

# Section 098413 Fixed Sound Absorption Panels Or Section 098436 Sound Absorption Ceiling Units Acoustical Quiet Coordinate Systems

## PART 1-GENERAL

### 1.1 RELATED DOCUMENTS

- A. Drawing 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 ceilings, baffles, wall panels as shown on the drawings.
- B. Related Sections include the following: (list applicable sections).

### 1.3 SUBMITTALS

- A. Manufacturer's Literature and Data:
  - 1. Product Data: Submit manufacturer's technical data and brochures for each system required along with independent test reports, which shall include.
    - a. Flame spread classification of 0-25 for a class A of 1 rating in accordance with ASTM E-84.
    - b. Acoustical Tests for each system specified (wall panels, baffle clouds).
    - c. Impact Test in accord with requirements of specification section 2.4.
- B. Shop Drawings:
  - 1. Shop drawings shall show a dimension, sizes, thickness, finishes accessories, attachments, and mounting to adjoining work.
- C. Samples:
  - 1. Samples shall include a 12" x 8" piece of each type of material and covering as specified and PVC accessories.
- D. Certifications:
  - 1. Submit certification from manufacturer of wall panel (or ceiling panel) attesting that products comply with specified requirements including finish as specified.

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## E. 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.

## 1.4 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 components. Systems consisting of components from a variety of manufacturers will not be considered.

## 1.5 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 panels or baffles 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. Acoustical Systems shall be manufactured by CMA | Gordon, 5023 Hazel Jones Rd., Bossier City, LA 71111 (318) 841-8159
- B. The list 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 14 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.

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## 2.2 SYSTEMS DESCRIPTION

- A. System shall be CMA | Gordon Quiet Coordinates Acoustical Systems. All panels, trims and accessories shall be provided as a complete package of this work.
- B. Acoustical Systems: (Choose one or more)
  - 1. Baffle System
  - 2. Wall Panels
  - 3. Ceiling Clouds
  - 4. Impact Ceiling Systems
- C. Product Size – 4'x 4', 5'x 5', Triangular, 4' x 8', 5' x 10' (or other non-standard sizes and shapes.)

## 2.3 MATERIALS

- A. Fiberglass Panels
  - 1. Fiberglass Core Thickness – 2" (1", 1.5" non-standards).
  - 2. Fiberglass Core Density – Special Dual Density 1.8# & 3#.
  - 3. Acoustical Qualities:
    - a. Finished Acoustical Materials as specified shall provide a NRC (Noise Reduction Coefficient) of 0.95. Wall Mounted Quiet Coordinates with Mounting "A", shall provide an absorption of 1.06 @ 500 Hz.
    - b. All material as furnished shall be tested in accord with ASTM C-423 for Sound Absorption. Test results shall be furnished for the mounting selected (E-400 ceiling, E-795 baffles, A or D-100 for wall).
- B. Extrusion Mounting System (choose one or both of the following options).
  - 1. High Impact System: Shall consist of 2" x 2" Wall Mount Extrusion, 3" Face Mount Extrusion (Wall Panels, Clouds, Baffles) and Double Mount 4" Extrusion (Wall Panel Application only). Complete system shall lock together without fasteners or other mechanical attachments. Extrusions shall be manufactured from Class A PVC.
  - 2. Slim/Mate Wall or Ceiling System: Shall consist of PVC Extrusions 2" deep with a 15/16" Exposed face. All components shall completely mate with each other to capture the panel or ceiling system as shown on the drawings.

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- C. Mounting Accessories: shall include Corner Trim Covers, Cable Crimp Sleeves, Turnbuckles, Wire Hanger Clips, Beam Clamps, and 7x7 Aircraft Cable, Nylon Tie Wraps, Roll in Frame Clamps for Banner & Flags, Off-set Attachment Clips and other Accessories that may be requires to completely and safely install the Quiet Coordinates System.
- D. Encapsulated Facings
  - 1. All facings furnished with acoustical cores shall be rated non-combustible, class A in accordance with ASTM E-84.
- E. Facing Options
  - 1. Facing shall be Matte Face, woven white fiberglass, specifically designed for high-impact resistance. Manufacturer shall submit an independent test report that shows that a 2" wall mounted panel shall absorb at least 78 lbs of force from a basketball's impact on the panel, without damage. (Optional Facings – Open Weave, Tuff-Stuff, Textura).
  - 2. Non Fiberglass – Nylon Ripstop Sailcloth, PVC, or Tedlar
  - 3. Panels subject to extreme abuse (arm level, back of bleachers, etc). Face shall by Quiet Coordinates Impact-Plus, perforated thermo-plastic 1/16"thick facing fully adhered to fiberglass core.

## 2.4 PAINTED QUIET COORDINATES (OPTIONAL)

- A. Panels and Extrusions field coated by spraying the materials with a water base, non-bridging air-dried coating. All PVC Extrusions must be first sprayed with a approved air dried primer. Non-Toxic.
- B. All coatings shall be as specified. Contact the manufacturer for specific recommendations for applications and maintenance.

## PART 3 – EXECUTION

### 3.1 EXAMINATION

- A. Examine building structure scheduled to receive acoustical system for unevenness or irregularities that would affect quality and execution of work.
- B. Tolerance:
  - 1. Install ceiling systems with maximum permissible deflection of L/360 of span maximum surface deviation of 1/8" in 4'-0" (no load applied) ASTM 635-92.

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## 3.2 INSTALLATION

- A. General: Comply with manufacturer's printed instructions, governing regulations for Seismic Codes, and with the Ceiling Interior Systems Construction Association standards applicable to work.
- B. Space Enclosure: Do not install any work until space is enclosed and weather proofed, wet-work in space is completed and nominally dry, work above ceilings is complete, and temperature and humidity is continuously maintained at values near those of final occupancy.

## 3.3 CLEANING

- A. Clean all surfaces following installation, in accord with manufacturer's directions. For removal of dirt or other stains from the panels and extrusions, spray Windex brand cleaner on clean dry towel, and then with a gentle rubbing motion apply the towel to the panel or extrusion. Never spray a cleaner of any type directly on the panel.
- B. Replace units having tears, abrasion, or other defects, with unblemished panels, or suspension.
- C. Maintenance per manufacturer's finish maintenance instructions.

## 3.4 PROTECTION

Protection of CMA | Gordon Acoustical systems from damage by other trades after installation to be provided by general contractor.