

SECTION 09840 – ACOUSTICAL WALL TREATMENT (POROUS EXPANDED POLYPROPYLENE. P.E.P.P)

PART 1 - GENERAL AND SUPPLEMENTARY PROVISIONS

1.1 SCOPE OF WORK

- A. Section Includes: SOUND SILENCER, Porous Expanded Polypropylene [**Acoustical Wall Panels**] or [**Baffles**]
- B. Related Sections:
 - 1. Division 9 Sections: [Any Section whose works attaches to or abuts the work covered by this section]

1.2 REFERENCES

- A. American Society for Testing and Materials (ASTM):
- B.
 - 1. ASTM E84: Standard Test Method for Surface Burning Characteristics of Building Materials.
 - 2. ASTM C423-99a: Sound Absorption by Reverberation Room Method.

1.3 PRODUCT DESCRIPTION

- A. Performance Requirements:
 - 1. Provide acoustical wall panels designed and tested to provide surface-burning characteristics (ASTM E84) as follows:
 - a. Flame spread: [**1" F/S – 3,**] [**2" – F/S – 5,**]
 - b. Smoke Developed: [**1" S/D – 84,**] [**2" S/D – 113.**]
 - 2. Provide acoustical wall panels, which have been manufactured, fabricated and installed to provide Noise Reduction Coefficient (NRC) rating as follows:
 - a. For direct adhesive or mechanical fastener mounting **Type A Mounting [1" NRC .45] [2" NRC .70] [Select mounting style and performance data from product literature at ASI web site at www.acousticalsurfaces.com]**

1.4 SUBMITTALS

- A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.
- B. Product Data: Submit manufacturer's product data and installation instructions.
- C. Samples: Submit [**State number of samples required**] samples: 6" x 6" (152 x 152 mm) for each PEPP ceiling unit required, showing full range of exposed texture to be expected in completed work.
- D. Quality Assurance/Control Submittals: Submit the following:
 - 1. Test reports: Upon request submit certified test reports from recognized test laboratories

2. Certificates: Submit manufacturer's certificate that products meet or exceed specified requirements.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Utilize an installer having demonstrated experience on projects of similar size and complexity
- B. Regulatory Requirements and Approvals: [Non required]

1.6 DELIVERY, STORAGE & HANDLING

- A. General: Comply with Division 1 Product Requirement Section.
- B. Delivery: Deliver material in the manufacturer's original, unopened, undamaged containers with identification labels intact.
- C. Provide labels indicating brand name, source of procurement, style, size and thickness
- D. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.

1.7 PROJECT/SITE CONDITIONS

- A. Environmental Requirements:
 1. Do not install acoustical panels until building is closed in and HVAC system is operational.

1.8 MAINTENANCE

- A. Extra Materials: Provide [**A recommended percentage of**] [**Specify percentage.**] Additional material for use by owner in building maintenance and repair.
- B. Provide new unopened cartons of extra materials, packaged with protective covering for storage and identified with appropriate labels.

PART 2 – PRODUCTS

2.1. ACOUSTICAL WALL PANELS

- A. Acoustical Wall Panels shall be as provided by Acoustical Surfaces Inc, 123 Columbia Court N. Chaska, Minn. 55318. Ph: 1 (800) 448 –0121
 1. **SOUND SILENCER**, Porous Expanded Polypropylene (PEPP) Acoustical Wall Panels:
 - a. Material description: Sound Silencer panels shall be manufactured from expanded polypropylene beads, which shall be capable of being recycled.
 - b. Thickness [**1" (25.4 mm) thick**] [**2" (51 mm) thick**].
 - c. Color, [**White, Charcoal**]
 - d. Edge, Square

- e. Width, [23 ¾", 604mm]
- f. Length, [47 ¾", 1213mm]
- g. Mounting Style, [A] [C-20] [C40] [D-20] [Select mounting style] Provide all fasteners, [Furring strips] and [Bonded Acoustical Pad] for complete single source installation.
- h. Acoustical panels shall be impervious to moisture, excessive humidity or water.
- i. Acoustical panels shall be impact resistant

2.2 PRODUCT SUBSTITUTIONS

- A. Substitutions: No substitutions permitted without express prior approval from Architect prior to bidding.

2.3 ACCESSORIES

- A. Provide accessories as follows:

- 1. Adhesives as recommended by manufacturer for single source responsibility

PART 3 – EXECUTION

3.1 MANUFACTURER'S INSTRUCTIONS

- A. Comply with the instructions and recommendations of the acoustical panel manufacturer.
- B. Install materials in accordance with governing regulations, fire resistance rating requirements and industry standards applicable to work.

3.2 EXAMINATION

- A. Site Verification of Conditions:

- 1. Examine surfaces scheduled to receive furred out or directly attached acoustical units for unevenness, irregularities and dampness that would affect quality and execution of work.
- 2. Do not proceed with installation of acoustical panels until unacceptable conditions are corrected.

3.3 INSTALLATION

- A. General: Do not begin installation until materials sufficient to complete an entire room are received and are ready for installation..
 - 1. Field cut acoustical panels as required, in accordance with manufacturers recommended procedures and equipment
 - 2. Install acoustical wall panels in accordance with quantity and lay-outs as shown on the architectural drawings

- 3 Acoustical wall panels shall be adhesively or mechanically mounted in accordance with manufacturer's recommendations and/or as detailed on the drawings.

3.4 CLEANING

- A. Clean exposed surfaces of acoustical panel to comply with manufacturer's instructions for cleaning.
- B. Remove and replace tiles, which cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.

3.5 PROTECTION

- A. Protect installed work from damage due to subsequent construction activity, including temperature and humidity limitations and dust control, so that the work will be without damage and deterioration at the time of acceptance by the Owner.

END OF SECTION