

## PP215 Pipe-Style Snow Guard Submittal Document Set

### ROOF TYPES

- New / Existing Membrane (EPDM, TPO, PVC)
- New / Existing Copper Flat Seam

### AVAILABLE MATERIALS

- Aluminum Bracket with Stainless Steel Base Plate and Aluminum Accessories (AL) (SS)
- Brass Bracket with Stainless Steel Base Plate and Brass Accessories (BR) (SS)

### AVAILABLE FINISHES

- Mill Finish
- Powder Coating (additional charge) using RAL TIGER Drylac® Exterior Colors

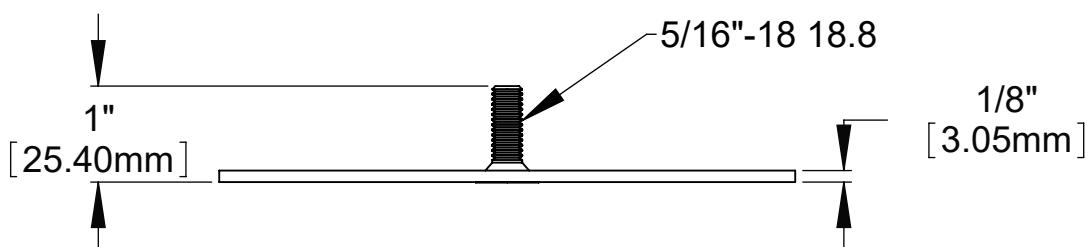
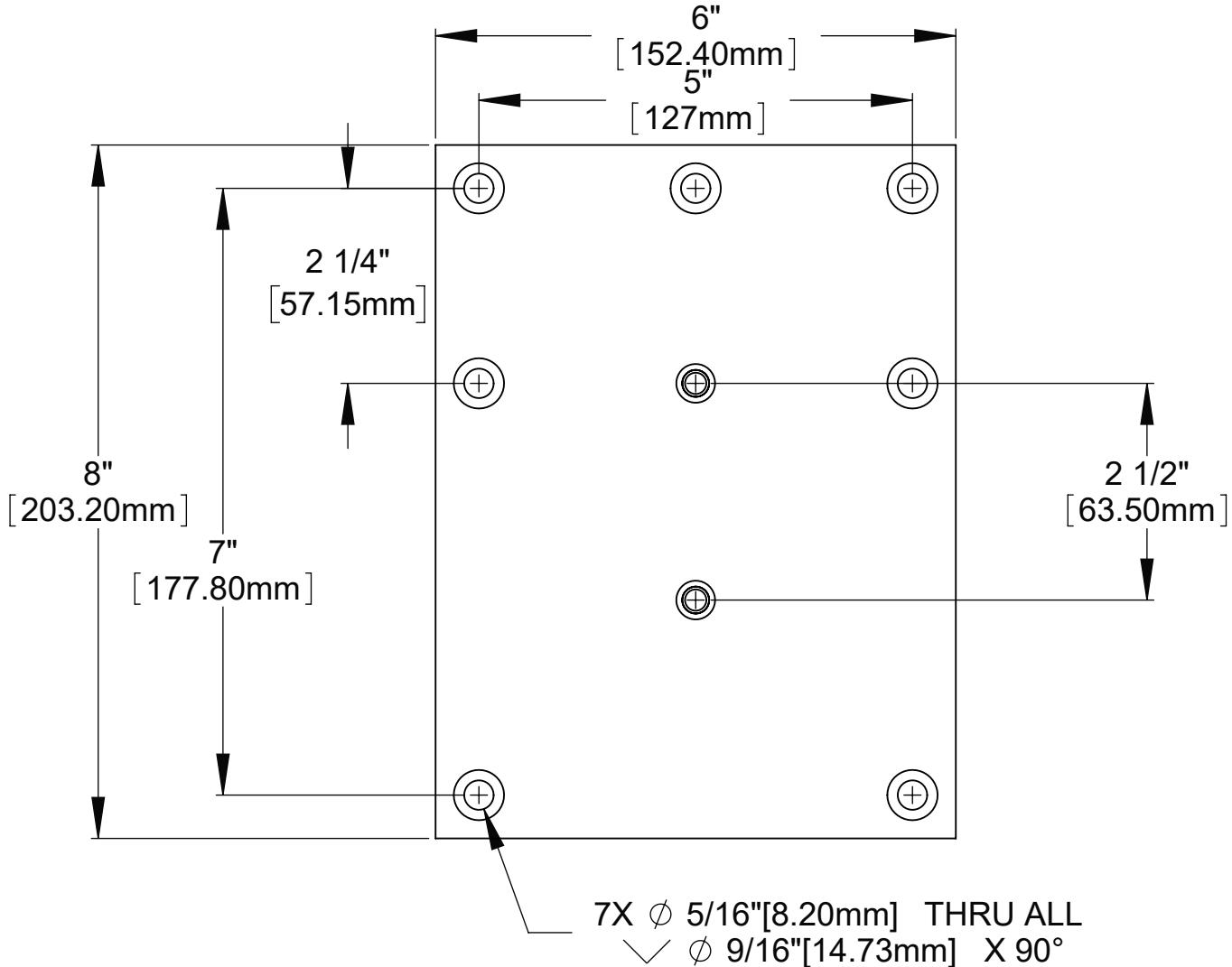
### FEATURES/ADVANTAGES

- Height Adjustable - 39° of height adjustability for a customized setting on varying roof pitches
- Bracket is available in Aluminum or Brass
- Base Plate is available in Stainless Steel or Brass
- Bracket measures a substantial 6" L x 1 1/2" W x 8 7/8" H (when extended to tallest, most upright position)
- Base Plate can be flashed with optional compatible target patch
- Accepts 1" OD Pipe (Tubing)
- Compatible with the use of Ice Flags and Ice Screens
- Internal and External Couplings, End Collars and End Caps are available for this system



# Cut Sheet - BASE SS 6X8-200

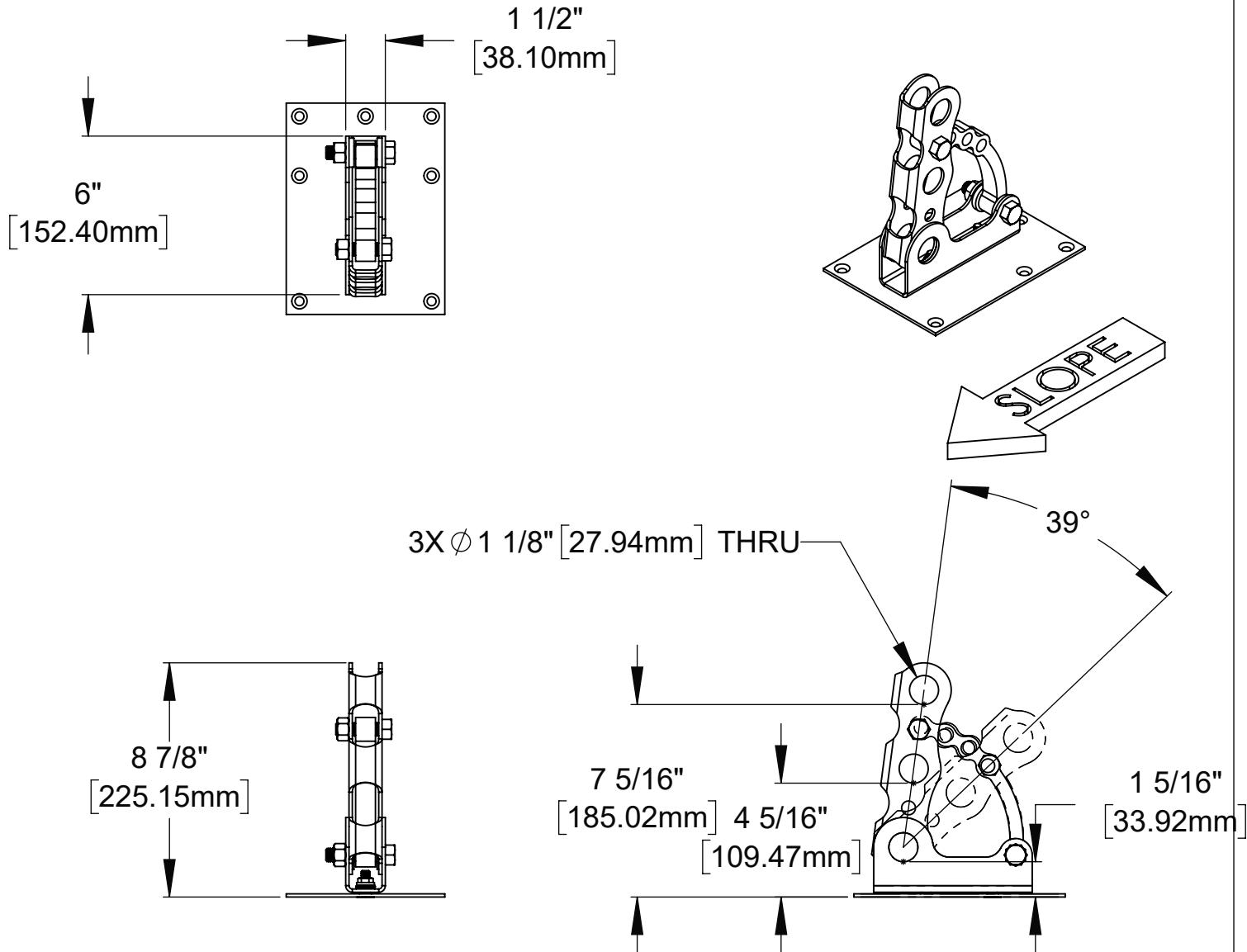
1. Installation to be completed in accordance with manufacturer's written specifications and installation instructions.
2. See spec sheet or contact manufacturer for detailed material, finishes, and configuration options.
3. Contact manufacturer for detailed layout.
4. Do not scale drawings.
5. Subject to change without notice.
6. For patent information, visit our [Patent Page](#).



