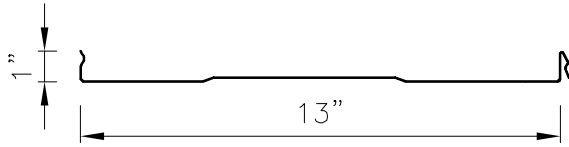
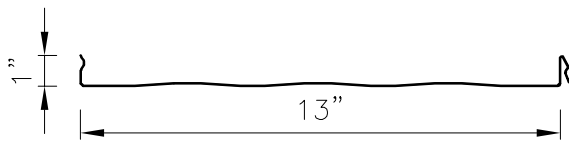


Instaloc Standing Seam Panel

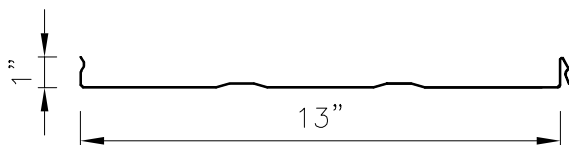
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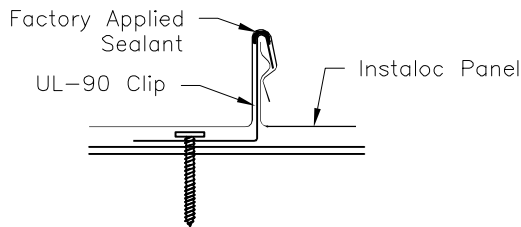
PLANK PROFILE



STRIATIONS PROFILE



MINOR RIB PROFILE



SEAM ENGAGEMENT

Applications

Non-structural panel used on roof slopes of 3:12 or greater. Continuous lengths up to 80ft.

Substrates

Plywood, Metal Deck

Material

Standard - 24 GA. ASTM A792 (50 ksi)

Optional - 22 GA. ASTM A792 (50 ksi)

Finishes

Acrylic Coated Galvalume®

Fluoropolymer (Kynar 500® PVDF resin-based)

Pan Conditions

Plank, Striated, and Minor Ribs

(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.)

Manufacturing

Roll formed in factory.

Testing/Agency Approvals *

Uplift: UL 580, UL 1897

Impact Resistance: UL Class 4

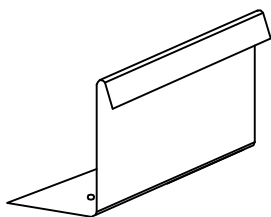
Fire Rating: UL Class A

Texas Windstorm: RC-86

Testing and Approvals are product specific. Please inquire for details.

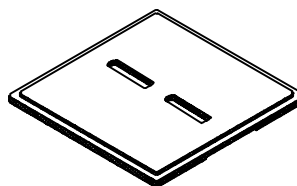
NOTE:

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



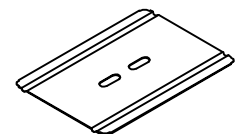
CLIP

24 GA. - ASTM A792 (50 ksi)



STACKABLE LEVELING SHIM

6" x 6" x 1/4" Thick



BEARING PLATE

24 GA. - ASTM A792 (50 ksi)

TECHNICAL BULLETIN

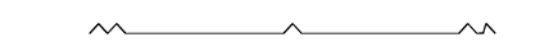
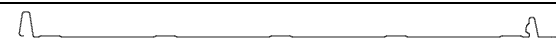

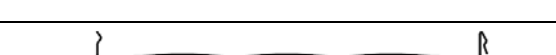
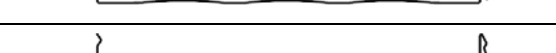
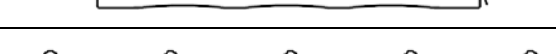

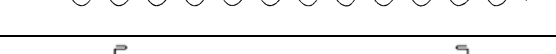

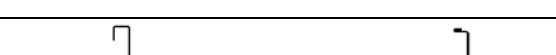
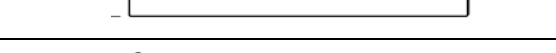

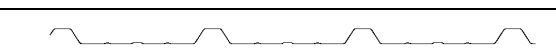

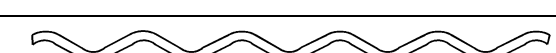
Issue Date : June 1, 2006

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	
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> .

