

## SECTION 09841

### ACOUSTICAL WALL PANELS

#### PART 1 GENERAL

##### 1.1 SECTION INCLUDES

- A. Acoustical Fabric Panel System.
- B. Noise-Reducing Fabric Panel System.

##### 1.2 RELATED SECTIONS

- A. Section 01110 - Summary of Work.
- B. Section 06400 - Architectural Woodwork.
- C. Section 08110 - Metal Doors and Frames.
- D. Section 08210 - Wood Doors.
- E. Section 09200 - Plaster and Gypsum Board.
- F. Section 09500 - Ceilings.
- G. Section 09700 - Wall Finishes.
- H. Section 09900 - Paints and Coatings.
- I. Section 12050 - Fabrics.
- J. Affected sections of Divisions 15 and 16.

##### 1.3 REFERENCES

- A. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
- B. ASTM E 90 - Standard Test Method for Laboratory Measurement of Airborne-Sound Transmission Loss of Building Partitions.

##### 1.4 SYSTEM DESCRIPTION

- A. Acoustical Fabric Panel System:
  - 1. Thermal resistance: R-value 1.4 (0.24 metric equivalent).
  - 2. Noise reduction coefficient (NRC), when tested in accordance with ASTM E 90 at 1000-4000 Hertz level:
    - a. Over concrete substrate: 0.90.
    - b. Over drywall substrate: 0.67.

3. Flammability, when tested in accordance with ASTM E 84: Flame spread index 25 or less; smoke developed index 450 or less.
- B. Noise-Reducing Fabric Panel System:
1. Thermal resistance: R-value 4.3 (0.75 metric equivalent).
  2. Noise reduction coefficient (NRC), when tested in accordance with ASTM E 90 at 1000-4000 Hertz level: 0.97.
  3. Flammability, when tested in accordance with ASTM E 84: Flame spread index of 12.1; smoke developed index of 24.3.

#### 1.5 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's descriptive literature for fabric panel systems components.
- C. Shop Drawings:
1. Submit scaled and dimensioned elevation drawings of each surface in project to receive fabric wall panels, indicating fabric wall panel layouts; minimum scale 1/2 inch equals 1 foot (1:20).
  2. Indicate for each panel in project:
    - a. Location.
    - b. Size.
    - c. Type, including frame, core, and fabric finish components.
  3. Submit drawings indicating construction details of fabric wall panels; include details of interface with adjacent construction.
- D. Verification Samples:
1. Two samples of each specified reveal material, minimum size 12 inches (304 mm) long.
  2. Two samples of each specified fabric, minimum size 12 inches (304 mm) square.
- E. Quality Assurance Submittals:
1. Certified reports from independent testing laboratory supporting compliance of fabric wall panels to specified noise-reducing, thermal resistance, and surface burning requirements.
  2. Manufacturer's certification that:
    - a. Fabric wall panel systems meet specified regulatory requirements.
    - b. Installer of manufacturer's product is approved.
  3. Installer's certification that fabrics selected for fabric wall panel systems have correct properties for use in systems.
  4. Manufacturer's instructions:

- a. Printed installation instructions for system components, including product storage requirements.

#### 1.6 QUALITY ASSURANCE

- A. Installer Qualifications: Approved by fabric wall panel system manufacturer.
- B. Regulatory Requirements: Fabric wall panel systems certified Class 1 or Class A by regulating building code.
- C. Mock-Ups:
  1. Construct mock-ups using materials specified in this section.
  2. Construct mock-ups as directed, at location indicated or directed.
  3. Construct mock-ups at location indicated or directed, and as follows:
    - a. Size: \_\_\_ feet (\_\_\_ mm) by \_\_\_ feet (\_\_\_ mm).
    - b. Include the following: \_\_\_\_\_.
  4. Obtain Architect's acceptance of mock-ups before beginning construction activities of this section; accepted mock-ups will be standard by which completed construction activities of this section is judged.
  5. Mock-ups may not remain as part of Work.
  6. Accepted mock-ups may remain as part of Work.
- D. Pre-Installation Meeting:
  1. Convene at job site seven (7) calendar days prior to scheduled beginning of construction activities of this section to review requirements of this section.
  2. Require attendance by representatives of the following:
    - a. Installer of this section.
    - b. Other entities directly affecting, or affected by, construction activities of this section.
  3. Notify Architect four (4) calendar days in advance of scheduled meeting date.