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# Cut Sheet - PP215

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2. See spec sheet or contact manufacturer for detailed material, finishes, and configuration options.
3. Contact manufacturer for detailed layout.
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## Available Materials

- Aluminum Bracket, Stainless Steel Base Plate
- Brass Bracket, Stainless Steel Base Plate

## Available Bracket Finishes

- Mill Finish
- Powder Coated (Ral Tiger Drylac Powder Coating Color Code: \_\_\_\_\_)

## Available Flashing

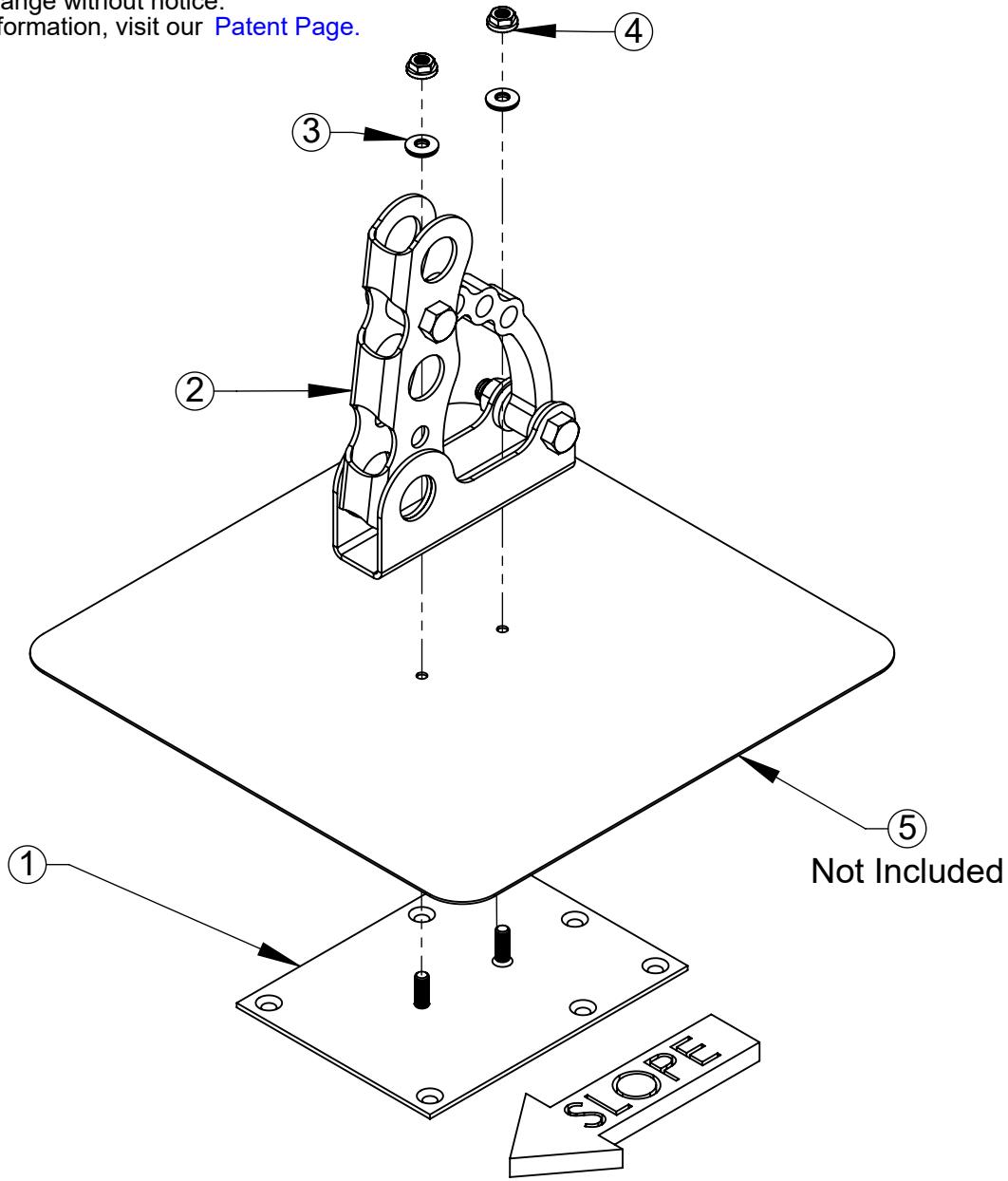
- PP99-CU (Copper Flashing)
- Customer Supplied



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# Assembly Sheet - PP215

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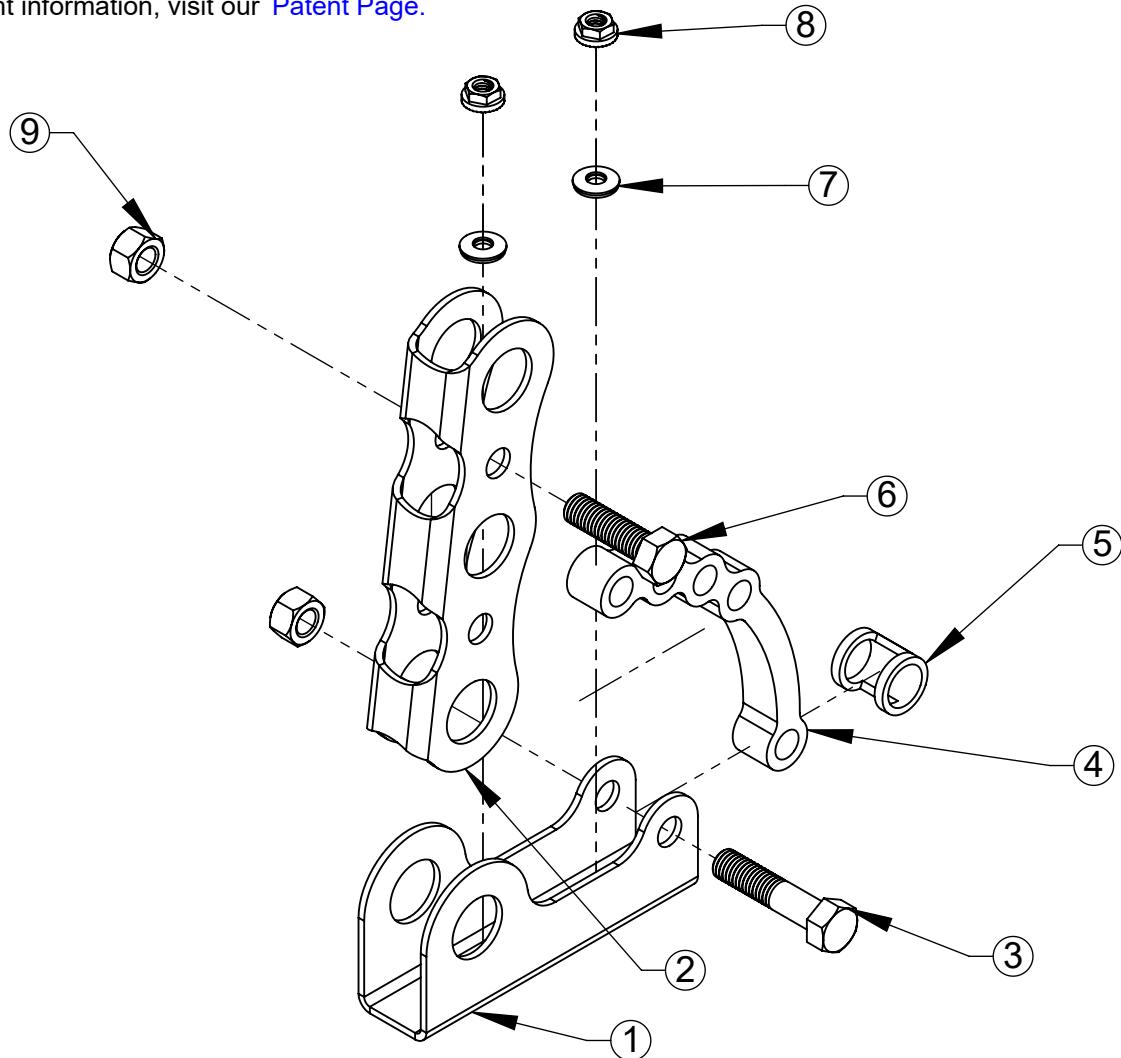
ITEM NO.	PART CODE	DESCRIPTION	QTY
1	BASE SS 6X8-200	SS 6X8-200 BASE PLATE	1
2	PP225-UPKIT	225 3PP BRACKET ONLY	1
3	W-NEO SS-.313	SS NEO WASHER .313 ID (INCLUDED IN POLY KIT GF NEO)	2
4	N-FL SS .313-18	SS FLANGE NUT .313-18	2
5	NOT INCLUDED	TARGET PATCH FLASHING (CUSTOMER SUPPLIED OR PP99-CU)	1



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# Assembly Sheet - PP225-AL-UPKIT

1. Installation to be completed in accordance with manufacturer's written specifications and installation instructions.
2. See spec sheet or contact manufacturer for detailed material, finishes, and configuration options.
3. Contact manufacturer for detailed layout.
4. Do not scale drawings.
5. Subject to change without notice.
6. For patent information, visit our [Patent Page](#).



