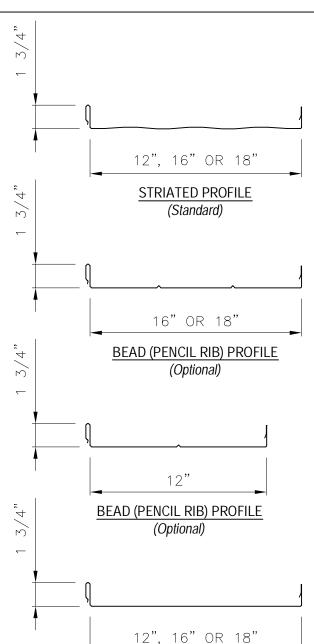
McELROY METAL, INC



www.mcelroymetal.com

Medallion-Lok Panel

Product Data



FLAT PAN PROFILE (Optional)

Applications

Snap Seamed roof panel used on slopes down to 3:12. Continuous length up to 75'. Please inquire for longer lengths.

Substrates

Plywood, Metal Deck, Rigid Insulation/Metal Deck or Open Framing.

<u>Material</u>

Standard - 24 GA. ASTM A792 (50 ksi steel) AZ55 - Bare AZ50 - Painted

Optional - 22 GA. ASTM A792 (50 ksi steel) AZ55 - Bare AZ50 - Painted

and .032 Aluminum (Sunnyvale Plant Only)

Manufacturing

Roll formed in factory.

Finishes

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

Pan Conditions

Flat Pan, Pencil Ribbed or Striated

Oil canning is inherent in all metal panels and is not cause for panel rejection. A signed oil canning acknowledgement will be required for all orders prior to production.

Testing *

Uplift: UL 580 Class 90, ASTM E1592

Air & Water Infiltration: ASTM E1680, and ASTM E1646.

Fire Resistance: UL 263 & UL 790 Class A

Impact Testing: UL 2218 Class 4

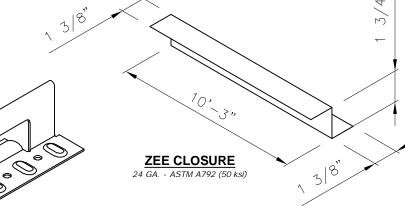
Miami Dade Approval: NOA# 13-0430.06

Florida Product Approval: FL 1747.5 & FL 1832.7

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.



STANDARD CLIP

16 GA. Galvanized G90 - ASTM A653 (50 ksi)

<u>UL-90 CLIP</u> 16 GA. Galvanized G90 - ASTM A653 (50 ksi)

MEDLOK PAGE 1 of 1



Issue Date : June 1, 2006 Revised: August 17, 2020 No. 04-268-06

Texas Department of Insurance Approval

The following roofing products have been evaluated by the Texas Department of Insurance for being in compliance with the *International Residential Code* (IRC) and the *International Building Code* (IBC).

Panel Name	Minimum Gauge	Product Evaluation Number	Panel Profile
5V-Crimp	26	RC-13	^^
Meridian	26	RC-34	
Multi-Rib	26	RC-63	
ABC Instaloc	24	RC-86	}
ABC InstaLoc	26	RC-93	}R
MaxRib	29	RC-157	^^
Multi-Cor	26	RC-158	~~~~~~
ABC 238T	24	RC-270	
ABC JSM 200 DL	24	RC-271	
ABC Permaseam	24	RC-272	(
MultiRib	26	RC-283	^
PBR-Panel	26	RC-284	
Met Tile	26	RC-425	
Milan	29	RC-463	~
Medallion-Lok	24	RC-573	(

For additional information and verification please visit http://www.tdi.state.tx.us/wind.

ADELANTO, CA ASHBURN, GA BOSSIER CITY, LA CLINTON, IL DIAMOND, MO HOUSTON, TX LEWISPORT, KY
MARSHALL, MI MAUSTON, WI MERKEL, TX PEACHTREE CITY, GA SUNNYVALE, TX WINCHESTER, VA



Issue Date : June 1, 2006 Revised: August 1, 2017 No. 04-267-06

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".



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", "SV-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.



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", "Medall Crimp", "Mega-Rib", "Maxima 1.5", "Maxima 212", "Maxima 216", "Maxima 318", "Maxima 324", "Metallogic-2000", "Mirage", "M-Cor", "Multi-Cor", and "Max-Rib", "U", "PBU", "Mirage II", "Maxima ADV", "Met-Tile", "ABC Permaseam 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".

Incline: Unlimited 1. Deck: C-15/32 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.

Incline: Unlimited 2. Deck: NC 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 "GlassRoc".

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.

Incline: Unlimited 4 Deck: NC 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

Surfacing: - Coated Steel, Aluminum, or Copper roofing panels, mechanically fastened or with steel screws when roof deck fasteners (panel clips) not required.

Incline: Unimted 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 1/2 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.

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

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

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

Ply Sheet (Otional): - 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.