#### 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store products of this section in manufacturer's unopened packaging until installation.
- B. Maintain storage area conditions for products of this section in accordance with manufacturer's instructions until installation.

#### 1.8 SEQUENCING

- A. Sequence construction activities of this section to begin in an area only after all other construction activities are completed and all other finishes are installed.

- B. Do not allow construction activities of this section to begin in an area before obtaining installer's acceptance of conditions in accordance with EXAMINATION Article of PART 3 of this section.

## 1.9 MAINTENANCE

- A. Extra Materials: For each fabric specified, supply to Owner a single length of fabric from the same bolt as that installed, equal to 10 percent of the quantity installed or 5 linear yards (5 m), whichever is greater.

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Fabri-Trak Systems®, Inc.; 11 Russell Avenue, South River, NJ 08882. Tel: 732-432-5860. Fax: 732-432-4075.

Authorized Installer of Product:

Brambier's Windows & Walls

South Florida

1616 NE 205 Terrace

Miami, FL 33179

Phone 305.653.1712

Fax 305.653.1714

[lyle@brambiers.com](mailto:lyle@brambiers.com)

North Florida

1648 Taylor Rd. #240

Daytona Beach, Fl 32128

Phone 386.756.0101

Fax 305.513.5866

Georgia Fax 770.234.5505

[lyle@brambiers.com](mailto:lyle@brambiers.com)

- B. Requests for substitution will be considered in accordance with provisions of Section 01600.
- C. Substitutions: Not permitted.
- D. Unless otherwise specified for an individual product or material, supply all products specified in this section from the same manufacturer.

### 2.2 ACOUSTICAL FABRIC PANEL SYSTEM

- A. Concealed Framework:
  1. Acceptable system: FABRI-TRAK(R) Upholstered Wall System.
  2. Description: Rigid vinyl extrusions, formed as single piece, with integral clamping jaws, 1/2 inch (12 mm) nailing flange, 1 inch (25 mm) wide edge.
  3. Projection From Wall: 3/8 inch (9 mm).
  4. Profile: One or more of the following:
    - a. Radius edge.
    - b. Square edge.

- c. Beveled edge.
- d. Monolithic edge.

- B. Core Material: One or more of the following:
  - 1. Acoustical core material: Fire-retardant compressible polyester padding, 1/2 inch (12 mm) thick.
  - 2. Tackable core material: Fire-retardant rigid material, 3/8 inch (9 mm) thick.
  - 3. Nailable core material: Fire-retardant treated veneer plywood, 3/8 inch (9 mm) thick.

### 2.3 NOISE-REDUCING FABRIC PANEL SYSTEM

- A. Concealed Framework:
  - 1. Acceptable system: FABRI-TRAK(R) Upholstered Wall System.
  - 2. Description: Rigid vinyl extrusions, formed as single piece, with integral clamping jaws, 1 inch (25 mm) nailing flange, 3/4 inch (19 mm) wide edge.
  - 3. Projection From Wall: 1 inch (25 mm).
  - 4. Projection From Wall: 2 inches (50 mm).
  - 5. Profile: One or more of the following:
    - a. Radius edge.
    - b. Square (monolithic) edge.
    - c. Beveled edge.
- B. Core Material: One or more of the following:
  - 1. Noise-reducing core material: Fire-retardant glass-fiber padding, 1-1/8 inch (28 mm) thick, 6 pounds per cubic foot (96 kg/cu m) density.
  - 2. Tackable core material: Two layers fire-retardant rigid material, 1/2 inch (12 mm) thick.
  - 3. Nailable core material: Two layers fire-retardant treated veneer plywood, 1/2 inch (12 mm) thick.

### 2.4 FABRICS

- A. Fabric Type \_\_:
  - 1. Manufacturer: \_\_\_\_\_.
  - 2. Width: \_\_\_\_\_.
  - 3. Material: \_\_\_\_\_, flame retardant treated.
  - 4. Style: \_\_\_\_\_.
- B. Fabrics: Specified in Section 12050.
- C. Fabrics: Supplied by Owner; specified in Section 01110.