MANUFACTURING LOCATIONS

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



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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HOUSTON, TX



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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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.



Construction No. 572 TGKX.572 Roof Deck Constructions

[Page Bottom](#)

Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

Roof Deck Constructions

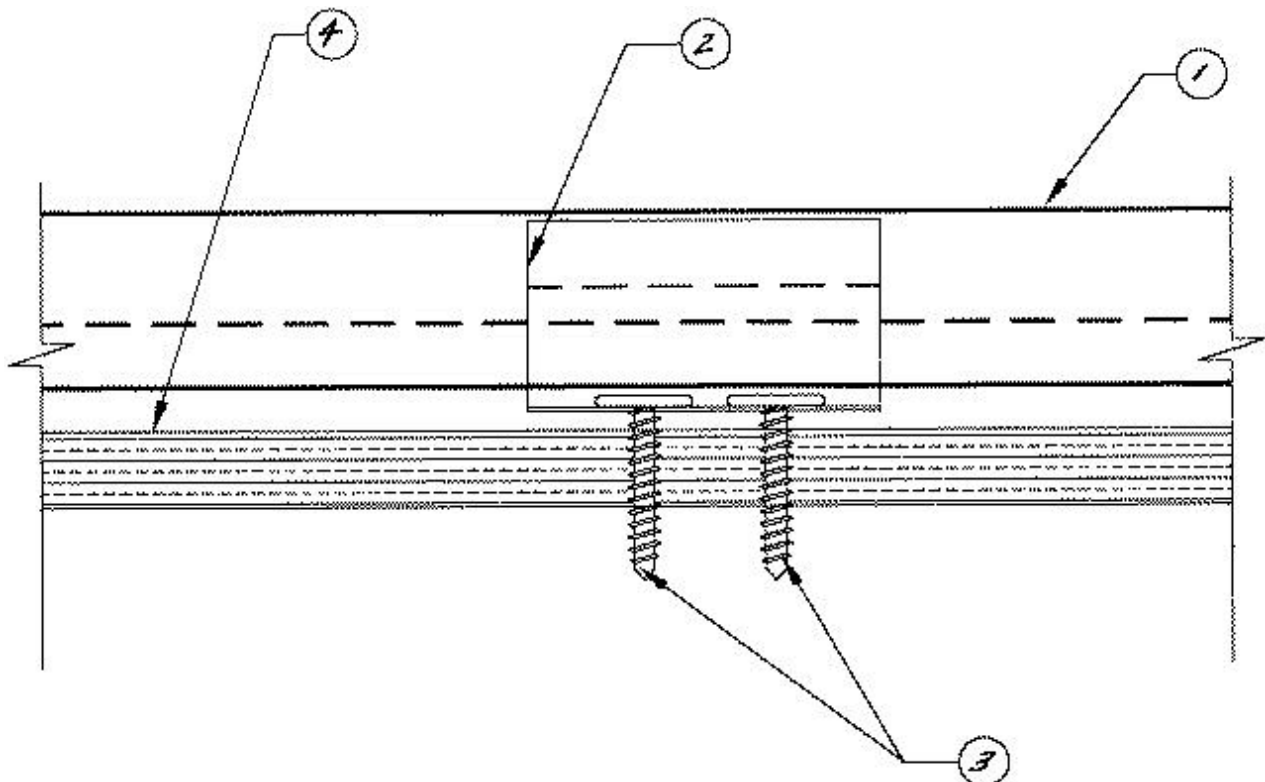
[See General Information for Roof Deck Constructions](#)