Issue Date: September 9, 2002 Revised: April 24, 2020 No. 03-145-02

UL Construction #343 Medallion-Lok/Permaseam

UL580 Class 90 Wind Uplift

1. Metal Roof Deck Panels* - No. 24 MSG min coated steel. Panel width 18 in. max., 10 in. min. Rib height 1-3/4 in. at female side. Panels continuous over three or more clips with no endlaps. A bead of sealant may be used at panel side joints.

McElroy Metal Mill, Inc. "Medallion-Lok" or "ABC Permaseam Panel"

Roof Deck Fasteners*(Panel Clips) – One piece assembly, 3-1/2 in. wide, 1-7/8 in. high. Min thickness No. 18 MSG. Clips spaced 36 in. OC, max, fastened to plywood deck.

McElroy Metal Mill, Inc.

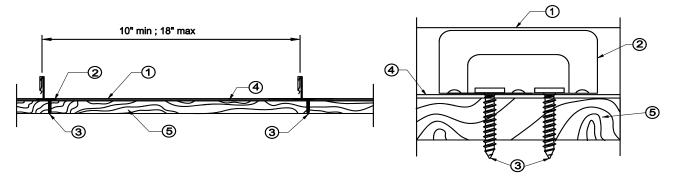
"Medallion-Lok Clip" or "ABC Permaseam Clip"

- 3. Fasteners (Screws) Fasteners used to attach panel clips (Item 2) to plywood to be No. 10-12 by 1 in. long pancake head, No. 2 Phillips drive, A-point, coated steel screw. Min two fasteners per clip to be used. When Items 5A (Rigid Insulation) and 5B (Bearing Plate) are used, No. 12 Dekfast fastener to be used and installed through clip (Item 2), bearing plate (Item 5B), rigid insulation (Item 5A) and plywood decking (Item 5A). Length of fastener to be equal to total thickness plus 7/8 in.
- 4. Underlayment Underlayment used over plywood deck to be Type 15 or 30 organic felt. Sides overlapped min 2 in., end laps per manufacturer's instructions. Felt nailed to plywood deck with 1-1/4 in. long steel cap nails, located per manufacturer's instructions. Nail spacing to be max 12 in. OC at the side lap and max 24 in. OC in interior rows. As An Alternate A self-adhering modified bitumen water proofing membrane may be used, installed per manufacturer's instructions. Note when alternate is used the plywood joints need not be sealed.
- 5. Plywood Decking Plywood decking to be graded per PS83 specifications, 19/32 in. thick, exposure 1, APA Rated Sheathing (42/20) square edged. Butt ends not blocked. All butt and side joints to be sealed with a one part urethane caulk sealant applied with a caulking gun and feathered outward from the joint. (Note exception under Item No. 4, Alternate.)
- 5A. Rigid Insulation (Optional) (Not Shown) Maximum thickness 1-1/2 in. Any rigid type having a minimum compressive strength of 25 psi or minimum density of 2 pcf. Supplied in 4 ft. wide sheets
- 5B. **Bearing Plate (Optional)** (Not Shown) To be used with Item 5A. Bearing plates to be minimum 16 MSG coated steel. Located under each clip (Item 2) for support.
- 5C. Oriented Strand Board (OSB) (Not Shown) As an alternate decking, nom. 5/8 in. thick (19/32 in. actual) APA rated OSB may be substituted for plywood decking (Item 5). Installation procedures to be same as for plywood.
- Supports (Not Shown) Spaced max of 24 in. OC. Any of the following types may be used to support the plywood decking:
 - a) Nom 2 by 6 in., No. 2 grade or better S-P-F, Hemlock Fir, Douglas Fir or Southern Yellow Pine or equivalent.
 - b) Wood trusses with a nom 2 by 4 in. upper chord of the same grade as item a.
- c) No. 22 MSG min cold formed coated steel (min yield to be 33,000 psi).
- 7. Plywood Fasteners (Not Shown) Fasteners used to attach the plywood deck or OSB to the supports to be as follows:
 - a) For plywood-to-wood supports No. 8-18 by 1-7/8 in. long bugle-head steel screws with a No. 2 Phillips drive, a "Hi-Low" thread pattern and an "S-Point".
 - b) As an alternate to Item a, 8d common ring shanked nails may be used.
 - c) For plywood-to-steel supports for a steel thickness less than No. 20 MSG No. 7-19 by 1-1/4 in. long bugle-head steel screws with a No. 2 Phillips head drive "Hi-Low" threads and an "S-Point". For a steel thickness greater than No. 20 MSG to No. 16 MSG, No. 6-20 by 1-1/4 in. long bugle-head steel screws with a No. 2 Phillips drive and a S12 (TEKS/3) supR point.

Spacing: Fastener spacing for all fastener types to be 6 in. OC at the plywood edges and 12 in. OC in the interior.

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

*Bearing the UL Classification Mark



Issue Date: September 9, 2002

No. 03-140-02

UL Construction #255 MedLok

UL580 Class 90 Wind Uplift

 Metal Roof Deck Panels* - No. 24 MSG min thickness coated steel. Panel width 18 in. max., 10 in. min. Rib height 1-3/4 in. at female side. Panels continuous over two or more spans. A bead of sealant may be used at panel side joints.