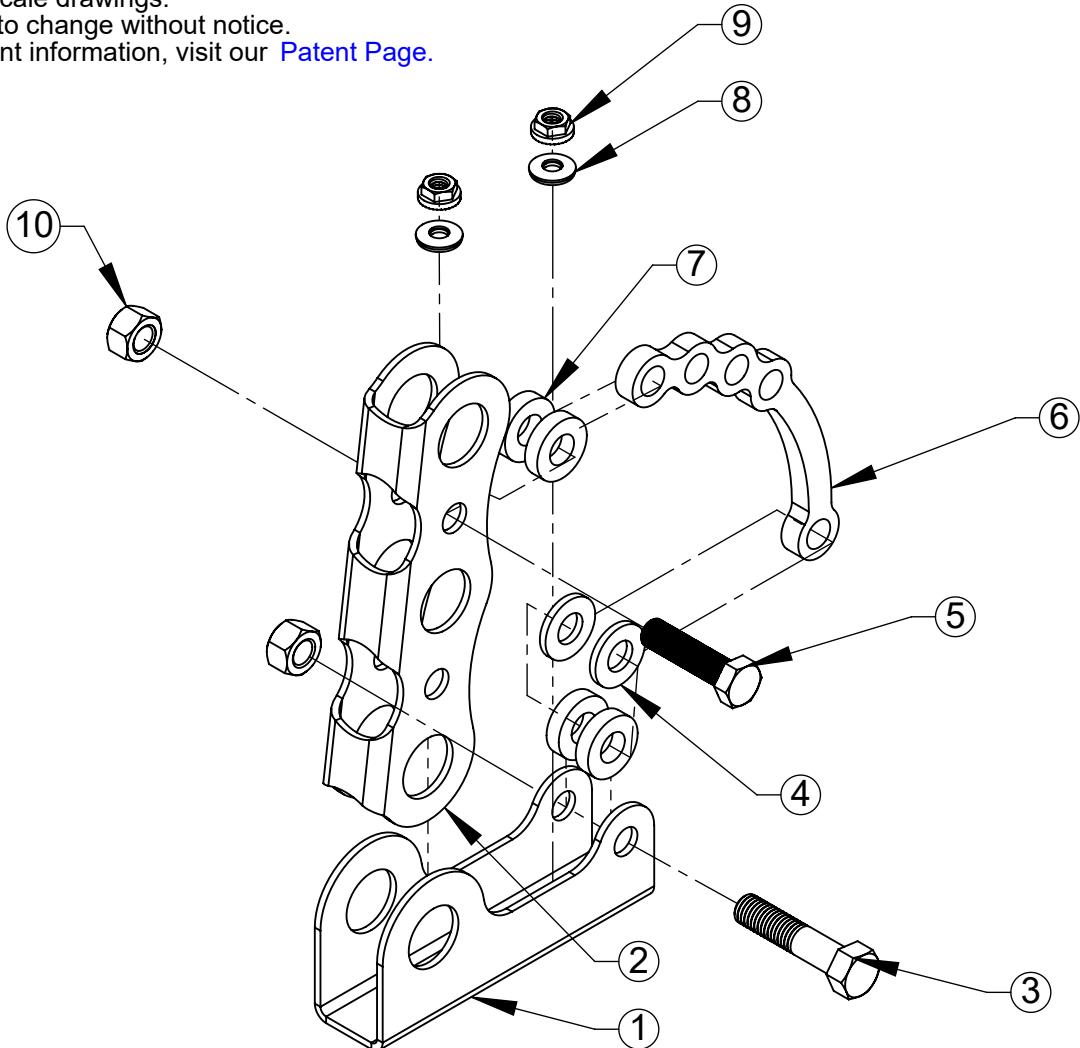
ITEM NO.	PART CODE	DESCRIPTION	QTY
1	BASE-PP225-AL	BASE FOR 225 AL UPKIT	1
2	UPRT-PP225-AL	AL 225 UPRIGHT FOR UPKIT	1
3	B-HX SS-.5-13X2.25	SS HEX BOLT .5-13X2.25	1
4	PP225 CONNECT AL	PP225 AL-CONNECTOR	1
5	UNIV SPACER AL-.78	SPACER 1.125 WIDE / .78 GAP-AL	1
6	B-HX SS-.5-13X1.75	SS HEX BOLT .5-13X1.75	1
7	W-NEO SS-.313	SS NEO WASHER .313 ID (INCLUDED IN POLY KIT GF NEO)	2
8	N-FL SS-.313-18	SS FLANGE NUT .313-18	2
9	N-HX SS -.5-13	SS HEX NUT .5-13	2



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# Assembly Sheet - PP225-BR-UPKIT

1. Installation to be completed in accordance with manufacturer's written specifications and installation instructions.
2. See spec sheet or contact manufacturer for detailed material, finishes, and configuration options.
3. Contact manufacturer for detailed layout.
4. Do not scale drawings.
5. Subject to change without notice.
6. For patent information, visit our [Patent Page](#).



ITEM NO.	PART CODE	DESCRIPTION	QTY
1	BASE-PP225-BR	BASE FOR 225 BR UPKIT	1
2	UPRT-PP225-BR	BR 225 UPRIGHT FOR UPKIT	1
3	B-HX BR-.5-13X2.25	BR HEX BOLT .5-13X2.25	1
4	SPACER BR .125IN	BR 1/8" SPACER	2
5	B-HX BR-.5-13X1.75	BR HEX BOLT .5-13X1.75	1
6	PP225 CONNECT BR	PP225 CONNECTOR CAST BR	1
7	SPACER BR .25IN	BR 1/4" SPACER	4
8	W-NEO SS-.313	SS NEO WASHER .313 ID (INCLUDED IN POLY KIT GF NEO)	2
9	N-FL SS-.313-18	SS FLANGE NUT .313-18	2
10	N-HX BR-.5-13	BR HEX NUT .5-13	2



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Scale: 1:3

12/27/2022



## PP215 & PP215R Specification Sheet

### Snow Guards

## PART 1 – GENERAL

### 1.1 SUMMARY

#### A. WORK INCLUDES

1. PP215 & PP215R Snow guards that attaches directly the roof deck.
2. Coordinate with installation of to assure proper placement of snow guards.
3. Provide appropriate snow guard and fasteners for the roof system.

#### B. RELATED SECTIONS

1. Section 07600: Flashing and Sheet Metal. MasterFormat 2016 07 60 00
2. Section 07500: Membrane Roofing. MasterFormat 2016 07 50 00
3. Section 07720: Snow Guards. MasterFormat 2016 07 72 00
4. Division 1: Administrative and procedural requirements.
5. Division 7: Thermal and Moisture Protection.

### 1.2 SYSTEM DESCRIPTION

#### A. COMPONENTS

PP215 Snow Guard System: Consists of snow guard bracket and base plate.

1. BASE SS 6X8-200
2. PP225-UPKIT
3. W-NEO SS-.313
4. N-FL SS .313-18
5. TARGET PATCH FLASHING (CUSTOMER SUPPLIED OR PP99-CU)

PP215R Snow Guard System: Consists of snow guard bracket, base plate and ferrule.

1. BASE SS 8X8-200R
2. PP225-UPKIT
3. W-NEO SS-.313
4. N-FL SS-.313-18
5. TARGET PATCH FLASHING (CUSTOMER SUPPLIED)
6. FERRULE

#### B. ACCESSORIES

1. PP75, tubing
2. Couplings
  - a. PP84, external
  - b. PP86, internal
3. PP56, end caps
4. PP65, end collars
5. Ferrules – use with PP215R system
6. PP95, ice flags, optional
7. Fasteners
  - a. To be of metal compatible with snow guards.
  - b. Fasteners should be selected for compatibility with roof deck.
  - c. Fastener strength should exceed or be equal to that of snow guard system.
8. Target Patch of appropriate size and material and method of installation to meet roof manufacturer's requirement for proper flashing.

Alpine SnowGuards®, a Division of Vermont Slate & Copper Services, Inc.

