

DIVISION 9 – FINISHES

SECTION 09521

ACOUSTICAL TREATMENT

PART 1: GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Divisions 1 Specification Sections, apply to work of this Section.

1.2 SUMMARY

- A. Extent of each type of acoustical treatment is shown and scheduled on drawings.
- B. Types of acoustical treatment specified in this section include the following:
 - 1. Acoustical application sound absorber panels, ½ inch thick on walls at all interior office walls.

1.3 SUBMITTALS

- A. Product Data: Submit manufacturer's technical data for each type of acoustical insulation attachment system required.
- B. Samples for verification purposes: Submit the following: Submit the following:
 - 1. 12" square samples of each acoustical sound absorber type.
 - 2. One each of each type of a fastening device.

1.4 QUALITY ASSURANCE

- A. Fire Performance Characteristics: Provide acoustical sound absorber panels that are identical to those tested for the following fire performance characteristics, according to ASTM test method required, by UL or other testing and inspecting agency acceptable to authorities having jurisdiction. Identify acoustical ceiling components with appropriate marking of applicable testing and inspecting agency.
 - 1. Surface Burning Characteristics: As Follows.
 - a. Flame Spread: 25 or less.
 - b. Smoke Developed: 50 or less.
- B. Coordination of Work: Coordinate layout and installation of sound absorber panels with other work supported by, or penetrating through, ceilings, including light fixtures, HVAC equipment, fire-suppression system components (if any), and partition system (if any).

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver sound absorber panels to the job site in original, unopened packages and store them in a fully enclosed space where they will be protected against damage from moisture, direct sunlight, surface contamination or other causes.
- B. Before installing units, permit them to reach room temperature and a stabilized moisture content.
- C. Handle units carefully to avoid damaging units in any way.

1.6 PROJECT CONDITIONS

- A. Space Enclosure: Do not install sound absorber panels until space is enclosed and weatherproof, nominally dry, and ambient conditions of temperature and humidity will be continuously maintained at values near those indicated for final occupancy.

PART 2: PRODUCTS

2.1 SOUND ABSORBER PANELS FOR MECHANICAL ROOMS

- A. Sound absorbent materials for mechanical rooms on walls and other areas as indicated on the drawings.
- B. Provide highly efficient tuned sound absorber designed for low and mid-frequency sound absorption to consist of 3 pcf glass fiber core completely protected with 10-mil thick neoprene coated, fiberglass reinforced, aluminized polyester reflective film facing or equal fiberglass reinforced fabric, coated with black elastomer (neoprene) compound and laminated to aluminized polyester film. Two-inch (2") thick material rated at NRC .94 absorption coefficient. Board-like absorber shall have structural integrity and damage resistant and used in temperatures from -40 deg F. to +450 deg F.; shall have highly reflective surface and flame resistant properties. Fire Hazard Classifications: Flame spread 15; fuel contributed 0; smoke developed 10 with coated side exposed. Equal to Peabody S4 sound absorber panels; Pelican RM Acoustical Board.

- C. Sound Absorption coefficient as follows:

1	Frequency, Hz.	2" Thick
	0125	0.26
	0160	0.35
	0200	0.62
	0250	0.80
	0315	1.01
	0400	1.18
	0500	1.23
	0630	1.17
	0800	1.08
	1000	1.00
	1250	0.93
	1600	0.81
	2000	0.71
	2500	0.64
	3150	0.53
	4000	0.43
	NRC	0.94

2.2 SOUND ABSORBER PANELS FOR OTHER WALL CONDITIONS

- A. Provide 1/2" sound absorber panels in walls indicated on the plans.
1. Provide sound absorber panels on walls that separate offices, conference rooms, and in all halls.

2.3 MISCELLANEOUS MATERIALS

- A. Acoustical Sealant: Resilient, non-staining, non-shrinking, non-hardening, non-skinning, non-drying, non-sag sealant intended for interior sealing of concealed construction joints.
1. Available Products: Subject to compliance with requirements, products which may be incorporated in the work include, but are not limited to, the following:
- a. BA-98; Pecora Corp.
- b. Tremco Acoustical Sealant; Tremco

2.4 STC Ratings:

1. STC ratings for all private offices shall be no less than 37.
2. STC rating for Conference, Meeting and Seminar Rooms shall be no less than 42.
3. STC rating for Restroom/Toilet Rooms shall be no less than 42.
4. STC rating for Multi-Purpose Meeting Room shall be no less than 42.

PART 3: EXECUTION

3.1 PREPARATION

- A. Coordination: Make sure work penetrating sound absorber panels is in place

3.2 INSTALLATION

A. Sound Absorber Panels:

1. Material installed by impaling on welded pins or using edge clips or batten strips. All pins secured flush with surface of absorber. Install in strict accordance with manufacturer's recommendations and as indicated on the drawings. Tape all exposed joints, edges and penetrations with 2" wide matching tape. (self-adhesive).
2. Guarantee: Furnish Architect with regular guarantee that sound absorbent materials meet requirements of specifications and standards stated above.

3.3 CLEANING

- A. Clean exposed surfaces of sound absorber panels; comply with manufacturer's instructions for cleaning and touch-up of minor damage. Remove and replace work, which cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.
- B. Protect until substantial completion or acceptance.

END OF SECTION - 09521