

SECTION 09841

ACOUSTICAL WALL PANELS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Fabric covered acoustical wall panels.

1.2 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Show fabrication and installation details for acoustical wall panels, including plans, elevations, sections, details, and attachments to other Work.
- C. Samples for Selection: Manufacturer's color charts showing the full range of colors, textures, and patterns available for facing materials for each type of acoustical wall panel indicated. Include samples of installation devices and accessories.
- D. Product Test Reports: From a qualified testing agency indicating acoustical wall panels comply with requirements, based on comprehensive testing of current products.
- E. Maintenance Data: For acoustical wall panels and facings to include in maintenance manuals specified in Division 1.
- F. LEED Submittal:
 - 1. Credit MR 2.1 and 2.2: Comply with Division 1 Section "Construction Waste Management."
 - 2. Product Data for Credit MR 4.1 and Credit MR 4.2: For products having recycled content, documentation indicating percentages by weight of postconsumer and preconsumer recycled content.
 - a. Include statement indicating costs for each product having recycled content.
 - 3. Credit MR 5.1: Product Data indicating location of material manufacturer for regionally manufactured materials.
 - a. Include statement indicating cost and distance from manufacturer to Project for each regionally manufactured material.
 - 4. Credit EQ 4.1: Manufacturers' product data for interior sealants, including printed statement of VOC content and material safety data sheets.

1.3 QUALITY ASSURANCE

- A. Fire-Test-Response Characteristics: Provide acoustical wall panels with the following surface-burning characteristics as determined by testing identical products per ASTM E 84 by UL or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify acoustical wall panels with appropriate markings of applicable testing and inspecting agency.

1. Flame Spread: 25 or less.
2. Smoke Developed: 450 or less.

1.4 WARRANTY

- A. General Warranty: Special warranty specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- B. Special Warranty: Written warranty, signed by manufacturer agreeing to repair or replace components of acoustical wall panel system that fail in performance, materials, or workmanship within specified warranty period. Failure in performance includes, but is not limited to, acoustical performance. Failure in materials includes, but is not limited to, sagging or distortion of facing or warping of core.
- C. Warranty Period: Two years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 FABRIC-COVERED ACOUSTICAL WALL PANELS

- A. Back-Mounted, Edge-Framed Acoustical Wall Panels: Manufacturer's standard panel construction consisting of facing material stretched over front face of edge-framed, dimensionally stable, rigid glass-fiber board core and bonded or attached to edges and back of frame; and complying with the following requirements:
 1. Product: AlfaSorb Acoustical Wall Panels by Acoustical Solutions, Inc. (800) 782-5742
 2. Facing Material: Guilford of Maine FR 701 – Style 2100 – 100% polyester; color and pattern as selected by Architect from manufacturer's full range.
 3. Nominal Core Density: 6 to 7 lb/cu. ft. (96 to 112 kg/cu. m).
 4. Nominal Overall Panel Thickness and Noise Reduction Coefficient: 1 inch (25 mm) and not less than NRC 0.85 for Type A mounting per ASTM E 795.
 5. Panel Width: Manufacturer's standard.
 6. Panel Height: As indicated.
 7. Edge Detail: Square.
 8. Tackable, Impact-Resistant, High-Density Face Layer: 1/8-inch- (3.2-mm-) thick layer of molded glass-fiber board with a minimum nominal density of 16 to 18 lb/cu. ft. (256 to 288 kg/cu. m) laminated to face of core.
- B. Back-Mounting Accessories: Manufactures standard accessories for securely mounting panels, of type and size indicated and complying with the following requirements:
 1. Z Clips: Two part metal clips designed to support weight of panels. One part mechanically attached to wall substrate according to manufactures standard pattern and other part fastened to back of panel.
- C. Fabricate panels to sizes and configurations indicated; attach facing materials to cores to produce installed panels with visible surfaces fully covered and free from waves in fabric weave, wrinkles, sags, blisters, seams, adhesive, or other foreign matter.

1. Fabricate back-mounted panels in factory to exact sizes required to fit wall surfaces, based on field measurements of completed substrates indicated to receive acoustical wall panels.
 2. Where square corners are indicated, tailor corners.
 3. Where fabrics with directional or repeating patterns, or directional weave, are indicated, mark fabric top and attach fabric in same direction.
 4. Where fabric facings with seams are indicated, fabricate invisible seams and comply with Shop Drawings for location.
- D. Dimensional Tolerances of Finished Units: Plus or minus 1/16 inch (1.6 mm) for the following:
1. Thickness.
 2. Edge straightness.
 3. Overall length and width.
 4. Squareness from corner to corner.
- E. Sound-Absorption Performance: Provide acoustical wall panels with minimum noise reduction coefficients indicated, as determined by testing per ASTM C 423 for mounting type specified under individual product requirements.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install acoustical wall panels in locations indicated with vertical surfaces and edges plumb, top edges level and in alignment with other panels, and scribed to fit adjoining work accurately at borders and at penetrations. Comply with panel manufacturer's written instructions for installation of panels using type of mounting accessories indicated or, if not indicated, as recommended by manufacturer.
- B. Construction Tolerances: As follows:
1. Variation from Plumb and Level: Plus or minus 1/16 inch (1.6 mm).
 2. Variation of Joints from Hairline: Not more than 1/16 inch (1.6 mm).

3.2 CLEANING

- A. Clean panels on completion of installation, to remove dust and other foreign materials according to manufacturer's written instructions.
- B. Remove surplus materials, rubbish, and debris resulting from acoustical wall panel installation, on completion of the Work, and leave areas of installation in a neat and clean condition.

3.3 PROTECTION

- A. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, that ensure acoustical wall panels are without damage or deterioration at time of Substantial Completion.

- B. Replace panels that cannot be cleaned and repaired, in a manner approved by Architect, before time of Substantial Completion.

END OF SECTION