

SECTION 13980

SPRINKLER PIPING COVER ASSEMBLIES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Cover Assemblies for Sprinkler Piping Systems.
- B. Cover Assemblies for Plumbing Piping Systems.
- C. Cover Assemblies for Heating, Ventilating, and Air Conditioning Systems.
- D. Cover Assemblies for Electrical Conduit Systems.

1.2 RELATED SECTIONS

- A. Section 07900 - Joint Sealants.
- B. Section 08710 - Door Hardware.
- C. Section 13915 - Fire Protection Piping.
- D. Sections of Division 15 affecting construction activities of this section.
- E. Sections of Division 16 affecting construction activities of this section.

1.3 REFERENCES

- A. ASTM A 366/A 366M - Standard Specification for Steel, Sheet, Carbon, Cold-Rolled, Commercial Quality.
- B. ASTM A 653/A 653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- C. ASTM A 666 - Standard Specification for Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.

1.4 SYSTEM DESCRIPTION

- A. Design Requirements:
 - 1. Design complete cover assemblies to conceal components of the following systems in indicated areas:

- a. Fire sprinkler systems.
 - b. Piping systems.
 - c. Heating, ventilating, and air conditioning systems.
 - d. Electrical systems.
2. Include all fittings to conceal systems completely, except for components indicated to be sight-exposed.
 3. Design cover assembly to be virtually non-removable using conventional tools after initial installation.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's descriptive literature for specified system; include documentation of conformance to specified requirements.
- C. Shop Drawings:
 1. Submit dimensioned scale drawings as follows:
 - a. Plans: Indicate locations of systems to be covered, and layout of each type cover assembly; include cover sizes and locations of joints and fittings.
 - b. Details: Indicate cross-section profile of each cover type; show each type fitting indicated on plans.
 2. Imprint shop drawings with seal and signature of professional mechanical engineer, employed by cover assembly manufacturer, licensed to practice in the State in which the project is located.
- D. Selection Samples:
 1. Cover: Two sets of color chips representing manufacturer's full range of available colors.
 2. Joint Sealant: Two sets of color samples representing manufacturer's full range of available colors.
- E. Verification Samples:
 1. Cover: Two samples, minimum size 12 inches (304 mm) long, representing actual color and finish of linear units.
 2. Joint Sealant: Two samples, minimum size 12 inches (304 mm) long, representing actual sealant color.

- F. Quality Assurance Submittals:
 - 1. Contractor's certification that:
 - a. Cover assembly manufacturer meets specified qualifications.
 - b. Installer's mechanics will have met specified qualifications before beginning construction activities of this section.
 - 2. Manufacturer's instructions: Printed installation instructions for each assembly component, including storage requirements.

- G. Closeout Submittals:
 - 1. Project record documents: As-built drawings; two sets of specified shop drawings, with markings or notations indicating deviations between cover assemblies, as installed, and shop drawings.
 - 2. Manufacturer's recommendations for cleaning and maintaining finishes of sight-exposed components of assemblies.
 - 3. Warranty documents specified in WARRANTY Article of PART 1 of this section.

1.6 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Manufacturer: Minimum five (5) years documented experience producing cover assemblies similar to those specified in this section, having capability to design complete cover assemblies, employing training representative qualified to instruct installer's personnel in correct installation procedures, and employing professional mechanical engineer licensed to practice in the State in which the project is located.
 - 2. Installer: Having mechanics who have successfully completed training conducted by manufacturer's training representative.
- B. Pre-Installation Meetings:
 - 1. Convene at job site seven (7) calendar days prior to scheduled beginning of construction activities of this section to review requirements of this section.
 - 2. Require attendance by representatives of the following:
 - a. Installer of this section.
 - b. Other entities directly affecting, or affected by, construction activities of this section.

3. Notify Architect four (4) calendar days in advance of scheduled meeting date.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store products of this section in manufacturer's unopened packaging until installation.
- B. Maintain storage area conditions for products of this section in accordance with manufacturer's instructions until installation.

1.8 PROJECT/SITE CONDITIONS

- A. Field Measurements: Take field measurements of areas to receive cover assemblies; note discrepancies on submitted shop drawings.

1.9 WARRANTY

- A. Manufacturer's Warranty: Manufacturer's 10-year warranty against defects in products.

1.10 MAINTENANCE

- A. Extra Materials: For each assembly component, supply extra assembly components, in quantity equal to 5 percent of installed component.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Grice Engineering, Inc.; 23 North Main Street, P.O. Box 8037, Janesville WI 53547-8037; ASD. Tel. (800) 800-3213 or (608) 757-1335, Fax. (608) 757-1452.
- B. Requests for substitution will be considered in accordance with provisions of Section 01600.
- C. Substitutions: Not permitted.
- D. Unless otherwise specified for an individual product or material, supply all products specified in this section from the same manufacturer.

