GORDON, INC. SOFFIT-SHIELD™[1]

SECTION 05 58 00 OR 07 77 00

PART 1 – GENERAL

1.01 SECTION INCLUDES:

A. This section includes prefinished, prefabricated, through-fastened, concealed fastener Soffit System and accessories.
B. Related sections include the following:
   1. Metal decking
   2. Rough carpentry, plywood, and underlayment
   3. Insulation
   4. Membrane roofing
   5. Flashing and sheet metal
   6. Joint sealers: sealants and caulk
   7. Structural framing

1.02 RELATED DOCUMENTS/SECTIONS:

A. Drawings and general provisions of Contract, including General and Supplementary Conditions.
B. Division 1 Specification sections apply to work of this Section.
C. Finish Schedule or Finish Legend applies to work of this Section.

1.03 REFERENCES:

A. GENERAL
   1. Comply with applicable requirements of the following, except where more stringent requirements are indicated by building codes.
B. American Society for Testing and Materials (ASTM)
   1. ASTM A653: Steel Sheet, Zinc-Coated by the Hot Dip Process.
   2. ASTM A792: Steel Sheet, Aluminum-Zinc Alloy Coated by the Hot Dip Process.
   3. ASTM B209: Aluminum and Aluminum Alloy Sheet and Plate.
C. Sheet Metal and Air Condition Contractors National Association, Inc. (SMACNA)
   1. SMACNA Architectural Sheet Metal Manual, 1993 Edition.
D. American Iron and Steel Institute (AISI)
   1. AISI Cold Formed Steel Design Manual
E. Aluminum Association
   1. Aluminum Design Manual
F. Metal Construction Association (MCA)
   1. Preformed Metal Wall Guidelines
G. Code References:
   1. ASCE, Minimum Loads for Buildings and Other Structures
   2. BOCA National Building Code
   3. UBC Uniform Building Code
   4. SBC Standard Building Code

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5. BOAF Florida Building Code

1.04 DESIGN/PERFORMANCE REQUIREMENTS:

A. Performance Requirements: Provide factory formed, prefinished, through-fastened, concealed fastener, Soffit System that has been pretested and certified by Manufacturer to comply with specified requirements under installed conditions.
   1. The Metal Soffit System including required Trim Members shall meet the specified requirements for wind loads.
   2. The Panel will have continuous integral ribbing. Adjacent Panels shall interleave into place. Cover Trims or sealant hide the screws.
   3. The Soffit Panels are available in solid (non-perforated) form.

B. Structural Requirements: Engineer Panels for structural properties in accordance with the latest edition of American Iron and Steel Institute's *Cold Formed Steel Design Manual* using "effective width" concept and Aluminum Associations' *Aluminum Design Manual*.

1.05 SUBMITTALS:

A. Submission must be made within ten (10) working days of the General Contract Award to avoid project delay.

B. Product Data: Submit Manufacturer's Specifications, standard profile sheet, product data/brochure, and finish warranty.

C. Shop Drawings shall show Soffit with layout of Panels, screws, underlayment, and sections of each Flashing/Trim condition and shall be submitted for approval prior to fabrication. Drawings shall contain material type, metal thickness, and finish. Drawings shall distinguish between factory and field fabrication.

D. Samples:
   1. Submit sample 12'' long x full width Panel, showing proposed metal gauge, seam profile, and specified finish.
   2. Submit Manufacturer's Standard Colors for Architect's selection.

E. Certification: Submit certification from Manufacturer that materials and finishes meet specification requirements.

1.06 QUALITY ASSURANCE:

A. Manufacturer: Panel Manufacturer shall have a minimum of ten (10) years of experience in manufacturing exposed exterior Soffit Systems in a permanent stationary indoor facility and must have previously received Miami-Dade County Florida NOA.

B. Installer: Panel Installer shall have a minimum of two (2) years of experience in the installation of exposed exterior Soffit Systems and show evidence of successful completion of at least three (3) projects of similar size, scope, and complexity.

1.07 PRODUCT DELIVERY, STORAGE AND HANDLING:

A. Panels and Flashings shall be protected and properly packaged to protect against transportation damage in transit to the jobsite.

B. Upon delivery, exercise care in unloading, stacking, moving, storing, and erecting Panels and Flashings to prevent twisting, bending, scratching, or denting.

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C. Store Panels and Flashings in a safe dry environment under a waterproof covering to prevent water damage and allow adequate ventilation to prevent condensation. Panels and Flashings with strippable film shall not be stored in direct sunlight.
D. Upon installation, immediately remove strippable film from Panels and Flashings. Protect Panels and Flashings from foot traffic and from all other trades.

1.08 PROJECT CONDITIONS:

A. Field dimensions shall be taken prior to fabrication to verify jobsite conditions.
B. Panel should be installed as a Soffit/Fascia only.
C. Maximum Panel length is 8' (contact the factory for longer Panels).

1.09 WARRANTY:

A. Panel Manufacturer shall provide a five (5) year warranty on the paint finish covering chalking, cracking, checking, chipping, blistering, peeling, flaking, and fading.

