## **SECTION 09800**

#### ACOUSTICAL TREATMENT

Display hidden notes to specifier by using "Tools"/"Options"/"View"/"Hidden Text".

#### PART 1 GENERAL

## 1.1 SECTION INCLUDES

A. Wood veneer wall panels and support system.

## 1.2 RELATED SECTIONS

A. Section 06100 - Rough Carpentry: Wall furring.

## 1.3 REFERENCES

- A. ASTM C 423 Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
- B. ASTM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials.

## 1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. [ Product Data ]: Manufacturer's data sheets on each product to be used, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - 3. Installation methods.
- C. Shop Drawings:
  - 1. Elevations and details showing layout of panels including support hardware.
  - 2. Construction details necessary to achieve acoustical rating required.
- D. Certificates of Compliance: Indicate acoustical and fire performance to specified criteria signed by an officer of the panel manufacturer. Attach independent laboratory test results for each product used, showing that the products supplied as components meet or exceed the specified requirements.
- E. Selection Samples: For each finish product specified, samples of finished veneer species as requested by Architect.
- F. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns, including variations as expected with a natural product.

## 1.5 QUALITY ASSURANCE

- A. Single Source: Panels shall be purchased from a single manufacturer.
- B. Installer Qualifications: The installer shall be a firm with a minimum of two years of successful experience in installation of products with similar requirements.
- C. Mock-Up: Provide a mock-up for evaluation of installation techniques and application workmanship.
  - 1. Finish areas designated by Architect.
  - 2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
  - 3. Refinish mock-up area as required to produce acceptable work.

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Panel assemblies shall be delivered to the project site in original, unopened packages.
- B. Prior to panel installation the site shall be free of all wet and dusty trades and the climatic conditions stabilized to normal operational levels.
- C. Panels shall be stored in a fully enclosed space. For a minimum of seventy-two hours immediately prior to installation, store the panels in the room in which they will be installed. The temperature and humidity of the room shall closely approximate those conditions that will exist when the building is occupied. Store the panels off the floor.
- D. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

#### 1.7 PROJECT CONDITIONS

- A. Installation shall be done only when the temperature and humidity closely approximate the interior conditions that will exist when the building is occupied. The heating and cooling systems shall be operating before, during, and after installation, with the humidity of the interior spaces maintained between minimum 35 percent to maximum 55 percent.
- B. Prior to installation panels shall be allowed to stabilize on site 72 hours prior to installation, the site must be free of wet and dusty trades and the climate conditions stabilize to normal operational levels.

#### PART 2 PRODUCTS

#### 2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Sound Seal, which is located at: 50 H.P. Almgren Dr.; Agawam, MA 01001; Toll Free Tel: 800-569-1294; Tel: 413-789-1770; Fax: 413-789-4444; Email: <a href="mailto:salbrecht@soundseal.com">salbrecht@soundseal.com</a>; Web: <a href="mailto:www.soundseal.com">www.soundseal.com</a>;
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

## 2.2 WOOD VENEERED PLANK WALL SYSTEM

- A. Acceptable Product: WoodTrends Topline as manufactured by Sound Seal.
- B. Performance:
  - 1. Fire Performance: Constructed using fire retardant components meeting or exceeding the requirements of the ASTM E 84:
    - a. Flame Spread: Class A, 25 or less.
    - b. Flame Spread: Class B, 26 to 75.
    - c. Flame Spread: Class C, 76-200.
    - d. Smoke Developed: 450 or less.
- C. Panel:
  - 1. Material: Wood veneer laminated onto the face of 0.67 inch (17 mm) thick fire retardant MDF.
    - a. Width: 5 inches (533.5 mm).
    - b. Length: 85-3/4 inches (2180 mm).
    - c. Length: 109-1/2 inches (2780 mm)/
    - d. Length: \_\_\_\_\_
  - 2. Edge Detail: Tongue and groove plank edges.
  - 3. Topline 5/3 Design: 0.12 inches (3 mm) groove 0.20 inch (5 mm) apart, 18 percent open area.
  - 4. Topline 13/3 Design: 0.12 inches (3 mm) groove 0.50 inch (13 mm) apart, 11 percent open area.
  - 5. Topline 28/4 Design: 0.16 inches (4 mm) groove 1.14 inches (28 mm) apart, 6 percent open area.
  - 6. Topline 6/2 Design: 0.08 inches (2 mm) groove 0.24 inches (6 mm) apart, 16 percent open area.
  - 7. Topline 14/2 Design: 0.08 inches (2 mm) groove 0.55 inches (14 mm) apart, 9 percent open area.
  - 8. Fiberglass Between Furring: 1 inch (25 mm) thick, 3 pcf density.
    - a. NRC: 0.75.
    - b. NRC: 0.70.
    - c. NRC: 0.65.
  - 9. Fiberglass Between Furring: 2 inch (51 mm) thick, 3 pcf density.
    - a. NRC: 0.95.
    - b. NRC: 0.90.
    - c. NRC: 0.85.
  - 10. Acoustic Textile: Adhere to back of panel.
- D. Support System: Support panels with a special nailclip supplied with the panels and spaced not more than 24 inches (610 mm) on center.

## 2.3 VENEER AND FINISH

- A. Veneer: First Quality select veneer from manufacturer's standard selection of wood species.
- B. Veneer: Special veneers with staining and lacquering to match Architect's samples.
- C. Veneer Species:
  - 1. American Walnut.
  - 2. American Oak.
  - European Oak.
  - 4. Anigre.
  - 5. Ash.
  - 6. Khaya Mahogany.
  - 7. Beech Steamed.
  - 8. Maple.
  - 9. Beech Unsteamed.
  - 10. Oregon Pine.
  - 11. Pear.
  - 12. Carolina Pine.
  - 13. Sapeli Mahogany.
  - 14. Cherry.
  - 15. Teak.
  - 16. Custom: \_\_\_\_\_.
- D. Veneer Finish: Two coats clear UV- Polyacrylate lacquer.

## PART 3 EXECUTION

# 3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

## 3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

## 3.3 INSTALLATION

A. Install in accordance with manufacturer's instructions.

# 3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

## **END OF SECTION**