### 2.5 ACCESSORIES

- A. Reveal Type \_\_:
  - 1. Manufacturer's standard laminated wood reveal strip, 1/2 inch (12 mm) thick, with beveled long edges.
  - 2. Width: \_\_ inch(es) (\_\_ mm).

3. Finish: \_\_\_\_\_.
4. Fasteners for Concealed Framing: Types and sizes specified in manufacturer's instructions for substrate types.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Installer's Examination:
  1. Have installer of this section examine conditions under which construction activities of this section are to be performed, then submit written notification if such conditions are unacceptable.
  2. Transmit two copies of installer's report to Architect within 24 hours of receipt.
  3. Beginning construction activities of this section before unacceptable conditions have been corrected is prohibited.
  4. Beginning construction activities of this section indicates installer's acceptance of conditions.

### 3.2 INSTALLATION

- A. Install systems in accordance with shop drawings and manufacturer's instructions.
- B. Install concealed framework extrusions in maximum lengths practical:
  1. Form end-to-end butt joints with hairline joints.
  2. Where horizontal and vertical concealed framework extrusions intersect, form hairline mitered joints.
  3. Joint locations shall not be visible in finished Work.
- C. Install core materials so that joints between core materials and edges of concealed framework extrusions are not visible in finished Work; rabbet edges of rigid core materials for flush fit at nailing flanges of concealed framework extrusions.
- D. Install fabrics without visible wrinkles or folds, maintaining horizontal/vertical alignment of warp/woof of fabric; force fabric edges into clamping jaws, using tools and techniques that will not damage finish of fabrics.
- E. Install reveal materials in maximum lengths practical.

### 3.3 PROTECTION OF INSTALLED PRODUCTS

- A. Protect finished installation from damage by subsequent construction activities until Substantial Completion.

- B. If areas of fabrics become soiled by subsequent construction activities, clean in accordance with fabric manufacturer's recommendations; replace soiled areas that cannot be cleaned to Architect's acceptance in accordance with the following paragraph.
- C. Where fabric has become soiled, or otherwise visibly damaged, to the extent that repairs cannot be made to the Architect's acceptance, have installer of this section remove entire run of fabric and replace with new material in accordance with requirements of this section; cost of replacement shall not affect Contract Sum.

### 3.4 SCHEDULES

- A. Area Designation: Reception.
  - 1. North and West walls: Acoustical fabric panel system, Panel Type 1; horizontal wall panel, radius edge, with reveal.
    - a. Panel core material: Acoustical core.
    - b. Panel fabric: Type A.
    - c. Reveal: Laminated wood, black lacquer finish.
  - 2. East Wall: Glazed curtain wall.
  - 3. South Wall:
    - a. Desk front: Acoustical fabric panel system, Panel Type 2; horizontal puff panel, radius edge, with reveal.
      - 1) Panel core material: Nailable core base, 2 layers acoustical core.
      - 2) Panel fabric: Type B.
      - 3) Reveal: Stainless steel, Number 7 finish.
    - b. Soffit: Acoustical fabric panel system, Panel Type 3; horizontal panel, radius edge, with reveal.
      - 1) Panel core material: Nailable core base for mounting corporate logo.
      - 2) Panel fabric: Type B.
      - 3) Reveal: Stainless steel, Number 7 finish.
- B. Area Designation: Conference.
  - 1. North wall: Acoustical fabric panel system, Panel Type 4; full-height wall panel, monolithic edge, abutted joints.
    - a. Panel core material: Acoustical core and tackable core; locations indicated on drawings.
    - b. Panel fabric: Type C.
  - 2. All other walls:: Acoustical fabric panel system, Panel Type 5; full-height wall panel, monolithic edge, abutted joints.
    - a. Panel core material: Acoustical core.
    - b. Panel fabric: Type D.
- C. Area Designation: A/V Presentation Room.

1. All walls: Noise-reducing acoustical fabric panel system, Panel Type 6; full-height wall panel, radius edge, abutted joints.
  - a. Panel core material: Noise-reducing core.
  - b. Panel fabric: Type E.

END OF SECTION