



## TECHNICAL BULLETIN

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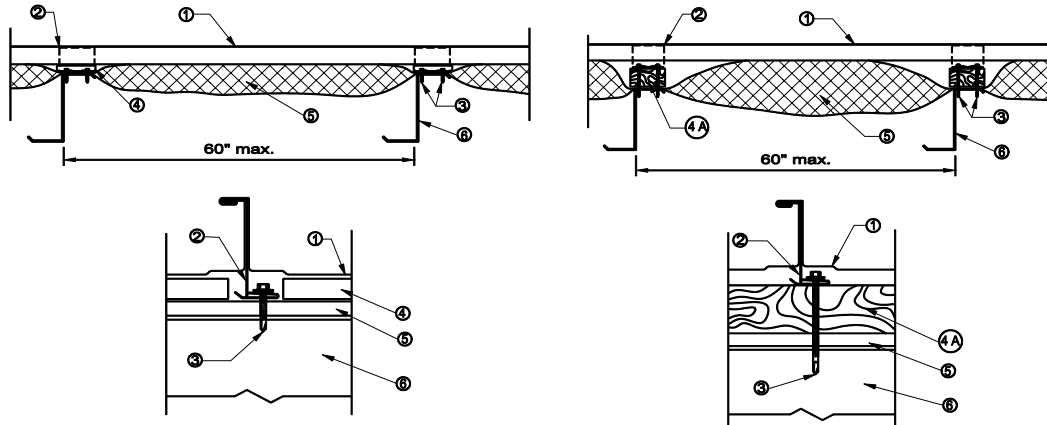
No. 03-147-02

### UL Construction #506 Maxima, Maxima ADV UL 580 Class 90 Wind Uplift

1. **Metal Roof Deck Panels\*** - No. 24 MSG min thick coated steel. Panel width, max 18"., min 12"; rib height 2". Panels continuous over two or more spans. The panel flat area may have optional striations or minor corrugations placed at various locations in the panel flat area beginning min of 2" from side ribs. The upper flange of the panel rib may be horizontal, or optionally formed down to form an angle of 0° to 90° between the vertical segment and the top flange of the rib. End lap occur adjacent to and within 12 in. of purlin (Item 6) with panels overlapped 2 in. min. An end lap back-up-plate (Item 2A) to be used. A bead of sealant may be used at panel end laps and side ribs. Ribs to be seamed with an electric or hand seaming tool to form a flange with a tight hem. Seaming process to include the upper portion of the Panel Clips (Item 2).  
**McElroy Metal Mill, Inc.** "Maxima-212", "Maxima-216", "Maxima-218"
- 1A. **Metal Roof Deck Panels\*** - (Not shown) – Panels (coated steel only) may be physically or mechanically curved at a radius of 4ft. or greater.  
**McElroy Metal Mill, Inc.** "Maxima ADV"
2. **Roof Deck Fasteners\* - (Panel Clips)** – Located at side of panels over purlins (Item 6). (Max spacing 60 in. OC). When wood thermal block (Item 4A) is used, clips to be located on top. Either of the following:  
**Fixed Clip (Not Shown)** – One piece assembly fabricated from No. 22 MSG min thick steel, 3-1/2 in. wide.  
**McElroy Metal Mill, Inc.** "Maxima Fixed Clip"  
**Floating Clip** – Two piece assembly with a base fabricated from NO. 16 MSG min thick steel, 2 in. wide and a top fabricated from No. 22 MSG min thick steel, 4-5/16 in. wide.  
**McElroy Metal Mill, Inc.** "Maxima Floating Clip"
- 2A. **End Lap Back-Up-Plate-** (Not Shown) – No. 16 MSG min thick coated steel channel, 3 in. wide with two 3/8 in. deep legs. Max length 74 in. Located under the panel end lap (50 ksi min yield strength).
- 2B. **Roof Deck Fasteners\*(Cinch Plate)** – Optional – (Not Shown) – width 1-5/16". Length 18" max. Fabricated from No. 20 MSG min thick stainless steel. Located over end lap.
- 2C. **End Lap Back-Up-Plate** – (Optional) – (Not Shown) – No. 16 MSG min thick coated steel. Width 11,15 or 17 in., length 7 in. Two 3/4 in. by 3/4 in. tabs and a 1 in. deep vertical leg located at upslope edge of panel. Used with Item 2A (50 ksi min yield strength).
3. **Fasteners (Screws)** – For panel clip-to-purlin attachment to be No. 1/4-14 by min 1 in. long self drilling, self-tapping hex-washer head plated steel screws. Two Fasteners used per clip. Fasteners used at end lap to be one of the following: No. 1/4-14 by 1 in. long Type AB point, self-drilling, self-tapping hex-washer-head plated or stainless steel screws or No. 12-14 by 1-1/4 in. long self-drilling self-tapping hex-washer-head plated steel screws. Spacing for 16 in. wide panels to be a 1, 3, 4, 4, 3 in. pattern; spacing for 18 in. wide panels to be a 1-1/2, 3-1/2, 4, 4, 3-1/2, 1-1/2 in. pattern.
4. **Thermal Spacer**-(Opt.)-Polyisocyanurate-3/8" min, 2-3/8" max thick, 4" min width, length sized to fit between panel clips (Item 2).
- 4A. **Thermal Block** – (Optional) – Nom 2 by 4 in. wood, length continuous.
5. **Insulation** – (Optional) – Any compressible blanket insulation 8 in. max thick before compression, or 6 in. max thick when located between Thermal Spacer (Item 4) or Thermal Block (Item 4A) and purlin (Item 6).
6. **Purlins** – No. 16 MSG min thick steel (50 ksi min yield strength).Max spacing 60 in. OC.

Refer to General Information, Roof Deck Construction for items not evaluated.

\*Bearing the UL Classification Mark



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