SECTION 09 84 13

StrandTecTM Backfill Cementitious Wood Fiber Acoustical Panels

PART 1 GENERAL

1. SECTION INCLUDES
   1. Backfill cementitious wood fiber acoustical panels and accessories for wall installation.
2. REFERENCES
   1. Reference Standards: American Society for Testing and Materials (ASTM)
      1. ASTM E84: Standard Test Method for Surface Burning Characteristics of Building Materials.
      2. ASTM C423: Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
      3. ASTM E795: Standard Practices for Mounting Test Specimens During Sound Absorption Tests
      4. ASTM E1264: Standard Classification for Acoustical Ceiling Products
3. SUBMITTALS
   1. Product Data: Submit manufacturer’s technical data sheet and installation instructions.
   2. Samples: Submit one (1) 8” x 11” sample for each type of wood fiber wall panel unit required.
   3. Certificates: Submit manufacturer’s certificate that products meet or exceed specified requirements.
   4. Test Reports: Upon request, submit certified test reports from recognized test laboratories.
4. MAINTENANCE MATERIAL
   1. Extra Stock Materials:
      1. Deliver no less than two percent (2%) / (Other) of each type, color, and pattern of material.
5. QUALITY ASSURANCE
   1. Qualifications:
      1. Manufacturers: Provide cementitious wood fiber acoustical panels 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 panels classified as Class A in accordance with ASTM E84 resulting in a Flame Spread Index and Smoke Developed Index between 0-15 when tested by a qualified testing facility.
      2. Acoustical Characteristics: Acoustical panels to have a Noise Reduction Coefficient (NRC) rating no less than 0.45 – for 1” panel, 0.55 – for 1-3/8”, and 0.65 – for 2” when tested in accordance with ASTM C423 with Type A mounting by a qualified testing facility.
6. DELIVERY, STORAGE, AND HANDLING
   1. Storage and Handling Requirements:
      1. Handle products carefully to avoid damage or chipping edges.
      2. Store products in a clean, cool, dry place, and out of direct sunlight.
      3. Store products 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.
7. SITE CONDITIONS
   1. Ambient Conditions: Maintain ambient temperature and humidity conditions at levels indicated for the project when occupied for its intended use.
   2. Existing Conditions: Do not install cementitious wood fiber panels until space is enclosed and weather proofed, wet work is completely dry, and work on walls is complete.
8. WARRANTY
   1. Manufacturer Warranty: Provide manufacturer’s written product warranty per Section 01 77 00 – Closeout Procedures.

PART 2 PRODUCTS

1. MANUFACTURERS
2. ASI Architectural, 123 Columbia Court N, Chaska, MN 55318.  
   Phone: 888-258-4637. Fax: 952-448-2613. Website: www.asiarchitectural.com
3. DESCRIPTION
4. Product Description: StrandTec Backfill acoustical panel as manufactured by ASI Architectural.
5. Product Options: For each product characteristic listed below, options are bound byparentheses. Please select one (1) option from the choices.
   1. Panel Composition: Excelsior bonded with inorganic binder - Portland cement with   
       CFAB acoustical backfill
   2. Finish: (Natural) / (White) / (SonoKoteTM custom color)
   3. Panel Thickness: (2”) / (2-3/8”) / (3”)
   4. Panel Size: For 2” Panel: (23-3/4” x 23-3/4”) / (23-3/4” x 47-3/4”) /   
       (23-3/4” x 95-1/2”)  
       For 2-3/8” Panel: (23-3/4” x 47-3/4”) / (23-3/4” x 95-1/2”)  
       For 3” Panel: (24” x 48”) / (24” x 96”)
   5. Edge Profile: (Beveled) / (Other)
   6. Mounting Method: Direct attachment: (A Mount) / (C-25 Mount) / (C-50 Mount)
6. PERFORMANCE
7. Surface burning characteristics when tested in accordance with ASTM E84 meets Class A classification. Flame Spread Index and Smoke Developed Index of 0-15.
8. Acoustical performance characteristics when tested in accordance with ASTM C423 with mounting per ASTM E795:

|  |  |  |  |
| --- | --- | --- | --- |
| Mounting Method |  | Thickness |  |
|  | 1” | 1-3/8” | 2” |
| NRC (Type A) | 0.45 | 0.55 | 0.75 |
| NRC (Type C-25) | 0.80 | 0.80 | 0.90 |
| NRC (Type C-50) | 0.85 | 0.90 | 0.95 |

1. ACCESSORIES
2. Direct attachment hardware for wall panels as specified by manufacturer.
3. Products with Options: Select one (1) option from the choices for each of the following accessories.
   1. SonoKote acoustically transparent paint (factory applied) / (field applied) if SonoKote custom color finish option selected.

PART 3 EXECUTION

1. EXAMINATION
2. Verification of Conditions**:** 
   1. Inspect installation area and conditions under which work is to be performed for compliance with all manufacturers’ environmental requirements.
   2. All wet work in the installation area must be complete, cured, and dry prior to installation.
   3. Wall assembly shall be complete, inspected, and accepted before wall work begins.
3. INSTALLATION
4. Comply with manufacturer’s instructions and recommendations for installation of acoustical wall and ceiling panels and with industry standards.
5. CLEANING
6. Clean surfaces of wall panels per manufacturer’s instructions.
7. Remove and replace damaged or discolored material and material that cannot be properly cleaned.
8. PROTECTION
9. 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