SECTION 076113

standing seam sheet metal ROOFING

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***NOTE TO SPECIFIER***

*Use this Specification Section for Mail Processing Facilities.*

***This is a Type 1 Specification with completely editable text; therefore, any portion of the text can be modified by the A/E preparing the Solicitation Package to suit the project.***

*For Design/Build projects, do not delete the Notes to Specifier in this Section so that they may be available to Design/Build entity when preparing the Construction Documents.*

*For the Design/Build entity, this specification is intended as a guide for the Architect/Engineer preparing the Construction Documents.*

*The MPF specifications may also be used for Design/Bid/Build projects. In either case, it is the responsibility of the design professional to edit the Specifications Sections as appropriate for the project.*

*Text shown in brackets must be modified as needed for project specific requirements.* *See the “Using the USPS Guide Specifications” document in Folder C for more information.*

*The last date that USPS revised this standard specification section occurs in two places, at the end of this section and in the Table of Contents. If the date in this section matches the date in the Table of Contents, then you are using the latest version. Do not delete or revise the “last revised” date at the end of the section during the development of the Project Manual.*

*The footer in this section should be edited to replace the text, “USPS MPF SPECIFICATION” with the project name, and the blank date in the center should be replaced with the submission date, for interim design reviews, or the issue date of the completed Project Manual.*

Use this section where standing seam sheet metal roofing is selected as the roofing system. Standing seam sheet metal roofing systems are acceptable with restrictions for steep slope applications at facilities with a “Critical” or “Non-Critical” building designation. Discuss the use of standing seam sheet metal roofing with the USPS Project Manager prior to specifying. An approved deviation letter may be required prior to specifying a standing seam sheet metal roofing system.

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# PART 1 - GENERAL

# 1.1 SUMMARY

## A. This Section includes requirements related to the installation of standing seam sheet metal roofing, flashings, and related accessories.

# 1.2 RELATED SECTIONS

## A. Section 013300 – Submittal Procedures

B. Section 016000 – Product Requirements

C. Section 079200 – Joint Sealants

D. Related Documents: The Contract Documents, as defined in Section 011000 - Summary of Work, apply to the Work of this Section. Additional requirements and information necessary to complete the Work of this Section may be found in other documents.

# 1.3 ALTERNATES

## A. Provide an alternate price for the 20-Year Total System Warranty described in paragraph 1.9A.

# 1.4 REFERENCES

## A. Reference standards of the following sources are applicable to products and procedures specified in Part 2 - Products and Part 3 – Execution of this Section:

### 1. American Architectural Manufacturers Association

#### a. AAMA 621 – Voluntary Specifications for High Performance Organic Coatings on Coil Coated Architectural Hot Dipped Galvanized (HDG) & Zinc-Aluminum Coated Steel Substrates

### 2. American Society for Testing and Materials (ASTM)

#### a. ASTM A 792/A 792M – Standard Specification for Sheet Steel, 55% Aluminum-Zinc Alloy Coated by the Hot-Dip Process

#### b. ASTM D 1970 – Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection

#### c. ASTM B 209 – Aluminum and Aluminum Alloy Sheet and Plate

#### d. ASTM F 1667 – Standard Specification for Driven Fasteners: Nails, Spikes, and Staples

### 3. National Roofing Contractors Association (NRCA)

#### a. NRCA Roofing and Waterproofing Manual, 5th Edition

4. Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA).

 a. SMACNA Architectural Sheet Metal Manual, 7th Edition

### 5. Underwriters Laboratories, Inc. (UL)

#### a. UL 2218 - Impact Resistance of Prepared Roof Covering Materials

#### b. UL 580 - Tests for Uplift Resistance of Roof Assemblies

# 1.5 SUBMITTALS

A. Prior to the start of work, submit the following to USPS for approval:

1. Product submittals required within Section 013300.

B. Refer to Section 013300 for procedural requirements related to the submittal process.

# 1.6 QUALITY ASSURANCE PROCEDURES

A. Applicator Qualifications: A qualified firm that is approved, authorized, or licensed by roofing system manufacturer to install manufacturer’s product and that is eligible to receive a manufacturer’s warranty. Company shall have a minimum of 5 years documented experience certified by roofing system manufacturer.

B. Single Source Responsibility: Roofing system materials and components shall be supplied and warranted by roofing system manufacturer for specified roofing system and shall be in compliance with specified regulatory requirements.

