

SECTION 098400
PHONSTOP Acoustical Panels

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Adhesively applied expanded recycled glass ceiling and wall tiles.

EDIT NOTE: SELECT TILE ABOVE OR PANEL BELOW. IF USING BOTH TYPES ON PROJECT, INDICATE ON DRAWINGS WHERE TILES AND PANELS ARE SCHEDULED.

2. Lay-in expanded recycled glass ceiling panels for exposed suspension systems.

B. Related Sections:

EDIT NOTE: ADD OR DELETE SECTIONS PER PROJECT REQUIREMENTS.

1. Section 095100 – Acoustical Ceilings.
2. Section 095300 – Acoustical Ceiling Suspension Systems.
3. Section 095423 – Linear Metal Ceilings.
4. Section 095426 – Linear Wood Ceilings.
5. Section 095443 – Stretched-Fabric Ceiling Systems.
6. Division 21 – Fire Suppression.
7. Division 23 – Mechanical. Diffusers, vents, and other mechanical items.
8. Division 26 – Electrical. Lights and other ceiling mounted electrical items.

1.2 SYSTEM DESCRIPTION

A. Acoustical Performance Requirements:

1. NRC (Noise Reduction Coefficient): Comply with ASTM C423-90a.

1.3 SUBMITTALS

A. Product Data: Manufacturer's technical data for each type of ceiling panel and ceiling and wall tile including finishes and the following:

1. Manufacturer's installation instructions.
2. Certified test reports indicating compliance with performance requirements specified herein.

B. Samples: 2 full size sets of Samples of each specified tile and panel for color selection or verification.

C. Closeout Submittals:

1. Operating and Maintenance Manual, including cleaning and maintenance instructions.
2. Extra Material for Owner's stock.
3. Material Safety Data Sheets (MSDS).

D. LEED Submittals:

1. Credit MR 2.1 and MR 2.2: Comply with Section 017419 – Construction Waste Management and Disposal.
2. Product Data for Credit MR 4.1[**and MR 4.2**]: For products having recycled content, documentation indicating percentages by weight of postconsumer and preconsumer recycled content.
 - a. Include statement indicating costs for each product having recycled content.

3. Product Data for Credit EQ 3.1[**and EQ 3.2**]: For products, including printed statement of VOC content.

1.4 QUALITY ASSURANCE

- A. Single Source Responsibility: Obtain tile units for entire Project from a single manufacturer.
- B. Manufacturer's Qualifications: Firm with not less than 5 years experience in manufacturing of products similar in complexity to those required for this Project.
- C. Installer's Qualifications: Firm with not less than 5 years experience in installation of products similar in complexity to those required for this Project, including specific requirements indicated.
 1. Successfully completed not less than 5 comparable scale projects.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store materials in manufacturer's original unopened containers with brands, names, and production lot numbers clearly marked on these containers.
- B. Storage and Protection: Comply with manufacturer's recommendations.
 1. Store products in a cool, dry place out of direct sunlight.
 2. Protect from elements and from damage.

1.6 PROJECT CONDITIONS

- A. Environmental Requirements within building:
 1. Tiles and panels do not require special environmental conditions.
 2. Systems may be installed at any stage of construction.

1.7 WARRANTY

- A. Provide manufacturer's written warranty per Section 017700 – Closeout Procedures.

1.8 MAINTENANCE

- A. Extra Materials:
 1. Deliver not less than the following quantity of each type, color, and pattern of material, exclusive of material required to properly complete installation.

EDIT NOTE: RETAIN AMOUNT OF EXTRA MATERIALS USED ON PROJECT. DELETE THIS ARTICLE IF NO EXTRA MATERIALS ARE REQUIRED OR ACCEPTABLE.

- a. 3 percent.
- b. 5 percent.
- c. 1 carton.
2. Furnish extra materials from same production run to verify run for color.
3. Package replacement materials with protective covering, identified with appropriate labels.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Subject to compliance with requirements, provide products from the following manufacturer:
 1. ArtUSA
2775 Bankers Ind. Dr.
Atlanta GA 30366
Telephone: 888-454-6975

Fax: 770-246-7860
Website: www.noisecontrolproducts.com
E-mail: sales@noisecontrolproducts.com

- B. Substitutions: Comply with Section 016000 – Product Requirements.

2.2 MANUFACTURED UNITS

- A. Adhesively Applied Expanded Glass Ceiling and Wall Tiles: Ceiling and wall tiles manufactured from 100 percent recycled glass.
1. Fire Resistance: ASTM E84, Class 1.
 - a. Flame Spread: 0.
 - b. Smoke Density: 0.

EDIT NOTE: RETAIN ONE OF THE FOLLOWING NOISE REDUCTION COEFFICIENTS AND DELETE THOSE NOT REQUIRED FOR PROJECT.

2. NRC (Painted): 0.90 per ASTM C423 Type A mounting.
3. NRC (without space between tiles): 0.90 per ASTM C423 Type A mounting.
4. NRC (Plastered): 0.70 per ASTM C423 Type A mounting.
5. Density: 16.79 pounds per cubic foot, per ASTM D1622.
6. Compressive Strength: 165 psi, per ASTM D1621.
7. Thermal Resistance: 3.24 effective R-value, per ASTM C518.

