

**SECTION 098400 - SOUND-ABSORBING WALL AND CEILING UNITS****PART 1 - GENERAL****1.1 SECTION INCLUDES**

- A. Acoustic Wall Panels.

**1.2 REFERENCES**

- A. ASTM C423 - Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method; 2009a.
- B. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2016.
- C. ASTM E795 - Standard Practices for Mounting Test Specimens During Sound Absorption Tests; 2016.

**1.3 SUBMITTALS**

- A. General: Submit manufacturer's documentation for each type of product under provisions of Section 013300 - Submittal Procedures.
- B. Product Data: Manufacturer's printed data sheets for products specified.
- C. Shop Drawings: Fabrication and installation details, panel layout.
- D. Selection Samples: Manufacturer's color charts for applicable material, indicating full range of material, colors, and patterns available.
- E. Verification Samples: Fabricated samples of each type of product specified; 6" minimum length and width, showing construction, edge details.
- F. Test Reports: Certified test data from an independent test agency verifying that panels meet specified requirements for acoustical and fire performance.
- G. Maintenance Materials: Furnish maintenance information and recommendations for Owners use.

**1.4 QUALITY ASSURANCE**

- A. Source Limitations: All similar products to be obtained from a single manufacturer through one source providing a comprehensive material and installation package.
- B. Installer Qualifications: Utilization of an installer with demonstrated experience and quality in projects of similar size and complexity.

**1.5 DELIVERY, STORAGE, AND HANDLING**

- A. Protect acoustical units from moisture during shipment, storage, and handling. Deliver in factory-wrapped bundles; do not open bundles until units are needed for installation. Ensure all supplied hardware, material, and components are maintained until product is fully installed.
- B. Store units flat, in dry, well-ventilated space; do not stand on end.
- C. Protect edges from damage.
- D. Acclimatize product for minimum 24 hours at temperature and humidity approximately that of occupancy prior to installation.

## 1.6 PROJECT CONDITIONS

- A. Environmental Limitations: Do not deliver or install materials until spaces are enclosed from the exterior environment, wet work in spaces is complete and dry, and HVAC system is maintaining an ambient temperature at occupancy levels during the remainder of the construction period.
- B. Field Measurements: Installer to verify field measurements and dimensions as indicated in Design Submittal.
  - 1. Coordinate location of other product and trades with product layout.
- C. Ensure that Design Submittal signoffs and other required information are supplied in time to prevent interruption of construction process. Ensure that products of this section are supplied to affected trades in time to prevent interruptions.

## 1.7 WARRANTY

- A. Special Warranty: Refer to manufacturer's standard warranty for specific products, terms, and limitations.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURER

- A. Acceptable Manufacturer: FRASCH; Located at 1425 Avenue R, Grand Prairie, TX 75050; Phone: 682.200.3005; Email: [quotes@frasch.co](mailto:quotes@frasch.co); Web: [www.frasch.co](http://www.frasch.co)
- B. Substitutions: Not permitted.

### 2.2 SOUND-ABSORBING AND SOUND-DIFFUSING PANELS

- A. Basis of Design: FRASCH; Product: 'STRATAWOOD' <https://frasch.co/stratawood/>
- B. Material Minimum Performance Attributes:
  - 1. Surface Burning Characteristics:
    - a. Flame spread index of 25 or less and smoke developed index of 450 or less, when tested in accordance with ASTM E84.
  - 2. UL Tested ASTM E-84: Class A
  - 3. Noise Reduction Coefficient (NRC):
    - a. Tested in accordance with ASTM C423 for mounting, per ASTM E795.
    - b. Avg. apparent NRC > .75
- C. Product Attributes:
  - 1. Panel Size: As indicated in Submittal Drawings and per Architects approval. Standard of 24" x 96" x .87"
  - 2. Panel Thickness: 9mm PET felt substrate
  - 3. Edges: Exposed felt, machined edge.
  - 4. Corners: Square, exposed felt, machined edge.
  - 5. Material: Polyester (PET) felt, 55% pre-consumer recycled
  - 6. Color: As selected by Architect from manufacturer's full range.
  - 7. Patterns: As selected by Architect from manufacturer's full range and outlined in Submittal Drawings.
  - 8. Mounting Method:
    - a. Direct adhered or fastened to substrate.

### 2.3 FABRICATION

- A. General: CNC fabricates panels to sizes, configurations, and patterns on 9 mm PET felt, fold edges and create air cavity with secret trap doors.

- B. Tolerances: Fabricate to finished tolerance of plus or minus 1/16 inch for thickness, overall length and width, and square-ness from corner to corner.

## 2.4 ACCESSORIES

- A. Wall Mounting Accessories: Manufacturer's standard accessories at locations indicated on each acoustical unit, sized appropriately for weight of acoustical unit.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates for conditions detrimental to installation of acoustical units. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 INSTALLATION

- A. Install acoustical units in locations indicated, following manufacturer's installation instructions and in accordance with local jurisdiction authorities.
- B. Wall surface to be smooth, cleaned, and dry prior to installation of the product.
- C. Using the tabs, open secret trap doors, fasten to substrate, and close doors.
- D. Align panels accurately, with edges plumb and edges level. Scribe to fit accurately at adjoining work and penetrations.
- E. Install acoustical units to construction tolerances of plus or minus 1/16 inch for the following:
  - 1. Plumb and level.
  - 2. Flatness.
  - 3. Width of joints.

### 3.3 CLEANING

- A. Clean felt facing upon completion of installation from dust and other foreign materials, following manufacturer's instructions.
- B. Lightly vacuum occasionally to remove any particulate matter and air-borne debris or dust. Compressed air can be used to dust the material in difficult to reach areas or for large assemblies.

### 3.4 PROTECTION

- A. Provide protection of installed acoustical panels until completion of the work.
- B. Replace panels that cannot be cleaned and repaired to satisfaction of the Architect.

END OF SECTION 098400