

ACOUSTIC SOUND ABSORBING WALL UNITS

GENERAL INFORMATION

- 1.1 This section describes requirements pertaining to fabric covered acoustical wall panels.
- 1.2 Reference Standards:
 - a. American Association of Textile Chemists and Colorists (AATCC) TM 16-04 Test Method: Colorfastness to Light
 - b. American Society for Testing and Materials (ASTM) C 423 Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method
 - c. ASTM D 1117 Nonwoven Fabrics
 - d. ASTM D 5034 (R2001) Breaking Strength and Elongation of Textile Fabrics (Grab Test)
 - e. ASTM E 84 Surface Burning Characteristics of Building Materials

DESIGN REQUIREMENTS

- 2.1 Wall Covering Panels:
 - a. Width: 600 mm (24-inches) unless shown otherwise. End filler panels may vary in width as necessary to cover wall to wall installation. Width and height may vary depending on design intent and field conditions and are subject to approval by CU Facilities.
 - b. Height: For full height panels field measure panels for custom fit flush to ceiling and tolerance at floor to within 3 mm (1/8-inch) at top of base. Height for other panels as shown on drawings.
 - c. Thickness: 25 mm (1 inch) nominal, unless shown otherwise on drawings.
 - d. Fabric Covering: Seamless, plain woven 2-ply 100 percent polyester, minimum 15 ounces per linear yard. Tear strength shall be minimum 29 pounds. Tensile strength shall be 150 pounds minimum in accordance with ASTM D 5034

DESIGN REQUIREMENTS

- e. Fabric covering shall be stretched free of wrinkles and then bonded to the edges and back or bonded directly to the panel face, edges, and back of panel a minimum distance standard with the manufacturer. Light fastness (fadeometer) shall be approximately 40 hours in accordance with AATCC TM 16.
- f. Fire rating for the complete composite system: Class A, 200 or less smoke density and flame spread less than 25, when tested in accordance with ASTM E 84.
- g. Substrate: Fiber glass or mineral fiber.
- h. Noise Reduction Coefficient (NRC) Range: (0.50-0.60) (0.80-0.90) ASTM C 423.

2.2 Mounting system: Manufacturer's standard concealed system.

- a. Mounting system shall be capable of supporting twice the weight of the panel.
- b. Fasteners: Selected as appropriate for substrate.

2.3.1 Submittals:

- a. Samples: Fabric Covering in quadruplicate, as specified in Section 09 06 00, SCHEDULE FOR FINISHES, size 200 mm (1/4 yard), full width of mill run for each color specified.
- b. Manufacturer's Literature and Data: Complete instructions for installation of wall panels.
- c. Certificate: Flame spread smoke density factors.

CONSTRUCTION REQUIREMENTS

3.1 Preparation: Walls shall be clean, smooth, oil free, contain no protrusions, and prepared in accordance with manufacturers printed instructions.

3.2 Installation:

- a. Apply panels using concealed aluminum splines, bolted to wall surfaces in accordance with the manufacturer's installation instructions.
- b. Locate panels as shown on approved shop drawings.

3.3 Cleaning, Adjustment and Protection:

- a. Follow manufacturer's instructions.
- b. Clean all panel fabric surfaces to remove soil without using abrasive cleaners or solutions containing corrosive solvents.
- c. Remove debris from worksite.

3.4 Demonstration:

- a. After all adjustments, lubrications and clean up, the installer shall demonstrate and instruct the proper operation, function and maintenance procedures for the panels.
- b. Deliver all maintenance manuals to the owner.

REFERENCE

- 4.1 The applicable CSI Specification Section is 09 84 33.