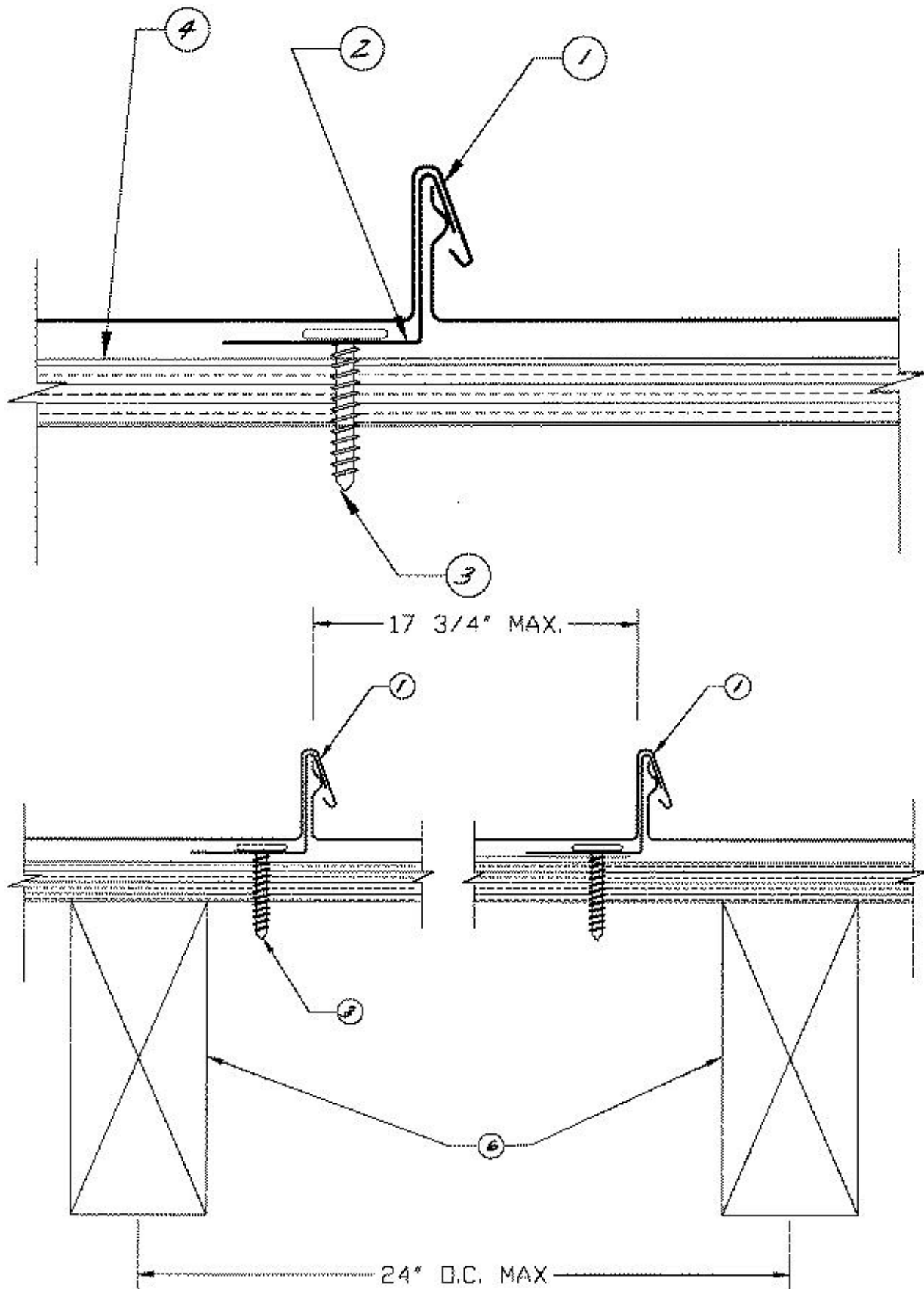
Construction No. 572

November 09, 2012

Uplift – Class 90

Fire Not Investigated





1. **Metal Roof Deck Panels*** — No. 26 MSG min coated steel. Max panel width 17-3/4 in. Rib height nominal 1 in. Panels continuous over two or more spans. A bead of sealant may be used at panel endlaps.

MCELROY METAL MILL INC ([View Classification](#)) — "ABC Instaloc"

2. **Roof Deck Fasteners: (Panel Clips)** — One piece clip, 24 MSG minimum coated steel, 2 in. long by 1-3/32

in. high. Base of one piece clip 1.275 deep with two 0.188 in. dia thru-holes for fasteners (screws). Panel clips located at sides of panels spaced 24 in. OC maximum.

