

GORDON, INC. DATA CENTER PARTITION WALL SYSTEM

SECTION 09 00 00

PART 1 – GENERAL

1.01 SECTION INCLUDES:

- A. Work on this Section includes the installation of the Data Center Partition Wall System, including, but not necessarily limited to the following:
 - 1. Aluminum Post and Batten Framing and Infill Panels: As specified in this Section.

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.
- D. Related Work:
 - 1. Structural Data Center Ceiling Grid System: As specified in Division 9.

1.03 REFERENCES:

- A. ASTM (American Society for Testing and Materials)
 - 1. ASTM E84, Standard Test Method for Surface Burning Characteristics of Building Materials.
 - 2. ASTM D635, Standard Test Method for Rate of Burning and or Extent and Time
 - 3. The Aluminum Association, Aluminum standards and Data

1.04 DESIGN/PERFORMANCE REQUIREMENTS:

- A. All components of the Gordon, Inc. Partition Wall System shall be provided by one (1) Manufacturer to ensure single source responsibility and quality control.
- B. Completed Partition Wall System shall be capable of providing a demountable barrier between the Data Hall and Mechanical Gallery. The System must be installable from the Data Hall side only.

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.
- C. Shop Drawings shall show dimensions, sizes, thickness, finishes, joining, attachments, and relationship of adjoining work.
- D. Samples:

1. Samples shall consist of two (2) sample-size posts, one (1) sample-size Polygal® Panel, one (1) head track, one (1) head track fascia piece, and two (2) floor brackets.
- E. Certification:
 1. Submit certification from Manufacturer of Partition Wall 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, Inc. Data Center Partition Wall 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. Data Center Partition Wall System:
 - 1. Framing System:
 - a. Materials: Framing members shall be manufactured of extruded aluminum alloy 6063, temper T5 or T6.
 - b. Finish shall be 204-R1 etched and clear anodized.
 - c. Post profile shall be a 3" x 3" wide box beam with a continuous integral locking feature for attachment of batten panel retainer to facilitate field installation.
 - d. Post and Batten (available up to 14' nominal length) shall have a continuous snapping feature to allow installation of 16 mm infill Panels.
 - 2. Panels shall be 16 mm thick hollow polycarbonate sheets. Finish shall be "ICE." Panel material must pass Flame Spread rating of 5 and Smoke Developed rating of 70 per ASTM E84 requirements. Panels are nominal 4' wide by 14' tall. The top and bottom of each panel will be fitted with an extruded aluminum alloy 6063, with a 204-R1 etched and clear anodized finish trim.
 - 3. Attachment System:
 - a. Top Trade made of 6063-T5 or T6 extruded aluminum profiles, which allow for vertical movement of Post, Batten, and Panels in cases of ceiling or floor displacement. Top track to bolt to ceiling system above every 4'.
 - b. Top Bracket – 16 Gauge stainless steel #2B brackets shall fit within the hollow Post. Each top bracket to fasten to screw slots in the top track with ¼-20 bolts.
 - c. Floor Bracket – 16 Gauge stainless steel #2B brackets shall be fastened to the flooring below with fasteners designed for anchoring into the appropriate substrate and fit securely within the hollow Post.

- B. System Description:
 - 1. Extruded aluminum Data Center Partition Wall System with infill Panels as indicated on Drawings, including notes and details.

2.03 FINISHES:

- A. The framing system and attachment system components of the Gordon, Inc. Partition Wall System shall have a clear anodized finish.
- B. The infill Panels finish shall be "ICE."

2.04 FABRICATION:

- A. The extruded aluminum framing members shall be cut to the specified length as shown on the Drawings.
- B. The infill Panels shall be supplied as nominal 4' wide by up to 14' tall.

PART 3 - EXECUTION

3.01 EXAMINATION:

- A. Examine building structure scheduled to receive Partition Wall System for unevenness or irregularities that would affect quality and execution of work.
- B. Verify that the structural ceiling grid system above is level and at the proper height above the floor.

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 building and Seismic Codes if required.
- B. Partition Wall System Installation:
 - 1. Prior to installing the Partition Wall System, verify that the structural ceiling grid system above is level and at the proper height above the floor. Reference Submittal/Shop Drawings if available.
 - 2. Attach the aluminum top track to the ceiling system every 4' with fasteners deemed acceptable by the Structural Engineer.
 - 3. Layout positions of floor brackets no more than 48" on center. Center aligned with top bracket.
 - 4. Attach floor brackets to floor using appropriate fasteners for the substrate.
 - 5. Slide top brackets into guides of post. Stand post up and place over the mounted floor brackets. Plumb the post. Fasten each wing of the top bracket to the screw slot of the top track with ¼-20 Philips head bolts.

6. Continue installing post until complete. There shall be 45” between posts, with posts centered on 48” centerlines. Install the snap in filler piece into top track between posts.
7. Install aluminum J Trims on the bottom edge of the Polycarbonate Panels with the longer leg facing the Data Hall. Place the Wall Panel in to position between posts.
8. From the Data Hall side, insert the Polycarbonate Panels within the posts. Position the two Panels in place and secure with an aluminum batten. Begin the installation of each aluminum batten at the bottom of the post and progressively install upwards toward the ceiling. The batten is best installed with a clean, rubber mallet.
9. After all battens have been installed, insert the aluminum valance strip into the top track.

3.04 CLEANING:

- A. Clean all surfaces following installation. If necessary, use only a mild soap or detergent solution such as TSP-90 or Ivory.
- B. Maintenance per Manufacturer’s finish maintenance instructions.

3.05 PROTECTION:

- A. Procedures: Care should be taken during the remainder of construction to protect the Partition Wall System 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