McElroy Metal Mill, Inc. "Medallion-Lok"

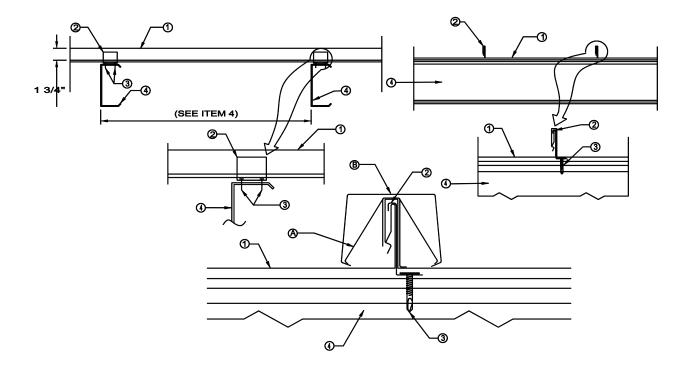
2. **Roof Deck Fasteners* -** (Panel Clips) – One piece assembly, 3-1/2 in. wide, 1-7/8 in. high. One panel clip located at each purlin intersection.

McElroy Metal Mill, Inc. "Medallion-Lok Clip"

- 3. Panel Fasteners (Screws) Fasteners used to attach panel clips (Item 2) to purlins to be No. 10-16 by 1 in. long plated pancake head No. 2 phillips drive, No. 3 self-drilling point steel screws. Two screws per clip to be used inserted through ¼ in. diam guide holes.
- 4. **Purlins** No. 16 MSG min thickness steel (50,000 psi min yield strength). Spacing for Class 90 to be 48 in. OC: For Class 60 to be 60 in. OC

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

*Bearing the UL Classification Mark



CORPORATE OFFICE • P.O. BOX 1148 • SHREVEPORT, LA 71163-1148 • (318) 747-8000 • FAX (318) 747-8029

TECHNICAL BULLETIN

Issue Date: September 9, 2002 No. 03-146-02

UL Construction #468 Medallion Lok

UL580 Class 90 Wind Uplift

1. **Metal Roof Deck Panels*** - No. 24 MSG min thickness coated steel panels. Panel width 18 in. maximum. Panel ribs to be 1-3/4 in. high. Panels continuous over three or more clips with no end laps.

McElroy Metal Mill, Inc.

"Medallion-Lok"

2. Roof Deck Fasteners* - (Panel Clips) - One piece assembly, No. 18 MSG min thickness, 3-1/2 in. wide, 1-7/8 in. high. Clip spacing to be 48 in. OC. Clips to interface with Item 3 bearing plate.

McElroy Metal Mill, Inc. "Medallion-Lok Clip"

- 3. **Bearing Plate** One piece assembly, No. 18 MSG in thickness steel, 3-7/8 in. wide, 6 in. long. (50,000 psi min yield strength).

 4. **Panel Fasteners** (**Screws**) Fasteners used to attach panel clips and bearing plates (Items 2 and 3) through rigid insulation and
- 4. Panel Fasteners (Screws) Fasteners used to attach panel clips and bearing plates (Items 2 and 3) through rigid insulation and into light gauge steel deck (Item No. 6) to be No. 14 truss head type with No. 3 Phillips drive, self-drilling steel screws. Two screws per clip to be used, inserted through ¼ in. diam guide holes. Length of screws based on overall insulation thickness (4 in. max) plus metal deck depth.
- Foamed Plastic (Rigid Insulation) Min thickness 1 in., max thickness 4 in. Density to be a min of 2 pcf. As an alternate, 7/16 in. thick oriented strand board (OSB) may be placed on top of the rigid insulation provided combined thickness of OSB and rigid insulation does not exceed 4 in. max.
- 6. Liner Panel Min thickness 22 MSG Coated steel (33,000 psi) min yield strength, min depth 1-1/2", fabricated to various profiles.
- 7. Underlayment One ply of 30 lb roofing felt or one layer of bituminous resin type water proofing membrane.
- 8. Supports (Not Shown) Used to support liner panels, spaced per deck manufacturer's specifications. The following items may be used in conjunction with the "Medallion-Lok" Metal Roof Deck Panels (Item 1).
 - A. Batten Clips* Slipped over ribs formed by roof deck panels. One piece assembly, 1-3/4 in. high, 1-3/4 in. max width, with four legs and two arms. Formed to engage ribs of "Medallion-Lok" Panels and Batten Cap (Item B). Clips spaced 48 in. OC.

 McElroy Metal Mill, Inc.

 "Medallion-Lok Batten"
 - B. **Batten Cap*** Slipped over batten clip. Two inches high, 1-1/2 in. wide at top with sides formed to engage batten clip (Item A). Snapped over batten clips.

McElroy Metal Mill, Inc.

"Medallion-Lok Batten"

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

*Bearing the UL Classification Mark

