SECTION 055813 - COLUMN COVERS

GENERAL

RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

SUMMARY

Section includes [**spackled-seam**] [**and**] [**snap-together**] metal column covers.

ACTION SUBMITTALS

Product Data: For each type of product, including finishing materials.

Shop Drawings: Show fabrication and installation details for column covers.

Samples for Initial Selection: For products involving selection of color, texture, or design[**, including mechanical finishes**].

Samples for Verification: For each type of exposed finish required, prepared on 6-inch- (150-mm-) square Samples of metal of same thickness and material indicated for the Work.

INFORMATIONAL SUBMITTALS

Qualification Data: For [fabricator] [organic-coating applicator] [anodic finisher] [and] [powder-coating applicator].

Mill Certificates: Signed by stainless-steel manufacturers certifying that products furnished comply with requirements.

CLOSEOUT SUBMITTALS

Maintenance Data: For [mirrorlike stainless-steel finish] [and] [statuary conversion coating copper-alloy finish] to include in maintenance manuals.

QUALITY ASSURANCE

Fabricator Qualifications: A firm experienced in producing column covers similar to that indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

Organic-Coating Applicator Qualifications: A firm experienced in successfully applying organic coatings of type indicated to metals of types indicated and that employs competent control personnel to conduct continuing, effective quality-control program to ensure compliance with requirements.

Anodic Finisher Qualifications: A firm experienced in successfully applying anodic finishes of type indicated and that employs competent control personnel to conduct continuing, effective quality-control program to ensure compliance with requirements.

Powder-Coating Applicator Qualifications: A firm experienced in successfully applying powder coatings of type indicated to metals of types indicated and that employs competent control personnel to conduct continuing, effective quality-control program to ensure compliance with requirements.

Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for fabrication and installation.

Build mockups of typical column covers.

Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

DELIVERY, STORAGE, AND HANDLING

Deliver column covers wrapped in protective coverings and strapped together in suitable packs or in heavy-duty cartons. Remove protective coverings before they stain or bond to finished surfaces.

PRODUCTS

SPACKLED-SEAM COLUMN COVERS

<Double click here to find, evaluate, and insert list of manufacturers and products.>

Form column covers from 0.125-inch (3.2-mm) aluminum sheet complying with ASTM B209 (ASTM B209M), with not less than strength and durability properties of Alloy 5005-H32; rolled to radii indicated. Taper edges of adjoining pieces of column covers, for taping and spackling, to 0.094-inch (2.4-mm) thickness in approximately 1 inch (25 mm) of width. Punch tapered edges for gypsum board screws at 1/2 inch (12 mm) o.c., and mill grooves in tapered edge to improve bond with joint compound.

Support Framing: At vertical joints, provide 1-1/2-by-3-5/8-inch (38-by-89-mm) steel channel support posts formed from 0.040-inch (1.0-mm) galvanized steel.

Joint Treatment Materials: Provide joint treatment compounds and reinforcing tape complying with requirements in Section 092900 "Gypsum Board."

SNAP-TOGETHER COLUMN COVERS

<Double click here to find, evaluate, and insert list of manufacturers and products.>

Form column covers to shapes indicated from metal of type and minimum thickness indicated below. Return vertical edges and bend to form hook that engages continuous mounting clips.

Aluminum Sheet: ASTM B209 (ASTM B209M), with not less than strength and durability properties of Alloy 5005-H32, [**0.063 inch (1.60 mm)**] <**Insert dimension**> thick.

Finish: [**Baked enamel or powder coat**] [**Siliconized polyester**] [**High-performance organic coating**] [**Mill**] [**Clear anodic**] [**Color anodic**].

Steel Sheet: Uncoated, cold-rolled, ASTM A1008/A1008M, commercial steel, exposed, [**0.060 inch (1.52 mm)**] <**Insert dimension**> thick.

Finish: [**Factory primed**] [**Baked enamel**] [**Powder coat**].

