

# GORDON EXTRUDED ALUMINUM CG SUSPENSION SYSTEM

## SECTION 09 54 00

### PART 1 – GENERAL

#### **1.01 SECTION INCLUDES:**

- A. This section includes extruded aluminum CG (specify CG10, CG15, or CG20) Suspension System and Perimeter as shown on the Drawings.

#### **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 apply 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. ASTM (American Society for Testing and Materials)
  - 1. ASTM C635, Standard Specifications for Metal Suspension Systems for Acoustical Tile and Lay-In Panel Ceilings.
  - 2. ASTM C636, Recommended Practice for Installation of Metal Suspension System for Acoustical Tile and Lay-In Panels.
- C. CISCA Ceiling Systems Installation Handbook.

#### **1.04 DESIGN/PERFORMANCE REQUIREMENTS:**

- A. All components of the Gordon Extruded Aluminum CG Suspension System shall be provided by one (1) Manufacturer to ensure single source responsibility and quality control.

#### **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 technical data and brochures for each type of specified system required. All products furnished shall have a flame spread classification of 0-25 for a Class A or 1 rating in accordance with ASTM-423.
- C. Shop Drawings shall show RCP dimensions, profile sizes, module sizes finishes, joining, attachments, and relationship of adjoining work.
- D. Samples:
  - 1. Submit three (3) samples consisting of 12" pieces of each type of Suspension and finish as specified, including Perimeter Molding and accessories.

- E. Certification:
  - 1. Submit certification from Manufacturer of Suspension System attesting that products comply with specified requirements, including finish, as specified.
- F. Qualification Data:
  - 1. 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. "Stick Built" or "Kit of Parts Systems" consisting of components from a variety of Manufacturers will not be considered or accepted.
- C. Manufacturer/Fabricator must own and operate its own painting and finishing facility to assure single source responsibility and quality control.

**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 SEQUENCING:**

- A. Substitute Products: Alternate proposals for substitute products will not be accepted unless approval is issued in addenda.
- B. Contract Execution: Submittals shall be completed and approved prior to award of subcontract for system components.
- C. Manufacturer's Production Schedule: Sub-contract for the work of this section shall be planned to allow sufficient time for Manufacturer's production and delivery scheduling.

**1.09 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 Extruded Aluminum CG (specify CG10, CG15, or CG20) Suspension 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. Materials:
  - 1. The Ceiling Suspension System shall be CG (specify CG10, CG15, or CG20) series. Modular Ceiling Suspension System shall consist of 12' 0" Main Tees and 4' 0" and/or 2' 0" nominal Cross Tees manufactured of extruded aluminum components by Gordon, Inc. All members shall be of standard 6063-T6 aluminum alloy. Each Cross Tee shall be factory fabricated for independent aluminum Bend-Tab Clips on each end.
  - 2. Main Tees, Cross Tees, and Wall Angle shall be of the finish specified by customer.
  - 3. All components shall be extruded aluminum, meeting all loading data. No roll formed aluminum Grid will be allowed.
  - 4. Main Tees shall be joined together at each end by means of an independent aluminum Bend-Tab Splice Member.
  - 5. Cross Tees shall attach to Main Tees and other Cross Tees by means of an independent aluminum Bend-Tab Clip which penetrates and slides through slots in the Main Tees and other Cross Tees.
  - 6. All Grid Components have factory applied 3/32" x 3/8" (CG-10), 3/32" x 15/32" (CG-15), or 3/32" x 3/4" (CG-20) white closed-cell polyethylene gasket with adhesive on one side. Polyethylene gasket must pass fungus resistance test method 508.1 mill-std 810 C flame resistance test FMYSS 302 with burn rate of 4" per minute. Shore hardness of gasket must be 7 on AA scale and 51 on 00 scale per ASTM D-2240. The gasket must be 2 lb. density per cubic foot and meet U.S.D.A. approval.
  - 7. The System shall comply with ASTM C-635 "Metal Suspension Systems for Acoustical Tile and Lay-In Panel Ceilings," with intermediate duty (CG-10 & CG-15) and heavy duty (CG-20) designation.
- B. System Description:
  - 1. Extruded CG Suspension System as manufactured by Gordon, Inc., shall consist of Main Tees (list finish and profile number), Cross Tees (list finish and profile number), Perimeter Wall Angle (list finish and profile number), and all necessary Clips and Splices required for a complete System as required to meet local building codes.
  - 2. Deflection of Grid shall be limited to L/360 of span (1/8" maximum) when full dead load is applied.
  - 3. Aluminum extrusion shall be 6063-T6 alloys (ASTM B221, ASTM B221M).

4. General: Provide metals free from surface blemishes where exposed to view in finished unit. Surfaces exhibiting pitting, seam marks, rollers 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. All visible Suspension Components shall receive a satin clear anodized 200-R1 finish or a factory-applied powder coating finish to match Custom Color and gloss specifications or Standard Colors as required. Factory finish is a 5-stage pretreatment with dried-in-place conversion coating followed by an AAMA 2604 compliant powder coating. Finish shall be chosen from the Manufacturer's standard paint finish selection (Custom Colors or other types of paint are available).

### **2.04 FABRICATION:**

- A. The Suspension module will be (Specify size, i.e. 2' x 2').
- B. All intersections between Main Tees and Cross Tees shall be butt cut and notched as required.
- C. Perimeter shall be fabricated to match the system.
- D. All components, including accessories, are available to meet codes such as seismic and loads such as light fixtures and air diffusers.
- E. Hanger wires (furnished by the Ceiling Contractor) shall be #12 Gauge galvanized without kinks and splices.

## **PART 3 - EXECUTION**

### **3.01 EXAMINATION:**

- A. Examine building structure scheduled to receive Ceiling System for unevenness or irregularities that would affect quality and execution of work.
- B. Tolerances: Install Ceiling System with maximum permissible deflection of L/360 of span with maximum surface deviation of 1/8" in 10'-0" (no load applied) ASTM 635-92.

### **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.

### **3.04 CLEANING:**

- A. Clean all surfaces following installation. If necessary, use a dilution of Isopropyl Alcohol and distilled water.
- B. Replace units having scratches, abrasions, or other defects with unblemished Panels or Suspension.
- C. Maintenance per Manufacturer's finish maintenance instructions.

**3.05 PROTECTION:**

- A. Procedures: Care should be taken during the remainder of construction to protect Cleanroom CG Grid 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**