
SECTION 07600 - FLASHING AND SHEET METAL

PART 1 - GENERAL

1.01 Description

Furnish and install the National Sheet Metal System Fascia/Snap-On (Flat) Coping as manufactured by National Sheet Metal Systems, Inc., in accordance with manufacturer's printed instructions and specifications.

- B. RELATED WORK: Metal work other than the furnished fascia/coping/flashing system _____ (manufactured by National Sheet Metal Systems, Inc.) is not covered by any warranties either expressed or implied unless so stated in writing. Related work must be installed and secured so as not to interfere with the performance of the fascia/coping/flashing system _____. Related work specified in other sections:
1. Flashing and sheet metal.
 2. Rough carpentry.
 3. Roofing.
 4. Structural steel and light gauge framing.
- C. For further information, reference National Sheet Metal System's current product catalog.

1.02 QUALITY ASSURANCE

- A. Installing membrane contractor shall be responsible for the installation of the fascia/coping/flashing system _____ in general accordance with the membrane manufacturer's recommendations.
- B. Provide fascia/coping/flashing system _____ which *meets* the criteria recommended by Factory Mutual Research Corporation's (FMRC) requirements for Roof Perimeter Flashing for use in Zone 1 and Zone 2 Windstorm Resistance Areas as defined in FME & R Loss Prevention Data Sheet 1-7 and 1-49.
- C. Edge details shall meet the design requirements set forth by SPRI's (Single Ply Roofing Institute) - "Wind Design Guide For Use With Low Slope Roofing."
1. Anticipated design pressures calculated for edge systems on the project are _____.

2. Certify that perimeter metal edge systems furnished meet the above pressures as tested using SPRI test method RE-2 or RE-3 test methodology.
3. Further certify that membrane attachment by perimeter edge systems exceeds 100 lbs/ft of force as tested by SPRI test method RE-1.

D. APPLICABLE STANDARDS:

1. American Society for Testing and Materials (ASTM) as referenced herein.
2. National Roofing Contractors Association (NRCA) "Roofing and Waterproofing Manual", third edition.
3. Single Ply Roofing Institute (SPRI) "Wind Design Guide For Use With Low Slope Roofing", April 1994.
4. Sheet Metal and Air Conditioning National Association, Inc. (SMACNA), "Architectural Sheet Metal Manual", fifth edition 1993.

E. WARRANTY CERTIFICATION (if applicable): Installing contractor shall certify that the fascia/coping/flashing system _____ has been installed per National Sheet Metal System's printed details and specifications.

F. CHANGES: Changes or alterations in the fascia/coping/flashing system _____ without prior written consent from National Sheet Metal Systems shall render the system unacceptable for warranty(ies).

G. When several products or manufacturers are specified as being acceptable, Contractor has the option of choosing among those named. When either a single named product or system is specified, substitutions will be allowed only if the specified product or system becomes unavailable through no fault of the Contractor.

1.03 SUBMITTALS

- A. Prior to the start of installation, the installing contractor shall furnish details showing size(s) of fascia/coping/flashing required plus the thickness (es) of treated wood nailer(s) or substrate to be used. Drawings should include building location, height and details of any related sheet metal work involved. Shop drawings: Show the layout of wall sections, attachment, joint details, subgirt locations, trim flashing, accessories and air infiltration seals.
- B. Product Data: Provide manufacturer's technical literature showing material types, finishes and gauges.
- C. Design Calculations: Submit manufacturer's certification their product *meets* Factory Mutual Research Corporation's (FMRC) requirements for Roof Perimeter Flashing for use in Zone 1 and

Zone 2 Windstorm Resistance Areas as defined in FME & R Loss Prevention Data Sheet 1-7 and 1-49 design recommendations, and meets the wind resistance requirements in item 1.02 C above.

1.04 DELIVERY AND STORAGE

- A. All fascia/coping/flashing system _____ materials shall be delivered with appropriate identification labels, warnings and storage recommendations.
- B. All fascia/coping/flashing system _____ materials shall be stored in a clean, dry location prior to installation to prevent any damage to the contents. Store materials off the ground and protect from damage and deterioration as required by the material manufacturer.
- C. Handle materials to prevent damage to their surfaces, edges and ends of metal items. Damaged material shall be rejected and immediately removed from the site.

1.05 PRECAUTIONS

- A. Fascia/coping/flashing sections furnished with strippable protective vinyl masking should have film removed immediately before installation to prevent damage to the coating if left exposed to the ultra-violet rays of sunlight.
- B. During installation of fascia/coping/flashing system _____, installers shall wear protective eyewear to prevent eye injury.

1.06 WARRANTY

- A. All National Sheet Metal System's products are warranted to be free of defects in material and workmanship for a period of five (5) years from date of shipment. At our option, National Sheet Metal Systems will entertain requests for alternate product warranties on a per-job basis. Product modification may be required to adapt to a project's geographic location, building height, or geometry. Product liability is limited to the repair or replacement of National Sheet Metal Systems furnished materials, provided printed installation instructions have been followed. Provide at no additional charge to the owner the manufacturer's Twenty (20) year finish warranty (for standard coil-coated Kynar 500 colors) against peeling, chalking, fading, checking and crazing, commencing upon the date of substantial completion. No other warranties either expressed or implied are acceptable unless so stated in writing.
- B. National Sheet Metal Systems, Inc. reserves the right to make changes or to amend any of the information contained in current publication, whether to present new information obtained, or as needed to conform to a specific project, job or climatic condition.