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## PP215 & PP215R Specification Sheet

### Snow Guards

#### C. DESIGN REQUIREMENTS

1. Spacing to be recommended by manufacturer or building engineer.
2. Install a minimum of 6 fasteners (8 with PP215R) per snow guard base plate.
3. It is important to design new structures or assess existing structures to make sure they can withstand retained snow loads.

#### 1.3 SUBMITTAL

- A. Submit manufacturer's specifications, standard detail drawings, installation instructions, and recommended layout.

#### 1.4 QUALITY ASSURANCE

- A. Installer to be experienced in the installation of specified roofing material and snow guards for not less than 5 years in the area of the project.

#### 1.5 DELIVERY / STORAGE / HANDLING

- A. Inspect material upon delivery and order replacements for any missing or defective items. Keep material dry, covered and off the ground until installed.

## PART 2 – PRODUCTS

#### 2.1 MANUFACTURER

- A. Alpine SnowGuards®, a Division of Vermont Slate & Copper Services, Inc.  
289 Harrel St., Morrisville, VT 05661 | 888-766-4273 | [www.alpinesnowguards.com](http://www.alpinesnowguards.com)

#### 2.2 MATERIALS

- A. Snow Guard Bracket - 5000 Series Aluminum.
- B. Base Plate - 11 gauge thick 304 Stainless Steel with two 5/16" 304 stainless steel machine screws welded into countersinks.
- C. PP75, tubing (choose one):
  1. Aluminum – 6000 Series, 1" outside diameter and .120" wall thickness, extruded.
  2. Stainless Steel – 304 alloy, same dimensions as aluminum, welded.
- D. PP84 and PP86, external and internal couplings (choose one):
  1. Aluminum – 6000 Series
    - a. Internal and concealed coupling 3" long.
    - b. External and exposed coupling which can also serve as a 5" long expansion mechanism.
  2. Stainless Steel – 304 Series
    - a. Internal and concealed coupling 3" long.
    - b. External and exposed coupling which can also serve as a 5" long expansion mechanism.
- E. PP56, end caps - 304 Stainless Steel.
- F. PP65, end collars (choose one)
  1. 6000 Series Aluminum.
  2. 304 Stainless Steel.
- G. Ferrules – use with PP215R system - 6000 Series Aluminum 1" O.D., .120" wall x 24" long. Cut to length on site.



## PP215 & PP215R Specification Sheet Snow Guards

H. PP95, ice flags, optional (choose one)

1. 6000 Series Aluminum 3" wide x length (as needed).
2. 304 Stainless Steel.

I. Fasteners (can be purchased from others) to be compatible with chosen roof application and meet specified pull-out values as shown in load test data.

### 2.3 FINISH (choose one)

- A. Mill Finish – standard
- B. Powder Coated – available at additional cost

## PART 3 – EXECUTION

### 3.1 EXAMINATION

#### A. Substrate

1. Inspect structure on which snow guard system is to be installed and verify it will withstand any additional loading that it may incur. Notify general contractor of any deficiencies before installing Alpine SnowGuards' products.
2. Verify roofing material has been installed correctly prior to installing snow guards.

### 3.2 INSTALLATION

- A. Comply with architectural drawings and snow guard manufacturer's recommendations for location of system. Comply with manufacturer's written installation instructions for installation and layout.

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07 72 53 Snow Guards



## PP215 Snow Guard Installation Instructions

### ROOF TYPES

- New / Existing Membrane (EPDM, TPO, PVC) with solid structural deck immediately below roof surface.
- New / Existing Copper Flat Seam

### BASE PLATE INSTALLATION

1. Place base plate on top of finished roof. Align base plate so that studs are set parallel to slope of roof. There will be three fastener holes on up-slope of base plate.
2. Fasten base plate to substructure (usually wood blocking for this system) using appropriate fasteners for type and thickness of decking. Make certain that base plate cannot shift.
3. Consult with an engineer, snow guard manufacturer or fastener company to determine the fastener required for attaching base plate to substructure.

### MEMBRANE FLASHING INSTALLATION

1. Use an acceptable piece and size of membrane flashing material to cover base plate in a method acceptable by roofing material manufacturer. This is commonly referred to as a Flashing Patch. flashing patch size will be a minimum of 12" x 12" but each membrane manufacturer has specific requirements.
2. Cut two small holes in flashing to fit tightly over threaded studs.
3. Before installing flashing apply a generous amount of acceptable sealant around threaded studs.
4. Apply flashing over base plate and seal perimeter of flashing to membrane deck sheet, following best practice methods for your roofing material.
5. threaded studs are now only part of base plate exposed. NOTE: Due to sealant applied around studs there may be bleed out at this opening. When bracket is installed and tightened this bleed out will help to create a water tight compression fitting.
6. Once base plate and flashing are installed, move on to installation of snow guard bracket.



## PP215 Snow Guard Installation Instructions

### COPPER FLASHING INSTALLATION

1. Use flashing material to cover base plate in a method acceptable by roofing manufacturer. This flashing is commonly referred to as a Flashing Patch. flashing size should be a minimum of 12" x 12" (prefabricated copper flashing patches embossed for base plate shape are available from snow guard manufacturer).
2. If fabricating flashing, cut two small holes in flashing to fit tightly over threaded studs.
3. Before installing flashing apply a generous amount of acceptable sealant around threaded studs.
4. Apply flashing over base plate and seal perimeter of flashing to flat seam copper roof, following best practice methods for your copper roofing material.
5. Threaded studs on base plate should still be exposed. NOTE: Due to sealant applied around studs there may be bleed out at this opening. When bracket is installed and tightened this bleed out will help to create a water tight compression fitting.
6. Install EPDM rubber washer on studs.
7. Once base plate and flashing are installed, move on to installation of snow guard bracket.

### BRACKET INSTALLATION

Aluminum Bracket (reference Assembly Sheet – PP225-AL-UPKIT)

1. Empty contents of bag onto work surface and reference PP225-AL-UPKIT assembly drawing for part codes and descriptions.
2. Insert SS Hex Bolt .5-13x2.25 through back hole of Base for 225 AL Upkit, PP225 AL-Connector, Spacer, and 2nd back hole of Base for 225 AL Upkit.
3. Apply thread lock and tighten SS Hex Nut to SS Hex Bolt.
4. Line up AL 225 Upright for Upkit with appropriate hole for angle of roof with PP225 AL-Connector and insert SS Hex Bolt .5-13x1.75 through both AL 225 Upright and PP225 AL-Connector.
5. Apply thread lock and tighten SS Hex Nut to SS Hex Bolt.
6. Open assembly to expose holes in Base for 225 AL Upkit.  
Place bracket over threaded studs on previously installed baseplate.
7. Place one SS Neo Washer over each stud and press them down against bracket.
8. Tighten SS Flange Nut over each stud and tighten to 15 inch-pounds.
9. Install Pipes, Couplings, End Caps and End Collars (refer to Pipe-Style Installation Instructions). Ice Flags are optional.



## PP215 Snow Guard Installation Instructions

### BRASS BRACKET (REFERENCE ASSEMBLY SHEET – PP225-BR-UPKIT)

1. Empty contents of bag onto work surface and reference PP225-BR-UPKIT assembly drawing for part codes and descriptions.
2. Insert BR Hex Bolt .5-13x2.25 through single back hole of Base for 225 BR Upkit, and then through (in order) one BR  $\frac{1}{4}$ " Spacer, one BR  $\frac{1}{8}$ " spacer, PP225 Connector Cast BR one BR  $\frac{1}{4}$ " Spacer, one BR  $\frac{1}{8}$ " spacer and out through other side of Base for 225 BR Upkit.
3. Apply thread lock and tighten BR Hex Nut to BR Hex Bolt .5-13x2.25 to 45 inch-pounds.
4. Insert BR Hex Bolt .5-13x1.75 through one side of BR225 Upright for Upkit, and then through (in order) one BR  $\frac{1}{4}$ " Spacer, the appropriate hole for angle of roof in PP225 Connector Cast BR, one BR  $\frac{1}{4}$ " Spacer and out through other side of BR225 Upright for Upkit.
5. Apply thread lock and tighten BR Hex Nut to BR Hex Bolt .5-13x1.75 to 45 inch-pounds.
6. Open assembly to expose holes in Base for 225 BR Upkit. Place bracket over threaded studs on previously installed baseplate.
7. Place one SS Neo Washer over each stud and press them down against bracket.
8. Tighten SS Flange Nut over each stud and tighten to 15 inch-pounds.
9. Install Pipes, Couplings, End Caps and End Collars (refer to Pipe-Style Installation Instructions). Ice Flags are optional.

