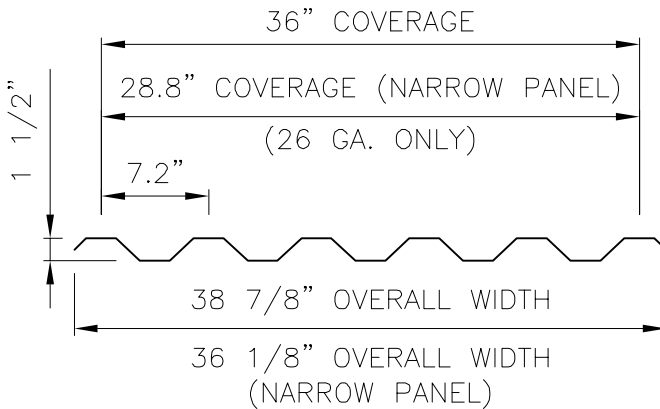


## Mega-Rib Panel

## Product Data



### MEGA-RIB PROFILE

#### Applications

Exposed fastener wall/roof panel used on slopes down to 1:12. Tape sealant is required on seam (side-laps). Standard panel lengths up to 40'. Please inquire for longer lengths.

#### Substrates

Plywood or Purlins.

#### Material

- Standard - 24 GA. Steel ASTM A792 (50 ksi) AZ55 - Bare  
AZ50 - Painted
- Optional - 22 GA. Steel ASTM A792 (50 ksi) AZ55 - Bare  
AZ50 - Painted
- 26 GA. Steel ASTM A792 (80 ksi) (Narrow Coverage) AZ50 - Bare  
AZ50 - Painted
- 26 GA. Steel ASTM A792 (80 ksi) (Full Coverage) AZ50 - Bare  
\*\*Adelanto Only\*\* AZ50 - Painted
- 18 GA. and 20 GA. Steel ASTM A792 (50 ksi) AZ50 - Painted  
(limited availability)

#### Manufacturing

Roll formed in factory.

#### Finishes

- Acrylic Coated Galvalume®
- Fluoropolymer (Kynar 500® PVDF resin-based)
- Siliconized Polyester and Polyester

#### Pan Conditions

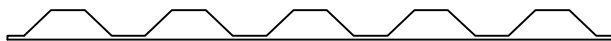
Oil canning is inherent in all metal panels and is not cause for panel rejection.

#### Testing \*

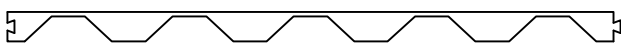
- Uplift: UL 580 Class 90, ASTM E1592
  - Air & Water Infiltration: E1646 and E1680
  - Impact Resistance: UL 2218 Class 4
  - ICC-ES Approval: ESR-5896 on 24 GA.
  - Fire Resistance: UL 263 & UL 790 Class A
  - Florida Product Approval: FL 1832.8 (non-structural)  
FL 1747.6 (structural)
  - Miami Dade Approval: NOA# 15-1013.06
- \*Testing and Approvals are product specific. Please inquire for details.\*

#### **NOTE:**

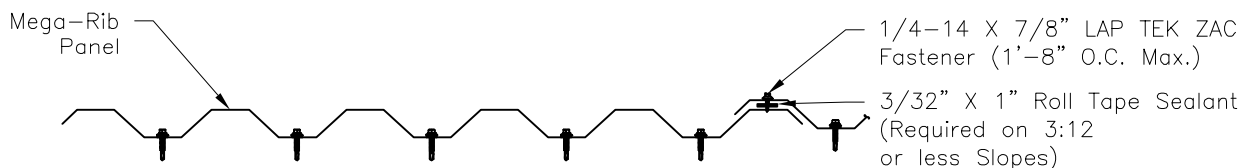
All data represented on this sheet may not be applicable to all widths and gauges. Please contact McElroy Metal for more information.



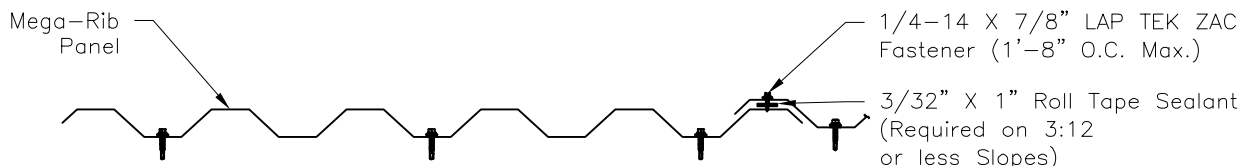
FOAM INSIDE CLOSURE



FOAM OUTSIDE CLOSURE



FASTENER PATTERN  
(@ Eaves, Ridges & Endlaps)