PART 2 - PRODUCTS

2.01 MANUFACTURER

General: Subject to compliance with the specified requirements, all perimeter edge metal components shall be furnished by: National Sheet Metal Systems, Inc., 2964 Alcove Drive, Scottdale, GA 30079, Ph# 877-438-6385, Fx# 866-298-6767, or approved equal.

A. Fascia/Coping/Flashing

1. National Sheet Metal Systems, Inc. Fascia System _____, Coping System _____, Flashing System _____ to be a decorative, formed steel or aluminum sheet metal system to terminate the roofing membrane at the perimeter; for use with stone ballasted, mechanically attached or adhered single-ply roofing systems, and/or built-up or modified roofing assemblies. Sizes and dimensions as shown on architectural drawings/plans. The system shall be installed watertight using concealed splice plates. All fascia / coping / flashing covers to be installed over galvanized waterdam, continuous cleats or anchor chairs furnished by the manufacturer. Color(s) to be selected from manufacturer's standard color selection.

B. Performance Characteristics:

1. Specified product(s) shall firmly terminate membrane (where applicable), restricting wind pull-back and failure.
2. Fascia/coping/flashing cover(s) and waterdam components shall move freely with thermal cycles preventing periodic maintenance.

C. Material Gauge:

1. Fascia/coping/flashing covers to be fabricated from 28 ga., 26 ga., 24 ga., 22 ga. Steel, .032", .040", .050", .063", .080" Aluminum.
2. Waterdam components (if applicable) 26 ga., 24 ga., 22 ga. G-90 galvanized steel.

D. Standard Length of Product: 10'-0" with concealed splice plates at joints.

E. Finishes: (Aluminum) mill finish, Kynar 500 / Hylar 5000 from manufacturer's standard coil-coated colors, custom color Kynar 500 / Hylar 5000, clear or bronze anodized. (28 ga., 26 ga., 24 ga., 22 ga. Steel) G-90 unfinished galvanized, bonderized, 24 ga. and 22 ga. prefinished steel with Kynar 500 / Hylar 5000 from specified manufacturer's standard color selection.

2.03 ACCESSORIES

- A. Mitters, scuppers, and accessory items etc. shall be furnished by manufacturer; color to match above.
- B. Factory assemblies shall be furnished to maintain watertight integrity.
- C. Provide matching accessories such as extenders, brick/wall caps, gutters and downspouts, or other special fabrications from the manufacturer; color to match above.

PART 3 - EXECUTION

3.01 INSPECTION AND SUBSTRATE PREPARATION

- A. Fascia/coping/flushing installation shall not disrupt other trades. Verify that substrate is dry, clean and free of foreign matter.
- B. Prior to the installation of the fascia/coping/flushing, the installing contractor shall inspect the treated wood nailer(s) to determine suitability for attachment of the fascia/coping/flushing system thereto.
- C. Nailer(s): All horizontal wood nailer(s) to receive the fascia/coping/flushing shall be pressure treated with salt preservatives. They must be installed horizontal, true and level, free of protruding knots, splinter or other irregularities.
- D. Nailer(s) Attachment: Methods used to fasten the nailer(s) vary with jobsite conditions. However, it is essential that secure attachment of durable stock be accomplished. Factory Mutual Loss Prevention Data Sheet 1-49 (October 1979) contains proper recommendations for the attachment of nailers and spacing of fasteners.
- E. Immediately notify the owner's representative of all unacceptable conditions prior to installation of the perimeter metal system.
- F. Make all necessary corrections, repairing or replacing of substrate materials prior to the application of architectural metal. Substrate materials shall be in a suitable condition as recommended by the materials manufacturer.

3.02 INSTALLATION

- A. Submit fascia/coping/flushing installation instructions to architect or specifier for approval prior to fabrication. Strictly follow the material manufacturer's printed installation requirements. If parapet walls and perimeter nailers are to be covered with roofing membrane, follow the membrane manufacturer's installation requirements.
- B. Installer shall check as-built (jobsite) conditions and verify manufacturer's sizes and details to determine suitability before fabrication. Completed work shall be true to line without buckling,

creasing, warp or wind in finished surfaces. "Oil-canning" surfaces are not acceptable.

- C. Under no circumstances shall incompatible materials be allowed to come in contact with each other. Isolate dissimilar metals, masonry or concrete from metals using bituminous paint, tape or slip-sheet. Use gasketed fasteners where required to prevent corrosive actions.
- D. Coordinate architectural metal and roofing work to provide a suitable waterproof condition during installation.
- E. Allow sufficient clearances for expansion and contraction of linear metal components. Secure metal using continuous cleats, clips and fasteners as required by the system. No exposed face fastening shall be accepted.
- F. Maintain prefinished surfaces in undamaged condition until date of substantial completion. Repair or replace damaged components, any touch-up to be indistinguishable from undamaged surface/finish.
- G. Upon completion of work, a final inspection by the owner's representative shall be made. Any necessary corrective actions will be noted and the installing contractor shall make corrections within five (5) working days. Upon acceptance of the project, any applicable warranties shall be presented to the owner's representative.

END OF SECTION