C. Examine the technical specifications and drawings. Verify all dimensions, detail conditions, roof plan notes and existing site conditions that may affect the work. Verification of existing dimensions and site conditions is the responsibility of the Contractor. No additional compensation will be considered for failure to verify existing dimensions, detail conditions, roof plan note callouts, and existing site conditions.

D. Upon examination, if conflicts between the technical specifications and drawings, and those of federal, state or local regulatory agencies, the product manufacturer, industry roofing standards, or USPS-mandated requirements are discovered, notify USPS immediately for resolution.

E. During work, if conditions are discovered which do not allow for continuation of the work per the technical specifications and drawings, notify USPS immediately for resolution.

## F. Refer to manufacturer minimum slope requirements for the standing seam sheet metal system selected for use. Do not install standing seam sheet metal roof systems on slopes less than 2-inches per foot.

1.7 DELIVERY, STORAGE AND HANDLING

A. Refer to Section 016000 for transport, handling, storage and product requirements.

B. Deliver materials in manufacturer's original containers, dry, undamaged, seals and labels intact.

C. Store materials in weather protected environment, clear of ground and moisture. Cover insulation, roofing materials, and other moisture-sensitive products with a canvas tarp.

D. Protect adjacent materials and surfaces against damage from roofing work. Do not store materials on previously completed roofing.

# 1.8 ENVIRONMENTAL REQUIREMENTS

## A. Do not perform work during inclement weather. Refer to product manufacturer for outdoor temperature requirements for installation of materials. Do not install materials at times when the outdoor temperature does not fall within the minimum/maximum temperature requirements of the manufacturer.

B. Cold weather precautions:

### 1. NOTE: Do not install standing seam sheet metal roofing at temperatures below 32°F (0°C).

### 2. When the outside temperature is forecast to fall below 40°F (5°C), store unused materials in a heated location. Remove these materials only when ready for installation.

### 3. Do not install self-adhering membrane when the temperature of the outside air, self-adhering membrane, or roof deck are below 40°F (5°C).

### 4. Refer to the sheet metal roofing panel manufacturer and NRCA requirements and recommendations for additional cold weather application requirements and restrictions.

## C. Material Safety Data Sheets (MSDS) of all specified products shall remain on site for the duration of this project.

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***NOTE TO SPECIFIER***

*Per discussions between the designer and USPS Project Manager, determine the warranty requirements for the project. Choose from the following warranty options and actions:*

*1. If an alternate price for a 20-year “Total System, Non-Pro-Rated Warranty” is specified, do not edit paragraph 1.9A.*

*2. If a 20-year “Total System, Non-Pro-Rated Warranty” will be included in the base proposal, DELETE ”an alternate price for” from paragraph 1.9A.*

*3. If no warranty is specified, EDIT the title of Article 1.9 (DELETE the words “MANUFACTURER WARRANTY AND”), and DELETE paragraph 1.9A. The two-year contractor guarantee shall remain in place.*

*Re-letter/number paragraphs and sub-paragraphs after editing.*

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1.9 MANUFACTURER WARRANTY AND GUARANTEE

A. Provide an alternate price for a manufacturer 20-Year Total System, Non-Pro-Rated Warranty (including insulation, roofing membrane, and flashings) covering materials and labor. The warranty shall include the following additional items:

a. Roofing inspection by a technical representative of the roofing membrane manufacturer 22-24 months after date of Final Acceptance.

b. Roofing manufacturer will provide unlimited repairs during warranty period with no cost limitation.

c. Temporary emergency repairs may be made by United States Postal Service without voiding any warranty provisions.

d. Attach copy of Record Document Roof Plan Drawings, Roof Detail Drawings, and Record Standing Seam Sheet Metal Roofing Specification Section to Warranty.

B. The Contractor shall provide a two-year guarantee. At a minimum, the guarantee shall include the following:

1. Contractor name, address, phone number and project contact name.

2. The project completion date, and date of guarantee expiration.

3. The guarantee shall include, in writing, all project work, workmanship, and/or all materials installed by the Contractor or subcontractors to be of a quality that will comply with all project specific requirements of the Construction Documents and other documents governing the Work and workmanship through the guarantee period.

4. Investigate roof leaks during the guarantee period within a reasonable time period, but in no instance greater than 24-hours after notification of a leak. Repair leaks determined to be the cause of the Work at no cost to USPS.