FASTENER PATTERN  
(@ Intermediate Purlins)



# TECHNICAL BULLETIN

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Issue Date : June 1, 2006

Revised: August 1, 2017

No. 04-267-06

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## Tests for Impact Resistance of Roof Covering Materials

### UL 2218

#### Impact Resistance Class 4

Class 4 formed coated Steel Panels designated Type Coated steel panels (surfacing) identified as “Multi-Rib”, “Master-Lok”, “R”, “Medallion-Lok”, “Medallion”, “Medallion I Batten”, “Medallion II Batten”, “Meridian”, “5V-Crimp”, “Mega-Rib”, “Maxima 1.5”, “Maxima 212”, “Maxima 216”, “Maxima 218”, “Maxima 318”, “Maxima 324”, “Metalogic-2000”, “Mirage”, “M-Cor”, “Multi-Cor”, “Max-Rib”, “Mac-Rib”, “U”, “PBU”, “Mirage II”, “Maxima ADV”, and “Met-Tile”, “ABC Permaseam Panel;”, “ABC SL Low Panel”, ABC JSM 200”, “ABC Instaloc”, ABC SERIES 300”, “238T Roof Panel”, and “138T Roof Panel”.

Class 4 formed copper panel, designated “ABC JSM 200”

Class 4 formed aluminum panel, designated “ABC 238T Roof Panel” and “Medallion-Lok”.

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ADELANTO, CA

LEWISPORT, KY  
MAUSTON, WI

ASHBURN, GA  
MERKEL, TX

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HOUSTON, TX



# TECHNICAL BULLETIN

Issue Date : June 1, 2006

Revised : April 24, 2017

No. 04-266-06

## Tests for Fire Resistance of Roof Covering Materials UL 790 (ASTM E108 and NFPA 256)

### Class A

Coated Steel Panels (surfacing) identified as "Multi-Rib", "Master-Lok", "R", "Medallion-Lok", "Medallion", "Medallion I Batten", "Medallion II Batten", "Meridian", "5V-Crimp", "Mega-Rib", "Maxima 1.5", "Maxima 212", "Maxima 216", "Maxima 218", "Maxima 318", "Maxima 324", "Metalogic-2000", "Mirage", "M-Cor", "Multi-Cor", and "Max-Rib", "U", "PBU", "Mirage II", "Maxima ADV", "Met-Tile", "ABC Perma seam Panel", "ABC SL Low Panel", "ABC JSM 200", "ABC Instaloc", "ABC Series 300", "238T Roof Panel", and "138T Roof Panel".

Copper panels (surfacing) identified as "ABC JSM 200".

Aluminum panels (surfacing) identified as "ABC 238T Roof Panel" and "Medallion-Lok".

