

SECTION 07 72 00
ROOF ACCESSORIES

SPEC WRITER NOTES:

1. Use this section only for NCA projects.
2. Delete between //___// if not applicable to project. Also delete any other item or paragraph not applicable in the section and renumber the paragraphs.
3. Include standard manufactured components installed on and in roofing other than mechanical, electrical, and structural items.

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section specifies roof hatches; equipment supports; gravity ventilators; and metal grating roof walkway system.

1.2 RELATED WORK

- A. Color and texture of finish: Section 09 06 00, SCHEDULE FOR FINISHES.
- B. Sealant material and installation: Section 07 92 00, JOINT SEALANTS.
- C. General insulation: Section 07 21 13, THERMAL INSULATION.
- D. Rigid insulations for roofing: Section 07 22 00, ROOF AND DECK INSULATION.

1.3 QUALITY CONTROL

- A. All roof accessories to be the products of manufacturers regularly engaged in producing the kinds of products specified.
- B. Each accessory type to be the same and be made by the same manufacturer.
- C. Assemble each accessory to the greatest extent possible before delivery to the site.

1.4 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Samples: Provide representative sample panel of color finished aluminum sheet not less than 100 mm X 100 mm (four by four inches); provide extrusions in a width not less than section to be used. Include manufacturer's identifying label.
- C. Shop Drawings: Indicate each item specified showing design, details of construction, installation and fastenings.
- D. Manufacturer's Literature and Data: Provide for each item specified.

E. Certificates: State that aluminum has been given specified thickness of anodizing.

1.5 PRE-INSTALLATION CONFERENCE

A. Convene a meeting on site, after submittals are received and approved but before any work, to review drawings and specifications, submittals, schedule, manufacturer instructions, site logistics and pertinent matters of coordination, temporary protection, governing regulations, tests and inspections; participants to include RE/COR and all parties whose work is effected or related to the work of this section.

1.6 APPLICABLE PUBLICATIONS

A. Publications listed below form a part of this specification to extent referenced. Publications are referenced in text by the basic designation only. Comply with applicable provisions and recommendations of the following, except as otherwise shown or specified.

SPEC WRITER NOTES:

1. Remove reference citations that do not remain in Part 2 or Part 3 of edited specification.
2. Verify and make dates indicated for remaining citations the most current at date of submittal; determine changes from date indicated on the TIL download of the section and modify requirements impacted by the changes.

B. American Architectural Manufacturers Association (AAMA):

2605-11 High Performance Organic Coatings on Architectural Extrusions and Panels

C. American Society for Testing and Material (ASTM):

ASTM A653/A653M-22 Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) By the Hot-Dip Process

B209/B209M-21a Aluminum and Aluminum Alloy-Sheet and Plate

B221M-21 Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes

D. National Association of Architectural Metal Manufacturers (NAAMM):

AMP 500 Series Metal Finishes Manual

MGB 531 Metal Bar Grating Manual

PART 2 - PRODUCTS

SPEC WRITER NOTES:

1. Update materials requirements to agree with applicable requirements (types,

grades, classes) specified in the referenced Applicable Publications.

2.1 MATERIALS

- A. Aluminum, Extruded: ASTM B221/B221M.
- B. Aluminum Sheet: ASTM B209/B209M.
- C. Galvanized Sheet Steel: ASTM A653/A653M; G-90 coating.
- D. Metal Grating for Roof Walkway: NAAMM MBG 531.

2.2 ROOF HATCH (SCUTTLE)

- A. Fabricate from aluminum with mill finish.
- B. Curb and Cover:
 - 1. Exterior Facing: Minimum 2.3 mm (0.09 inch) thick sheet aluminum.
 - 2. Interior Facing: Minimum 1 mm (0.04 inch) thick sheet aluminum.
 - 3. Minimum of 25 mm (one inch) thick mineral fiber insulation between facings of cover and over exterior face of curb.
 - 4. Form exterior curb facing with an integral three-inch-wide roof flange and cap flashing minimum 2.3 mm (0.09 inch) thick sheet aluminum.

SPEC WRITER NOTES:

- 1. Do not use less than 300 mm (12 inch high) curb above roof surface. Where access is to service roof equipment comply with OSHA for stair size, roof opening 750 mm X 2400 mm (2'-6" by 8'0"). Show opening size on the drawings.
- 5. Make curb // 300 mm (12 inches) // // _____//.
- 6. Form cover to lap curb and cap flashing.
- 7. Size opening as shown.
- C. Hardware:
 - 1. Provide spring snap latch with inside and outside operating handles and padlock hasp on inside. Provide two snap latches when hinge side is over 2100 mm (7 feet) long.
 - 2. Provide pintle hinges.
 - 3. Provide automatic hold open and operating arm with enclosed torsion or compression spring lifting mechanism.
 - 4. Covers must automatically lock in the open position at not less than 70 degrees.
 - 5. Provide weatherstripping at cover closure.
 - 6. Galvanize all hardware items.
- D. Assembly:
 - 1. Completely shop assemble roof scuttle.

2. Fully weld all joints exposed to the weather and built into the roofing.
3. Finish weld smooth where exposed.
4. Operation with minimum force to open and close.