# PART 2 – PRODUCTS

# 2.1 STANDING SEAM SHEET METAL ROOFING SYSTEM SUMMARY

## A. Acceptable sheet metal roofing panel manufacturers: Manufacturers offering panels meeting the requirements listed in Item 2.2.

## B. Selected products, when used within the specified roof assembly, must be capable of meeting the warranty requirements listed in Article 1.9.

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***NOTE TO SPECIFIER***

*Underlayment requirements:*

*1. If an architectural standing seam sheet metal system is specified (a continuous underlying substrate, such as a plywood deck, is present), do not edit Article 2.2 below.*

*2. If a structural standing seam sheet metal system is specified (the system will be installed directly over structural steel purlins), DELETE Article 2.2 below.*

*Re-number Articles, if necessary, after editing.*

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# 2.2 UNDERLAYMENT

## A. Self-adhering membrane: Product approved for use in high-temperature conditions by the underlayment manufacturer and sheet metal panel manufacturer, and meeting the following criteria:

### 1. Meeting the requirements of ASTM D 1970.

### 2. Approved for use as an underlayment for standing seam sheet metal roofing.

### 3. A 40-mil minimum membrane thickness.

B. For use over self-adhering membrane:

1. Red rosin paper; 36-inch width, minimum; 3 pounds per 100 square feet, minimum.

# 2.3 SHEET METAL ROOF PANELS

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***NOTE TO SPECIFIER***

*Underlayment requirements:*

*1. If an architectural standing seam sheet metal system is specified (a continuous underlying substrate, such as a plywood deck, is present), DELETE “and/or structural” from paragraph 2.3A, and DELETE sub-paragraph 2.3.A.2 below.*

*2. If a structural standing seam sheet metal system is specified (the system will be installed directly over structural steel purlins), DELETE “architectural and/or” from paragraph 2.3A, but do not edit sub-paragraph 2.3.A.2 below.*

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## A. Product type: Factory-formed, prefinished galvanized steel, minimum 22-gauge architectural and/or structural sheet metal roof panels; conforming to ASTM A 792/A 792M. Fabricated to allow for a minimum 1-3/4 inch high standing seams 18-inches o.c. maximum, or as recommended by the sheet metal roofing panel manufacturer for this application. Factory-fabricated “ready to use” for field assembly.

### 1. Panels shall be capable of spanning the structural purlins spacing.

## B. Panel finish: Kynar 500 coated, with a factory-applied top side film thickness of 0.70 to 0.90 mil over a 0.25 to 0.30 mil prime coat to provide a total dry film thickness of 0.95 to 1.25 mil, to meet AAMA 621. Underside of panel shall be coated with a primer with a dry film thickness of 0.25 mil. Finish shall conform to all tests for adhesions, flexibility and longevity as specified by Kynar 500 supplier. Standard color as determined by USPS.

## C. Impact Resistance: Conforming to the requirements of UL 2218.

## D. Wind uplift: Conforming to the requirements of UL 580, and capable of obtaining a UL Class 90 rating for wind uplift.

# 2.4 CLIPS

## A. System clips: Concealed; size, type, and configuration as necessary to match roof system type. Product manufactured by or approved by the sheet metal panel manufacturer.

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***NOTE TO SPECIFIER***

*Underlayment requirements:*

*1. If an architectural standing seam sheet metal system is specified (a continuous underlying substrate, such as a plywood deck, is present), do not edit paragraph 2.5.A below.*

*2. If a structural standing seam sheet metal system is specified (the system will be installed directly over structural steel purlins), DELETE paragraph 2.5.A below.*

*Re-number/letter paragraphs and sub-paragraphs, if necessary, after editing.*

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# 2.5 FASTENERS

## A. For fastening red rosin paper:

### 1. Staples; size as necessary to hold red rosin paper in place prior to installation of standing seam sheet metal roof system.

## B. For fastening of sheet metal clips:

### 1. Fastener type compatible with the substrate encountered and approved for use in this application by the sheet metal panel manufacturer.

## C. For fastening of other sheet metal accessories:

### 1. Fastener type compatible with the substrate encountered and approved for use in this application by the sheet metal panel manufacturer. Provide neoprene washers where shown on drawings.

# 2.6 SHEET METAL AND FLASHING ACCESSORIES

## A. Rake edges, perimeter fascia, fascia extensions, hip and ridge flashings, expansion joints and counterflashings: Prefinished galvanized steel: Kynar 500 coating, 24-gauge; color as selected by USPS.

