

SECTION 09 84 33
SOUND-ABSORBING WALL UNITS

PART 1 - GENERAL**1.1 DESCRIPTION**

This section specifies the requirements for fabric covered acoustical wall panels.

1.2 RELATED WORK

Color and location for hanging: FINISH PLANS.

1.3 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in text by basic designation only.
- B. American Association of Textile Chemists and Colorists (AATCC):
TM 16-04.....Test Method: Colorfastness to Light
- C. American Society for Testing and Materials (ASTM):
C 423-08.....Sound Absorption and Sound Absorption
Coefficients by the Reverberation Room Method
- D 1117-01.....Nonwoven Fabrics
- D 5034-09.....Breaking Strength and Elongation of Textile
Fabrics (Grab Test)
- E 84-10.....Surface Burning Characteristics of Building
Materials

1.4 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. 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.
- C. Manufacturer's Literature and Data: Complete instructions for installation of wall panels.
- D. Certificate: Flame spread smoke density factors.

PART 2 - PRODUCTS**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.

B. Height:

1. 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.

2. Height for other panels as shown.

C. Thickness: 25 mm (1 inch) nominal.

D. Fabric Covering: Seamless non-woven, embossed texture, needle punched 100 percent polyester, minimum 0.034 kg per linear meter (11 ounces per linear yard). Tear strength shall be minimum 110 N (25 pounds) machine direction and minimum 178 N (40 pounds) cross-machine direction in accordance with ASTM D 1117. Tensile strength shall be minimum 220 N (50 pounds) machine direction and minimum 330 N (75 pounds) cross-machine direction in accordance with ASTM D 5034 plain woven 2-ply 100 percent polyester, minimum 0.47 kg per linear meter (15 ounces per linear yard). Tear strength shall be minimum 129 N (29 pounds). Tensile strength shall be 667 N (150 pounds) minimum in accordance with ASTM D 5034 perforated vinyl covering with fabric backing, minimum 0.62 kg per linear meter (20 ounces per linear yard) total weight. 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.

E. 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.

F. Substrate: Fiber glass or mineral fiber.

G. Noise Reduction Coefficient (NRC) Range: 0.80-0.90 per ASTM C 423.

2.2 ALUMINUM

A. Manufacturers standard concealed aluminum mounting system.

B. Mounting system shall be capable of supporting twice the weight of the panel.

2.3 FASTENERS

Use toggle bolts: Wire wings are not acceptable.

PART 3 - EXECUTION**3.1 WALL 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.

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