

# GORDON EXTRUDED ALUMINUM INTERIOR BEAM MATE GRID SYSTEMS

## SECTION 09 54 36

### **PART 1 – GENERAL**

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

- A. This section includes Extruded Aluminum Interior Beam Mate System as shown on the Drawings.
- B. Related sections include the following: (List applicable sections)

#### **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 Interior Beam Mate 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 Beam System required.
- C. Shop Drawings shall show dimensions, sizes, perimeter details, finishes, joining, attachments, and relationship of adjoining work, as well as Reflected Ceiling Plans.
- D. Samples:

1. Submit three (3) samples consisting of 6” pieces of each type of Beam, Clip Systems, and finish as specified.
- E. Certification:
1. Submit certificates from Manufacturer of Beam Mate 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 Beam Mate 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. Suspension System:
    - a. Extruded Aluminum Beam Mate in (list standard sizes required) or custom sizes as specified and detailed.
    - b. Aluminum extrusion shall be 6063-T6 alloy. (ASTM B221, ASTM B 221M).
    - c. The Grid System shall form a (specified) module size. Main Beams shall be supported a minimum of 48" O.C. with #12 galvanized hanger wire, braided stainless steel cable, or all thread rod. Cross Beams shall be attached to Main Beams by means of Aluminum Clips to afford rigid lateral connection.
    - d. Deflection of Beam System shall be limited to L/360 of the span when full dead load is applied.
    - e. Provide metals free from surface blemishes where exposed to view in finished unit. Surfaces that exhibit pitting, seam marks, roller marks, stains, discolorations, or other imperfection on finished units are not acceptable. All metal shall be of the highest-grade commercial type.
  - 2. In-Fill Panels for Beam System (If used):
    - a. Light diffusers shall be 0.080 nominal flat matte opal white acrylic, class A, incombustible. OR
    - b. Metal Panels shall be in size and thickness as required to limit deflection to L/360 of the span. Panels may be perforated, slotted, woven, etc. and fabricated to fit the required opening.

## **2.03 FINISHES:**

- A. Factory finishing is to be supplied 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. Alternate finishes shall be chosen from the manufacturer's standard paint finish selection (Custom Colors or other types of paint are available) including:
  - 1. Powder Coating – AAMA 2605 compliant
  - 2. Wood-Look Series 1 and Series 2 Laminate finish is available upon request.

## **2.04 FABRICATION:**

- A. Provide Beam Mate Ceiling System with all necessary Clips for attachment of Main Tees, Cross Tees, and Perimeter and Attachment Clips to hangers.
- B. Perimeter Conditions:
  - a. Floating Perimeters:
    - i. Provide factory-mitered and welded Beam Mate Corners OR
    - ii. Contura Perimeter Trims may also be provided.
  - b. Fixed Perimeters:
    - i. Wall Angle.
      - 1. Custom options are available.

## **PART 3 - EXECUTION**

### **3.01 EXAMINATION:**

- A. Examine building structure scheduled to receive Beam System for unevenness or irregularities that would affect quality and execution of work. Notify Contractor in writing of any unsatisfactory conditions.
- B. Tolerances: Install Beam 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.
- C. Verify that Beam Mate parts coordinate with bill of materials 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. Protection of Beam Mate Ceiling Systems from damage by other trades after installation to be provided by General Contractor.

## **END OF SECTION**