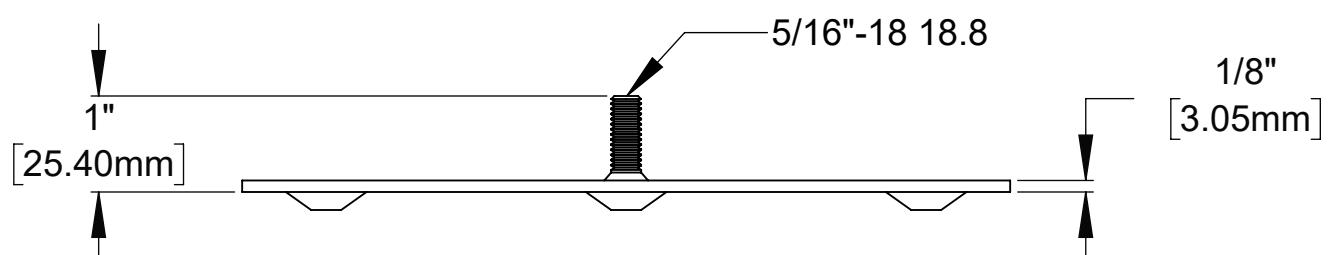
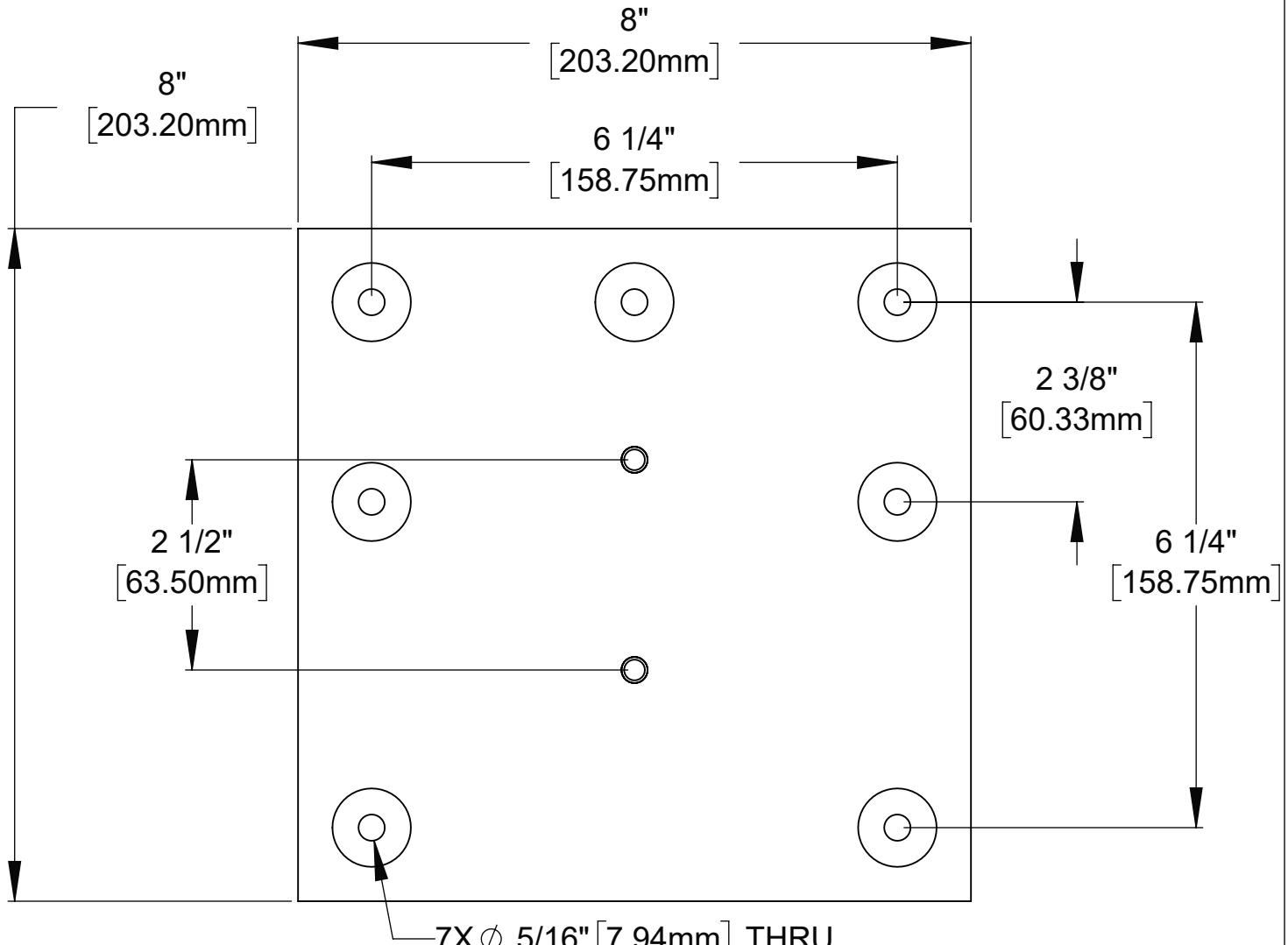
### SNOW GUARD LAYOUT FOR PIPE STYLE BRACKETS

- Contact Alpine SnowGuards for detailed layout.
- Do not install runs of snow retention bar more than 100 feet long without a break to allow for thermal expansion.
- First row of snow guards are installed above outer most wall or support of the building.

Document version 08.12.2022  
07 72 53 Snow Guards

# Cut Sheet - BASE SS 8x8-200R

1. Installation to be completed in accordance with manufacturer's written specifications and installation instructions.
2. See spec sheet or contact manufacturer for detailed material, finishes, and configuration options.
3. Contact manufacturer for detailed layout.
4. Do not scale drawings.
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6. For patent information, visit our [Patent Page](#).



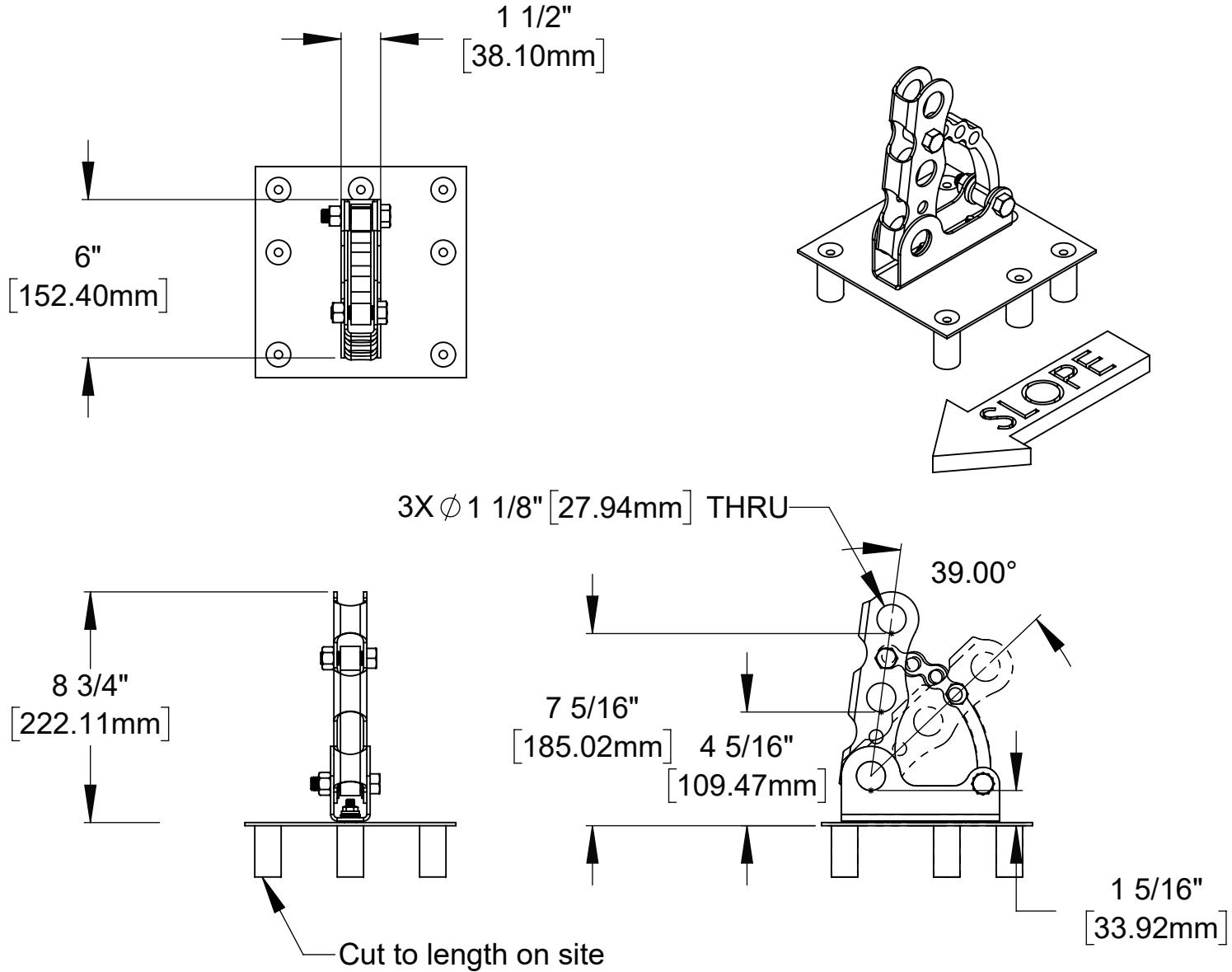
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Scale: 1:2

6/30/2022

# Cut Sheet - PP215R

1. Installation to be completed in accordance with manufacturer's written specifications and installation instructions.
2. See spec sheet or contact manufacturer for detailed material, finishes, and configuration options.
3. Contact manufacturer for detailed layout.
4. Do not scale drawings.
5. Subject to change without notice.
6. For patent information, visit our [Patent Page](#).



