SECTION 09 51 23

Sound SilencerTM dBA Acoustical Ceiling Tiles

**PART 1 GENERAL**

1. **SECTION INCLUDES**
   1. Sound SilencerTM dBA acoustical ceiling tiles and accessories for ceiling installation.
2. REFERENCES
   1. American Society for Testing and Materials (ASTM)
      1. ASTM E84: Standard Test Method for Surface Burning Characteristics of Building Materials.
      2. ASTM E90: Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements
      3. ASTM C423: Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
      4. ASTM E795: Standard Practices for Mounting Test Specimens During Sound Absorption Tests
   2. International Code Council (ICC)
      1. ICC IBC: International Building Code
3. **SUBMITTALS**
   1. Product Data: Manufacturer’s data sheet and installation instructions.
   2. Samples: Submit, at minimum, a 4” x 4” sample for each type of specified acoustical tile.
   3. Test Reports: Upon request, submit certified test reports to verify specified product performance.
4. **QUALITY ASSURANCE**
   1. Qualifications:
      1. Manufacturers: Provide acoustical ceiling tiles from a single manufacturer.
      2. Installers: Utilize an installer having demonstrated experience on projects of comparable size and complexity.
   2. Performance Requirements:
      1. Surface Burning Characteristics: Acoustical tiles to perform as specified when tested in accordance with ASTM E84. Acoustical tile surface burning performance should comply with the International Building Code and other local building code requirements.
      2. Acoustical Characteristics: Acoustical tiles to perform as specified when tested in accordance with ASTM C423, and ASTM E90.
5. **DELIVERY, STORAGE, AND HANDLING**
   1. Storage and Handling Requirements:
      1. Handle tiles carefully to avoid any damage.
      2. Store tiles indoors in a clean, cool, dry place, and out of direct sunlight.
      3. Store tiles in a space where the ambient temperature and humidity conditions are being maintained at the levels indicated for the project when occupied for its intended use.
6. **SITE CONDITIONS**
   1. Ambient Conditions:
      1. Maintain ambient temperature and humidity conditions at levels indicated for the project when occupied for its intended use.
      2. Do not install products under environmental conditions outside manufacturer’s recommended limits.
   2. Existing Conditions: Do not install ceiling tiles until space is enclosed and weather proofed, wet work is completely dry, and work above ceilings is complete.
7. **WARRANTY**
   1. Provide manufacturer’s written product warranty per Section 01 77 00 – Closeout Procedures.

**PART 2 PRODUCTS**

**(Specifier Note: Red colored text below requires you to select an option before this specification can be completed. Options in red text are bound by parenthesis. Additional Sound Silencer dBA information can be found on our website** [**https://www.acousticalsurfaces.com/sound\_silencer/dBA\_panel.htm**](https://www.acousticalsurfaces.com/sound_silencer/dBA_panel.htm)**)**

1. **MANUFACTURERS**
   1. Acoustical Surfaces, Inc., 123 Columbia Court N, Chaska, MN 55318.  
      Phone: 952-448-5300. Fax: 952-448-2613. Website: www.acousticalsurfaces.com
2. **DESCRIPTION**
   1. Product: Sound SilencerTM dBA acoustical ceiling tiles by Acoustical Surfaces, Inc.
   2. Product Options:
      1. Tile Composition: Semi-rigid porous expanded polypropylene acoustical bead foam
      2. Tile Thickness: (1”) / (2”)
      3. Tile Size: (23 ¾” x 23 ¾”) / (23 ¾” x 47 ¾”)
      4. Edge Profile: Square
      5. Finish: (Charcoal) / (White)
      6. Mounting Method: (Lay-In) / (Adhesive) / (Direct Attachment)
   3. Product Performance:
      1. Acoustical Performance
         1. Noise Reduction Coefficient (NRC) per ASTM C423

|  |  |  |
| --- | --- | --- |
| Thickness | 1” | 2” |
| E-400 Mount | 0.50 | 0.65 |

* + - 1. Sound Transmission Classification (STC) per ASTM E90

|  |  |  |
| --- | --- | --- |
| Thickness | 1” | 2” |
| STC | 6 | 7 |
| OITC | 5 | 6 |

* + 1. Surface Burning Performance
       1. Fire Rating per ASTM E84: Class A.

1. **ACCESSORIES**
2. Attachment hardware for ceiling tiles as specified by manufacturer for installation.

**PART 3 EXECUTION**

1. **EXAMINATION**
   1. Verification of Conditions:
      1. Examine surfaces scheduled to received furred out or directly attached acoustical units for unevenness, irregularities or dampness that would affect quality and execution of work.
      2. All wet work in the installation area must be complete, cured, and dry prior to installation.
      3. Work above ceilings shall be complete, inspected, and accepted before ceiling work begins.
2. **INSTALLATION**
3. Comply with manufacturer’s instructions and recommendations for installation of ceiling tiles and with industry standards.
4. **CLEANING**
5. Clean surfaces of ceiling tiles per manufacturer’s instructions or recommendations.
6. Remove and replace damaged or discolored material and material that cannot be properly cleaned.
7. **PROTECTION**
8. 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