### 1. Fabricate to the dimensions and configurations indicated on the drawings.

## B. Continuous cleats: Galvanized steel; G 90, hot-dipped zinc-coated sheet steel, 22-gauge, minimum.

C. Gutters: Prefinished galvanized steel, 24-gauge, with Kynar 500 coating. Fabricate gutters to match dimensions indicated on the drawings; fabricate in 10-foot sections, with a 4-inch flange with a 1/2-inch hug at the inner edge of the gutter flange.

1. Gutter spacers: Painted galvanized steel, 1-inch wide by 1/8-inch thick; seal and secure to gutter as shown on drawings. Paint color to match gutter.

D. Scuppers:

1. Scupper liners: Stainless steel, 22-gauge. Fabricate scupper flashings in accordance with the “SMACNA Architectural Sheet Metal Manual, 7th Edition”, Figures 1-26, 1-28, 1-29 and 1-30. Provide a 4-inch flange with a 1/2-inch hug at the inner edge of the scupper

flange. Solder all seams watertight.

2. Conductor boxes and scupper closure plates: Stainless steel, 22-gauge. Solder all seams watertight. Fabricate these components in accordance with the drawings, and the requirements outlined in the “SMACNA Architectural Sheet Metal Manual, 7thEdition”.

E. Conductor box fascia covers: Prefinished galvanized steel, 24-gauge, with Kynar 500 coating; standard prefinished color as selected by USPS.

F. Downspouts, associated with gutters and scuppers: Prefinished galvanized steel, 24-gauge, with Kynar 500 coating; standard prefinished color as selected by USPS. Fabricate downspouts with a “Pittsburgh Lock” seam, and in accordance with the drawings and “SMACNA Architectural Sheet Metal Manual, 7th Edition”, Figures 1-32B and 1-32F; size the hangers to match downspouts.

## G. Apron, wall and cricket flashing (related to rooftop curbs, chimneys and other square

## penetrations: Prefinished galvanized steel: Kynar 500 coating, 24-gauge; color as selected by USPS.

### 1. Fabricate to the dimensions and configurations indicated on the drawings.

## H. Plumbing vent and tubular penetration flashings: Metal flashing with flanged sleeve with hood, prefabricated flashing with elastomeric collar, or other product type manufactured by, or approved by the sheet metal panel manufacturer.

### 1. For sheet metal plumbing vent and tubular penetration flashings with flange and sleeve and hood:

#### a. Clamp: Stainless steel plumbers clamp, size as necessary to tightly secure hood.

# 2.7 MISCELLANEOUS MATERIALS

## A. Ventilation accessories, including ridge vents, soffit vents and other rooftop vents:

### 1. Provide accessories manufactured by, or approved by, the sheet metal roofing manufacturer, if required.

## B. For use at sheet metal flashing strip-ins, and where indicated on drawings:

### 1. Pressure-sensitive EPDM flashing material; non-reinforced, nominal 60-mil thickness, black color. Type acceptable to asphalt shingle roofing manufacturer for specific flashing conditions encountered. Minimum 5-inch width.

### 2. Primer: Type compatible with pressure-sensitive EPDM flashing and acceptable to the sheet metal panel manufacturer.

## C. Butyl tape: for use behind counterflashing flanges and other locations indicated where indicated on the drawings. Width and thickness as necessary to create a seal between the existing substrate and secured counterflashing.

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***NOTE TO SPECIFIER***

*Snow Retention:*

*1. At project locations where excessive, accumulating snow is possible, the designer/specifier must consider the use of a snow retention system. If such a system is determined to be necessary for the project location, do not edit Article 2.8.*

*2. If a snow retention system is not determined to be necessary for the project location, or cannot be installed due to the potential of increased structural load on the building structure, DELETE Article 2.8.*

*NOTE: A structural analysis should be performed prior to specifying a snow retention system to ensure a structure’s capability to support potential additional load from accumulated snow.*

*Re-number/letter Articles, paragraphs and sub-paragraphs, if necessary, after editing.*

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# 2.8 SNOW RETENTION SYSTEM

## A. Provide a snow retention system:

### 1. The snow retention system shall be approved for use by the sheet metal panel manufacturer.

### 2. Snow retention system standing seam clamps: Product such as “S-5! Clamps”, manufactured by S-5! Attachment Solutions – Metal Roof Innovations, Ltd., Colorado Springs, CO. Clamp size and configuration as necessary to accommodate standing seam size and profile. Product shall be approved by USPS prior to use.