Stainless-Steel Sheet: ASTM A240/A240M or ASTM A666, [**Type 304**] [**Type 316**], [**0.050 inch (1.27 mm)**] <**Insert dimension**> thick.

Finish: [**No. 2B**] [**No. 4**] [**No. 6**] [**No. 7**] [**No. 8**].

Bronze Sheet: ASTM B36/B36M, Alloy UNS C28000 (muntz metal, 60 percent copper) or Alloy UNS C23000 (red brass, 85 percent copper), [**0.051 inch (1.29 mm)**] <**Insert dimension**> thick.

Finish: [**Buffed finish, lacquered**] [**Hand-rubbed finish, lacquered**] [**Statuary conversion coating over satin finish**].

Brass Sheet: ASTM B36/B36M, Alloy UNS C26000 (cartridge brass, 70 percent copper), [**0.051 inch (1.29 mm)**] <**Insert dimension**> thick.

Finish: [**Buffed**] [**Hand-rubbed**] finish, lacquered.

Column covers may be fabricated from prefinished metal sheet in lieu of finishing after fabrication provided unfinished edges are concealed from view.

Increase metal thickness or reinforce with concealed stiffeners, backing materials, or both, as needed to provide flat surfaces where indicated.

Support joints with concealed stiffeners as needed to hold exposed faces of adjoining sheets in flush alignment.

Form returns at vertical joints to provide hairline V-joints.

Form returns at vertical joints to provide [**1/2-inch- (12-mm-)**] [**3/4-inch- (18-mm-)**] wide reveal at joints. Provide snap-in metal filler strips at reveals that leave reveals [**1/2 inch (12 mm) deep**] [**flush**].

Form returns at vertical joints to accommodate backer rod and sealant.

Fabricate column covers with hairline horizontal V-joints produced by forming returns on mating ends of column cover sections. Locate horizontal joints as indicated.

Fabricate column covers without horizontal joints.

Fabricate column covers with horizontal butt joints, tightly fitted and backed with a sleeve for field splicing with adhesive.

Fabricate column covers with [**1/2-inch- (12-mm-) wide**] reveals at horizontal joints produced by forming returns on mating ends of column cover sections. Provide snap-in metal filler strips at reveals matching reveals at vertical joints. Locate horizontal joints as indicated.

Fabricate [**base**] [**ceiling**] ring to [**match**] [**contrast with**] column covers.

Fabricate with calk stop/stiffener ring.

Apply manufacturer's recommended sound-deadening [**insulation**] [**mastic**] to backs of column covers.

MISCELLANEOUS MATERIALS

Fasteners: Fabricated from same basic metal and alloy as fastened metal unless otherwise indicated. Do not use metals that are incompatible with materials joined.

Provide concealed fasteners for interconnecting column covers and for attaching them to other work unless[**otherwise indicated**][**exposed fasteners are unavoidable or are the standard fastening method**].

Provide [**Phillips**] [**tamper-resistant**] [**square or hex socket**] flat-head machine screws for exposed fasteners unless otherwise indicated.

Sound-Deadening Materials:

Insulation: Unfaced, mineral-fiber blanket insulation complying with ASTM C665, Type I, and passing ASTM E136 test.

Mastic: Cold-applied asphalt emulsion complying with ASTM D1187/D1187M.

Backing Materials: Provided or recommended by column cover manufacturer.

PAINTS AND COATINGS

Lacquer for Copper Alloys: Clear, acrylic lacquer specially developed for coating copper-alloy products.

Shop Primers: Comply with [Section 099113 "Exterior Painting" and Section 099123 "Interior Painting."] [Section 099600 "High-Performance Coatings."]

Universal Shop Primer for Ferrous Metal: Fast-curing, lead- and chromate-free, universal modified-alkyd primer complying with MPI#79 and compatible with topcoat.

Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D1187/D1187M.

