

PART 1 ACOUSTICAL WALL TREATMENT – Section 09840

PART 2 GENERAL

2.1 SECTION INCLUDES:

- 2.1.1 Acoustic Diffuser Panels

2.2 REFERENCES

- 2.2.1 ASTM C 423 – Standard Test Method for Sound Absorption.
- 2.2.2 ASTM E 84 – Standard Test Method for Surface Burning Characteristics of Building Materials.

2.3 PERFORMANCE REQUIREMENTS

- 2.3.1 Acoustical Absorption: In accordance with ASTM C 423. Type A mounting method unless otherwise specified.
- 2.3.2 Flame Spread Rating: Provide all components with Class A flame spread rating when tested in accordance with ASTM E 84.

2.4 SUBMITTALS

- 2.4.1 Submit under provisions of Section 01300
- 2.4.2 Product Data: Manufacturer's data sheets on each product to be used, including:
 - 2.4.2.1 Preparation instructions and recommendations
 - 2.4.2.2 Storage and handling requirements and recommendations
 - 2.4.2.3 Installation methods
 - 2.4.2.4 Verification Sample Provided: One (1) 16" x 16" x 1" sample representing product, color and pattern for each product specified. Additional samples are charged according to size, type and fabric. These samples are manufactured for evaluation purposes.
 - 2.4.2.5 Manufacturer's standard fabric is Guilford of Maine, Anchorage 2335.
 - 2.4.2.6 Customer Own Material (C.O.M.) fabric will be subject to Acoustic Enterprises, Inc. (AEI) approval as to its appropriateness for panel use. A one (1) yard sample of C.O.M. fabric to be furnished to AEI (at customer's expense) for Verification Samples.
 - 2.4.2.7 Mock-up panels that are actual size to the project would be charged as part of the purchase order.

2.5 QUALITY ASSURANCE

- 2.5.1 Manufacturer Qualifications: Minimum 10 years of experience in producing acoustical products of the types specified herein.
- 2.5.2 Installer Qualifications: Must be a qualified and experienced installer.

2.6 DELIVERY, STORAGE AND HANDLING

- 2.6.1 Protect acoustical products from moisture.
- 2.6.2 After inspection of contents, products should remain in manufacturer's packaging until ready for installation.
 - 2.6.2.1 Store materials flat, in dry, well-ventilated space.
 - 2.6.2.2 Do not stand panels on end.
 - 2.6.2.3 Protect edges from damage.

2.7 PROJECT CONDITIONS

- 2.7.1 Do not begin installation of acoustical products until building has been enclosed and environmental conditions approximate those that will prevail when building is occupied.
- 2.7.2 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 have stabilized at 60-80 degrees F (16 – 27 degrees C) and 40% - 50%, respectively.

2.8 EXTRA MATERIALS

- 2.8.1 As per Architect requirements specified in Purchase Order.

PART 3 PRODUCTS

3.1 MANUFACTURERS:

- 3.1.1 Acceptable Manufacturer: Acoustic Enterprises Inc., 7601 Miller Dr., Frederick, CO 80504. Telephone (303) 774-9992 or (888) 287-4183. FAX: (303) 774-0081. Email: acoustic@ecentral.com. Website: www.dimensionalachoustics.com.
- 3.1.2 Substitutions: Not permitted.
- 3.1.3 Provide all acoustical products specified herein by Acoustic Enterprises, Inc.

3.2 ACOUSTIC DIFFUSER PANELS

- 3.2.1 Wrapped Acoustic Diffuser Panels: Fiberglass core of 6-7 pcf with hardened edges, seamless finish material wrapped and bonded to back side of panels. Utilizes Patented VACU-BOND® process.
 - 3.2.1.1 Thickness: 1 inch; NRC not less than 0.80
 - 3.2.1.2 Thickness: 2 inch; NRC not less than 1.00
 - 3.2.1.3 Size: As per drawings
 - 3.2.1.4 Finish Material: Manufacturer's standard is Guilford of Maine, Anchorage 2335
 - 3.2.1.5 Alternate Finish Material: Customer Own Material (C.O.M.) fabric
 - 3.2.1.6 Color: Select from manufacturer's standard or alternate C.O.M.
 - 3.2.1.7 Edge Detail:
 - 3.2.1.7.1 Square
 - 3.2.1.7.2 Beveled upon request

- 3.2.1.8 Mounting Options:
 - 3.2.1.8.1 Impaling Clips
 - 3.2.1.8.2 Z-Clips with resin hardened spots
 - 3.2.1.8.3 Adhesive
 - 3.2.1.8.4 Rotofast Anchors

PART 4 EXECUTION

4.1 EXAMINATION

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

4.2 PREPARATION

- 4.2.1 Clean surfaces thoroughly prior to installation.
- 4.2.2 Prepare surface for achieving the best result for the substrate under the project conditions.

4.3 INSTALLATION

- 4.3.1 Install acoustical panels as per General Contractor's provisions and specifications.
- 4.3.2 Installer Qualifications: Must be a qualified and experienced Installer.

4.4 PROTECTION

- 4.4.1 Protect installed products until completion of project.