



TECHNICAL BULLETIN

Issue Date: September 9, 2002

No. 03-139-02

UL Construction #205

ML-90

UL580 Class 90 or 30 Wind Uplift (See Item No. 1)

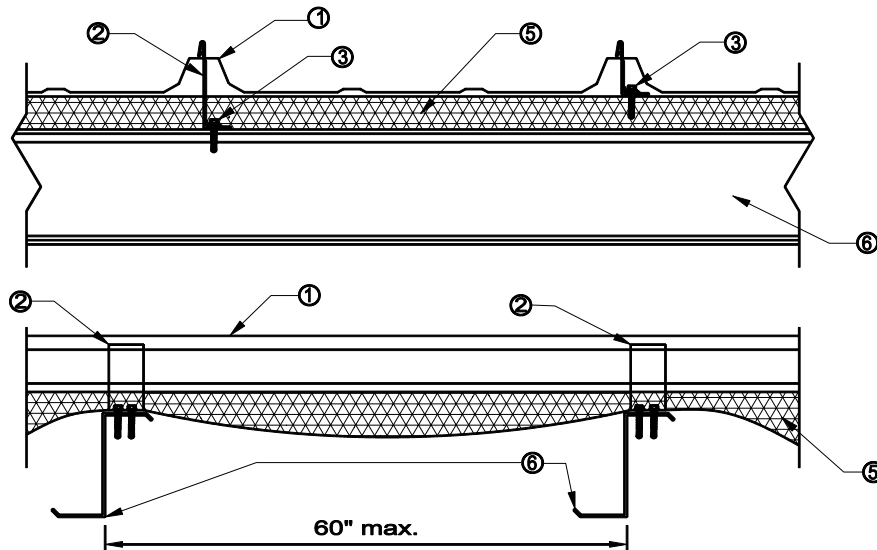
1. **Metal Roof Deck Panels*** - Maximum width 24 in., height at female rib 2-13/16 in. For Class 90 – No. 24 MSG min coated steel, for Class 30 No. 26 MSG min coated steel. Panels continuous over two or more spans. End laps to occur adjacent to purlins with panels overlapped 3 in. max. A line of sealant may be used at panel end laps and side joints; adjacent panels may be seamed with electric seamer with seaming operation to include roof deck fasteners (Item 2). Male/female side laps shall remain interlocked and fully engaged after seaming.

McElroy Metal Mill, Inc. Master-Lok 90
- 2A. **Roof Deck Fasteners* - (Panel Clips)** – (Not Shown) – Fixed or sliding type. Fixed clips fabricated from 0.031 in. thick spring steel. Width approximately 3-1/4 in., height approximately 4-1/4 in. Sliding clip base approximately 5 in. wide fabricated from 0.060 in. thick steel. Tab 2-1/2 in. wide fabricated from 0.031 in. thick spring steel. Maximum height approximately 4-1/4 in.

McElroy Metal Mill, Inc. "ML90RS"
- 3A. **Fasteners (Screws)** – Fasteners, used for "ML90RS" panel clip to purlin connections to be No. 14 by 1/1/4 in. long self-drilling, self-tapping, hex-head, plated steel screws used without separate washers. A minimum of one screw to be used for either fixed or sliding clips. Fasteners used at end-lap to be same type, spaced in a 5, 3-1/2, 3-1/2, 3-1/2, 3-1/2, 5 in. pattern with an additional fastener located at the second slanted segment of the rib on both sides of the end lap panel.
4. **Thermal Spacer** – (Optional) – (Not Shown) – Polystyrene, 1 in. max thickness, 3 in. wide, cut to fit between panel clips.
5. **Insulation** – (Optional) – Any compressible blanket insulation, 6 in. max thickness when located between thermal spacer (Item 4) and purlin (Item 6) before compression.
6. **Purlin** – No. 16 MSG min gauge steel (55,000 psi min yield strength).
7. **Splice Plate Assembly** – (Not Shown) – Used at panel end laps; consisting of a lower section, 6 in. wide, with a 1 in. vertical leg, formed to the general profile of the panel, and having four 1 in. wide by 3/4 in. long tabs for sliding over the panel end. Upper section to be 2 1/4 in. wide 24 in. long and also formed to the general profile of the panel with one end formed to fit over a side rib. Six 3/16 in. diameter guide holes located in flat areas with 3 holes located at rib location. Both parts to have ribs formed for reinforcement. Both parts fabricated from No. 18 MSG min 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 diameter guide holes located in the flat area only.

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

*Bearing the UL Classification Mark



CORPORATE OFFICE
SHREVEPORT, LOUISIANA