

CHASE
SECTION 077123 - GUTTERS AND DOWNSPOUTS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Gutters, downspouts and related accessories.
- B. Downspout splash blocks.

1.2 RELATED SECTIONS

- A. 006239 – LEED Metal-Containing Product List.*
- B. 006240 – LEED New Product Content Form.*
- C. 006241 – LEED New Product Source Form.*
- D. 013564 – Green Requirement Summary.
- E. 013565 – LEED Certification Procedures.*
- F. 061000 – Rough Carpentry.
- G. 076200 – Flashing and Sheet Metal Trim.
- H. 079000 - Joint Sealants

1.3 REFERENCES

- A. ASTM B 209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
- B. Architectural Sheet Metal Manual (ASMM); Sheet Metal and Air Conditioning Contractors' National Association (SMACNA); latest edition.
- C. AAMA 1405.1 – Specification for Aluminum Raincarrying Systems; American Architectural Manufacturers Association (AAMA); latest edition.

1.4 DESIGN AND PERFORMANCE REQUIREMENTS

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

1.5 SUBMITTALS

- A. See Section 013000 for submittal procedures.
- B. Product Data: Manufacturer's catalog data, detail sheets, and specifications.
- C. Shop Drawings: Prepared specifically for this project; showing dimensions of metal gutters and accessories, fastening details and connections and interface with other products.
- D. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.
- E. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
- F. Manufacturers warranties.
- G. LEED Submittals: Submit applicable LEED Submittal Form for each different product made from metal, indicating percentage of recycled content, as specified in Section 006239.*
- H. LEED Submittals: Submit applicable LEED Submittal Form for each different product made from metal, indicating percentage of recycled content, as specified in Section 006240.*
- I. Green Submittals: Submit applicable LEED Submittal Form for each different product made from metal, indicating percentage of regional materials, as specified in Section 006241.*

1.6 QUALITY ASSURANCE

- A. Fabrication and installation of gutter and downspout components shall be by a sole source.
- B. Fabricator / Installer shall have not less than 5 years experience fabricating and installing gutters and downspouts on projects of similar scope.

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- C. Fabricator / Installer shall perform all work in accordance with the SMACNA Architectural Sheet Metal Manual.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Store products to prevent twisting, bending, and abrasion, and to provide ventilation.
- C. Slope stored materials to drain.
- D. During storage prevent contact with materials capable of causing discoloration, staining, or other damage.

1.8 PROJECT CONDITIONS

- A. Coordinate installation with installation of adjacent roofing, siding and related materials.

1.9 WARRANTY

- A. Provide the Manufacturer's Limited 20-Year, pro-rated and non-transferable Warranty covering labor materials.

1.10 COORDINATION

- A. Coordinate Work with other operations and installation of floor finish materials to avoid damage to installed underlayment and membrane materials.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

1. Englert, Inc., www.englertinc.com.
2. Dimensional Metals, Inc., www.dmimetals.com.
3. Substitutions: See Section 016000.

2.2 MATERIALS

- A. Sheet metal: continuous and seamless roll-formed Aluminum sheet compliant with ASTM B 209, Alloy 3105-H24 with factory-applied min. 70% Kynar high performance organic fluoropolymer coating, color as indicated on drawings.

2.3 COMPONENTS

- A. Gutters: K-style, 0.032" min. thickness.
- B. Downspouts: rectangular, corrugated, 0.032" min. thickness.
- C. Endcaps, inside and outside miters: 0.027" min. thickness.
- D. Gutter hangers and anchors, downspout brackets: 0.063" min. thickness.
- E. Sealant: refer to Section 079200 – Joint Sealants.
- F. Fasteners: Aluminum, color-matched to gutter and downspout materials.

2.4 ACCESSORIES

- A. Splash blocks: Architectural cast stone veneer remnants, minimum 12" x 12", set flush with grade and pitched minimum 1/2" per foot away from building.

2.5 FABRICATION

- A. Form gutters and downspouts of profiles and size indicated.
- B. Fabricate with required connection pieces.
- C. Form sections square, true, and accurate in size, in maximum possible lengths, free of distortion or defects detrimental to appearance or performance.
- D. Hem exposed edges of metal.

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- E. Fabricate gutter and downspout accessories.
- F. Seal all seams and joints watertight.

2.6 FACTORY FINISHING

- A. Fluoropolymer Coating: High Performance Organic Finish, AAMA 2604; multiple coat, thermally cured fluoropolymer finish system; color as scheduled.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. Verify governing dimensions at building.
- C. Verify surfaces are ready to receive gutters and downspouts.
- D. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Clean and repair if necessary any adjoining work on which this work is in any way dependent for its proper installation.
- C. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install gutters using appropriate hangers to allow normal expansion and contraction.
- C. Install gutter hangers using two 1-1/4 inch (32 mm) screw shank nails and fastened into solid lumber.
- D. All gutters shall be in continuous length for each elevation (run). No end laps are allowed.
- E. Exercise care in placing aluminum in contact with other dissimilar metals or materials that are not compatible with aluminum.
- F. Providing adequate insulation/separation where ever necessary, such as by painting or otherwise protecting when they are in contact with aluminum or when drainage from them passes over Aluminum surfaces.
- G. Install sealants where indicated to clean dry surfaces only without skips or voids.

3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

*** (TEXT HIGHLIGHTED IN GREEN DENOTES REQUIREMENTS WHICH ARE APPLICABLE ONLY TO PROJECTS PURSUING LEED CERTIFICATION. ELIMINATE IF NOT APPLICABLE)**

END OF SECTION