# ALPRO® ACOUSTICAL SYSTEMS WALL BAFFLE PANEL SYSTEM FOR INDUSTRIAL APPLICATIONS

#### Section 09 84 00

#### PART 1 - GENERAL

# 1.01 <u>SECTION INCLUDES:</u>

A. This section includes ALPRO® Acoustical Wall Baffle Panel System 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. B209 Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate
  - 2. E84 Standard Test Method for Surface Burning Characteristics of Building Materials
- C. The Aluminum Association Standards and Data

# 1.04 <u>DESIGN/PERFORMANCE REQUIREMENTS:</u>

A. All components of the ALPRO<sup>®</sup> Acoustical Wall Baffle Panel 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.
  - 1. All products furnished shall have a flame spread classification of 0-25 for a Class A or Class 1 rating in accordance with ASTM E84.
  - 2. All products furnished shall be tested in accordance with ASTM C-423 for Sound Absorption. Test results shall yield an NRC (Noise Reduction Coefficient) of no less than 0.85 for corrugated baffles and 0.80 for flat baffles.
- C. Shop Drawings shall show dimensions, sizes, thickness, finishes, joining, attachments, and relationship of adjoining work.

# D. Samples:

1. Submit a minimum 12" X 12" nominal piece of each type of metal, finished as specified, and accessories.

#### E. Certification:

1. Submit certificates from Manufacturer of Wall Baffle Panel System attesting that products comply with specified requirements, including finish, as specified.

# F. 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.

# 1.06 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.
- D. Testing Agency Qualifications: An independent testing agency, acceptable to authorities having jurisdiction, with the experience and capability to conduct testing indicated, as documented according to ASTM E 548.

# 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:
  - 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: ALPRO® Acoustical Wall Baffle Panel 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. System Description:

1. Baffle Wall Panels shall be ALPRO<sup>®</sup> Acoustical Systems. All Baffle Wall Panels and Suspension Components, including Acoustical Component, shall be provided as a complete package of this work.

#### B. Materials:

- 1. Mounting Accessories (For Wall Mounted Baffles)
  - a. For surface mounting to structural wall, furnish Z Clips in extruded aluminum or 18 Gauge Galvanized Steel.
  - b. For offset mounting, furnish offset mounts for 1", 2", or 4" spacing from the wall (Aluminum, Steel, or Stainless Steel). Finished to match the Wall Baffle.
  - c. General: 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. Metal Wall Baffle Panels

- a. Choose from the following selections for exposed metal: Aluminum sheet shall be 3003-H14 alloy, 0.032" thick (ASTM B 209). Galvanized sheet (ASTM A366/A366M) shall be 22 gauge, 24 gauge or 26 gauge. Galvanized Steel is recommended for interior use only.
- b. The metal acoustical Wall Baffle Panels shall be corrugated using (Specified ALPRO® Pattern Type) and perforated with 1/8" diameter holes on 21/64" staggered centers, approximately 13% open area.
- c. The Wall Baffle Panels shall be fabricated of stucco-embossed or smooth aluminum (0.032") OR Galvanized (22, 24, 26) Gauge steel.

- d. Framing members shall be made from 6063 extruded aluminum or Galvanized Steel.
  - i. Provide two (2) framing members for Wall Baffle Panels up to 48" in length.
  - ii. Provide three (3) framing members for Wall Baffle Panels up to 96" in length.
  - iii. Provide four (4) framing members for Wall Baffle Panels up to 120" in length.
- e. Sound Absorption Material:
  - Provide fiberglass 2" thick X 2 PCF density. The fiberglass panel shall be wrapped in Class A, per ASTM E 84, Black Polyvinylchloride (PVC)

#### 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 (interior use only) 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 (exterior or interior use) compliant
  - 2. Proclaim™ Expressive Laminate Imagery for Flat Wall Baffle Panels

# 2.04 **FABRICATION**:

A. ALPRO<sup>®</sup> Acoustical Wall Baffle Panel System Baffles are formed to the specified profile size.

#### PART 3 - EXECUTION

#### 3.01 **EXAMINATION**:

A. Examine building structure scheduled to receive Wall Panel Baffles for unevenness or irregularities that would affect quality and execution of work.

#### 3.02 PREPARATION:

A. 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 and governing regulations applicable to work.
- B. Tolerances: Install Baffle Panel System with maximum permissible deviation from plumb, level, or line of 1/8" in 4'-0" (No load applied).

#### 3.04 CLEANING:

A. Follow Manufacturer's cleaning instructions for specified finish.

# 3.05 PROTECTION:

A. Protection of Gordon, Inc. systems from damage by other trades after installation to be provided by the General Contractor.

# **END OF SECTION**