

Architect/Engineer Specifications – Factory Mutual Approved

Section 13900 / 21 00 00

COMMERCIAL/RESIDENTIAL COVER SYSTEM FOR CONCEALMENT OF PIPING, CONDUIT, WIRING AND CABLE

PART 1 GENERAL

1.01 DESCRIPTION

- A. Soffit shall be Factory Mutual tested and approved for use with fire sprinkler systems. The soffit system shall carry the appropriate approval stamp, insuring FM Approval. The results of said tests shall be part of the shop drawing submittal package. The soffit/cover system shall incorporate a concealed snap-lock connection, which, once assembled, renders the cover essentially irremovable with the use of ordinary tools.

1.02 SUBMITTALS

- A. Submit copies of manufacturer's specifications, installation instructions, and product data.

1.03 JOB CONDITIONS

- A. Coordinate installation soffit/cover system with all other trades.

PART 2 PRODUCTS

2.01 MATERIAL

- A. A factory-fabricated steel cover support system with concealed surface-mounted attachment clamps, in dimensions as shown on the drawings for concealment of piping, conduit, wiring, cable or fire sprinkler piping.

Approved sources:

Grice Engineering, Inc.
121 E Burbank Ave
P.O. Box 8037
Janesville, WI 53547-8037
Phone #: 800-800-3213
Fax #: 608-757-1452

In-Ex Systems, Inc.
4473 Cavallon Way
Acworth, GA 30101
Phone #: 800-483-8201
Fax #: 678-766-8202

B. Support/Attachment Devices

1. Spring steel shield clips of the size recommended by manufacturer, for securement of the cover. Clips shall be produced from 21-gauge minimum zinc-plated spring steel and shall have a reverse curvature design such that the clips soundly secure the soffit from easy removal. Each clip must be demonstrated as being able to resist a force of 100 lbs. uplift at the free end. Test results shall be available upon request.

C. Soffit/Cover

1. The soffit/cover shall be smooth in appearance and shall be made of 20-gauge G90galvanized steel, with a paint grip finish and factory painted of a color to be specified by the owner's representative. The cover shall have a snap-lock interfacing with the clamps such that once assembled, it is rendered virtually irremovable with the use of ordinary tools. (FM Approved projects require soffit to consist of 20 Gauge G90 galvanized steel)
2. The soffit and related fittings shall be factory painted with Sherwin Williams epoxy polyester hybrid powder coating of a color to be specified by the owner's representative. Matching touch-up paint shall be supplied to the owner by the manufacturer.
3. Cover manufacturer shall be staffed with a licensed engineer having a minimum of five years experience with such systems.
4. The cover shall be sized in accordance with requirements to accommodate the specific application size as specified by the project documents, specifications and blue prints, provided to the cover manufacturer prior to bid date.
5. L-Design shield cover for sidewall installations and U-Design shield cover for pendant installations respectively.
6. Cover joints shall be butt-joined with interlocking internal splice couplings and/or with male/female interlocking joints.
7. Cover design shall include a rollformed "groove" at the interfacing of the cover and the adjacent construction surface to facilitate the application of sealant/adhesive compounds and enhance the security of such compounds from dislodging.

**NOTE TO SPECIFIERS: Other options are available.*

* Stainless Steel with #4 finish: 18 Gauge, 20 Gauge, 22 Gauge, and 24 Gauge.

* Cold-Rolled Steel: 18 Gauge, 20 Gauge, 22 Gauge, and 24 Gauge.

Finishes available with cold-rolled steel:

- * Zinc-galvanized Paint grip (treated to accept painting but not painted) of ASTM-A527. Coating Class G90.
- * Zinc-galvanized Paint grip painted to specified color factory treated and factory painted in colors selected by architect from manufacturer's standard colors.
- * Primed with specific primer, which will be compatible with paint scheduled after installation.

D. Accessories

1. The system shall include tamper-resistant end caps, prefabricated corners, wall flanges, couplings, and other items, which may be necessary to complete the system, and shall be installed in accordance with manufacturer recommendations.
2. Spare Parts - The installing contractor shall supply the owner with quantities of spare parts equal to a minimum of five percent (5%) of the total quantities of each soffit part utilized in this installation.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Installation of system shall be in strict accordance with approved shop drawings and manufacturer's printed instructions.
1. If used to conceal fire sprinkler systems, the sprinkler contractor/engineer must determine the piping and sprinkler layout, including sprinkler head locations and pipe support locations (based on pipe manufacturer's specifications). Indicate areas on drawings where cover system is to be used.
 2. Select appropriate fasteners for the substrate encountered to adequately secure the pipe and cover system.
 3. To insure that the cover is linear and snug-fitting when installed, it is imperative that its support devices are anchored squarely and firmly against the structural surface in a straight line.
 4. All penetrations to the soffit/cover system must be field cut to prevent misalignment with intended protrusion. The exceptions to this are that access doors will be factory furnished and installed and perforations, if required, for ventilation purposes will be factory perforated.
 5. Guidelines for installation of modular soffit/cover system shall be supplied by the manufacturer of said system and the installing contractor shall adhere to the manufacturer's guidelines.
 6. All field cut ends and scratches shall be "touched up" (spray or brush) with a matching paint.

7. Manufacturer shall supply on-site installation instruction, upon installer's request, by a qualified installation instructor for a minimum of one day for the project start-up (1,500 lineal feet minimum.)
8. The completed installation shall be visibly searched for voids between the interfacing of the cover and construction surface. Voids shall be sealed with a color matching siliconized caulk or urethane caulk.

END OF SECTION

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