

Noise Control Specialist
6060 N. Central Expressway
Suite 500
Dallas, TX 75206
Phone: 214-382-2951
Fax: 214-382-2952
E-mail: info@noisecontrolspecialist.com
www.noisecontrolspecialist.com

**SECTION 09840
ACOUSTICAL WALL TREATMENT**

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes: Custom fabricated acoustical wall panels.

1.02 REFERENCES

- A. ASTM International:
 - 1. ASTM C423 Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
 - 2. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials.
 - 3. ASTM E795 Standard Practices for Mounting Test Specimens During Sound Absorption Tests.

1.03 SYSTEM DESCRIPTION

- A. Performance Requirements:
 - 1. Surface Burning Characteristics (ASTM E84):
 - a. Flamespread: 25 maximum.
 - b. Smoke Developed: 450 maximum.
 - c. Fire ratings for all fabric covered panels is based on testing of the panel wrapped with the standard in stock fabric, Guilford of Maine, Model FR 701.

1.04 SUBMITTALS

- A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.
- B. Product Data: Submit product data sheet, for specified products.
- C. Shop Drawings: Submit shop drawings showing layout, edge profiles and panel components, including anchorage, accessories, finish colors and textures.
- D. Samples: Submit selection and verification samples of finishes, colors and textures.
- E. Test Reports: Certified test reports showing compliance with specified performance requirements.
 - 1. Standard Systems: Submit certified copies of previous test reports substantiating performance of system in lieu of retesting.

1.05 QUALITY ASSURANCE

Specifier Note: Paragraph below should list obligations for compliance with specific code requirements particular to this section. General statements to comply with a particular code are typically addressed in Conditions of the Contract and Division 1 Regulatory Requirements Section. Repetitive statements should be avoided.

- A. Regulatory Requirements and Approvals: [Specify applicable requirements of regulatory agencies].

1. [Code agency name].
 - a. [Report or approval number].

1.06 DELIVERY, STORAGE & HANDLING

- A. General: Comply with Division 1 Product Requirements Section.
- B. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- C. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.

1.07 PROJECT CONDITIONS

- A. Environmental Requirements: Do not install panels until wet work, such as concrete and plastering, is complete; the building is enclosed; and the temperature and relative humidity are stabilized at 60 - 80 degrees F (16 - 27 degrees C) and 35% MINIMUM RH and 55% MAXIMUM RH, respectively. All products constructed with wood or wood fiber content must be stored for at least 72 hours in the controlled environment specified herein prior to installation to allow the materials to stabilize.

PART 2 PRODUCTS

2.01 ACOUSTICAL WALL PANELS

- A. Manufacturer: Noise Control Specialist
 1. Contact: 6060 N. Central Expressway, Suite 500, Dallas, TX 75206; Phone: 214-382-2951; Fax: 214-382-2952; Email: info@noisecontrolspecialist.com; Website: www.noisecontrolspecialist.com
- B. Substitutions: No substitutions permitted.

2.02 MANUFACTURED UNITS

- A. HardSide Panels:
 1. Thickness: [1/2 inch (12.7 mm)] [1 inch (25.4 mm)] [1 1/2 inches (38 mm)] [2 inches (51 mm)] [3 inches (76 mm)] [4 inches (102 mm)].
 2. Size: As indicated on the drawings up to a maximum 48 inch (1219 mm) x 120 inch (3048 mm) panel.
 3. Core: [1/2 inch (12.7 mm)] [1 inch (25.4 mm)] [1 1/2 inch (38 mm)] [2 inch (51 mm)] [3 inch (76 mm)] [4 inch (102 mm)] thick fiberglass, 6 - 7 pcf (96 - 112 kg/m³) density.
 4. Edge Detail: [Square] [Round] [Mitered] [Beveled] [Pencil] hardened with non-resin, Class A hardening solution.
 5. Facing: [100% polyester fabric, FR 701 Style 2100 by Guilford of Maine] [Factory approved customer selected fabric]. Designer selected fabrics must be approved by the panel manufacturer as acceptable quality for wrapping and covering core materials. Some fabrics are unstable, too stiff, or lack the weight and thread density for producing an acceptable finish product.
 - a. Color: [As selected from panel manufacturer's stocked range of colors] [As selected from fabric manufacturer's full range of colors].
 6. Sound Absorption (ASTM C423): Noise Reduction Coefficient as follows:

Specifier Note: NRC, sound absorption data is based on testing with Guilford FR701 fabric. To maintain specified sound absorption, fabrics should be selected that allow air to pass easily through the material into the acoustical core.

- a. 1/2 inch (12.7 mm) Panel: 0.60, minimum.
- b. 1 inch (25.4 mm) Panel: 0.80, minimum.
- c. 1-1/2 inch (38 mm) Panel: 0.95, minimum.
- d. 2 inch (51 mm) Panel: 1.00, minimum.
- e. 3 inch (76mm) Panel 1.00, minimum
- f. 4 inch (102 mm) Panel: 1.10, minimum, 125 Hz = 0.65 or greater.

7. Mounting Accessories: [HS Impaling clips] [Z-clips] [Velcro] [Magnetic tape].

2.03 FABRICATION

Specifier Note: Retain or delete paragraphs below per project requirements.

Specifier Note: Heat shrink process described below creates a more impact resistant panel. Dents in the fiberglass core due to impacts and abuse are invisible behind the stretched fabric face.

- A. General: Treat fabric wrapped panels using heat shrink process to develop fully taut facing.
- B. SorbAll and SorbAll High Impact Panels: Wrap panel edges and return facing fabric 1 - 2 inches (25.4 - 51 mm) on back of panel. Secure fabric with adhesive applied to edges and back of panel only.

PART 3 EXECUTION

3.01 MANUFACTURER'S INSTRUCTIONS

- A. Compliance: Comply with manufacturer's product data, including product technical bulletins, product catalog installation instructions and product carton instructions for installation.

3.02 EXAMINATION

- A. Site Verification of Conditions: Verify that substrate conditions, which have been previously installed under other sections, are acceptable for product installation in accordance with manufacturer's instructions.
 1. Verify that stud spacing is 16 inches (406 mm) oc, maximum, for panels installed over open studs.
 2. Do not install panels until unsatisfactory conditions are corrected.

3.03 CLEANING

- A. Follow manufacturer's instructions for cleaning panels soiled during installation. Replace panels that cannot be cleaned to as new condition.
- B. Keep site free from accumulation of waste and debris.

END OF SECTION