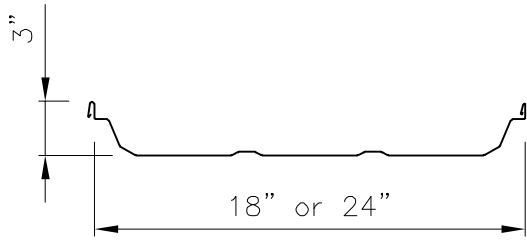
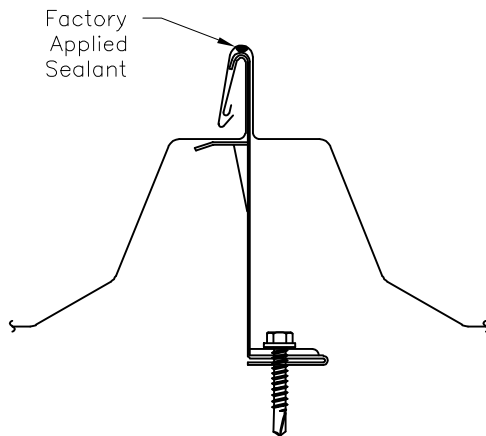


MasterLok-90 Panel

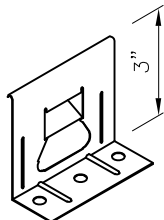
Product Data



MINOR RIB PROFILE
(Standard)

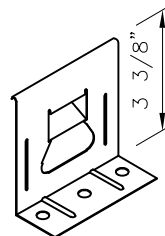


SEAM AND CLIP ENGAGEMENT



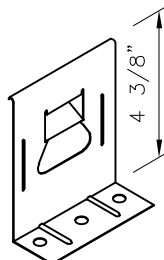
UTILITY FIXED CLIP

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



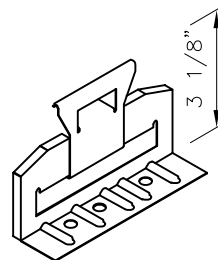
LOW FIXED CLIP

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



HIGH FIXED CLIP

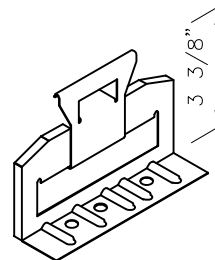
22 GA. Galvanized G90 - ASTM A653 (50 ksi)



UTILITY FLOATING CLIP

2-Piece

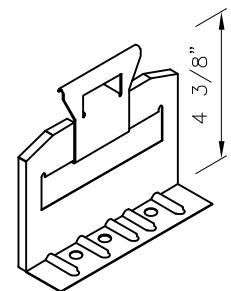
Clip: 22 GA. Galv. G90 - ASTM A653 (50 ksi)
Base: 16 GA. Galv. G90 - ASTM A653 (50 ksi)
Tab: 21 GA. - ASTM A684 (210 ksi)
Heat Treated to RC 42-47



LOW FLOATING CLIP

2-Piece

Clip: 22 GA. Galv. G90 - ASTM A653 (50 ksi)
Base: 16 GA. Galv. G90 - ASTM A653 (50 ksi)
Tab: 21 GA. - ASTM A684 (210 ksi)
Heat Treated to RC 42-47



HIGH FLOATING CLIP

2-Piece

Clip: 22 GA. Galv. G90 - ASTM A653 (50 ksi)
Base: 16 GA. Galv. G90 - ASTM A653 (50 ksi)
Tab: 21 GA. - ASTM A684 (210 ksi)
Heat Treated to RC 42-47

Applications

Snap Seamed roof panel used on slopes down to 1/4:12. Continuous length up to 50'. Please inquire for longer lengths.

Substrates

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

Best suited for simple sloped roofs without dormers, hips, valleys or other special conditions.

Material

Standard - 24 GA. ASTM A792 (50 ksi steel) AZ55 - Bare
AZ50 - Painted
Optional - 22 GA. ASTM A792 (50 ksi steel) AZ55 - Bare
AZ50 - Painted

Manufacturing

Roll formed in factory. (Bossier, Clinton and Winchester Plants)

Finishes

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

Pan Conditions

Minor Ribs

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

Testing *

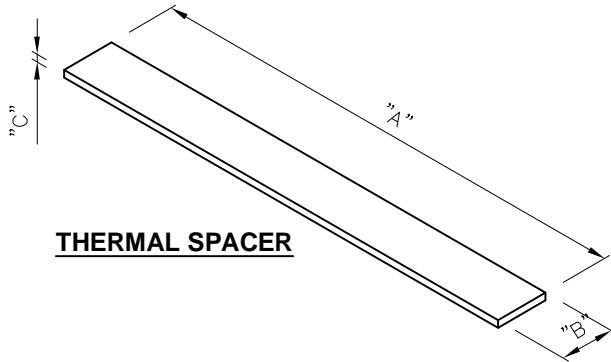
Uplift: UL 580 Class 90, ASTM E1592 Uplift,
Air & Water Infiltration: ASTM E1680, and ASTM E1646.
Fire Resistance: UL 263 & UL 790 Class A
Impact Testing: UL 2218 Class 4
Florida Product Approval: FL 1747.1 & FL 1832.2
Testing and Approvals are product specific. Please inquire for details

NOTE:

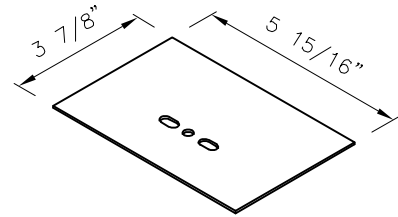
All data represented on this sheet may not be applicable to all widths and gauges. Please contact McElroy Metal for more information.

