

SECTION 098310 - ACOUSTICAL PANELS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Acoustical panels.

1.2 SUBMITTALS

- A. Product Data: Submit manufacturer's technical data for each type of acoustical panel required.
- B. Samples: Minimum 3 inch x 3 inch samples of specified acoustical substrate.
- C. Shop Drawings: Submit shop drawings showing how panels are to be laid out on walls and ceilings. Width of panels and location of vertical seams are critical.

1.3 QUALITY ASSURANCE

- A. Single-Source Responsibility: Provide acoustical panel units and installation components by a single manufacturer.
- B. Fire Performance Characteristics: Identify acoustical wall components with appropriate markings of applicable testing and inspecting organization.
 - 1. Surface Burning Characteristics: As follows, tested per ASTM E 84.
 - a. Flame Spread: 25 or less.
 - b. Smoke Developed: 200 or less.
- C. Coordination of Work: Coordinate acoustical panel work with installers of related work including, but not limited to building insulation, gypsum board, light fixtures, mechanical systems, electrical systems, and sprinklers.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Deliver acoustical panels to project 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, and other causes.
- B. Before installing acoustical panels, permit them to reach room temperature and a stabilized moisture content.
- C. Handle acoustical panels carefully to avoid chipping edges or damaged units in any way.

1.5 PROJECT CONDITIONS

A. Space Enclosure:

1. Panels: All wet work must be complete and dry prior to installation. Installation shall be carried out where the temperature is between 40 degrees F and 120 degrees F.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Acoustical Panels:

1. CFAB Cellulose Panels by Acoustical Surfaces, Inc. (Basis of Design)
 - a. 123 Columbia Court North, Suite 201, Chaska, MN 55318.
 - b. 952-448-5300, Fax: 952-448-2613.
 - c. Toll Free: 1-800-448-3134.
2. Or equal.

2.2 ACOUSTICAL PANELS

A. Product: CFAB Cellulose Panels.

1. Material: Panels are industry first cellulose-based material. Consisting of 65-75% recycled content. Alternative to traditional fiberglass and synthetic acoustical and thermal panels.
2. Sizes: Available in 2'×4', 4'×4', and 4'×8' panels.
3. Thickness: Available in 1/2", 1", or 2".
4. Densities:
 - a. 3lb pcf: 1" and 2" Thickness.
 - b. 6lb pcf: 1" Thickness.
 - c. 8lb pcf: 1/2" and 1" Thickness.
5. Physical Property Data:
 - a. Surface Burning Characteristics per ASTM E-84, UL 723:
 - 1) Flame Spread: 15.
 - 2) Smoke Developed: <450 (Class A).
 - b. Critical Radiant Flux per ASTM E-970: >0.12 w/cm².
 - c. Corrosiveness per ASTM C-739: Acceptable.
 - d. Fungal Growth per ASTM C-1338: Acceptable.
 - e. Thermal Resistance per ASTM C-518: 3.6 – 3.7 R per inch.
 - f. Moisture Absorption per ASTM C-739: Acceptable.
 - g. Odor Emission per ASTM C-1304: Acceptable.
6. Acoustical Performance:
 - a. The open design and density of panels increases sound absorption to control and deaden sound. Panels achieve high Noise Reduction Coefficient (NRC) ratings based on density specified.
 - b. NRC values per thickness:
 - 1) 1/2 inch: 0.50 NRC.
 - 2) 1 inch: 0.80 NRC.
 - 3) 2 inch: 1.00 NRC.

CFAB Cellulose Acoustical and Thermal Panels
Acoustical Surfaces, Inc.

7. Applications: Can be used in any area that calls for acoustical or thermal treatment. They can be covered with fabric or other decorative material. Typical applications include but are not limited to insulation components, office panels, acoustic panels/inserts, and any molded, flat panel or lofted parts.
8. Sustainable Qualities: Made from combination of recycled and renewable fibers, environmentally responsible and sustainable. Most products are completely recyclable, and no scrap is produced during manufacturing or installation of material. Through innovative manufacturing process, ecocell is produced as cellulose based product made primarily from post consumer and post industrial paper, with recycled newspaper being main raw material.
9. Safety Features
 - a. They do not contain any harmful airborne particles and do not itch or irritate skin like fiberglass insulation.
 - b. Easy to handle and soft to the touch, panels can be left exposed, painted or covered with gypsum board.
 - c. To protect against mold growth, panels contain an EPA registered fungicide.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Do not proceed with installation until all wet work such as concrete, terrazzo, plastering and painting has been completed and thoroughly dried out, unless expressly permitted by manufacturer's printed recommendations.

3.2 PREPARATION

- A. Measure each wall area and establish layout of acoustical units to balance border widths at opposite edges of each wall. Coordinate panel layout with mechanical and electrical fixtures.

3.3 INSTALLATION

- A. Install panels per manufacturer's written instructions.

END OF SECTION 098310