FABRICATION, GENERAL

Coordinate dimensions and attachment methods of column covers with those of adjoining construction to produce integrated assemblies with closely fitting joints and with edges and surfaces aligned unless otherwise indicated.

Form metal to profiles indicated, in maximum lengths to minimize joints. Produce flat, flush surfaces without cracking or grain separation at bends.

GENERAL FINISH REQUIREMENTS

Complete mechanical finishes of flat sheet metal surfaces before fabrication where possible. After fabrication, finish all joints, bends, abrasions, and other surface blemishes to match sheet finish.

Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

Apply organic and anodic finishes to formed metal after fabrication unless otherwise indicated.

Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable.

Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

ALUMINUM FINISHES

Clear Anodic Finish: AAMA 611, [AA-M12C22A41, Class I, 0.018 mm] [AA-M12C22A31, Class II, 0.010 mm] or thicker.

Color Anodic Finish: AAMA 611, [AA-M12C22A42/A44, Class I, 0.018 mm] [AA-M12C22A32/A34, Class II, 0.010 mm] or thicker.

Color: [Champagne] [Light bronze] [Medium bronze] [Dark bronze] [Black] <Insert color>.

Color: [Match Architect's sample] [As selected by Architect from full range of industry colors and color densities].

Baked-Enamel or Powder-Coat Finish: AAMA 2603 except with a minimum dry film thickness of 1.5 mils (0.04 mm). Comply with coating manufacturer's written instructions for cleaning, conversion coating, and applying and baking finish.

Color and Gloss: [As indicated by manufacturer's designations] [Match Architect's sample] [As selected by Architect from manufacturer's full range] <Insert color and gloss>.

Siliconized Polyester Finish: Epoxy primer and silicone-modified, polyester-enamel topcoat; with a dry film thickness of not less than 0.2 mil (0.005 mm) for primer and 0.8 mil (0.02 mm) for topcoat.

Color and Gloss: [As indicated by manufacturer's designations] [Match Architect's sample] [As selected by Architect from manufacturer's full range] <Insert color and gloss>.

High-Performance Organic Finish: Two-coat fluoropolymer finish complying with [**AAMA 2604**] [**AAMA 2605**] and containing not less than [**50**] [**70**] percent PVDF resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.

Color and Gloss: [As indicated by manufacturer's designations] [Match Architect's sample] [As selected by Architect from manufacturer's full range] <Insert color and gloss>.

High-Performance Organic Finish: [**Three**] [**Four**]-coat fluoropolymer finish complying with AAMA 2605 and containing not less than [**50**] [**70**] percent PVDF resin by weight in both color coat and clear topcoat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.

Color and Gloss: [As indicated by manufacturer's designations] [Match Architect's sample] [As selected by Architect from manufacturer's full range] <Insert color and gloss>.

STEEL SHEET FINISHES

Surface Preparation: Clean surfaces to comply with SSPC-SP 1, "Solvent Cleaning," to remove dirt, oil, grease, or other contaminants that could impair paint bond. Remove mill scale and rust, if present, from uncoated steel, complying with SSPC-SP 5/NACE No. 1, "White Metal Blast Cleaning," or with SSPC-SP 8, "Pickling."

Pretreatment: Immediately after cleaning, apply a conversion coating of type suited to organic coating applied over it.

Factory Priming for Field-Painted Finish: Where field painting after installation is indicated, apply shop primer to prepared surfaces of items unless otherwise indicated. Comply with requirements in SSPC-PA 1, "Paint Application Specification No. 1: Shop, Field, and Maintenance Painting of Steel," for shop painting.

Baked-Enamel Finish: After cleaning and pretreating, apply manufacturer's standard two-coat, baked-on finish consisting of prime coat and thermosetting topcoat to a minimum dry film thickness of 2 mils (0.05 mm).

Color and Gloss: [As indicated by manufacturer's designations] [Match Architect's sample] [As selected by Architect from manufacturer's full range] <Insert color and gloss>.

