Construction No. 180

Uplift - Class 90

Fire Not Investigated
1. Metal Roof Deck Panels * - No. 24 MSG min gauge coated steel, 16 in. max width. Panels continuous over two or more spans. End lap to occur over purlins and to include End Lap Back-Up Plate (Item 2A or 2B). Ends of panels overlapped 6 in. beginning 1 in. from purlin web and extending across purlin upper flange. Side laps to be tightened and crimped with special motorized crimping machine to 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 laps and side joints.

- 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"
- CENTURION INDUSTRIES INC, DBA--"Centurion 1624M"
- CONSOLIDATED METALS OF FLORIDA, DIV OF--"CSS-210A"
- CUSTOM PANEL INDUSTRIES LLC--"T-Span"
- KNUDSON MFG INC--"ULTRALOK"
- MBCI--"BattenLok" or "SuperLok"
- MESCO METAL BUILDINGS--"BattenLok" or "SuperLok"
- METAL-FAB INC--"Met-Fab III"
- 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 Steelex", "264 or 262 Steelex Lock-Rib", "264 or 262 Steelex Pencil-Rib"
- 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 location.

- STEELOX SYSTEMS INC--"CF Clips"
- SUPERIOR METAL SYSTEMS INC--"SMS 416"

2A. Roof Deck Fasteners* (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--"Back-Up Plate"

2B. 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".

2C. Roof Deck Fasteners* (Panel Clips) (Not Shown) - No. 22 MSG min gauge coated steel. Guide holes in bottom of clip to accommodate two screw fasteners (Item 3). Note to Tom - Who is supposed to be listed under this item?

2D. Roof Deck Fasteners* (Panel Clips) - (Not Shown) - Either of the following: Fixed or Utility Clip-one piece assembly fabricated from No. 22 MSG min gauge steel, 3 in. wide. Floating Clip-two piece assembly with a base fabricated from No. 16 MSG min gauge steel, 1-5/8 in. wide, and a top fabricated from No. 22 MSG min gauge steel, 4-1/4 in. wide. One clip to be used per panel at each purlin location.

- 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"

3. Fasteners (Screws) For attaching panel clips to purlins-to be 1/4-14 shoulder or stand-off type; self-drilling, self-tapping, hex-head, plated steel screws. Fastener length to vary with thickness of insulation and to be min of 3/4 in. longer than nom thickness of rigid insulation (Item 5) and liner panel (Item 11). One fastener per clip to be used at each purlin. As an alternate fastener for panel clip to purlin attachment, a No. 12-14 self-drilling, self-tapping, hex-head plated steel screw may be used. Same length detail as for 1/4-14 screws to apply. Fasteners used at end laps to be 1/4-10 by 1 in. long self-drilling, self-tapping, hex-head plated steel screws with 1/2 in. OD metal backed sealing washers. Spaced in 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 Units.

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.

4. Roof Deck Fastening* (Bearing Clip) No. 18 MSG min gauge coated steel; 3 in. wide by 3-1/4 in. long with 3/8 in. legs. Used under Panel Clips (Item 2) over purlins and rigid insulation.

- STEELOX SYSTEMS INC--"Bearing Clip"
5. **Foamed Plastic** *(Rigid insulation) Rigid type. Supplied in 4 ft wide sheets. Min thickness 1 in., max thickness 3 in. Butt joints to occur over purlins.*
   - ATLAS ROOFING CORP--"Classic Shield".

6. **Purlins** 0.056 in. min thickness steel (min yield strength 40,000 psi) 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 7A), with Flashings, (Item 7C). Assembly continuous over two spans erected in the same manner as 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. **Flashings** 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** Min 0.05 in. thickness 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.

11. **Liner Panel** *(Optional) - The following liner panel types may be used:*

   A. No. 27 MSG min coated steel; .700 in. deep with major ribs having a 2 in. wide crest and spaced 8 in. O.C. cover width 32 in. Panel to be installed with major ribs down. (Min. yield strength to be 40,000 psi.)

   B. No. 29 MSG min coated steel; 9/16 in. deep with ribs having a 3/4 in. wide crest and spaced 2.667 in. O.C. (Min. yield strength to be 80,000 psi.)
C. 0.018 in. min thickness aluminum (3105 H 194 alloy). 9/16 in. deep with ribs having a 3/4 in. wide crest and spaced 2.667 in. O.C. (Min. yield strength 30,000 psi)

All types to have adjacent widths overlapped min. of one corrugation at sides. End laps to be located over purlins with min. overlap to be 3 in. Liner panels to be fastened to purlins using No. 18-9 by 1 in. self-drilling, self-tapping, hex-head plated steel screws with an optional 1/2 in. O.D. plated steel washer and a neoprene sealing washer. Fasteners to be located one at each side lap and one in the approximate center of each panel width.

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

*Bearing the UL Classification Marking