SPEC WRITER NOTES:

1. Use following article for roof mounted equipment items other than mechanical equipment items. Prefabricated roof curbs for fans, ventilators and other roof mounted mechanical items are specified in Mechanical Specifications.

2.3 EQUIPMENT SUPPORTS

- A. Fabricate equipment supports from 1.3 mm (0.0516 inch) thick galvanized steel.
- B. Form exterior curb with integral base, // and deck closures for curbs installed on steel decking. //
- C. Use galvanized steel liners for curbs having inside dimension over 305 mm (12 inches).
- D. Fabricate curb with a minimum height of 200 mm (8 inches) above roof surface.
- E. Attach preservative treated wood nailers to top of curb. Use 50 mm (2 inch) by 50 mm (2 inch) minimum nominal size on curb with openings and 50 mm (2 inch) thick, width of curb up to 300 mm (12 inches) on equipment support curbs.
- F. Make size of supports suit size of equipment furnished, with height as shown on drawings, but not less than 200 mm (8 inches) above roof surface.

SPEC WRITER NOTES:

1. Use following article for gravity type ventilators not connected to ducts. All ventilators, mechanical and gravity, that are connected to ducts are specified in Mechanical Specifications.

2.4 LOW SILHOUETTE GRAVITY VENTILATORS

- A. Fabricate base of 1 mm (0.04 inch) thick aluminum, and vent of 0.8 mm (0.032 inch) thick aluminum. Height not to exceed 300 mm (12 inches) above top of roof curb. Design ventilators to withstand 137 Km (85 miles) per hour wind velocity. Provide ventilators with a removable 18 by 18 mesh aluminum wire cloth insect screen.

- B. Construct damper of the same material as the ventilator and design to completely close opening or remain wide open. Hold damper in closed position by a brass chain and catch. Extend chains 300 mm (12 inches) below and engage catch when damper is closed.

2.5 METAL GRATING ROOF WALKWAY SYSTEM

- A. Provide metal grating roof walkway system consisting of prefabricated pans, of 14 gauge, galvanized (G-90 Coating) steel grating with slip resistant surface.
- B. Provide grating units in 600 mm (two foot) widths and in 3000 to 3600 mm (10 to 12 foot long) sections as required.
- C. Provide complete with support framing, brackets, connectors, nosings and other accessories as required for complete roof walkway system. Include support stands at minimum 1500 mm (five feet) on center to hold planks a minimum of nine inches above roof surface.
- D. Include step units, nosings framing and connectors to provide changes in elevation as required.
- E. Provide neoprene rubber pads having a shore A hardness of 80 to 90-Durometer under each support or bearing surface.

2.6 FINISH

- A. In accordance with NAAMM Amp 500 Series.
- B. Aluminum, Mill Finish: AA-MIX, as fabricated.
- C. Aluminum, Clear Finish: AA-C22A41 medium matte, clear anodic coating, // Class 1, Architectural, 0.7 mils thick. // Class II, Architectural, 0.4 mils thick.//
- D. Aluminum Colored Finish: AA-C22A42 (anodized or AA0C22A44 (electrolytically deposited metallic compound) medium matte, integrally colored coating, // Class 1, Architectural, 0.7 mils thick //. Class II, Architectural, 0.4 mils thick. Dyes will not be accepted.
- E. Fluorocarbon Finish: AAMA 2605 high performance organic coating.

SPEC WRITER NOTES:

1. Show anchorage location for items specified on drawings.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install roof specialties where shown.
- B. Secure with fasteners in accordance with manufacture's printed installation instructions and approved shop drawings unless shown otherwise.

- C. Coordinate to install insulation where shown; see Section 07 21 13, THERMAL INSULATION and Section 07 22 00, ROOF AND DECK INSULATION.
- D. Comply with section 07 92 00, JOINT SEALANTS to install sealants where manufactures installation instructions require sealant.
- E. Coordinate with roofing work for installation of items in sequence to prevent water infiltration.
 - 1. After completion of base flashing, bend down cap flashing flange and secure to blocking with screws.
 - 2. Install expansion joint cover with 6 mm (1/4 inch) wide space at end joints and tension bars at 600 mm (24 inches) on center.
 - 3. Install cover plates with formed aluminum flashing concealed and centered on joint. Lap flashing to cover not less than 100 mm (4 inches).
- F. Equipment Supports: Do not anchor to insulating concrete or metal deck. Anchor only to building structure as per manufacturer's recommendations.

3.2 PROTECTION OF ALUMINUM

- A. Provide protection for aluminum against galvanic action wherever dissimilar materials are in contact, by painting the contact surfaces of the dissimilar material with two coats of asphalt coating (complete coverage), or by separating the contact surfaces with a preformed neoprene tape having pressure sensitive adhesive coating on side.
- B. Paint aluminum in contact with wood, concrete and masonry, or other absorptive materials, which may become repeatedly wet, with two coats of asphalt coating.

3.3 ADJUSTING

- A. Adjust roof hatch hardware to operate freely and so that cover will operate without binding, close tightly at perimeter, and latch securely.

3.4 PROTECTION

- A. Protect roof accessories from damage during installation and after completion of the work from subsequent construction.

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