

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Aluminum gutters, downspouts and accessories.

1.02 - REFERENCES

- A. ASTM B32 - Solder Metal.
- B. ASTM B209 - Aluminum and Aluminum Alloy Sheet and Plate.
- C. SMACNA - Architectural Sheet Metal Manual.

1.03 - SUBMITTALS

- A. Submit under provisions of Section 013300.
- B. Product Data: Provide data on prefabricated components.
- C. Shop Drawings: Indicate locations, configurations, jointing methods, fastening methods, locations and installation details.
- D. Samples: Submit two samples, 6 inches (150 mm) long, illustrating component design, finish, color and configuration.

1.04 - REGULATORY REQUIREMENTS

- A. Conform to applicable code(s) for size and method of rain water discharge.

1.05 - DELIVERY, STORAGE AND HANDLING

- A. Deliver, store, protect and handle products to site under provisions of Section 016500.
- B. Stack preformed and prefinished material to prevent twisting, bending or abrasion, and to provide ventilation. Slope to drain.
- C. Prevent contact with materials during storage which may cause discoloration, staining or damage.

PART 2 - PRODUCTS

2.01 - MATERIALS

- A. Aluminum: ASTM B209, 3003 alloy, H14 temper; 0.032 inch thick; mill finish interior, shop pre-coated Kynar 500 or Hylar 5000 finish, color to match existing structure.

2.02 - COMPONENTS

- A. Gutters: SMACNA style profile seamless, 6 inch , style-K with matching end caps.
- B. Downspouts: SMACNA rectangular profile seamless 4 inch x 6 inch. Configure with soldered elbow offsets to provide minimal clearance to the structure while providing allowance for concealed connectors.

2.03 ACCESSORIES

- A. Anchorage Devices: Concealed Type recommended by manufacturer.
- B. Gutter Supports: Hidden flanges screwed to fascia and interlocked / fastened to the top front edge of gutter.
- C. Downspout Supports: Flat 1 1/4" min. width concealed straps matching leader profile and color.
- D. End Caps, Elbows: Fabricate to gutter profile with factory soldered connections.
- E. Fasteners: Aluminum finish exposed fasteners same as leader metal.
- F. Leaf Screen: 10 gauge welded screen, galvanized after fabrication, sized to fit and cover entire length of gutter with gaps.
- G. Primer: Zinc chromate type.
- H. Protective Backing Paint: Bituminous.

2.04 - FABRICATION

- A. Form gutters and downspouts of profiles and sizes indicated in accordance with approved shop drawings.
- B. Fabricate with required connection, expansion and splice pieces.
- C. Form sections square in required profile, true and accurate in size, in maximum possible lengths, free of distortion or defects detrimental to appearance or performance. Allow for expansion at joints and at intervals required by the manufacturer.
- D. Hem exposed edges of metal.
- E. Solder shop formed metal joints. After soldering, remove flux. Wipe and wash solder joints clean. Weather seal all field joints and intersections with adjacent materials with color matching exterior vertical grade sealant.
- F. Fabricate gutter and downspout accessories; seal watertight.

2.05 - FINISHES

- A. Apply bituminous protective backing on surfaces in contact with dissimilar materials.

PART 3 - EXECUTION

3.01 - EXAMINATION

- A. Verify that surfaces are ready to receive work.

3.02 - INSTALLATION

- A. Install gutters, downspouts and accessories in accordance with manufacturer's instructions and approved shop drawings.
- B. Slope gutters 1/8 inch per foot minimum to leader locations.

- C. Seal metal joints other than factory welded joints watertight.
- D. Provide leader strap connections at 5'-0" maximum with a minimum of at least two connections per section.
- E. All gutter hangers shall be installed and fastened at 30 inches o.c. maximum.

END OF SECTION