

**Architect's and Engineer's Specifications for
Auralex® Acoustics, Inc.
Q'Fusors™ Diffusors**

Section 098413

Acoustical Treatment - Fixed Sound-Diffusors

1. General

1.1. Section Includes

- a) Sound diffusive 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 = 20 (maximum)
 2. Smoke Density = 300 (maximum)
- b) Sound Scattering: Provide panels that are certified to meet the following minimum sound scattering characteristics when tested in accordance with ISO 17497-1:

Octave Band Center Frequency [Hz]					
125	250	500	1000	2000	4000
0.00	0.01	0.00	0.03	0.54	0.75

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 diffusors 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 diffusion panels, demonstrating size, 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) ISO 17497-1 – Standard Test Method for Sound Scattering and Sound Scattering 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 sound scattering panels as manufactured by Auralex Acoustics, Inc., 6853 Hillsdale Court, Indianapolis, Indiana 46250-2039. Tel. (317) 842-2600. Fax: (317) 842-2760.
- b) Substitutions are not acceptable.

2.2. Q'Fusor™ sound diffusors

- a) Q'fusor™. Quadratic diffusor panel.
 - 1. Wideness: 21.75 inches (552 mm).
 - 2. Length: 21.75 inches (552 mm).
 - 3. Thickness: 2.75 inches (70 mm).
 - 4. Edges: Square.
 - 5. Corners: Square.
 - 6. Color: White.

2.3. Mounting Components

- a) Auralex Foamtak™ spray adhesive or approved equivalent to be used to adhere panels to surfaces.
- 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