MCELROY METAL MILL INC ([View Classification](#)) — "ABC Instaloc Clip"

3. Fasteners - (Screws) — Screws used to attach panel clips to oriented strand board (OSB) to be No. 10 x 1, Type A pancake head screw with a No. 2 phillips sized head. Two screws per clip. Fasteners used to attach OSB or plywood substructure (Item 4) to wood trusses or joists to be No. 8 by 2-1/2, 8d common deformed shank nails. As an optional fastener, No. 8 by 2 bugle head screws can be used. When light gauge structural steel joists are used, screws to NO. 12 by 1-5/8 in. long with phillips head. Fasteners to be spaced 6 in. OC at edges and 8 in. OC in the interior to attach to joists (Item 6).

4. Substructure - (OSB or Plywood) — Decking to be minimum, nominal 7/16 in. thick oriented strand board (OSB). Optional plywood deck, nominal 1/2 thick plywood, exposure sheathing span CDX, 40/20 may be used. All butt joints to be sealed against leakage by using tape and/or caulk.

5. Moisture Barrier — (Optional - Not Shown) Any suitable membrane to protect substructure (Item 3).

5A. Felt Paper — (Optional - Not Shown) One ply, 30# per 100 sq ft.

6. Joists — Joists space at 2 ft, 0 in. OC, may be one of the following:

A. Nom 2 by 6 in. wood joists No. 2 or better.

B. Nom 2 by 4 in. wood when used on a top cord of a wood truss, No. 2 or better.

C. Light gauge structural steel framing with the member against the plywood to be a min No. 22 MSG coated steel.

Refer to General Information, Roof Deck Construction, (Roofing Materials and Systems Directory) for Items Not Evaluated.

*Bearing the UL Classification Mark

Last Updated on 2012-11-09

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Construction No. 573 TGKX.573 Roof Deck Constructions

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 - Authorities Having Jurisdiction should be consulted before construction.
 - Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
 - When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
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Roof Deck Constructions

