

COPPER-CLAD STAINLESS STEEL SHEET METAL

PART 1 GENERAL

1.1 SUMMARY

- A.** Provide copper-clad stainless steel for the following applications:
1. Sheet metal roofing including standing seam, flat seam and batten seam types.
 2. Sheet metal fascia and wall panels.
 3. Rain drainage including gutters, downspouts, scuppers and conductors.
 4. Flashing including base, counter, cap, eave, valley, drip and step flashings.
 5. Fabricated assemblies, including dormers, cupolas, finials, and spires.

1.2 RELATED WORK

- A.** Examine Contract Documents for requirements that affect work of this Section. Other Specification Sections that relate directly to work of this Section include, but are not limited to:
1. Section 01 43 39, Mockups.
 2. Section 05 50 00, Metal Fabrications.
 3. Section 07 61 00, Sheet Metal Roofing.
 4. Section 07 62 00, Sheet Metal Flashing and Trim.
 5. Section 07 63 00, Sheet Metal Roofing Specialties.

1.3 SUBMITTALS

- A.** Product Data: Submit manufacturer's product data, installation instructions, and recommendations for each product specified.
- B.** Shop Drawings: Provide large scale shop drawings for fabrication, installation and erection of all parts of the work. Provide large scale plans, elevations, and details of profiles, joints, seams, anchorages, connections and accessory items. Indicate galvanic isolation from adjacent aluminum or carbon steel if applicable.
- C.** Material Samples: Submit two 6 by 6 inch flat samples of copper-clad stainless steel.
- D.** Fabricated Samples: Submit full size sample of typical seam, corner and termination as acceptable to the Architect, for approval of fabrication details and workmanship.

1.4 QUALITY ASSURANCE

- A.** Fabricator: Minimum 5 years experience with projects of similar complexity.
- B.** Installer: Minimum 3 years experience with projects of similar complexity. At Architect's request, submit names and locations of recent projects.
- C.** Industry Standards for Materials and Fabrication Details: Comply with recommendations of the Sheet Metal and Air Conditioning Contractors National Association (SMACNA) Architectural Sheet Metal Manual, current edition.

1.5 DELIVERY, STORAGE AND HANDLING

- A.** Deliver, store and handle materials and products in strict compliance with manufacturer's instructions and recommendations and industry standards. Protect from damage.
- B.** Sequence deliveries to avoid delays, but minimize on-site storage.

1.6 SEQUENCING AND SCHEDULING

- A.** Conference: Convene a pre-installation conference to establish procedures to maintain optimum working conditions and to coordinate this work with related and adjacent work.
- B.** Perform work of this section in coordination with other sections to provide the highest quality work which best fulfills the intent requirements of this work.

PART 2 PRODUCTS

2.1 MATERIALS

A. Material: 10 percent thickness of copper metallurgically bonded on each side to an 80 percent core of Type 430 stainless steel, fully annealed. No adhesives or brazing alloys shall be required to achieve a permanent bond.

1. Cross Section: Copper, stainless steel, copper.
2. Standard Thicknesses: As recommended by manufacturer from the following standard thicknesses and weights:
 - a. 0.012 inches thick, 0.4959 pounds per square foot.
 - b. 0.016 inches thick, 0.6612 pounds per square foot.
 - c. 0.0216 inches thick, 0.8927 pounds per square foot.
 - d. 0.027 inches thick, 1.1159 pounds per square foot.
3. Mechanically Fastened Joints: Copper, stainless steel, brass or bronze fasteners.
4. Soldered Joints: Soft soldered using 50-50 or higher tin content solder, mild fluxes.
5. Shapes: Coils, rolls or sheets up to 24 inches wide, as applicable.

B. Accessories: Provide all clips, cleats, straps, anchors, similar items necessary to properly complete the work. Provide accessories that are compatible with sheet metal materials used and which are of sufficient size and gage to perform as intended.

2.2 FABRICATION

A. Shop fabricates work to the greatest extent possible. Fabricate work to match approved shop drawings and to provide the best possible watertight, weatherproof performance with expansion provisions in running work. Minimize oil-canning, buckling, tool marks and other defects.

B. Fabricate work with uniform, watertight joints. Make seams as inconspicuous as possible.

C. Isolate dissimilar materials with isolation coating recommended by the manufacturer or other permanent separation acceptable to the Architect.

PART 3 EXECUTION

3.1 INSPECTION

A. Installer shall examine substrates, supports, and conditions under which this work is to be performed and notify Contractor, in writing, of conditions detrimental to the proper completion of the work. Do not proceed with work until unsatisfactory conditions are corrected. Beginning work means Installer accepts substrates and conditions.

3.2 INSTALLATION

A. Strictly comply with manufacturer's and fabricator's instructions and recommendations and approved details.

B. Securely anchor work and allow for thermal movement and building movement. Use concealed fasteners to the greatest extent possible. Install work to be permanently weatherproof and watertight.

3.3 ADJUSTING, CLEANING, PROTECTION

A. Adjust work to conform to appear uniform and in proper relationship with adjacent work.

B. Repair minor damage to eliminate all evidence of repair. Remove and replace work, which cannot be satisfactorily repaired.

C. Clean exposed surfaces using detergent and water. If solder flux residues are evident, remove using mild abrasive cleanser.