### 3. Snow retention system: Snow retention system appropriate for the anticipated snow accumulation at the project location. Products such as “Sno-Rail/Sno-Fence” and “Sno-Clip”, manufactured by Alpine SnowGuards, Morissville, VT.

# 2.9 SEALANT

## A. Refer to Section 079200.

# PART 3 - EXECUTION

# 3.1 GENERAL

## A. Refer to Section 024100 for general work and substrate preparation requirements.

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***NOTE TO SPECIFIER***

*Underlayment Requirements:*

*1. If an architectural standing seam sheet metal system is specified (a continuous underlying substrate, such as a plywood deck, is present), do not edit Article 3.2 below.*

*2. If a structural standing seam sheet metal system is specified (the system will be installed directly over structural steel purlins), DELETE Article 3.2 below.*

*Re-number Articles, if necessary, after editing.*

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# 3.2 UNDERLAYMENT INSTALLATION

## A. Install self-adhering membrane: Follow installation requirements of the underlayment manufacturer.

## B. Install one ply of red rosin sheathing paper. Secure to the deck as necessary to hold in place.

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***NOTE TO SPECIFIER***

*Underlayment Requirements:*

*1. If an architectural standing seam sheet metal system is specified (a continuous underlying substrate, such as a plywood deck, is present), do not edit sub-paragraph 3.3.A.1 below.*

*2. If a structural standing seam sheet metal system is specified (the system will be installed directly over structural steel purlins), delete “including underlayments,” from sub-paragraph 3.3.A.1.*

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# 3.3 STANDING SEAM SHEET METAL ROOFING INSTALLATION

## A. Roof system general installation instructions:

### 1. Except as may be modified by these specifications and drawings, install the specified sheet metal roof panel system, including underlayments, in accordance with the requirements and recommendations of the manufacturer, using the manufacturer’s

### current printed instructions, the recommendations outlined in the NRCA “Roofing and Waterproofing Manual, 5th Edition”, and the recommendations outlined in the “SMACNA Architectural Sheet Metal Manual, 7th Edition”.

### 2. Panels shall be installed plumb and true in a proper alignment and in relation to the existing structural framing. If necessary, use chalk lines as visible guides to ensure the proper alignment of the panels.

### 3. Install sheet metal panel clips as required to secure the standing seam sheet metal panel system to the underlying substrate, and to allow movement of the roof system. Follow the requirements and recommendations of the sheet metal panel manufacturer. Install a minimum of two fasteners per clip.

# 3.4 SHEET METAL FLASHING INSTALLATION

## A. Rake edges perimeter fascias and fascia extensions:

### 1. Continuous cleats: Provide continuous cleats where indicated on drawings. Secure the horizontal flange and vertical face of the continuous cleat with ring shank coated nails 12-inches on center, max. Decrease fastener spacing to 6-inches o.c., max. within 10-feet of a building corner.

### 2. Drip edges, fascia and fascia extensions: Place the drip edge, fascia or fascia extension. Hook the fascia to the underlying continuous cleat. Secure the flange with nails 3-inches o.c. in two staggered rows as indicated on the drawings.

## B. Hip and ridge flashings:

### 1. Fabricate and install hip and ridge caps as indicated on the drawings. Follow the recommendations and requirements of the sheet metal panel manufacturer.

## C. Expansion joints:

### 1. Fabricate and install expansion joint flashings as indicated on the drawings.

## D. Counterflashings: Install counterflashings at locations indicated on the drawings as follows:

### 1. Install continuous butyl tape behind vertical face of counterflashing.

### 2. Secure counterflashings with fasteners spaced as indicated on drawings.

### 3. Provide a continuous bead of sealant along the top edge of surface-mounted counterflashings to shed water and provide a watertight seal.

## E. Slip counterflashings: Install slip counterflashings at locations where existing sheet metal counterflashings cannot be lifted or removed, and at other locations indicated on the drawings as follows:

### 1. Install continuous butyl tape behind vertical face of counterflashing.

### 2. Secure counterflashings with fasteners spaced as indicated on drawings.

F. Gutters and downspouts:

1. Install the specified gutter spacers 24-inches o.c. Seal and secure the spacers to the gutter assembly as indicated on the drawings.