## Available Materials

- Aluminum Bracket,  
Stainless Steel Base Plate
- Brass Bracket,  
Stainless Steel Base Plate

## Available Bracket Finishes

- Mill Finish
- Powder Coated  
(Ral Tiger Drylac Powder  
Coating Color Code: \_\_\_\_\_)

## Available Flashing

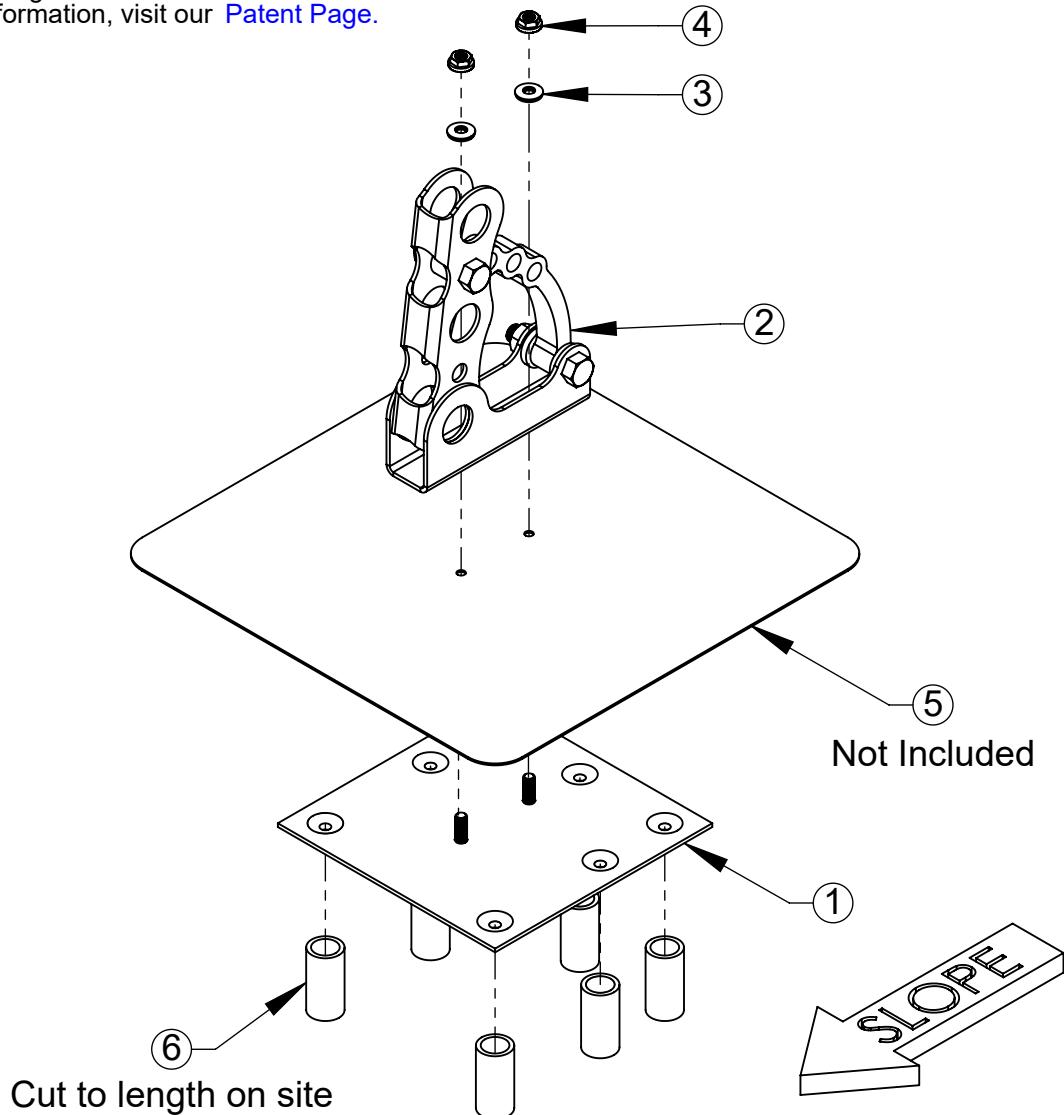
- PP99-CU  
(Copper Flashing)
- Customer Supplied



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# Assembly Sheet - PP215R

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3. Contact manufacturer for detailed layout.
4. Do not scale drawings.
5. Subject to change without notice.
6. For patent information, visit our [Patent Page](#).



ITEM NO.	PART CODE	DESCRIPTION	QTY
1	BASE SS 8X8-200R	STAINLESS STEEL 8X8-200R BASE PLATE	1
2	PP225-UPKIT	225 3PP BRACKET ONLY	1
3	W-NEO SS-.313	SS NEO WASHER .313 ID (INCLUDED IN POLY KIT GF NEO)	2
4	N-FL SS-.313-18	SS FLANGE NUT .313-18	2
5	NOT INCLUDED	TARGET PATCH FLASHING (CUSTOMER SUPPLIED OR PP99-CU)	1
6	FERRULE	FERRULE FOR 215R- 1" OD-AL (SOLD SEPARATELY)	7



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## PP215R Snow Guard Installation Instructions

### ROOF TYPES

New / Existing Membrane with insulation immediately below roof surface.

### INSTALLATION

#### Base Plate with Ferrule Installation

1. Place base plate on top of finished roof and mark locations of 6 fastener holes (3 on left of baseplate and 3 on right).

**Note:** *threaded studs on base plate are aligned parallel to roof slope with three fastener holes on up-slope of base plate.*

2. Remove base plate and at 6 marked hole locations, bore 6 one-inch holes through finished roof and through insulation until substructure is reached.
3. Measure depth of each hole and cut ferrules (1" O.D. aluminum tubing) to rest on substructure and to be flush with finished roof surface when inserted into holes.
4. Drop ferrules into place. Ferrules resting on substructure will prevent insulation from compressing when base plate is tightened into place.

**Note:** *Optional - apply appropriate amount of low expansion spray foam insulation inside ferrules. This is to prevent condensation on underside of metal decking.*

5. Place base plate on top of finished membrane roof so that 7 fastener holes line up with centers of 7 ferrules. The holes in base plate will lock into ferrules when ferrules are positioned properly.
6. Fasten base plate to substructure using appropriate fasteners for type of decking and thickness of insulation. Make certain that base plate cannot shift.
7. Consult with an engineer, snow guard manufacturer or fastener company to determine fastener required for attaching base plate to substructure.



## PP215R Snow Guard Installation Instructions

### Membrane Flashing Installation

1. Use an acceptable piece and size of membrane flashing material to cover base plate in a method acceptable by roofing material manufacturer. This is commonly referred to as a Flashing Patch. Flashing patch size will be minimum of 12" x 12"; each membrane manufacturer has specific requirements.
2. Cut two small holes in flashing to fit tightly over threaded studs.
3. Before installing flashing apply a generous amount of acceptable sealant around threaded studs.
4. Apply flashing over base plate and seal perimeter of flashing to membrane deck sheet, following best practice methods for your roofing material.
5. Threaded studs are now only part of base plate exposed.

**Note:** Due to sealant applied around studs there may be bleed out at this opening. When bracket is installed and tightened this bleed out will help to create a water tight compression fitting.

6. Once base plate and flashing are installed, move on to installation of snow guard bracket.

### Bracket Installation

Aluminum Bracket (reference Assembly Sheet – PP225-AL-UPKIT)

1. Empty contents of bag onto work surface and reference PP225-AL-UPKIT assembly drawing for part codes and descriptions.
2. Insert SS Hex Bolt .5-13x2.25 through back hole of Base for 225 AL Upkit, PP225 AL-Connector, Spacer, and 2nd back hole of Base for 225 AL Upkit.
3. Apply thread lock and tighten SS Hex Nut to SS Hex Bolt.
4. Line up AL 225 Upright for Upkit with appropriate hole for angle of roof with PP225 AL-Connector and insert SS Hex Bolt .5-13x1.75 through both AL 225 Upright and PP225 AL-Connector.
5. Apply thread lock and tighten SS Hex Nut to SS Hex Bolt.
6. Open assembly to expose holes in Base for 225 AL Upkit.  
Place bracket over threaded studs on previously installed baseplate.
7. Place one SS Neo Washer over each stud and press them down against bracket.
8. Tighten SS Flange Nut over each stud and tighten to 15 inch-pounds.
9. Install Pipes, Couplings, End Caps and End Collars (refer to Pipe-Style Installation Instructions). Ice Flags are optional.



