



## TECHNICAL BULLETIN

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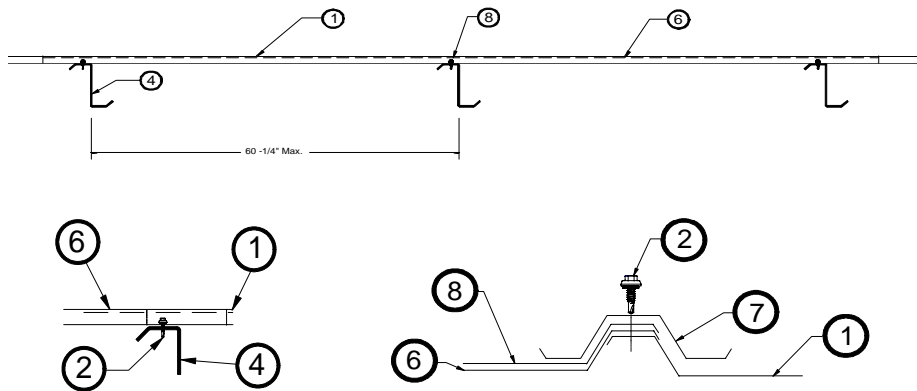
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### UL Construction #166 Multi-Rib w/ Skylight UL580 Class 90 Wind Uplift

- Metal Roof Deck Panels\*** - No. 26 MSG min coated steel. Panels continuous over two or more spans. End laps to occur over purlins with panels overlapped 6 in. with lap centered over purlin web. A line of sealant may be used at panel end and side laps.  
**McElroy Metal Mill, Inc.** "Multi-Rib"
- Fasteners** – For panel to purlin connections fasteners to be No. 12-14 self-drilling, self-tapping, hex-washer head, plated steel screws with a separate 5/8 in. OD plated steel washer and a bonded neoprene sealing washer. Length to be 1 in. for insulation up to 3 in. thick and 1-1/2 in. for insulation over 3 in. Spacing to be in a 5-7-5-7 in. pattern beginning 2- 1/2 in. from the centerline on both sides of each major rib. Spacing at end laps to be the same. Fasteners for panel to panel connections to be No. 14 x 3/4 in. self-drilling self tapping, hex head plated steel screws with a separate 5/8 in OD plated steel washer and a bonded neoprene sealing washer. Spacing to be 20 in. oc with a fastener located inline with the purlin fasteners.  
**As an alternate fastener** – For panel to purlin connections, No. 14 self-tapping, hex head plated steel screws, with a separate 5/8 in. OD plated steel washer and a bonded neoprene sealing washer. Length to be 3/4 in. for insulation up to 3 in. thick and 1-1/4 in. for over 3 in. thickness. Pilot holes to be 3/16 in. diameter. Spacing to be the same as for self-drilling fasteners. For translucent panel to purlin (end lap) connections, fasteners to be hex-head No. 12-14 structural, self-drilling screws with a separate 5/8 in. OD plated steel washer and a bonded neoprene sealing washer. Length to be 1-1/2 in. for insulation up to 6 in. Spacing to be in a 3, 1 1/2, 3, 4 1/2, 3, 1 1/2, 3 in. pattern beginning 2 1/4 in. from the centerline on both sides of each major rib. For translucent panel to metal (side lap) connections, fasteners to be hex-head No. 14 x 7/8 in. long, self-drilling steel screws with a separate 5/8 in. OD plated steel washer and a bonded neoprene sealing washer. Spacing to be 12 in. OC.
- Insulation** – (Optional) – Any compressible blanket insulation 4 in. max. thickness before compression.
- Purlin** – No. 16 MSG min gauge coated steel 50,000 psi min yield strength.
- Lateral Bracing** – (Not shown) – As required.
- Building Units** - \*(Optional) – (Translucent glass fiber reinforced plastic panels) Thickness nominal 1/16 in., formed to the general profile of the metal panels. Panels continuous over two spans. To be used with Translucent Panel Rib Reinforcement (Item 7) and Translucent Panel Reinforcement (Item 8).  
**McElroy Metal Mill Inc** – "Multi-Rib Skylight"
- Translucent Panel Rib Reinforcement** – For reinforcement of side laps – no 26 MSG min gauge steel strips fabricated to the configuration of side lap.
- Translucent Panel Purlin Reinforcement** – for translucent panel reinforcement over purlins – 3 in. wide by No. 26 MSG min. gauge strips fabricated in the shape of the Classified Metal Roof Deck Panel (Item 1).

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

\*Bearing the UL Classification Marking



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