

**Architect's and Engineer's Specifications for
Auralex® Acoustics, Inc.
ProPanels**

Section 098413

Acoustical Treatment - Fixed Sound-Absorptive Panels

1. General

1.1. Section Includes

- a) Broadband sound absorptive panels.

1.2. Related Sections

- a) Section 095xx – Suspended Acoustical Ceilings: Conventional grid-supported acoustic ceilings.

1.3. Performance requirements

- a) Fire: Provide panels that demonstrate "Class A" performance when tested in accordance with ASTM E84:
1. Flame Spread = 10
 2. Smoke Developed = 65
- b) Sound Absorption: Provide panels that are certified to meet the following minimum sound absorption characteristics when tested in accordance with ASTM C423:

ProPanels	Octave Band Center Frequency (Hz)						NRC
	125	250	500	1000	2000	4000	
1" thick	0.07	0.29	0.80	1.01	1.05	0.99	0.80
2" thick	0.42	0.89	1.12	1.07	1.10	1.09	1.05

1.4. Submittals

- a) Submit in accordance with provisions of Section 01300.
- b) Product Data: Submit manufacturer's recommended installation instructions and documentation certifying conformance with specified performance requirements.
- c) Shop Drawings: Submit drawings indicating layout for all areas to receive work of this section, including locations of light fixtures, ceiling diffusers and grilles. Indicate pattern of panels, details and coordination requirements for work of other sections.
- d) Samples: Submit for approval two (2) samples of sound absorptive panels, not less than four (4) inches by seven (7) inches in size and demonstrating color, edge style and texture.

1.5. Quality Assurance

- a) Installer Qualifications: Installers shall have demonstrated experience in installation of products similar to those specified in this section. Documentation of at least five (5) years previous installations of similar materials shall be provided.

1.6. Delivery, Storage and Handling

- a) Deliver materials in manufacturer's original unopened and undamaged packages with labels legible and intact.
- b) Store materials in unopened packages in a manner that will avoid damage from the environment and from construction operations.

1.7. References

- a) ASTM C423 – Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
- b) ASTM E84 – Standard Test Method for Surface Burning Characteristics of Building Materials.

1.8. Environmental Requirements

- a) Do not begin installation of acoustical panels until building has been enclosed and environmental conditions approximate interior conditions that will prevail when building is occupied.

2. Products

2.1. Manufacturers

- a) Provide ProPanels™ as manufactured by Auralex Acoustics, Inc., 9955 Westpoint Dr. Suite 101, Indianapolis, IN 46256. Tel. (317) 842-2600. Fax: (317) 842-2760.
- b) Substitutions are not acceptable.

2.2. Acoustical Panels

- a) B122 ProPanel™. Core of single fiberglass with density of 6 to 7 pcf (96 to 112 kg/m³), chemically hardened edges, and seamless finish material wrapped and bonded to back side of panel.
 1. Wideness: 24 inches (609.6 mm).
 2. Length: 24 inches (609.6 mm).
 3. Thickness: 1 inch (25.4 mm).
 4. Edges: Hardened, Beveled.
 5. Finish material: Guilford of Maine, Spinel.
 6. Finish color: Sandstone or Obsidian.
 7. Mounting: Impaling clips.
- b) B124 ProPanel™. Core of single fiberglass with density of 6 to 7 pcf (96 to 112 kg/m³), chemically hardened edges, and seamless finish material wrapped and bonded to back side of panel.
 1. Wideness: 24 inches (609.6 mm).
 2. Length: 48 inches (1 219.2 mm).
 3. Thickness: 1 inch (25.4 mm).
 4. Edges: Hardened, Beveled.
 5. Finish material: Guilford of Maine, Spinel.
 6. Finish color: Sandstone or Obsidian.
 7. Mounting: Impaling clips.
- c) B224 ProPanel™. Core of single fiberglass with density of 6 to 7 pcf (96 to 112 kg/m³), chemically hardened edges, and seamless finish material wrapped and bonded to back side of panel.
 1. Wideness: 24 inches (609.6 mm).
 2. Length: 48 inches (1 219.2 mm).
 3. Thickness: 2 inches (50.8 mm).
 4. Edges: Hardened, Beveled.
 5. Finish material: Guilford of Maine, Spinel.
 6. Finish color: Sandstone or Obsidian.
 7. Mounting: Impaling clips.
- d) M224 ProPanel™. Core of single fiberglass with density of 6 to 7 pcf (96 to 112 kg/m³), chemically hardened edges, and seamless finish material wrapped and bonded to back side of panel.
 1. Wideness: 48 inches (1 219.2 mm).
 2. Length: 48 inches (1 219.2 mm).
 3. Thickness: 2 inches (50.8 mm).
 4. Edges: Hardened, Back-Mitered on 48 inches sides.
 5. Finish material: Guilford of Maine, Spinel.
 6. Finish color: Sandstone or Obsidian.
 7. Mounting: Corner impaling clips.
- e) B244 ProPanel™. Core of single fiberglass with density of 6 to 7 pcf (96 to 112 kg/m³), chemically hardened edges, and seamless finish material wrapped and bonded to back side of panel.

1. Wideness: 24 inches (609.6 mm).
 2. Length: 48 inches (1 219.2 mm).
 3. Thickness: 2 inches (50.8 mm).
 4. Edges: Hardened, Beveled.
 5. Finish material: Guilford of Maine, Spinel.
 6. Finish color: Sandstone or Obsidian
 7. Mounting: Impaling clips.
- f) Custom ProPanels™. Core of single fiberglass with density of 6 to 7 pcf (96 to 112 kg/m³), chemically hardened edges, and seamless finish material wrapped and bonded to back side of panel.
1. Wideness: any, up to 60 inches (1 524 mm).
 2. Length: any, up to 120 inches (3 048 mm).
 3. Thickness: 0.5 inch (12.7 mm), 1 inch (25.4 mm), 2 inches (50.8 mm), or 4 inches (101.6 mm).
 4. Edges: Hardened, Beveled, radius, square, or Mitered.
 5. Finish material: Guilford of Maine.
 6. Finish color: Varies.
 7. Mounting: Z-Clips, Impaling clips, 1" Offset impaling clips, 2" Offset impaling clips or Clouds Mounts.

2.3. Mounting Components

- a) ProPanel™ Impaling Clips, Z-Clips, or Cloud Anchors: Provide hardware for permanent mounting to walls and/or ceilings.
- b) Other: Provide materials necessary for alternate permanent mounting to walls and/or ceilings as described in acoustical treatment design documentation.

3. Execution

3.1. Examination

- a) Examine surfaces to receive work of this section. Do not begin installation until unsatisfactory conditions have been corrected. Mounting surfaces shall be smooth, clean and dry. Drywall surfaces, if not painted, shall be sanded, primed and painted per the Owner/Architect.

3.2. Installation

- a) Install panels on walls and ceilings in locations and in patterns indicated on the drawings.
- b) Install each panel as indicated on shop drawings and in accordance with manufacturer's printed instructions, using approved mounting methods.

3.3. Adjust and Clean

- a) After installation of acoustical panels, clean all dirty surfaces, using cleaning materials and methods acceptable to manufacturer.
- b) Replace damaged components as directed by the Architect.
- c) Remove debris caused by work of this section on a daily basis. At completion of acoustical panel installation, remove all crates, cartons, packages and debris from the project site.

End of Section