## PP215R Snow Guard Installation Instructions

### Brass Bracket (reference Assembly Sheet – PP225-BR-UPKIT)

1. Empty contents of bag onto work surface and reference PP225-BR-UPKIT assembly drawing for part codes and descriptions.
2. Insert BR Hex Bolt .5-13x2.25 through single back hole of Base for 225 BR Upkit, and then through (in order) one BR  $\frac{1}{4}$ " Spacer, one BR 1/8" spacer, PP225 Connector Cast BR one BR  $\frac{1}{4}$ " Spacer, one BR 1/8" spacer and out through other side of Base for 225 BR Upkit.
3. Apply thread lock and tighten BR Hex Nut to BR Hex Bolt .5-13x2.25 to 45 inch-pounds.
4. Insert BR Hex Bolt .5-13x1.75 through one side of BR225 Upright for Upkit, and then through (in order) one BR  $\frac{1}{4}$ " Spacer, appropriate hole for angle of roof in PP225 Connector Cast BR, one BR  $\frac{1}{4}$ " Spacer and out through other side of BR225 Upright for Upkit.
5. Apply thread lock and tighten BR Hex Nut to BR Hex Bolt .5-13x1.75 to 45 inch-pounds.
6. Open assembly to expose holes in Base for 225 BR Upkit. Place bracket over threaded studs on previously installed base plate.
7. Place one SS Neo Washer over each stud and press them down against bracket.
8. Tighten one SS Flange Nut over each stud and tighten to 15 inch-pounds.
9. Install Pipes, Couplings, End Caps and End Collars (refer to Pipe-Style Installation Instructions). Ice Flags are optional.

### SNOW GUARD LAYOUT FOR PIPE STYLE BRACKETS

- Contact Alpine SnowGuards for detailed layout.
- Do not install runs of snow retention bar more than 100 feet long without a break to allow for thermal expansion.
- First row of snow guards are installed above outer most wall or support of the building.

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07 72 53 Snow Guards



## Snow Guard Maintenance

Our snow guards must be inspected annually. Any defects or damage in materials and/or workmanship must be reported to Alpine SnowGuards immediately. Seller will not be responsible for snow guard systems that have not been properly maintained.

- Ensure snow guard brackets, accessories & components are intact, have not been displaced, and show no signs of damage or wear.
- Inspect fasteners into roof deck.
- Inspect snow guard-related waterproofing and replace or repair where necessary to ensure roof integrity.
- Snow accumulation on roofs and rooftop solar panels must be removed to avoid damage to the roof or panels, the building structure, and anything below. Heavy snowfalls, drifting, and the gradual accumulation of snow and ice can lead to less-than-ideal snow guard performance.
- Check each clamp set screw with a torque wrench to ensure proper fastening has been maintained (clamp-to-seam models).
- Inspect sealant, tape, and adhesive. Remove and replace as needed.

Document Version 04.15.24



TIGER Drylac®

# ral colors

exterior powder coatings



## series 49

### Weather Resistant TGIC Polyester Powder Coatings for Exterior and Interior Applications

**Features:** Good weather resistance, good mechanical properties, very smooth flow, good storage stability, good coverage

**Gloss Level:** All colors featured in this chart are available as standard products in smooth glossy with a gloss level of 80-90+ (gloss level according to Gardner 60 deg., ASTM D 523).

**Typical Applications:** Residential windows and doors, garden equipment, patio furniture, automotive accessories, bicycles, motorcycles, sporting goods.

**Standard Packaging:** 55 lb boxes or 5 lb mini packs

**Datasheets:** Periodically updated datasheets, showing cure parameters, test results, pre-treatment information and more are available for all products in this chart. Please contact your local TIGER Drylac office or visit [www.tigerdrylac.com](http://www.tigerdrylac.com) for the most current edition.



All Series 49 (custom and stock) products, made in the US or Canada are periodically re-certified and carry the UL (Underwriter Laboratories) Recognized Component mark. This UL mark is for all equipment and products intended for the US and Canadian market.

## series 38

### Highly Weather- and UV-Resistant Powder Coatings based on Super Durable TGIC Polyester for Exterior and Interior Applications

**Features:** Superior gloss and color retention, excellent weather resistance, good mechanical properties, superior chalk resistance, smooth flow, excellent edge coverage, good storage stability. AAMA 2604-05 conforming.

**Gloss Level:** All colors featured in this chart are available as standard products in smooth glossy with a gloss level of 80-90 (gloss level according to Gardner 60 deg., ASTM D 523).

**Typical Applications:** Agricultural and construction equipment, bus shelters, lighting fixtures, playground equipment, site furnishings, garage doors, stadium seating, fencing, automotive equipment, and marine applications.

**Standard Packaging:** 44 lb boxes and 5 lb mini packs

## RAL

Having gained worldwide acceptance over the last few decades, the RAL is the most popular Central European Color Standard used today.

The RAL colors in this chart have been matched as closely as possible. Color chart production methods and influence from heat and light may account for slight color deviation from the actual RAL Standard. This chart therefore can not serve as a standard for RAL color production and is to be used as a guide for color planning and specification only.

To aid in final product selection please contact your regional Tiger Drylac location for a powder coated Q-Panel of the product of your choice.

**Datasheets:** Periodically updated datasheets, showing cure parameters, test results, pre-treatment information and more are available for all products in this chart. Please contact your local TIGER Drylac office or visit [www.tigerdrylac.com](http://www.tigerdrylac.com) for the most current edition.

**RAL colors not available:** Due to pigmentation a small percentage of colors in the yellow, orange, red and purple range offer only limited UV stability and are therefore not available.

**More standard Series 38 products:** For additional architectural mattes, glossy and metallic products please see our Series 38 Super Durable Powder Coatings brochure.

**Custom colors:** Custom colors not shown in this brochure can be custom made in 7 to 10 days. Due to pigmentation some colors in the yellow, orange, red and purple range offer only limited UV stability. UV stability of custom colors in that color range must be verified by our production laboratories on a case by case basis.

**TIGER Drylac continues to offer the largest product selection in the powder coating industry.** For additional standard products and innovative powder coating solutions please see our numerous other brochures including:

TIGER Drylac Metallic

TIGER Drylac Special Effect

TIGER Drylac Essentials

TIGER Drylac Specialties

TIGER Drylac Series 38 Super Durable

TIGER Drylac Anti-Graffiti

TIGER Drylac Series 58 Super Durable  
(for approved applicators only)

TIGER Drylac Series 75 Fluoropolymer  
(for approved applicators only)

TIGER Drylac Wood

## Specifying TIGER Drylac products

In order to eliminate possible errors in specifying our products, we recommend using the full product number rather than specifying the RAL number only. This product number not only describes the Series/Chemistry, but also the exact color, finish and sheen.

Please check with your local TIGER Drylac office or representative for assistance with specifications and suitability issues.

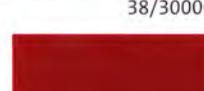
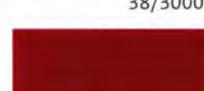
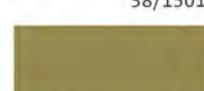
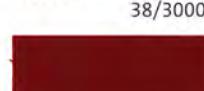
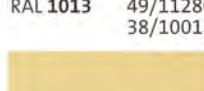
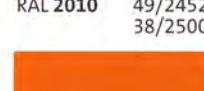
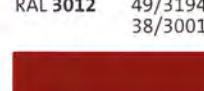
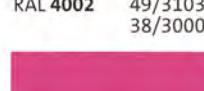
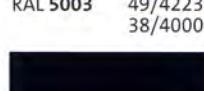
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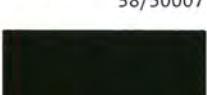
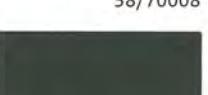
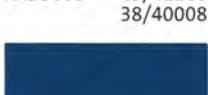
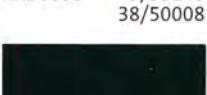
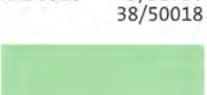
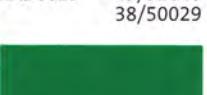
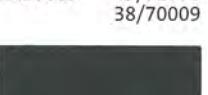
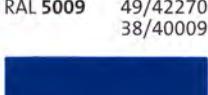
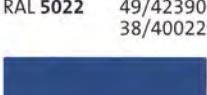
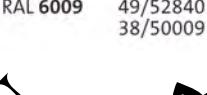
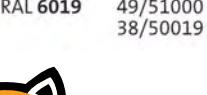
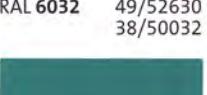
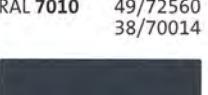
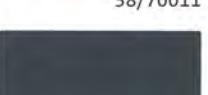
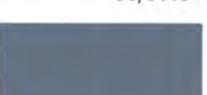
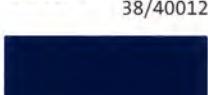
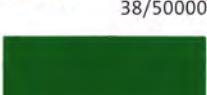
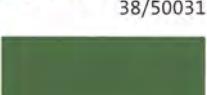
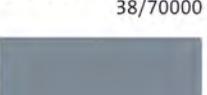
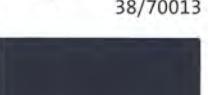
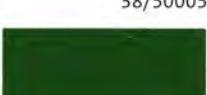
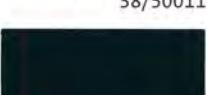
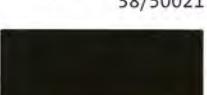
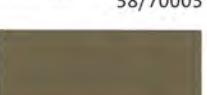
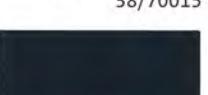
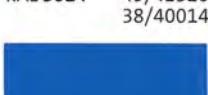
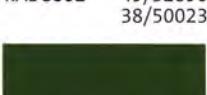
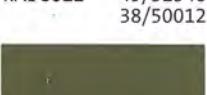
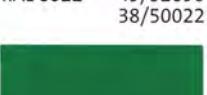
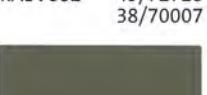
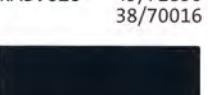
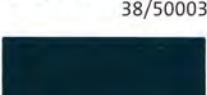
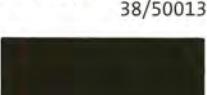
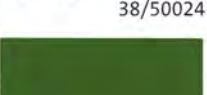
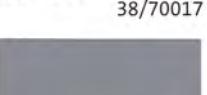
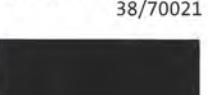
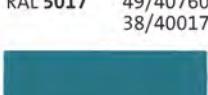
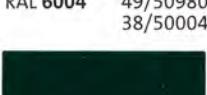
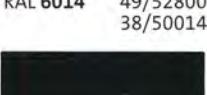
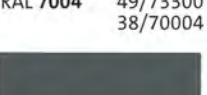
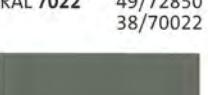
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Chemistry

