

ALPRO® Guideline Specifications

ALPRO® ACOUSTICAL SYSTEMS CEILING PANEL SYSTEMS

Note to Specifier: ALPRO Systems are a finished decorative/functional product and should be specified per The Construction Specifications Institute's format in the following Divisions. All Division numbers listed within this document refer to the CSI format: 09510 - Acoustical Ceilings, 09547 - Metal Ceiling, or 09800 - Acoustical Treatments

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 Metal Ceiling Panels as shown on the architectural 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 specified system.

B. Shop Drawings:

- 1. Shop drawings shall show dimensions, sizes, thickness, finishes, joining, mounting attachments, and relationship to adjoining work.

C. Samples:

- 1. Samples shall include a minimum 12" X 12" nominal piece of each type of metal, finished as specified, and accessories.

D. Certification:

- 1. Submit certification from manufacturer of ceiling panels attesting that products comply with specified requirements including finish as specified.

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.

F. Product Test Reports:

- 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-423-90 for Sound Absorption.

Test results for a Type E-400 ceiling mounting method shall yield an NRC (Noise Reduction Coefficient) of no less than 1.0.

G. Maintenance Data:

1. Provide maintenance instructions for acoustical panels to be included in maintenance manuals as specified in Division 1.

H. Warranty:

1. Provide product warranty for one year from date of substantial project completion.

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 metal components. 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.

1.5 DELIVERY, STORAGE & 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 acoustical panels 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. ALPRO Systems shall be manufactured by ALPRO Acoustical Systems, (909) 517-1133. (909)517-1130 FAX
- 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. Ceiling System shall be ALPRO Acoustical Systems. All panels, perimeter trims and suspension components including acoustical component shall be provided as a complete package of this work.

2.3 MATERIALS

A. Suspension System

1. Extruded aluminum as manufactured by ALPRO , Division of Gordon, Inc. shall consist of main tees, cross tees, perimeter angle, perimeter trim, and any 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 the span when full dead load is applied. (ASTM C 635)
3. Aluminum Extrusions shall be 6063-T6 alloy. (ASTM B 221, ASTM B 221 M)
4. General: Provide metals free from surface blemishes where exposed to view in finished unit. Surfaces that exhibit 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,

B. Metal Panels

1. Choose from the following selections for exposed metal. Aluminum sheet shall be 3003-H14 alloy, minimum .020", .032" recommended, (ASTM B 209). Galvanized steel sheet (ASTM A366/A 366M) shall be minimum of .0216" (26 Gauge), .0276" (24 gauge) recommended.
2. The metal acoustical Ceiling Panels shall be corrugated using (Specified ALPRO Pattern Type) and perforated with 1/8" diameter holes on 2 1/64" staggered centers, approximately 13% open area.
3. The panels shall be fabricated of stucco-embossed or smooth aluminum (.020" or .032") OR smooth galvanized (22, 24, 26) gauge steel.
4. Sound Absorption Material:
 - a. Provide fiberglass (1.5" or 2" or other thickness) X (1.5 #, 2 #, or other density). The fiberglass panel shall be wrapped in Class A, per ASTM E84, (Clear Polyvinylchloride) (Black Polyethylene).

2.4 FINISHES

A. Powder Coat Finish – (Interior use only)

1. All ALPRO Panels & Accessories shall receive a micro-etched pretreatment prior to receiving an electrostatically applied powder coat paint finish.
2. All cut edges, including perforated holes must be coated. Finish shall be cured and oven baked to insure paint adhesion and uniform surface hardness.
3. Paint Color to be selected from ALPRO Standard Colors (or approved custom color).

OR

A. Alternative Finishes – (Interior or exterior use)

1. Aluminum shall receive a factory applied and baked finish of a 70% Kynar® or Hylar 5000® (Fluropon® or Fluropon Classic® II) paint or a 50% Kynar® or Hylar 5000® (Acrodize™ Hardcoat or Acroflur™) paint
2. All cut edges, including perforated holes must be coated. Finish shall be cured and oven baked to insure paint adhesion and uniform surface hardness.
3. Material that is to be field painted should be degreased and primed per paint manufacturer's specifications.
4. Galvanized Steel sheets shall receive a factory applied and baked finish of Fluropon® paint. Galvanized Steel is recommended for interior use only.

PART 3 –EXECUTION

3.1 INSPECTION

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

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 weatherproofed, 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.
- B. Replace material having scratches, abrasions, or other defects, with unblemished panels, or suspension.
- C. Maintenance per manufacturer's finish maintenance instructions.

3.4 PROTECTION

- A. Protection of ALPRO® Acoustical 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.