

SECTION 07715 - ALUMINUM GUTTERS & LEADERS

PART 1 GENERAL

1.01 DESCRIPTION

A. GUTTERS

1. Furnish and install Industrial Gutter System at upper roof and at garage alternate with accessories as manufactured by Perimeter Systems, Division of Southern Aluminum Finishing Company (SAF), or equal. Provide Profile No. G4-(R) manufactured of Aluminum .063" thickness 14 gauge, White Kynar 500 finish.
2. Gutters shall be manufactured in 10'-0" lengths, tapered and notched to provide a 1" telescoping lap joint. Gutters shall be pre-punched at 12" O.C. to provide for thermal movement after installation.
3. Provide manufacturer's standard support brackets and interior straps for installation at 30" O.C. Bracketry shall be of a compatible material to gutter, with matching finish and color.

B. DOWNSPOUTS

1. Furnish and install manufacturer's standard downspout Profile No. DS manufactured of Aluminum, .050" thickness 16 gauge, White Kynar 500 finish.
2. Downspout shall be manufactured in 10'-0" lengths, factory offset on one end to provide for a $\frac{3}{4}$ " telescope joint. Downspout shall contain a factory mounted back, which is non-sealed to allow seepage of water in overflow conditions.
3. Elbows for downspouts shall be of welded construction, with matching finish applied after welding. Such finish shall be of quality equal to finish for non-welded parts. Grinding and spray painting of parts to match will not be permitted. Elbows will be provided with a factory offset on its lower end to allow a $\frac{3}{4}$ " telescope joint.
4. Provide manufacturer's standard wall brackets of compatible material to downspout with matching finish and color.

1.02 QUALITY ASSURANCE

- A. Installing contractor shall be responsible for installing gutter system in accordance with manufacturer's printed instructions. Follow primary roofing

material manufacturer's printed instructions for installation of joining eave trims.

1.03 SUBMITTALS

- A. Prior to start of installation, the installing contractor shall furnish details or catalog cuts indicating products to be used conform to these specifications.

1.04 DELIVERY & PRECAUTIONS

- A. All products delivered shall be stored in a clean, dry location prior to installation.
- B. Products furnished with strippable protective plastic film should have film removed prior to installation. Such film coated products shall not be exposed to sunlight for more than 30 minutes without removing film.
- C. Workmen shall use diligent care to avoid damage, scars, and abrasions to product when handling. Moreover, contractor shall wear protective gloves and clothing to avoid bodily injury when handling products.

PART 2 INSTALLATION

2.01 SUBSTRATE PREPARATION

- A. All horizontal blocking to receive gutters shall be installed true and straight and free of splinters, knots, or other irregularities. Follow local building codes or Factory Mutual Loss Prevention Data 1-49 (whichever is greater) for proper attachment of plates.
- B. Fascia boards shall be installed in a vertical fashion, true and straight and free of knots, splinters, or other irregularities. Soffits, extenders, or cladding to be applied to fascias shall be installed prior to gutter installation.
- C. Wall Conditions: Wall surfaces, which shall be subject to water runoff from gutters, shall be protected when project conditions do not allow immediate installation.

2.02 INSTALLATION PROCEDURES

- A. Review carefully and follow primary roof materials manufacturer's general recommendations as to installing waterproof membranes to this gutter system.
- B. Support Bracket Installation: Locate low and high points of gutter installation and chalk a guide line to allow a maximum $\frac{1}{4}$ "/40' slope. Install support brackets at 30" on center aligned with the chalk or other type of guideline. Take

care to avoid locating bracket directly over downspout outlet locations. Attach brackets with 2" x #10 wood screw.

- C. Gutter Installation: Install gutter sections from left to right (roof side) into support brackets. Insert each telescoping section into previous section for a distance of 1" seal and rivet at 2" O.C. Provide sealants and fasteners as provided by manufacturer. Nail rear upper portion of gutter with 2" self-drilling screws through pre-punched elongated holes at 12" O.C.
- D. Inside Strap Installation: Install straps at 30" O.C. alternating with support brackets. Strap shall be hooked into leading edge (bead) of gutter and riveted at its rear side. In no case shall strap be nailed, screwed, or otherwise fastened which would restrain thermal movement of product.
- E. Expansion Joints: At 40'-0" intervals, or as shown on plans, install manufacturer's standard elastomeric expansion joint assembly.
 - 1. Provide manufacturer's standard elastomeric expansion joint assembly. Install in strict accordance with printed instructions taking diligent care to allow:
 - a. Proper spacing between gutter sections.
 - b. Ample curing time for primers and adhesives prior to application of membrane.
 - c. Smooth, wrinkle free application of membrane.
 - 2. Follow plans and details for proper location of expansion joints.
- F. Miter Corners: Install manufacturer's welded miter units at locations shown on plans. Corners shall have 30" legs, pre-punched, notched, and telescoping to match gutter. All units shall be finished after fabrication, grinding and touch-up painting will not be allowed.
- G. End Caps/Terminations: Install manufacturer's end caps at all end terminations. End caps shall be riveted at 2" O.C. and sealed.
- H. Outlets: Locate all outlet locations and field cut hole in a neat workmanlike manner. Hole shall be located a distance of 1" from backside of gutter. Insert manufacturer's stainless steel outlet, fasten in place with 4 rivets (one being located on each flange), and seal.