- 1. Deck: C-15/32 **Incline:** Unlimited **Impact:** Class 4  
**Barrier Board:** - Georgia Pacific ¼ in. min " Densdeck" board or ¼" min United Sates Gypsum Co SECURELOCK® Glass-Mat Roof Board (Type SGMRX), National Gypsum "DEXcell Glass Mat Roof Board" or " DEXcell FV Glass Mat Roof Board", CertainTeed Gypsum "GlasRoc" or ½ in. min UL classified gypsum board with all joints staggered a min of 6 in. from the plywood joints.  
**Ply Sheet (Optional):** - Any UL Classified Type G1, G2 or G3 base/ply sheet, Type 15, 20 or 30 felt or UL Classified prepared roofing accessory or GCP Applied Technologies "Ice and Water Shield".  
**Surfacing:** - Coated Steel, Aluminum, or Copper roofing panels, mechanically fastened or with steel screws when roof deck fasteners (panel clips) not required.
- 2. Deck: NC **Incline:** Unlimited **Impact:** Class 4  
**Barrier Board (optional):** - ¼ in. (min) G-P Gypsum Densdeck® United States Gypsum Co SECURELOCK ®, Glass Mat Roof Board (Type SGMRX), National Gypsum "DEXcell Glass Mat Roof Board" or " DEXcell FV Glass Mat Roof Board", CertainTeed Gypsum "GlasRoc".  
**Ply Sheet (Optional):** - Any UL Classified Type G1, G2 or G3 base/ply sheet, Type 15, 20 or 30 felt or UL Classified prepared roofing accessory or GCP Applied Technologies "Ice and Water Shield".  
**Surfacing:** - Coated Steel, Aluminum, or Copper roofing panels, mechanically fastened or with steel screws when roof deck fasteners (panel clips) not required.
- 3. Deck: NC **Incline:** Unlimited **Impact:** Class 4  
**Barrier Board (optional):** - 7/16 OSB or 5/8 in. plywood over polyisocyanurate insulation board or polyisocyanurate composite board, any thickness.  
**Ply Sheet (Optional):** - Any UL Classified Type G1, G2 or G3 base/ply sheet, Type 15, 20 or 30 felt or UL Classified prepared roofing accessory or GCP Applied Technologies "Ice and Water Shield".  
**Surfacing:** - Coated Steel, Aluminum, or Copper roofing panels, mechanically fastened or with steel screws when roof deck fasteners (panel clips) not required.
- 4. Deck: NC **Incline:** Unlimited **Impact:** Class 4  
**Barrier Board (optional):** - Polyisocyanurate, glass fiber, perlite, or wood fiber, any thickness.  
**Ply Sheet (Optional):** - Any UL Classified Type G1, G2 or G3 base/ply sheet, Type 15, 20 or 30 felt or UL Classified prepared roofing accessory or GCP Applied Technologies "Ice and Water Shield".  
**Surfacing:** - Coated Steel, Aluminum, or Copper roofing panels, mechanically fastened or with steel screws when roof deck fasteners (panel clips) not required.
- 5. Deck: NC **Incline:** Unlimited **Impact:** Class 4  
**Insulation:** - None Required, however any UL Classified insulations may be over open purlin spans. Any combination and any total thickness of insulation may be used.  
**Surfacing:** - Coated Steel, Aluminum, or Copper roofing panels, mechanically fastened or with steel screws when roof deck fasteners (panel clips) not required.
- 6. Deck: C-15/32 **Incline:** Unimited **Impact:** Class 4  
**Barrier Board:** - Georgia Pacific ¼ in. min " Densdeck" board or ¼" min United Sates Gypsum Co SECURELOCK® Glass-Mat Roof Board (Type SGMRX), National Gypsum "DEXcell Glass Mat Roof Board" or " DEXcell FV Glass Mat Roof Board", CertainTeed Gypsum "GlasRoc" or ½ in. min UL classified gypsum board with all joints staggered a min of 6 in. from the plywood joints.  
**Ply Sheet (Optional):** - Any UL Classified Type G1, G2 or G3 base/ply sheet, Type 15, 20 or 30 felt or UL Classified prepared roofing accessory or GCP Applied Technologies "Ice and Water Shield".  
**Surfacing:** - Coated Steel, Aluminum, or Copper roofing panels, mechanically fastened or with steel screws when roof deck fasteners (panel clips) not required.

### Class C

- 1. Deck: C-15/32 **Incline:** No Limitations **Impact:** Class 4  
**Surfacing:** - Coated Steel roofing panels, mechanically fastened or with steel screws when roof deck fasteners (panel clips) not required.

### Maintenance and Repair

#### Class A, B, or C

- 1. Deck: C-15/32 **Incline:** No Limitations **Impact:** Class 4

**Existing Roof System:** - (to maintain existing Classifications) Class A, B or C smooth or mineral surfaced cap sheet or asphalt glass mat shingles or organic felt shingles.

**Ply Sheet (Optional):** - Type 15 or 30 organic felt or UL classified self-adhering modified bitumen membrane.

**Surfacing:** - Coated Steel "138T Roof Panel", mechanically fastened or with steel screws when roof deck fasteners (panel clips) not required.



# TECHNICAL BULLETIN

**Issue Date : June 1, 2006**

**Revised: December 13, 2013**

**No. 04-270-06**

## **Tests for Fire Resistance Ratings of Roof Covering Materials**

### **UL 263 (ASTM E119 and NFPA 251)**

#### **The following products:**

**Mechanically attached metal roof panels** "Multi-Rib", "Master-Lok 90", "R ", "Medallion-Lok ", "Medallion", "Medallion I Batten", "Medallion II Batten", "5V-Crimp", "Mega-Rib", "Max-Rib", "Maxima 212", "Maxima 216", "Maxima 218", "Maxima 318", "Maxima 324", "Metalogic-2000", "Mirage ", "U", "Maxima 1.5", "Mirage II", "Maxima ADV" and "Met-Tile", secured by steel anchor clips. Anchor clips are attached to a hat shaped member+ (minimum depth 1 in.) or a bearing plate ++.

Mechanically attached metal roof panels, identified as "ABC Permaseam Panel", "ABC SL Low Panel", "ABC JSM 200", "ABC Instaloc", "ABC SERIES 300" and "ABC 238T Roof Panel", secured by steel anchor clips. Anchor clips are attached to a hat shaped member+ (minimum depth 1 in.) or a bearing plate +++.