MasterLok-90 Panel (Continued)

Product Data



THERMAL SPACER

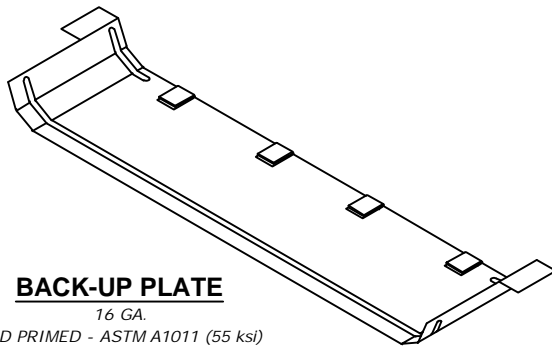


BEARING PLATE

16 GA.
RED PRIMED - ASTM A1011 (55 ksi)
GALVANIZED - ASTM A653 (55 ksi)

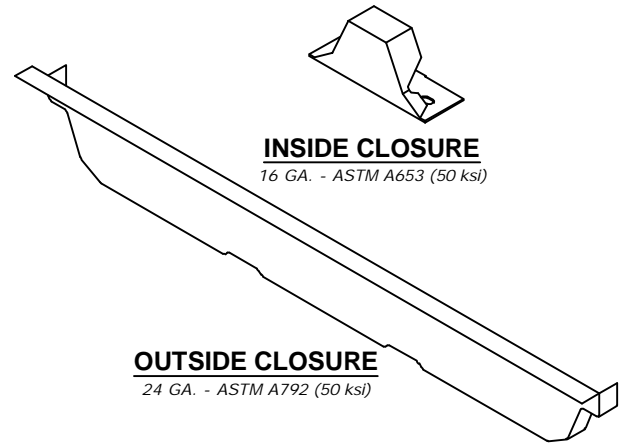
THERMAL SPACER SIZE CHART

PANEL	"A"	"B"	"C"
24"	22 7/8"	3"	3/8", 5/8", 1" or 1 3/8"



BACK-UP PLATE

16 GA.
RED PRIMED - ASTM A1011 (55 ksi)
GALVANIZED - ASTM A653 (55 ksi)

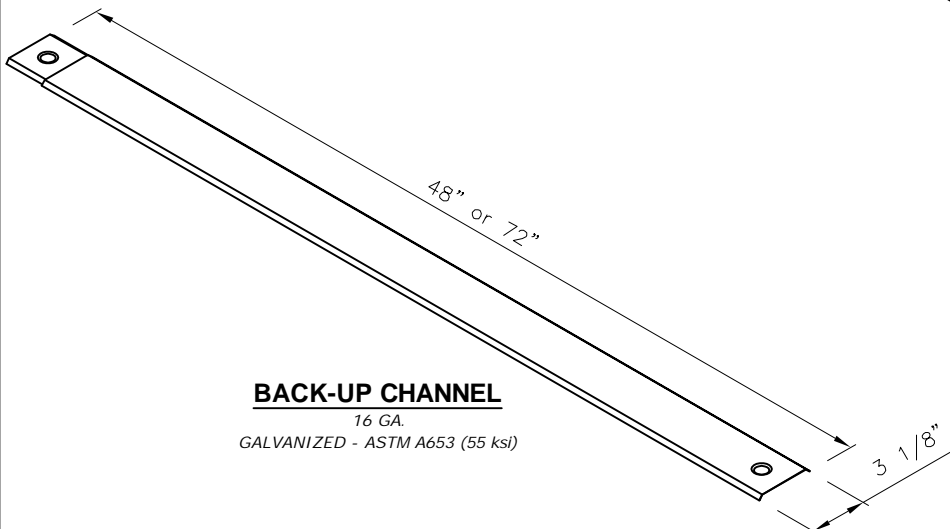


INSIDE CLOSURE

16 GA. - ASTM A653 (50 ksi)

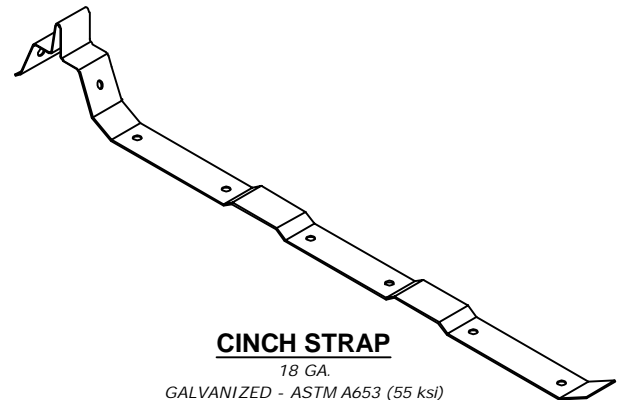
OUTSIDE CLOSURE

24 GA. - ASTM A792 (50 ksi)



BACK-UP CHANNEL

16 GA.
GALVANIZED - ASTM A653 (55 ksi)



CINCH STRAP

18 GA.
GALVANIZED - ASTM A653 (55 ksi)



TECHNICAL BULLETIN

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”.

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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 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" 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:** Unlimited **Impact:** Class 4
Barrier Board: - Georgia Pacific ¼ in. min " Densdeck" board or ¼" min 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" 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.

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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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