Color Group  
(starting with)

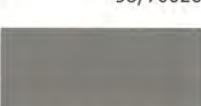
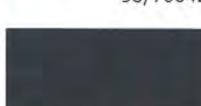
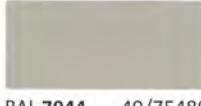
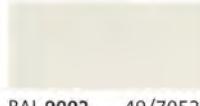
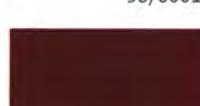
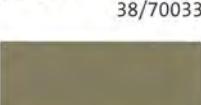
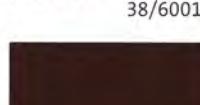
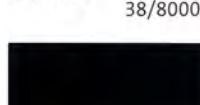
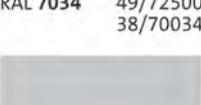
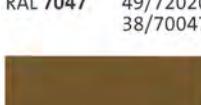
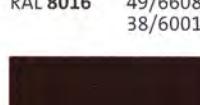
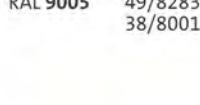
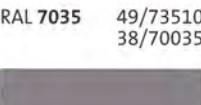
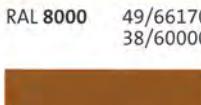
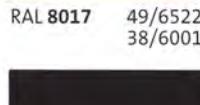
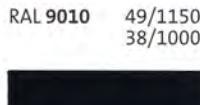
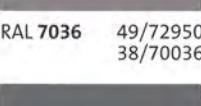
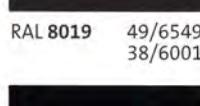
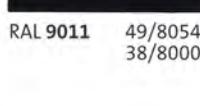
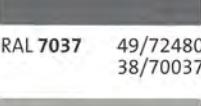
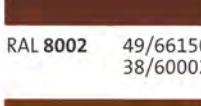
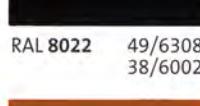
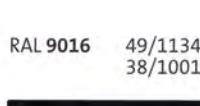
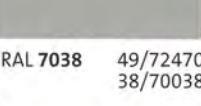
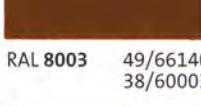
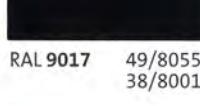
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16 Acrylic Hybrid	2 Yellow / Orange
28 Super Durable Polyester TGIC (for approved applicators only)	3 Red
39 Polyester TGIC	4 Blue
44 Polyurethane	5 Green
49 Polyester TGIC	6 Brown
59 Polyester TGIC-Free	7 Grey
69 Epoxy	8 Black
75 Fluoropolymer (for approved applicators only)	9 Metallic
89 Polyester/Epoxy Hybrid, Low/Fast Cure	

					
RAL 1000 49/15200 38/15000	RAL 1015 49/15320 38/15015	RAL 1033 49/22240	RAL 2012 49/24690	RAL 3014 49/31080	RAL 4004 49/31020 38/30024
					
RAL 1001 49/15190 38/15001	RAL 1016 49/22520 38/20016	RAL 1034 49/23910	RAL 3000 49/33120 38/30000	RAL 3015 49/33670	RAL 4005 49/42780
					
RAL 1002 49/22590 38/20002	RAL 1017 49/22510 38/20017	RAL 1037 49/20096	RAL 3001 49/31120 38/30001	RAL 3016 49/31980 38/30016	RAL 4006 49/32090
					
RAL 1003 49/22580	RAL 1018 49/21830 38/20018	RAL 2000 49/24570	RAL 3002 49/31110 38/30002	RAL 3017 49/31060	RAL 4007 49/32540 38/30025
					
RAL 1004 49/22570 38/20004	RAL 1019 49/13660 38/15019	RAL 2001 49/24560 38/23170	RAL 3003 49/31100 38/30003	RAL 3018 49/31050	RAL 4008 49/32280
					
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RAL 1013 49/11280 38/10013	RAL 1028 49/22460	RAL 2010 49/24520 38/25001	RAL 3012 49/31940 38/30012	RAL 4002 49/31030 38/30008	RAL 5003 49/42230 38/40003
					
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RAL 5005 49/43190 38/40010	RAL 5019 49/42360 38/40019	RAL 6006 49/52870 38/50006	RAL 6016 49/51020 38/50016	RAL 6027 49/50990 38/50027	RAL 7006 49/72580 38/70006
					
RAL 5007 49/42250 38/40007	RAL 5020 49/44270 38/40018	RAL 6007 49/52860 38/50007	RAL 6017 49/52780 38/50017	RAL 6028 49/52650 38/50028	RAL 7008 49/72570 38/70008
					
RAL 5008 49/42260 38/40008	RAL 5021 49/41190 38/40021	RAL 6008 49/53240 38/50008	RAL 6018 49/52720 38/50018	RAL 6029 49/52640 38/50029	RAL 7009 49/72770 38/70009
					
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RAL 5017 49/40760 38/40017	RAL 6004 49/50980 38/50004	RAL 6014 49/52800 38/50014	RAL 6025 49/52670 38/50025	RAL 7004 49/73300 38/70004	RAL 7022 49/72850 38/70022
					
RAL 5018 49/41140 38/40020	RAL 6005 49/50670 38/50002	RAL 6015 49/52790 38/50015	RAL 6026 49/52660 38/50026	RAL 7005 49/72590 38/70005	RAL 7023 49/72530 38/70023



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	RAL 7024 49/72870 38/70024		RAL 7040 49/75470 38/70046		RAL 8007 49/66120 38/60007		RAL 8025 49/66050 38/60025
	RAL 7026 49/72880 38/70026		RAL 7042 49/73250 38/70042		RAL 8008 49/66110 38/60008		RAL 8028 49/66500 38/60028
	RAL 7030 49/72890 38/70027		RAL 7043 49/72460 38/70043		RAL 8011 49/66100 38/60011		RAL 9001 49/10016 38/10001
	RAL 7031 49/72520 38/70031		RAL 7044 49/75480 38/70044		RAL 8012 49/66090 38/60012		RAL 9002 49/70520 38/10002
	RAL 7032 49/72910 38/70001		RAL 7045 49/77890 38/70045		RAL 8014 49/65230 38/60010		RAL 9003 49/11400 38/10003
	RAL 7033 49/72510 38/70033		RAL 7046 49/72010 38/70002		RAL 8015 49/63040 38/60015		RAL 9004 49/81950 38/80004
	RAL 7034 49/72500 38/70034		RAL 7047 49/72020 38/70047		RAL 8016 49/66080 38/60016		RAL 9005 49/82830 38/80010
	RAL 7035 49/73510 38/70035		RAL 8000 49/66170 38/60000		RAL 8017 49/65220 38/60017		RAL 9010 49/11500 38/10004
	RAL 7036 49/72950 38/70036		RAL 8001 49/66160 38/60005		RAL 8019 49/65490 38/60019		RAL 9011 49/80540 38/80001
	RAL 7037 49/72480 38/70037		RAL 8002 49/66150 38/60002		RAL 8022 49/63080 38/60022		RAL 9016 49/11340 38/10010
	RAL 7038 49/72470 38/70038		RAL 8003 49/66140 38/60003		RAL 8023 49/66070 38/60023		RAL 9017 49/80550 38/80017
	RAL 7039 49/71020 38/70039		RAL 8004 49/66130 38/60004		RAL 8024 49/66060 38/60024		RAL 9018 49/72490 38/10018

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