

SECTION 098433 - SOUND-ABSORBING WALL UNITS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Section includes shop-fabricated, acoustical panel units tested for acoustical performance, including the following:
 - 1. Sound-absorbing wall panels.

1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include panel edge, core material, and mounting indicated.
- B. Shop Drawings: For unit assembly and installation.
 - 1. Include plans, elevations, sections, and mounting devices and details.
 - 2. Include details at panel head, base, joints, and corners; and details at ceiling, floor base, and wall intersections. Indicate panel edge profile and core materials.
 - 3. Include details at cutouts and penetrations for other work.
- C. Samples: For each finish product specified, two samples, minimum size 12 inches square, representing actual product, color, and patterns.

1.4 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Elevations and other details, drawn to scale, on which the following items are shown and coordinated with each other, using input from installers of the items involved:
 - 1. Electrical outlets, switches, and thermostats.
 - 2. Items penetrating or covered by units including the following:
 - a. Lighting fixtures.
 - b. Air outlets and inlets.
 - c. Speakers.
 - d. Alarms.
 - e. Sprinklers.
 - f. Access panels.
 - 3. Show operation of hinged and sliding components covered by or adjacent to units.
- B. Product Certificates: For each type of unit.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For each type of unit to include in maintenance manuals.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum three years documented experience.
- B. Installer Qualifications: Minimum 2 years documented experience installing projects of similar size and complexity.
- C. Mock-Up: Provide a mock-up for evaluation of surface preparation 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.
 - 4. Accepted mock-ups shall be comparison standard for remaining Work

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver material in the manufacturer's original, unopened, undamaged containers with identification labels intact.
- B. Store products off the floor in manufacturer's unopened packaging protected from exposure to harmful environmental conditions and at temperature and humidity conditions as recommended by the manufacturer.
- C. A minimum of 72 hours prior to installation, wood products shall be stored in the room in which they will be installed. Temperature and humidity of the room during this period shall closely approximate those conditions that will exist when the building is occupied.
- D. Handle materials to avoid damage.

1.8 SEQUENCING

- A. Ensure that locating templates and other information required for installation of products of this section are furnished to affected trades in time to prevent interruption of construction progress.
- B. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

1.9 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.
- B. Space shall be fully enclosed with all exterior windows and doors in place, glazed, and weather-stripped. Roof is to be watertight, and all wet trades' work is to be completed, and thoroughly dry.
- C. Install only when the temperature and humidity closely approximate the interior conditions that will exist when the building is occupied. Heating and cooling systems shall be operating before, during, and after installation, with the humidity of the interior spaces maintained between 25 and 55 percent, and a temperature between 60 to 90 degrees F.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Fire Performance Characteristics: Wall units shall conform to Class 1, or A flame spread rating, tested according to ASTM E 84; Flame Spread: 25 or less. Smoke Developed: 450 or less.

2.2 MATERIALS - GENERAL

- A. Wood is a natural product that will undergo changes with variations in the environment. Therefore, all dimensional tolerances are plus or minus 1/8 inch.

2.3 PANEL GRILLE PANELS (WWP-1)

- A. General: Standard Panel Grilles are 1 foot wide and in nominal lengths of 2 feet to 10 feet in 1-inch increments. Actual lengths are 1 inch shorter to allow for a reveal between panels. Wood strips are fabricated without finger-joints, and fastened together with black ~~dowels or~~ woodbackers ~~depending on panel design. Dowels or~~ Woodbackers are positioned 5-1/2 inches from the ends and 12 inches on center, ~~with interconnecting male to female dowel attachment or~~ with overlapping woodbackers, ~~depending on panel design for support of the system.~~
1. Basis of Design: Subject to compliance with requirements, provide basis of design indicated or comparable products by one of the following:
 - a. Rulon; Panel Grille (Basis of Design)
 - b. ASI Architectural
 - c. Hunter Douglas
 2. Panel Size: As indicated on the Drawings
 3. Profile:
 - a. Number of Blades per Foot: **Eight. Provide blade spacing as instructed by Architect.**
 - b. Blade Thickness: **3/4 inch.**
 - c. Depth of the Blades: **Provide 1-3/8-inch, 2-inch, 2-5/16-inch and 3-3/4-inch blade depth as instructed by Architect.**
 4. Panel Design Description:
 - a. Wood-Backed Panel Grilles: Grilles consist of individual wood strips assembled in 12 inch widths in lengths up to 10 feet. Woodbackers are attached to the back of grilles 12 inches on center, beginning 5-1/2 inch from each end. Woodbackers are positioned perpendicular to the wood strips. Panel Grilles are 1 inch under an even foot length. Woodbackers are generally furnished black to be hidden from view. Woodbacker clips are used to snap the Panel Grilles into place.
 5. Blade Design: **Square.**
 - a. ~~B Bullnose Blade~~
 - b. ~~S Slanted Blade~~
 6. Trim and Border Treatment: Provide end caps or junction trims as indicated on the Drawings in the same species and finish as the Panel Grille.
 7. Wood Species: Select White Maple.
 8. Finish: Custom stain as selected by Architect.

2.4 ACCESSORIES

- A. Mounting Devices: Concealed on back of unit, recommended by manufacturer to support weight of unit, and as follows:
 - 1. Metal Clips or Bar Hangers: Manufacturer's standard two-part metal "Z" clips, with one part of each clip mechanically attached to back of unit and the other part to substrate, designed to permit unit removal.

2.5 FABRICATION

- A. Edges, borders, and perimeter trims shall be indicated on the Drawings in accordance with the manufacturer's standard design details.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine fabricated units, substrates, areas, and conditions for compliance with requirements, installation tolerances, and other conditions affecting unit performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Work shall not begin until the space is fully enclosed and glazed and all wet work is completed and dried out to the satisfaction manufacturer.
- C. Temperature shall be at least 65 degrees Fahrenheit during the installation and thereafter.
- D. 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 units in locations indicated. Unless otherwise indicated, install units with vertical surfaces and edges plumb, top edges level and in alignment with other units, faces flush, and scribed to fit adjoining work accurately at borders and at penetrations.
- B. Comply with manufacturer's written instructions for installation of units using type of mounting devices indicated. Mount units securely to supporting substrate.

3.4 FIELD QUALITY CONTROL

- A. Technical Service: Manufacturer shall provide a local Technical Service Representative for on-site training and assistance during the installation process.
- B. Environmental Monitoring: Manufacturer shall provide a temperature and humidity sensor to actively monitor the room in which the wood slats shall be installed for a minimum of one week before and up to two weeks after installation has been completed including all of the weeks in between.

- C. Upon completion of installation, the owner's representative shall inspect all finished surfaces to ensure that the work has been completed in a manner satisfactory to the owner. Any deficiencies in the installation shall be corrected prior to substantial completion.

3.5 ADJUSTMENTS AND CLEANING

- A. Clean exposed surfaces of panels in accordance with manufacturer's instructions.
- B. Remove and replace panels and tiles, which cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.

3.6 PROTECTION

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

END OF SECTION 098433