GORDON CLEAN COVE

SECTION 13 21 13

PART 1 – GENERAL

1.01 SECTION INCLUDES:

- A. This section includes the installation of the Cleanroom Coving System, including but not necessarily limited to the following:
 - 1. Aluminum Cleanroom Coving with vinyl anchor strips: As specified in the Section.
 - 2. Sealing of all joints and seams.

1.02 RELATED DOCUMENTS/SECTIONS:

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions.
- B. Cleanroom Ceiling System: As specified in Division 13.
- C. Cleanroom Wall System: As specified in Division 13.
- D. Lay-In Cleanroom Ceiling Blank Panels: As specified in Division 13.

1.03 REFERENCES:

- A. GENERAL
 - 1. Comply with applicable requirements of the following, except where more stringent requirements are indicated by building codes.
- B. The Aluminum Association Standards and Data

1.04 DESIGN/PERFORMANCE REQUIREMENTS:

A. All components of the Gordon, Inc. Clean Cove System shall be provided by one (1) Manufacturer to ensure single source responsibility and quality control. Completed Coving installation shall be capable of providing Cleanroom cGMP compatibility rating as required and indicated for area installed.

1.05 **SUBMITTALS**:

- A. Submission must be made within ten (10) working days of the General Contract Award to avoid project delay.
- B. Description of Work: Furnish and install extruded Aluminum Coving as manufactured by Gordon, Inc. for transition from Cleanroom Ceiling Grid to wall, and at wall inside corner locations as indicated on Drawings, including notes and details. The installed Coving System shall provide a smooth, cleanable transition at inside corner locations in the Cleanroom, necessary for GMP compliance.
- C. Shop Drawings shall show locations of extruded Aluminum Coving as well as relationship to other work.
- D. Samples:
 - 1. Submit three (3) samples consisting of 8" pieces of Clean Cove as specified.

E. Sustainability:

- 1. Materials and Resources
 - a. Building Life-Cycle Impact Reduction
 - i. LCAs for aluminum and steel are available.
 - a) Aluminum http://www.gordon-inc.com/literature/pdf/cisca_background_report_aluminum_2020-04-24.pdf
 - b) Steel http://www.gordon-inc.com/literature/pdf/cisca_background_report_steel_2020-04-24.pdf
 - Building Product Disclosure and Optimization Environmental Product Declarations
 - Industry-average EPDs for aluminum and steel are available.
 - a) Aluminum http://www.gordon-inc.com/literature/pdf/101.1_cisca_industry_wide_epd_aluminum_specialty_products.pdf
 - b) Steel http://www.gordon-inc.com/literature/pdf/102.1_cisca_industry_wide_e pd_steel_specialty_products.pdf
 - Building Product Disclosure and Optimization Sourcing of Raw Materials
 - i. Regional Materials Raw materials can be purchased from Vendors within 100 miles of the project location and fabrication of all materials in Bossier City, LA, U.S.A.
 - Gordon's mission is to locate recycled materials that are not only of high recycled content, but extracted, produced, or extruded in the U.S.A.
 - d. Building Product Disclosure and Optimization Material Ingredients
 - i. Full disclosure of material recycled content is available.
 - e. Construction and Demolition Waste Management
 - Most products shipped from our plant are engineered to fit and reduce field cutting during installation.
 - a) Fewer indoor air quality problems
 - b) Less scrap and debris cleaner work environment
 - Less noise pollution caused by field cutting of materials
 - Maintain comfort and well-being of workers and occupants
- 2. Indoor Environmental Quality
 - a. Low-Emitting Materials
 - Gordon's State-of-the-art Powder Coating line produces the highest quality powder coated surfaces while also contributing to our sustainability drive.
 - a) No heavy Metals used in pre-treatment
 - b) Processed water is fully compliant for introducing into waste stream

- c) Extremely efficient use of powder coating through reclamation system reducing powder wastage
- d) Factory finished products shipped from our plant eliminates field painting
 - Prevents odorous and irritating air contaminants
 - 2. Introduces no hazardous waste
 - 3. Contributes no VOCs
 - 4. Maintains comfort and well-being of workers and occupants

b. Interior Lighting

 Gordon's AAMA 2604 powder coat finishes can provide the proper light reflectance to improve illumination in the space and reduce lumen output requirements.

3. Innovation

a. Innovation

i. Gordon is a strategic partner with the design community and continuously finds ways to design products that can aid in improving environmental performance.

b. LEED Accredited Professional

- i. Gordon has LEED Accredited Professionals on staff to assist with your sustainability requirements
- 4. Detailed explanation of LEED Credits and Gordon, Inc.'s Contribution can be located at http://www.gordon-inc.com/company/sustainability/.

