**Technical Bulletin**

**UL Construction #268**

**238T**

**UL 580 Class 90 Wind Uplift**

1. **Metal Roof Deck Panels** - Min No. 24 MSG gauge coated steel or stainless steel or min .030 in. thick aluminum; nom 18 in. wide, 2-3/8 in. high standing seams. Panels continuous over two or more spans. Floating end laps to occur over purlins with panels overlapped 8 in. End lap to begin 3 in. from purlin web and to extend across purlin flange. A bead of mastic sealant may be used at panel end and side laps.

   McElroy Metal Mill, Inc.  “ABC 238T Roof Panel”

2A. **Panel Clips** — (Not Shown) - No. 16 MSG min gauge coated steel or stainless steel, 6 in. long by 2.718 in. high. Base to have two or four .281 in. dia. guide holes to accommodate screw fasteners (Item 4).

   McElroy Metal Mill, Inc.  “ABC 238T Roof Clip”

3. **Cap** — Used at seam, nom 1 in. wide, 1/2 in. deep fabricated from min No. 24 MSG gauge steel, stainless steel or .030 in. thick aluminum. Cap continuously seamed over panel seams using an electric seaming tool. Seaming process to include panel clips (Item 2).

4. **Fasteners** — (Screws) — Fasteners used to attach panel clips to purlin to be No. 14 by 3 in. long self-tapping, hex-head, plated or stainless steel screws without washers or 1/4 - 14 hex head driller without washer. Two fasteners per clip to be used. Fasteners used to attach thermal spacer (Item 6) to purlins to be same type, spaced 18 in. OC. Fastener used at end lap to be an expanding bolt type with an aluminum sleeve having a 5/8 in. diameter cap with a 1/4 - 20 by 1-7/16 in. long stainless steel bolt. Spacing at end lap to be 1, 3, 3, 4, 3, 3, in. pattern.

5. **Insulation** — (Optional) — Any compressible blanket insulation, 6 in. max thickness before compression, or foamed plastic (rigid insulation) supplied in min thickness 1 in., max thickness 4 in.

6. **Thermal Spacer** — (Optional) — Located over insulation at purlin locations. Nom wood 2 in. by 4 in. or polystyrene, 1 in. thick, 3 in. wide, continuous over purlins when blanket insulation exceeds 4 in. max thickness before compression.

7. **Purlins** — No. 16 MSG min steel (50,000 psi min yield strength).

   **Spacing**
   - 60 in. OC for steel panels - Class 90
   - 48 in. OC for aluminum panels - Class 90

8. **Lateral Bracing** — (Not Shown) — As required.

*Bearing the UL Classification Mark*