

## **Construction No. 576**

June 12, 2001 Uplift — Class 90 Fire Not Investigated



**1. Metal Roof Deck Panels**\* No. 24 MSG min coated steel. Max panel width 16 in., rib height 2 in. Panels continuous over two or more spans. Endlaps to overlap 6 inches. Panels may be mechanically curved at a radius between 20 in. and 109 in. incl. A bead of sealant may be used at panel ends and side joints. Side laps to be tightened and crimped with an electric crimping machine to an approx 90 degree angle. Crimping process to include the upper portion of panel clips (Item 2).

- MBCI "Curved BattenLok"
- NCI BUILDING SYSTEMS L.P. "Curved BattenLok"

**2. Roof Deck Fasteners\*** (Panel Clips) Either of the following: Fixed or Utility Clip—One piece assembly fabricated from 22 MSG min gauge steel, 3 in. wide. Floating Clip—Two piece assembly with a base fabricated from 16 MSG min gauge steel, 1-5/8 in. wide and a top fabricated from 22 MSG min gauge steel, 4-1/4 in. wide. Clip spacing 60 in. O C max.

 NCI BUILDING SYSTEMS L P — "SuperLok High or Low", "Fix or Floating Clip", "SuperLok Utility Clip" **3. Fasteners** (Screws) Screws used to attach the panel clips to Substructure (Item 4) to be No. 10 by 1 in. long Pancake head wood screws with a No. 2 Phillips head or 10 x 1 in. 1/4 in. Hex Head Woodgrip. Two screws per clip.

Screws used at endlap (high system only) to be one of the following: 14 x 1-1/4 in. Hex Washer Head. self-drilling, 14 x 1 in. Type AB Phillips Stainless Steel, self-tapping. Five screws per panel in a 1, 3, 4, 4, 3 - in. pattern. Screws used to attach Substructure (Item 4) to wood trusses or joists (Item 7) to be No. 8 by 2 in. Bugle head screws. As an optional fastener, 2-1/2 in. long 8d common deformed shank nails may be used. When light gauge structural steel joists are used, screws to be No. 12 by 1-5/8 in. long with a Phillips head.

Spacing of screws to be 6 in. O.C. at plywood or OSB ends and 12 in. O.C. at interior joists.

**4. Substructure** (Plywood or OSB) Plywood decking or Oriented Strand Board (OSB) to be nom 5/8 in. thick, exposure sheathing span, C-D, 40/20 plywood. (All butt joints to be sealed against leakage by using tape and/or caulking). In lieu of plywood, 1 in. tongue and groove decking may be used.

**4A. Endlap Back-Up Plate** (Optional) (Not Shown) - (High System Only)—Used at panel endlaps, 16 MSG min coated steel, 15-1/2 in. wide with two 1 in. wide by 3/4 in. long tabs for sliding over end of panel.

5. Moisture Barrier (Optional)—Any suitable membrane to protect Substructure (Item 4).

**6. Thermal Spacer** (Optional) (Not Shown)—Polystyrene—3/8 in., 5/8 in. or 1 in. nom thickness, 3 in. wide by 15-7/8 in. long.

7. Joists Joists spaced at 2 ft, 0 in. O.C. max, may be one of the following:

A. Nom 2 by 6 in. wood joists, No. 2 or better.

B. Nom 2 by 4 in. wood when used on a top chord of a wood truss, No. 2 or better.

C. Light gauge structural steel framing with the member against the plywood or OSB to be a min 22 MSG coated steel.

Refer to general information, Roof Deck Construction, for Items not evaluated.

\*Bearing the UL Classification Mark