2. Overlap individual gutter sections 1-1/2 inches. Seal overlap, and pop-rivet sections together with two rows of pop rivets. Space pop rivets 1/2-inch min., and 3/4-inches max. in each row. Completed gutter sections shall not exceed 50-feet in length.

3. Secure the flange with nails 3-inches o.c. in two staggered rows.

4. Gutter expansion joints: Provide gutter expansion joints at locations recommended by SMACNA; fabricated following the recommendations of SMACNA.

5. Downspouts: Install downspouts at locations indicated on drawings. Secure downspouts in accordance with the “SMACNA Architectural Sheet Metal Manual, 7th Edition”, Figure 1-35A, using fasteners appropriate for the substrate encountered.

a. Terminate the base of downspouts to match existing condition, unless indicated otherwise on the drawings.

G. Scupper liners, closure plates, conductor boxes and downspouts:

1. Scupper liners: Install scupper liners at through-fascia, through-wall, and overflow scupper locations indicated on the drawings. Install scupper liners following the requirements and recommendations of SMACNA.

2. Cover plates: At the exterior face of the scupper, install cover plates. Install scupper cover plates as indicated on the drawings and following the requirements and recommendations of SMACNA.

3. Conductor boxes: Where indicated on the drawings, install conductor boxes as indicated on the drawings, and following the requirements and recommendations of SMACNA.

4. Downspouts: Install downspouts at conductor boxes. Secure downspouts in accordance with the “SMACNA Architectural Sheet Metal Manual, 7th Edition”, Figure 1-35A, using fasteners appropriate for the substrate encountered.

a. Terminate the base of downspouts to match existing condition, unless indicated otherwise on the drawings.

5. Install conductor box fascia covers as indicated on the drawings. Fully clip fascia covers to stainless steel conductor boxes, or secure to substrate with fasteners appropriate for the substrate encountered.

H. Apron, side, and cricket flashings:

### 1. Install apron and backer/cricket flashings at roof curbs, chimneys, wall terminations, locations indicated on drawings, and at locations recommended by the sheet metal panel manufacturer.

#### a. At penetrations greater than 24-inches, roof slopes greater than 6:12 (27 degrees), when a large volume on snow or ice could accumulate behind a roof penetration or when the average January temperature is 30°F (-1°C) or lower, install cricket flashings in lieu of backer flashings behind roof penetrations.

#### b. Where cricket widths exceed 18-inches, provide wood framing and plywood support beneath sheet metal cricket flashing.

#### c. Secure apron and backer/cricket flashings to the underlying substrate with fasteners appropriate to the substrate.

## I. Tubular penetration flashing: Flash round pipe penetrations with a manufacturer recommended pipe flashing boot and specified watertight hood.

### 1. Flash tubular penetration where indicated on drawings. Follow asphalt shingle manufacturer recommendations and requirements.

### 2. Hood and drawband: Where a flanged sleeve sheet metal flashing is used, install a stainless steel hood over the fanged sleeve; solder all seams watertight. Secure a stainless steel drawband around the top of each hood to secure the hood to the penetration. Seal the top of the drawband and hood.

# 3.5 MISCELLANEOUS INSTALLATIONS/TREATMENTS

## A. Install ventilation accessories, including ridge vents, soffit vents and other rooftop vents at

## locations indicated on the drawings, or recommended by the sheet metal panel manufacturer

## following the printed instructions of the manufacturer.

## B. Sheet metal flashing strip-ins:

### 1. Install specified strip-in where indicated on drawings.

## C. Butyl tape:

### 1. Install specified butyl tape behind counterflashings where indicated on drawings.

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***NOTE TO SPECIFIER***

*Snow Retention:*

*1. If a snow retention system is to be included on the project, do not edit Article 3.6.*

*2. If a snow retention system is not included on the project, DELETE Article 3.6.*

*NOTE: A structural analysis should be performed prior to specifying a snow retention system to ensure a structure’s capability to support potential additional load from accumulated snow.*

*Re-number/letter Articles, paragraphs and sub-paragraphs, if necessary, after editing.*

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# 3.6 SNOW RETENTION SYSTEM INSTALLATION

## A. Install the snow retention system following the recommendations and requirements of the standing seam sheet metal panel and snow retention system manufacturers.

END OF SECTION

USPS MPF Specification Last Revised: 10/1/2022