PART 2 - PRODUCTS

2.01 MANUFACTURERS:

A. Acceptable System: SOFFIT-SHIELD™[1] Soffit Panel System shall be manufactured by Gordon, Inc. For all inquiries contact, Gordon, Inc., 5023 Hazel Jones Road, Bossier City, LA 71111, (800) 747-8954.
B. The listed Manufacturer shall not be construed as closing specifications to other prospective Manufacturers, but rather as establishing a level of quality in a metal system. Other systems may be submitted for approval, as provided for in the specifications at least ten (10) working days prior to submission of bids. Companies desiring to submit a proposal shall submit all descriptive information of the system proposed including photographs and Shop Drawings of at least three (3) projects similar in detail and scope.

2.02 PRODUCT CONSTRUCTION:

A. The SOFFIT-SHIELD™[1] Panel shall have a maximum coverage of 30''X96". Continuous integral steel rib Panel bonded to the inside surface of the Panel. Bonding agent performs to stress of 245 psi tensile and 360 psi shear. Total height of Panel shall be 7/8''.
B. Panels shall be directly fastened to the substrate.
C. The fasteners shall be hidden when screw covers or sealant is installed.
D. The Panel shall have an overlapping sidelap feature that maintains Panel-to-Panel flatness.
E. Soffit Panel Materials:
    1. Corrugated Backer Panel – 24 Gauge (0.0276'' +/- 0.004''), Grade 40 (40 ksi yield strength) structural steel with G90 (0.90 oz./ft^2) hot dipped galvanized coating, both conforming to ASTM A653.

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2. Optional: Corrugated Backer Panel – 24 Gauge (0.0276'' +/- 0.004''), Grade 40 (40 ksi yield strength) structural steel with AZ50 (0.50 oz./ft^2) aluminum-zinc alloy coating, both conforming to ASTM A792.
3. Face Panel – 0.090'' +/- 0.006'', 3003-H14 or equivalent (20 ksi yield strength) aluminum alloy conforming to ASTM B209.

F. Accessories:
   1. Flashing and Trim
      a. All Flashing and Trim shall be of the same material, gauge, finish, and color as the Soffit Panels and fabricated in accordance with standard SMACNA procedure and details.
   2. Fasteners
      a. All screws shall be plated steel or stainless steel. They shall have a combination steel and EPDM washer.
      b. Screws for Flashings and sidelaps shall be #12 x ¾'' sheet metal stitch screws. All sidelaps shall be fastened 6'' O.C.
   3. Caulking shall be polyurethane where it is exposed and there is no thermal movement. All caulking or sealing shall be done in a neat manner with excess caulking or sealant removed from exposed surfaces.
   4. Caulking shall be non-skinning, non-hardening gun grade butyl sealant or butyl sealant tape with a minimum thickness of 0.125'' where it is concealed and where thermal movement must be accommodated. All caulking or sealing shall be done in a neat manner with excess caulking or sealant removed from exposed surfaces.

G. General: Provide metals free from surface blemishes where exposed to view in finished unit. Surfaces that exhibit pitting, seam marks, roller marks, stains, and discolorations, or other imperfections on finished units are not acceptable. All metal shall be of the highest-grade commercial type.

2.03 FINISHES:

A. Refer to Manufacturer's Standard Colors to determine appropriate color. All Panels shall receive a factory-applied AAMA 2605 Powder Coat Finish conforming to the following:
   1. General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations relative to applying and designating finishes.
   2. Aluminum – Factory finishing is to be supplied to match Custom Color and glass specifications or Standard Colors as required. Factory finish is a 5-stage pretreatment with dried-in-place conversion coating followed by an AAMA 2605 compliant powder coating.
   3. Other finishes are available dependent on the application and project conditions.

2.04 FABRICATION:

A. Panels are lappable.
B. Panels shall be formed on a stationary forming tool to shape the sheet metal. Portable roll formers, rented or owned by the Installer, are not acceptable.
C. Fabricate Flashings from the same material as the Soffit System.

2.05 SOURCE QUALITY:

A. Source Quality: Obtain Metal Panels and accessories from a single Manufacturer.
B. Fabrication Tolerances:
    1. Rib height: 3/8'' +/- 1/64''.
    2. Panel shearing length: +/- 1/8'' maximum.
    3. Follow tolerances in MCA's Preformed Metal Wall Guidelines.
C. Tests and inspections
D. Verification of performance

PART 3 - EXECUTION

3.01 EXAMINATION:

A. Examination of Surfaces: Installer must examine conditions under which work is to be performed and must notify Contractor in writing of unsatisfactory conditions.
B. Verify that field measurements and block-out dimensions are as shown on Shop Drawings.

3.02 PREPARATION:

A. Clean surfaces thoroughly prior to installation.
B. Prepare surfaces using the methods recommended by the Manufacturer to achieving the best result for the project conditions.

3.03 INSTALLATION:

A. General: Comply with Manufacturer's printed instructions, governing regulations for Seismic Codes, and the Ceiling & Interior Systems Construction Association Standards applicable to work.
B. Space Enclosure: Do not install any work until space is enclosed and weatherproofed, wet-work in space is completed and nominally dry, work above ceilings is complete, and temperature and humidity shall be continuously maintained at values near those of final occupancy.

3.04 CLEANING:

A. Follow Manufacturer's cleaning instructions for specified finish.

3.05 PROTECTION:

A. Procedures: Advise the Contractor of procedures required to protect the finished work from damage during the remainder of the construction period.
B. Damage to Finished Work: Finished units shall be without damage. Damage shall be repaired by the Contractor at the expense of the party damaging the material, as in accordance with the contract requirements.

END OF SECTION

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