#### **Have been approved for use in the following Underwriters Laboratories design numbers:**

P225, P227, P230, P237, P250, P259, P265, P266, P268, P508, P510, P512, P514, P516, P518, P701, P711, P712, P713, P717, P719, P720, P722, P723, P726, P731, P732, P734, P739, P740, P801, P815, P819, P824, P825, and P828.

+Hat-shaped member to be a minimum of 16 gauge. The member will be fastened through the roof insulation to the steel roof deck with No. 14 self-drilling and/or self-tapping fasteners. Spacing to be determined by the structural loading requirements. In addition any compressible UL Classified glass fiber blanket insulation with or without a vapor-retarder facing may be used between the specified roof insulation and the metal roof panels.

++Bearing plate to be a minimum of 16 gauge. Member will be fastened through the roof insulation to the steel deck with No. 14 self-drilling and/or self-tapping fasteners.

+++Bearing plate to be a minimum of 24 gage . Member will be fastened through the roof insulation to the steel deck with No. 14 self-drilling and/or self-tapping fasteners.

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MAUSTON, WI

ASHBURN, GA  
MERKEL, TX

SUNNYVALE, TX  
HOUSTON, TX



## TECHNICAL BULLETIN

Issue Date : June 1, 2006

No. 03-262-06

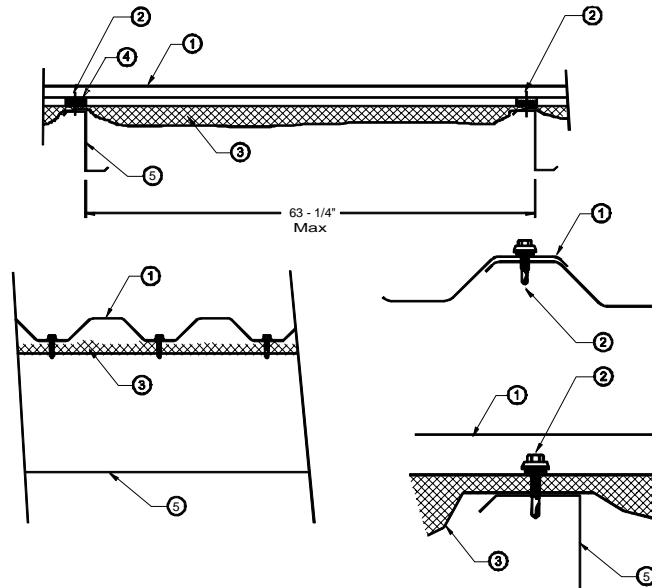
### UL Construction #244 Mega-Rib

UL580 Class 90 or 30 Wind Uplift (see Item #2)

1. **Metal Roof Deck Panels\*** - No. 26 MSG min gauge coated steel. Panel 36 in. wide and 1-1/2 in. high at the rib. Panels continuous over two or more spans. End laps to occur over purlins with panels overlapped a min of 4 in. with lap centered over purlin web. A bead of sealant may be used at panel end and side laps.  
**McElroy Metal Mill, Inc. "Mega-Rib"**
2. **Panel Fasteners** – For panel to purlin attachment to be No. 12-14 self drilling, self-tapping, hex head, plated steel stand-off screws with a separate 5/8 in. OD formed steel washer and a neoprene sealing washer. Length to be 3-3/4 in. when 2 in. thick thermal spacers (Item 4) and compressible blanket insulation (Item 3) are used and 2-3/8 in. when 1 in. thick thermal spacers and compressible insulation are used. When no thermal spacers are used No. 14 by min 3/4 in. long self drilling, self tapping, hex head, plated steel screws with 5/8 in. OD formed steel washer and a EPDM sealing washer to be used. Spacing: For Class 90 to be approximately 7.2 in. OC in every valley. For class 30 to be approximately 14 in. OC in every other valley. Spacing for class 90 or 30 at end laps to be 7.2 in. OC in every valley. Fasteners for panel to panel connections to be No. 12-14 by 1 in. long self drilling, self tapping, hex head, plated steel screws with a separate 1/2 in. OD formed steel washer and a neoprene sealing washer. Spacing for Class 90 or 30 to be 20 in. OC with a fastener located at end lap location in line with purlin fasteners.
3. **Insulation** – (Optional) – Any compressible blanket insulation 4 in. max. thickness before compression.
4. **Thermal Spacer Block** – (Optional) – Extruded polystyrene. Continuous max 2 in. thick by 4 in. in width. Installed along top flange of purlin between roof panels and blanket insulation.
5. **Purlin** – No. 16 MSG min gauge steel.
6. **Lateral Bracing** – (Not shown) – As required.

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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