Powder-Coat Finish: After cleaning and pretreating, apply manufacturer's standard thermosetting polyester or acrylic urethane powder coating with cured-film thickness not less than 1.5 mils (0.04 mm). Prepare, treat, and coat metal to comply with resin manufacturer's written instructions.

Color and Gloss: [As indicated by manufacturer's designations] [Match Architect's sample] [As selected by Architect from manufacturer's full range] <Insert color and gloss>.

STAINLESS-STEEL FINISHES

Surface Preparation: Remove tool and die marks and stretch lines, or blend into finish.

Polished Finishes: Grind and polish surfaces to produce uniform finish, free of cross scratches.

Run grain of directional finishes with long dimension of each piece.

When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces chemically clean.

Bright, Cold-Rolled, Unpolished Finish: No. 2B.

Directional Satin Finish: No. 4.

Dull Satin Finish: No. 6.

Satin, Reflective, Directional Polish: No. 7.

Mirrorlike Reflective, Nondirectional Polish: No. 8 finish.

COPPER-ALLOY FINISHES

Buffed Finish, Lacquered: M21-O6x (Mechanical Finish: buffed, smooth specular; Coating: clear, organic, air dried, as specified below).

Clear, Organic Coating: Lacquer specified for copper alloys, applied by air spray in two coats per manufacturer's written instructions, with interim drying, to a total thickness of 1 mil (0.025 mm).

Hand-Rubbed Finish, Lacquered: M31-M34-O6x (Mechanical Finish: directionally textured, fine satin; Mechanical Finish: directionally textured, hand rubbed; Coating: clear, organic, air dried, as specified below).

Clear, Organic Coating: Lacquer specified for copper alloys, applied by air spray in two coats per manufacturer's written instructions, with interim drying, to a total thickness of 1 mil (0.025 mm).

Statuary Conversion Coating over Satin Finish: M31-C55 (Mechanical Finish: directionally textured, fine satin; Chemical Finish: conversion coating, sulfide)[**, with color matching Architect's sample**].

EXECUTION

EXAMINATION

Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of column covers.

Proceed with installation only after unsatisfactory conditions have been corrected.

INSTALLATION

Locate and place column covers plumb and in alignment with adjacent construction. Perform cutting, drilling, and fitting required to install column covers.

Do not cut or abrade finishes that cannot be completely restored in the field. Return items with such finishes to the shop for required alterations, followed by complete refinishing, or provide new units as required.

Use concealed anchorages where possible.

Form tight joints with exposed connections accurately fitted together. Provide reveals and openings for sealants and joint fillers as indicated.

Corrosion Protection: Apply bituminous paint or other permanent separation materials on concealed surfaces where metals would otherwise be in direct contact with substrate materials that are incompatible or could result in corrosion or deterioration of either material or finish.

Apply joint treatment at joints of spackled-seam metal column covers. Comply with requirements in Section 092900 "Gypsum Board."

ADJUSTING AND CLEANING

Clean copper alloys according to metal finisher's written instructions in a manner that leaves an undamaged and uniform finish matching approved Sample.

Touchup Painting: Immediately after erection, clean abraded areas of shop paint and paint exposed areas with the same material as used for shop painting to comply with SSPC-PA 1 for touching up shop-painted surfaces.

Apply by brush or spray to provide a minimum 2.0-mil (0.05-mm) dry film thickness.

Touchup Painting: Cleaning and touchup painting of shop paint are specified in [Section 099113 "Exterior Painting" and Section 099123 "Interior Painting."] [Section 099600 "High-Performance Coatings."] [Section 099113 "Exterior Painting" Section 099123 "Interior Painting," and Section 099600 "High-Performance Coatings."]

Restore finishes damaged during installation and construction period so no evidence remains of correction work. Return items that cannot be refinished in the field to the shop; make required alterations and refinish entire unit or provide new units.

PROTECTION

Protect finishes from damage during construction period. Remove temporary protective coverings at time of Substantial Completion.

END OF SECTION 055813