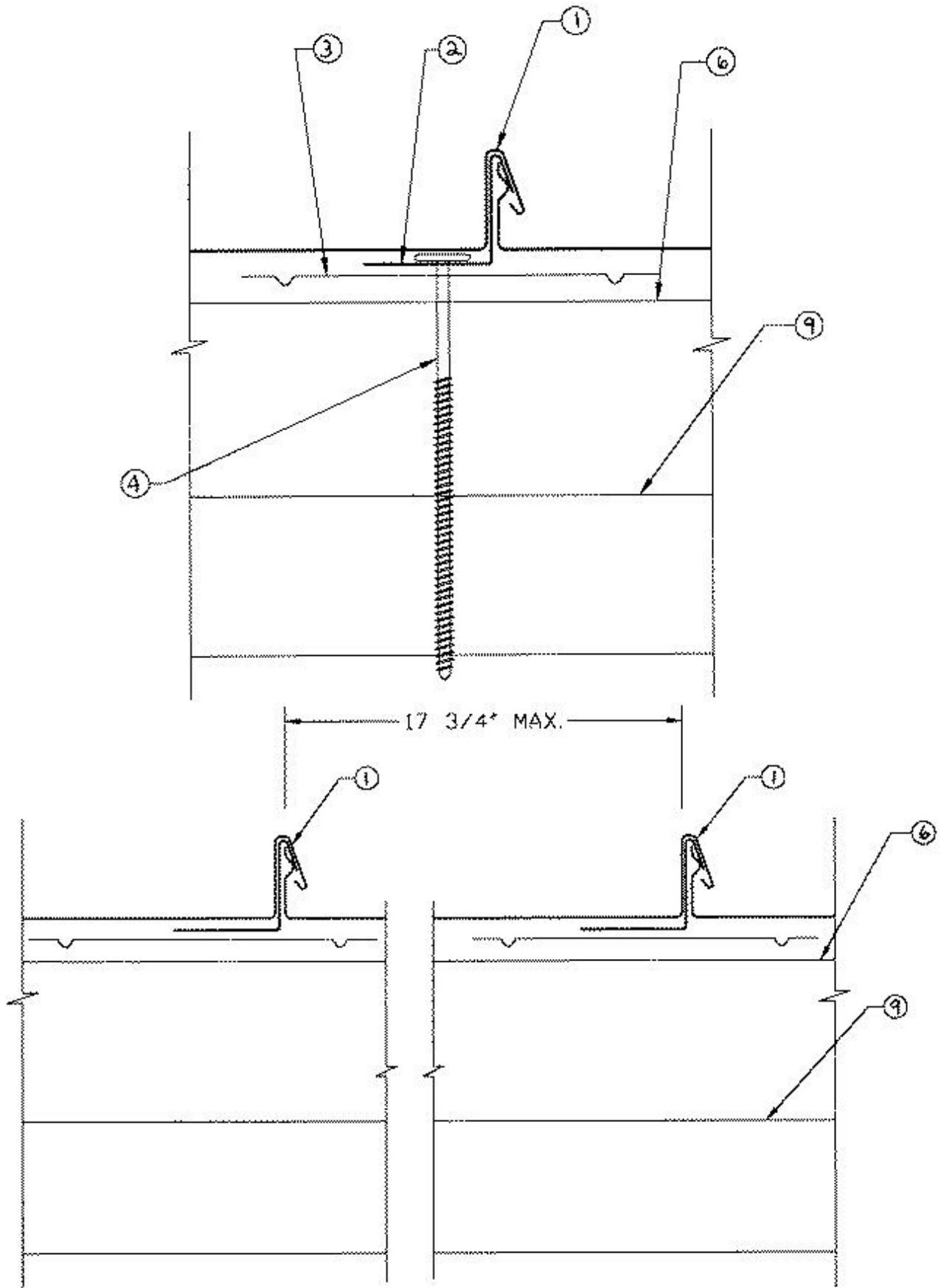
[See General Information for Roof Deck Constructions](#)