2.2 COMPONENTS

- A. Linear Units: Factory-formed profiles indicated on shop drawings, minimum length 5 feet (1524 mm), with horizontal edges formed to continuous profile designed to interlock with mounting clips and to provide sealant groove.
1. Material: Stainless steel sheet conforming to ASTM A 666, Type 304.
 2. Material: Cold-rolled commercial quality steel sheet conforming to ASTM A 366/A 366M.
 3. Material: Galvanized lock-forming quality steel sheet conforming to ASTM A 653/A 653M, G90 (Z275) coating.
 4. Sheet thickness: 16 gage (1.52 mm).
 5. Sheet thickness: 18 gage (1.22 mm).
 6. Sheet thickness: 20 gage (0.91 mm).
 7. Sheet thickness: 22 gage (0.76 mm).
 8. Sheet thickness: 24 gage (0.61 mm).
 9. Perforations: Factory-punched before finishing of metal; locations and patterns indicated on shop drawings.
 10. Finish: Number 4 satin polish.
 11. Finish: Galvanized finish for enhanced adhesion of field-applied finishes.
 12. Finish: Baked enamel, white color.
 13. Finish: Baked enamel, off-white color.
 14. Finish: Baked enamel, custom color matching Architect's sample.
 15. Finish: Baked fluoropolymer enamel, _____ color.
 16. Finish: Baked fluoropolymer enamel, color to be selected from manufacturer's full range of available colors.
 17. Finish: Baked fluoropolymer enamel, custom color matching Architect's sample.
- B. Fittings: Supply fittings indicated on shop drawings, including, but not limited to, the following:
1. Exterior and interior corner units: Same material, sheet thickness, and finish as linear units, factory-fabricated profile matching linear units; field-formed or shop-formed units not permitted.
 2. End caps: Same material, sheet thickness, and finish as linear units, factory-fabricated profile matching linear units; field-formed or shop-formed units not permitted.

3. Anchor clips: Spring steel, zinc-plated, minimum 250 pounds (113.25 kg) uplift resistance at free end, formed to interlock with horizontal edges of linear units, with fastener types and sizes recommended by manufacturer for indicated substrates.
 4. Internal splicing sleeves: Formed to fit inside linear units, of material compatible with linear unit material.
 5. Fire sprinkler head spacers.
 6. Access doors and frames:
 - a. Fabricated of same material, sheet thickness, and finish as linear units.
 - b. Provide each door with latching assembly.
 - c. Provide each door with latching assembly, lock cylinder, and two keys; key all access door locks alike.
 - d. Provide each door with latching assembly to accept cylinder specified in Section 08710.
 7. Cover removal tool: Supply five (5) units to Owner.
- C. Joint Sealant: Specified in Section 07900.
- D. Joint Sealant:
1. Acceptable product: One of the following:
 - a. Sikadur(R) 51 two-part epoxy sealant.
 - b. Sikaflex(R) TR two-part epoxy sealant.
 - c. Sonneborn Ultra polyurethane sealant.
 2. Color: _____.
 3. Color: To be selected from sealant manufacturer's full range of available colors.
- E. Pipe Support Devices: Specified in Section 15145.
- F. Pipe Support Devices: NFPA-tested and certified for indicated use, UL-listed, including, but not limited to, the following:
1. Low-profile steel hanger for supporting steel pipe and CPVC pipe.
 2. Low-profile copper-coated hanger for supporting copper pipe or tubing.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verification of Conditions: Systems to be concealed are located and grouped in accordance with shop drawings.

- B. Installer's Examination:
 - 1. Have installer of this section examine conditions under which construction activities of this section are to be performed, then submit written notification if such conditions are unacceptable.
 - 2. Transmit two copies of installer's report to Architect within 24 hours of receipt.
 - 3. Beginning construction activities of this section before unacceptable conditions have been corrected is prohibited.
 - 4. Beginning construction activities of this section indicates installer's acceptance of conditions.

3.2 INSTALLATION

- A. Field Cutting:
 - 1. Field cut linear units for required fit at ends of runs; make cuts square for hairline end-to-end butt joints.
 - 2. Field cut openings for indicated sprinkler heads
 - 3. Apply touch-up paint matching finish of linear units at cut openings.
- B. Install components in accordance with shop drawings and manufacturer's instructions.
- C. Overlap ends of linear units minimum 1 inch (25 mm) at end-to-end joints; place rivets at intervals of 1.25 inches (31 mm), maximum, spaced 0.50 inches (12 mm), maximum from end of overlapping section.
- D. Apply specified sealant in accordance with requirements of Section 07900 and instructions of sealant and cover assembly manufacturers.
- E. Site Tolerances: Maximum variation of cover assembly from plumb or level; 1/4 inch in 10 feet (6.3 mm in 3 m), non-cumulative.

3.3 PROTECTION

- A. Protect installed products of this section from damage to function or finish by subsequent construction activities.
- B. Repair minor damage to finishes in accordance with manufacturer' recommendations.

- C. Replace products having damage to function, and products having damage to finishes which cannot be repaired to Architect's acceptance.

END OF SECTION