F. Qualification Data:

 Firms specified in "Quality Assurance" Article must demonstrate their capabilities and experience by including lists of completed projects with project names and addresses, names and addresses of Architects and owners, and other information specified.

1.06 **QUALITY ASSURANCE:**

- A. Manufacturer: Firm with manufacturing and delivery capacity required for the project, shall have successfully completed at least ten (10) projects within the past five (5) years, utilizing systems, materials, and techniques as herein specified.
- B. Fabricator must own and operate its own manufacturing facilities for all metal components.

1.07 PRODUCT DELIVERY, STORAGE AND HANDLING:

A. All materials shall be protected during fabrication, shipment, site storage, and erection to prevent damage to the finished work from other trades. Store accessories inside a well-ventilated area, away from uncured concrete and masonry, and protected from the weather, moisture, soiling, abrasion, extreme temperatures, and humidity.

1.08 WARRANTY:

A. Furnish Manufacturer's:

1. Warranty that materials furnished will perform as specified for a period of not less than one (1) year from date of material shipment when installed in accordance with Manufacturer's recommendations.

PART 2 - PRODUCTS

2.01 MANUFACTURERS:

- A. Acceptable System: Gordon Clean Cove 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. Coving System and Attachment Materials:
 - 1. Clean Cove Coving System:
 - a. Clean Cove The Coving shall be extruded aluminum alloy 6063, temper T5 or T6 with Gordon, Inc.'s standard Cleanroom White powder coat finish. Cove profile shall have a continuous ribbed spine for attachment to the vinyl anchor strip affixed to the 90degree inside corner where the ceiling meets the wall or in wall corners.
 - b. Vinyl Anchor Strip An extruded vinyl anchor strip with serrated boss to receive the ribbed spine of the extruded aluminum Clean Cove shall be fastened into the wall inside corners or where the ceiling meets the walls.
 - c. 3-way Inside Corner Casting The Corner Casting shall be cast from Zinc, Zamak 3 alloy. Manufacturer shall supply inside corner casting for installation at wall angle inside corner to ceiling locations to provide a smooth, cleanable inside corner surface.
 - d. Sealing All seams and joints of the installed Clean Cove coving system shall be sealed with an owner-approved sealant caulk, color white.
- B. Clean Cove System Installation:
 - 1. Vinyl Anchor Strip Installation:
 - Install vinyl anchor strip securely in the wall corner or wall-toceiling corner, beginning approximately 4 inches from the inside corner intersection where walls and ceilings meet.

b. Anchor strips may be attached to the wall using flat head screws or heavy-duty polyolefin double-side tape.

2. 3-Way Inside Corner Casting Installation:

- Apply a bead of white, owner-approved caulk sealant to the perimeter edge on the backside of the 3 "arms" of the Clean Cove Corner zinc casting.
- Position the 3-way inside corner casting in the wall corner and wall-to-ceiling corner. Attach Clean Cove Corner Casting to the wall by using flat head screws through the holes in the tabs (2 per leg).
- c. Caulk the inside corner seams and wipe off excess caulk from the corner edges, taking care to leave a smooth seam free of surface imperfections.

3. Clean Cove Installation:

- a. Using a cut-off saw with carbide tip blade, cut Clean Cove extrusion to the appropriate length to form a continuous cove abutting the ends of the legs of the 3-way inside corner casting.
- b. Apply a bead of white, owner-approved caulk sealant to the flat surfaces on the back edge of the Clean Cove extrusion.
- c. Position the Clean Cove so that the ribbed spines on the back of the extrusion can snap into the serrated boss on the anchor strips.
- d. Press the Clean Cove firmly and securely into the vinyl anchor strip serrated boss.
- e. Caulk the butt splice seam and wipe off excess caulk from the Clean Cove edges, taking care to leave a smooth seam free of imperfections.

2.03 FINISHES:

A. The Clean Cove System shall receive a factory-applied antimicrobial powder coating finish in Gordon, Inc.'s standard Pearl White color. Factory finish is a 5-stage pretreatment with dried-in-place conversion coating followed by Gordon, Inc.'s standard Pearl White AAMA 2604 powder coating.

2.04 FABRICATION:

A. The Clean Cove System is provided in stock lengths. Installing contractor will cut material to length to fit at corners.

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.

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: Coordinate all work with other trades to be performed in or on ceiling and wall systems.

3.04 **CLEANING**:

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

3.05 PROTECTION:

- A. Procedures: Care should be taken during the remainder of construction to protect Gordon Clean Cove from damage.
- 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