SECTION 07620

SHEET METAL FLASHING AND TRIM

1 PART 1 GENERAL

1.1 SUMMARY

A. Section includes flashings and counter flashings gutters and downspouts and fabricated sheet metal items.

1.2 SYSTEM DESCRIPTION

- A. Sheet Metal System: Utilize Standard SMACNA "Architectural Sheet Metal Manual Details."
- B. Gutters and Downspouts: Size components for rainfall intensity determined by storm occurrence of 1 in 5 years in accordance with SMACNA recommendations.

1.3 SUBMITTALS

- A. Shop Drawings: Indicate material profile, jointing pattern, jointing details, fastening methods, flashings, termination, and installation details.
- B. Samples: Submit (1) 6" samples of actual size of each type of formed metal flashing illustrating typical seam, external corner, internal corner, material, color, and finish.

1.4 WARRANTY

A. Furnish five year manufacturer warranty for finishes.

2 PART 2 PRODUCTS

2.1 SHEET METAL FLASHING AND TRIM

- A. Fabricators: (Equal to)
 - 1. Cheney Flashing Co.
 - 2. Keystone Flashing Co.
 - 3. Metal-Era Inc.
 - 4. Ideal Roofing Co.
 - 5. Pac-Clad
- B. Product Description: Flashing and sheet metal; prefinished, including gutters, downspouts, pads and accessories.

2.2 COMPONENTS

A. Pre-Finished Galvanized Steel Sheet: ASTM A924/A924M, Grade A, or ASTM A653/A653M, G90 zinc coating; 24 gage core steel, shop pre-coated with PVDF

(polyvinylidene fluoride) coating; color as selected from manufacturer's complete color line.

2.3 ACCESSORIES

- A. Fasteners: Galvanized steel with soft neoprene washers.
- B. Gutter and Downspout Anchorage Devices: In accordance with SMACNA requirements.
- C. Gutter Supports: Straps.
- D. Downspout Supports: Straps.
- E. Underlayment: No. 30 asphalt saturated roofing felt.
- F. Protective Backing Paint:: Zinc molybdate alkyd.
- G. Slip Sheet: Rosin sized building paper.
- H. Sealant: Exterior metal lap joint butyl or polyisobutylene sealant as specified in Section 07900.
- I. Plastic Cement: ASTM D4586, Type I.

2.4 FABRICATION

- A. Gutter Accessories: Profiled to suit gutters and downspouts.
- B. Splash Pads: Precast concrete type, of 12" x 12" and profiles indicated; minimum 3000 psi at 28 days, with minimum 5 percent air entrainment.
- C. Downspout Boots: Steel.
- D. Form components to shape indicated on Drawings, accurate in size, square, and free from distortion or defects. Form pieces in longest practical lengths.
- E. Fabricate cleats and starter strips of same material as sheet, to interlock with sheet.
- F. Hem exposed edges on underside 1/2 inch miter and seam corners. Fabricate vertical faces with bottom edge formed outward 1/4 inch and hemmed to form drip.
- G. Fabricate flashings to allow toe to extend 2 inches over roofing. Return and brake edges.
- H. Form material with standing seams, except where otherwise indicated. At moving joints, use sealed lapped, bayonet-type or interlocking hooked seams.
- I. Fabricate corners in one piece, 18 inch long legs; seam for rigidity, seal with sealant.
- J. Form sheet metal pans with upstand, and flanges.

2.5 SHOP FINISHING

A. PVDF (Polyvinylidene Fluoride) Coating: High Performance Organic Finish, AAMA 2604 or 2605; multiple coat, thermally cured fluoropolymer finish system.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify roof openings, curbs, pipes, sleeves, ducts, or vents through roof are solidly set, cant strips and reglets in place, and nailing strips located.
- B. Verify membrane termination and base flashings are in place, sealed, and secure.

3.2 PREPARATION

A. Paint concealed metal surfaces and surfaces in contact with dissimilar metals with protective backing paint to minimum dry film thickness of 15 mil.

3.3 INSTALLATION

- A. Install starter and edge strips, and cleats.
- B. Install surface mounted reglets. Seal top of reglets with sealant. Insert flashings to form tight fit. Seal flashings into reglets with sealant.
- C. Secure flashings, gutters and downspouts in place using [concealed] fasteners.
- D. Apply plastic cement compound between metal work and felt flashings.
- E. Fit components tight in place. Make corners square, surfaces true and straight in planes, and lines accurate to profiles.
- F. Install sheet metal pans surrounding roof penetrations. Fill pans watertight with plastic cement.
- G. Slope gutters 1/4 inch per foot minimum.
- H. Connect downspouts to downspout boots system. Seal connection watertight.
- I. Set splash pads under downspouts.
- J. Seal joints watertight.
- K. Install snow guards as indicated on Drawings.

...END OF SECTION