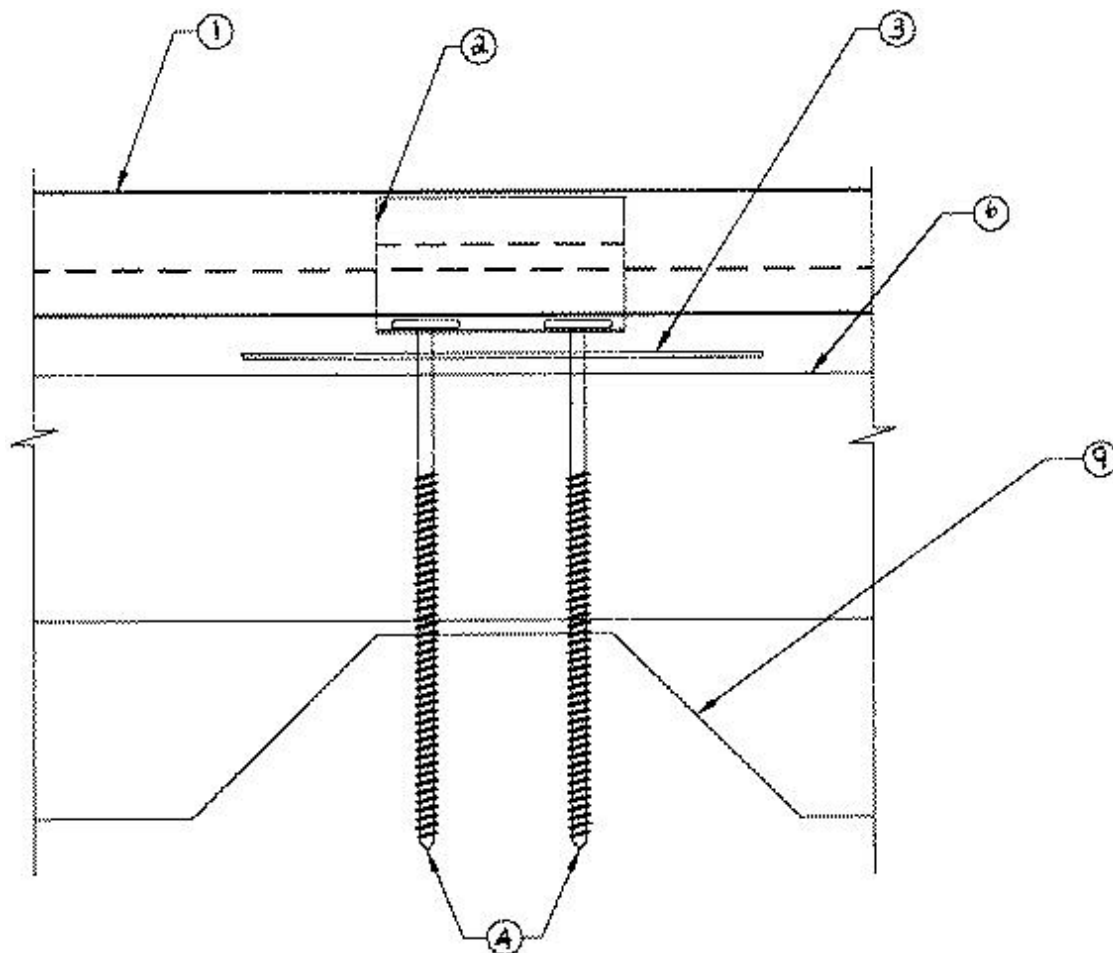
Construction No. 573

November 09, 2012

Uplift — Class 90

Fire Not Investigated





1. **Metal Roof Deck Panels*** — No. 26 MSG min coated steel. Max panel width 17-3/4 in. Rib height nominal 1 in. Panels continuous over two or more spans. A bead of sealant may be used at panel endlaps.

MCELROY METAL MILL INC ([View Classification](#)) — "ABC Instaloc"

2. **Roof Deck Fasteners: (Panel Clips)** — One piece clip, 24 MSG minimum coated steel, 2 in. long by 1-3/32 in. high. Base of one piece clip 1.275 in. deep with two 0.188 in. dia thru-holes for fasteners (screws). Panel clips located at sides of panels spaced 24 in. OC maximum.

MCELROY METAL MILL INC ([View Classification](#)) — "ABC Instaloc Clip"

3. **Bearing Plate** — Min 24 MSG, 4-3/16 in. wide by 6 in. long bearing plate with two slots to accommodate fasteners (Item 4) and one rib along 2 sides to add stiffness (psi min yield strength). Used with foamed plastic (rigid insulation) (Item 6).

4. **Fasteners - (Screws)** — Screws used to attach panel clips to metal deck to #14x7 in. self drilling pancake head screw with a #3 phillips sized head. Screws to penetrate metal deck minimum 1 in. Two screws per clip. Fasteners used to attach metal deck to purlins (Item 10) to be #14x1 in. long with hex head. Spacing on screws to 12 in. OC into purlins.

5. **Felt Paper** — (Optional) (not shown) One ply, 30# per 100 sq ft.

6. **Foamed Plastic - (Rigid Insulation)** — Min thickness 1 in. Max thickness 6 in., density to a minimum of 2 pcf.

7. **Wall Board** — (Optional, not shown) Max 5/8 in. thick, 4 by 8 ft gypsum board located over liner panel. Total thickness of foamed plastic (rigid insulation) (Item 6) and wall board not to exceed 6 in.

8. **Oriented Strand Board (OSB)** — (Optional) (not shown) OSB located over foamed plastic, (Item 6). Max thickness 7/16 in. Total thickness of foamed plastic (rigid insulation) (Item 6) and OSB not to exceed 6 in. Bearing plate (Item 3) not required when OSB is used.

9. **Liner Panel (Metal Deck)** — Min 22 MSG metal deck by 1.5 in. deep, various configurations.

10. **Purlin (not shown)** — 8 in. deep cee purlin, min. 16 MSG (50,000 psi min yield strength). Spaced maximum 5 ft, 1/16 in. OC.

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

*Bearing the UL Classification Mark

Last Updated on 2012-11-09

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