1-1/8 in. long self-drilling, self-tapping, hex-washer head, plated steel screws with a 5/8 in. OD steel washer and a sealing washer. Screws spaced 4 in. OC beginning 2 in. from ribs.
 - AEP-SPAN--"SL-216 End-Lap Back-Up Plate"
- **2H. Roof Deck Fasteners*** (Panel Clip) (Not Shown) Two part assembly; A base fabricated from No. 16 MSG min coated steel and an upper tab fabricated from No. 22MSG min coated

steel. Clips fastened to purlins with two fasteners per clip. See Item No. 3 for description of fasteners.

- AEP-SPAN--"SL-216 Clip"
- **2I. Roof Deck Fasteners*** (Panel Clip) (Not Shown) Two part assembly; A base fabricated from No. 16 MSG min coated steel and upper tab fabricated from No. 22 MSG min coated steel. Clips fastened to purlins using two fasteners per clip. See Item No. 3 for description of fasteners.
 - CUSTOM PANEL INDUSTRIES LLC--"T-Span Clip".
- **3. Fasteners (Screws)** For attaching panel clips to purlins- 1/4 14 by 1 in. long shoulder or stand off type, self-drilling, self-tapping, hex-head plated steel screws. One screw per clip to be used. As an alternate fastener for panel clip to purlin attachment a No. 12-14 by 1 in. long self-drilling, self-tapping, hex-head plated steel screw may be used. Fasteners used at end laps-1/4 10 by 1 in. long self-drilling, self-tapping, hex-head plated steel screws with 1/2 in. OD metal backed sealing washer, spaced on a 1, 3, 3-1/2, 3-1/2, 3, 1 in. pattern.

For Building Unit-to-Panel side lap connections-No. 18-9 by 1 in. long self-drilling, self-tapping, hex-head plated steel screws with a separate 1/2 in. OD plated steel washer and a neoprene sealing washer. One fastener required at each end and one at mid-span of each rib of the Building Unit.

For Reinforcing Plate-to-Building Unit end lap connection-No. 18-9 by 1 in. long self-drilling, self-tapping, hex-head plated steel screws with a separate 1/2 in. OD plated steel washer and a neoprene sealing washer. Spacing to be nom 2-1/2, 5-1/2, 5-1/2 in. beginning at the female rib of the Building Unit.

- **4. Thermal Spacer Block** Used over purlins. Expanded polystyrene 1 in. thick, 5 in. wide, 48 in. long with cutout to accommodate panel clips.
- **4A. Thermal Spacer Block** (Optional) (Not Shown) Used over purlins. Expanded polystyrene 1 in. thick max, 3 in. wide, cut to fit between panel clips (For use with Item 2A only.
- **5. Insulation** (Optional) Any compressible blanket type 4 in. max thickness before compression. An additional 2 in. max thickness of compressible blanket insulation may be used between purlins. The additional insulation shall not be sandwiched between the upper flange of the Purlin and the Metal Roof Deck Panel.

As an alternate method of installation, a max of 6 in. of compressible blanket insulation may be used. The insulation is to be laid over the purlins and slit along the purlins to a depth of 5 in. (1 in. above the purlin) in such a manner that no material in excess of 4 in. is sandwiched between the purlins and the Roof Deck Panels.

- **6. Purlins** Z-shaped, 0.056 in. min thickness steel (40,000 psi min yield strength) or min "H" series open web steel joists.
- **7. Building Units** * (Optional) Prefabricated assemblies of a Skylight Panel, (Item 7B), mounted in a Perforated Metal Roof Deck Panel, (Item 1), with Flashings, (Item 7C). Assembly continuous over two spans erected in the same manner as for Metal Roof Deck Panels.
 - STEELOX SYSTEMS INC--"264 Steelox-Skylight" .

- NCI BUILDING SYSTEMS LP-"BattenLok Light Transmitting Panel" or "SuperLok Light Transmitting Panel"
- **7A.** Perforated Metal Roof Deck Panels No. 24 MSG min gauge coated steel perforated in the flat portion.
- **7B. Plastic Skylight** * (Translucent, glass fiber reinforced plastic panel) Thickness 0.04 in. (nom) formed to fit the Perforated Metal Roof Deck Panel, (Item 7A).
- **7C. Flashing** No. 20 MSG min gauge coated steel. Attached to the Building Unit to retain and flash the Plastic Skylight to the Perforated Metal Roof Deck Panel.
- **8. Insulating Units** (Optional) Prefabricated assemblies of a Plastic Insulating Skylight Pan, (Item 8B), mounted in an Aluminum Frame, (Item 8A). Assembly spans between adjacent Purlins beneath a Building Unit only.
- **8A.** Aluminum Frame Extruded aluminum alloy, 0.055 in. min thickness, shop assembled.
- **8B. Plastic Insulating Skylight Pan** (Translucent, glass fiber reinforced modified acrylic plastic panel). Shop assembled in Aluminum Frame, (Item 8A).
- 9. Insulation Trim No. 24 MSG min gauge coated steel. Used at the sides of the Building Unit.
- **10. Reinforcing Plate** (Not Shown) Min 0.05 in. thick coated steel. Max length 15-1/2 in., width 5-1/4 in. Used at downslope end lap of Building Unit to Metal Roof Deck Panel.

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

*Bearing the UL Classification Marking