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# **Guideline Specifications**

# GORDON EXTRUDED ALUMINUM LG SUSPENSION SYSTEM DIVISION 09 5400 Specialty Ceilings

# PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

A. Drawings and General Provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections apply to this Section.

#### 1.2 SUMMARY

A. This section includes extruded aluminum grid system and perimeter as shown on the drawings.

### 1.3 REFERENCES

- A. ASTM C635, Standard Specification for Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings.
- B. ATSM C363, Recommended Practice for Installation for Metal Suspension for Acoustical Tile and Lay-in Panels
- C. CISCA Ceiling Systems Installation Handbook.

### 1.4 SUBMITTALS

- A. Manufacturer's Literature and Data:
  - 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 on 0-25 for a Class A or 1 rating in accordance with ASTM-423.
- B. Shop drawings shall show dimensions, sizes, thickness, alloys, tempers, finishes, joining, attachments and relationship of adjoining work.

# C. Samples:

1. Samples shall include a three, 12" pieces of each type of suspension and finish as specified including perimeter molding and accessories.

### D. Certification:

1. Submit certification from manufacturer of suspension system attesting that products comply with specified requirements including finish as specified.

### E. 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.

### 1.5 QUALITY ASSURANCE

- A. Manufacturer: Firm with manufacturing and delivery capacity required for the project, shall have successfully completed at least ten projects within the past five 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.

# 1.6 DELIVERY, STORAGE & HANDLING

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.

### PART 2 - PRODUCTS

### 2.1 MANUFACTURER

- A. Gordon Extruded Aluminum LG-15 Suspension Systems shall be manufactured by Gordon Cleanroom Products Division, Gordon, Inc., 5023 Hazel Jones Road, Bossier City, LA 71111, (888) 315-1561, Fax (800) 877-8746, <a href="www.gordoncleanroom.com">www.gordoncleanroom.com</a>, sales@gordoncleanroom.com.
- 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 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 projects similar in detail and scope.

# 2.2 SYSTEM Description

- A. The ceiling Suspension System shall be LG-15 series. Modular ceiling suspension system shall consist of 12' 0" main tees, 4' and/or 2' nominal cross tees manufactured of extruded aluminum components by Gordon, Inc. All members shall be of standard 6063-T5 aluminum alloy. Each cross tee shall be factory fabricated for independent aluminum bend-tab clips on each end.
- B. Main tees, cross tees, and wall angle shall be (select one: clear anodized, Cleanroom White powder coat) finish.
- C. All components shall be extruded aluminum, meeting all loading data. No roll-formed steel or aluminum grid will be allowed.

- D. Main tees shall be joined together at each end by means of an independent aluminum bend-tab splice member.
- E. 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.
- F. All grid components have factory applied 3/32" x 15/32" white closed-cell polyethylene gasket with adhesive on one side. Polyethylene gasket must pass fungus resistance test method 508.1 mill-std 810C 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 OO scale per ASTM D-2240. The gasket must be 2 lb. density per cubic foot and meet USDA approval.
- G. The system shall comply with ASTM C-635 "Metal Suspension Systems for acoustical tile and lay-in panel ceilings", with intermediate duty designation.

### 2.3 MATERIALS

# A. Extruded LG Suspension System

- Extruded LG 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-T-5 alloys. (ASTM B221, ASTM B 221 M)
- 4. General: Provide metals free from surface blemished where exposed to view in finished unit. Surfaces exhibiting 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.

### 2.4 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 described in paragraph 2.2.
- 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.

### 2.5 FINISHES

A. All suspension components visible shall receive a micro-etched pretreatment prior to receiving an electrostatically applied Acrylic-Polyester hybrid powder coat paint finish.

 All suspension components visible shall be supplied with a satin clear anodized 200-R1 finish.

### PART 3 - EXECUTION

### 3.1 INSPECTION

A. Examine building structure schedule of receive ceiling system for unevenness or irregularities that would affect quality and execution of work.

### B. Tolerances:

1. Install ceiling system with maximum permissible deflection of L/360 of span maximum surface deviation of 1/8" in 10'-0" (no load applied) ASTM 635-92.

# 3.2 INSTALLATION

A. General: Comply with manufacturer's printed instructions, with governing regulations for Seismic Codes, and with the Ceiling & Interior Systems Construction Association standards applicable to work.

### 3.3 CLEANING

- A. Clean all surfaces following installation. If necessary use only a mild soap or detergent solution such as TSP-90 or Ivory.
- B. Replace units having scratches, abrasions, or other defects with unblemished panels or suspension.
- C. Maintenance per manufacturer's finished maintenance instructions.

### 3.4 PROTECTION

A. Protection of Gordon Systems from damage by other trades after installation to be provided by general contractor.

### 3.5 GENERAL RESPONSIBILITY

A. Variation from specification: Any variation from this specification resulting in additional cost to any other contractor or subcontractor on this project shall be the sole financial responsibility of the contractor for the work of this section.