EDIT NOTE: RETAIN TILE SIZE REQUIRED FOR PROJECT AND DELETE SIZES NOT REQUIRED.

8. Size: Nominal 24 inch by 24 inch (610 mm by 610 mm).
9. Size: Nominal 24 inch by 48 inch (610 mm by 1220 mm).
10. Tile Thickness: 2 inch (50 mm) total thickness.
11. Edge: 3/8 inch (9 mm) chamfer.

EDIT NOTE: RETAIN TILE EDGE ABOVE OR BELOW AS REQUIRED FOR PROJECT.

12. Edge: Square.

EDIT NOTE: SELECT ONE OF THE FOLLOWING FINISHES. DELETE THOSE NOT USED FOR PROJECT.

13. Finish: Manufacturer's standard in the following color:
 - a. Gray.
 - b. Custom, match RAL name and number: **[Insert name and number]**.
14. Acceptable Product: PHONSTOP V.

- B. Lay-in Expanded Glass Ceiling Panels: Ceiling panels manufactured from 100 percent recycled glass.
1. Fire Resistance: ASTM E84, Class 1.
 - a. Flame Spread: 0.
 - b. Smoke Density: 0.

EDIT NOTE: RETAIN ONE OF THE FOLLOWING NOISE REDUCTION COEFFICIENTS AND DELETE THOSE NOT REQUIRED FOR PROJECT.

2. NRC: 0.70 per ASTM C423 Type E mounting.
3. Density: 16.79 pounds per cubic foot, per ASTM D1622.
4. Compressive Strength: 165 psi, per ASTM D1621.
5. Thermal Resistance: 3.24 effective R-value, per ASTM C518.

EDIT NOTE: RETAIN PANEL SIZE REQUIRED FOR PROJECT AND DELETE SIZES NOT REQUIRED.

6. Size: Nominal 24 inch by 24 inch (610 mm by 610 mm).
7. Size: Nominal 24 inch by 48 inch (610 mm by 1220 mm).

8. Tile Thickness: 1 inch (25 mm) total thickness.
9. Edge: Slightly beveled square.

EDIT NOTE: SELECT ONE OF THE FOLLOWING FINISHES. DELETE THOSE NOT USED FOR PROJECT.

10. Finish: Manufacturer's standard in the following color:
 - a. Gray.
 - b. Custom, match RAL name and number: **[Insert name and number]**.
11. Acceptable Product: PHONSTOP E.

2.3 SUSPENSION SYSTEM

- A. Suspension System: Refer to Section 095300 – Acoustical Ceiling Suspension Assemblies for acoustical panel support system.

EDIT NOTE: RETAIN PARAGRAPH ABOVE OR 1 OF 2 BELOW. 15/16 INCH GRID IS RECOMMENDED BY TILE MANUFACTURER.

- B. Suspension System: **[Insert acoustical tile ceiling system suspension system specifications here.]**
- C. Suspension System:
 1. Acceptable Product: pinta Ceiling Grid System.

EDIT NOTE: RETAIN MATERIALS BELOW WITH PHONSTOP V, DELETE IF NOT REQUIRED FOR PROJECT.

2.4 MISCELLANEOUS MATERIALS

- A. Primer:
 1. Acceptable Product: PHONSTOP pt17 Synthetic Penetrating Primer.
- B. Adhesive:
 1. Acceptable Product: PHONSTOP pa81 Adhesive.

EDIT NOTE: RETAIN ABOVE FOR CONCRETE, MASONRY, AND DRYWALL SUBSTRATES AND BELOW FOR PLYWOOD AND METAL SUBSTRATES.

2. Acceptable Product: PHONSTOP pa101 Adhesive.
- C. Acrylic Paint:
 1. Acceptable Product: PHONSTOP Paint.

EDIT NOTE: RETAIN PLASTER BELOW IF REQUIRED FOR PROJECT, USE IN CONJUNCTION WITH SQUARE EDGE TILE.

- D. Acoustical Plaster:
 1. Acceptable Product: PHONSTOP pa85 Plaster.
 2. Color as selected from manufacturers color chart.

EDIT NOTE: RETAIN BELOW TILES EXPOSED TO EXTERIOR.

- E. Sealer:
 1. Acceptable Product: PHONSTOP pt13 Sealer.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verification of Conditions: Examine areas and conditions under which work is to be performed and identify conditions detrimental to proper and or timely completion.

1. Do not proceed until unsatisfactory conditions have been corrected.

EDIT NOTE: RETAIN ARTICLE BELOW FOR PHONSTOP E.

3.2 INSTALLATION, SUSPENDED ACOUSTICAL PANEL CEILINGS

- A. Comply with manufacturer's instructions and recommendations for installation of acoustical panels:
 1. Coordinate with mechanical and electrical in locating and spacing fixtures, diffusers, and similar items located in ceiling.
 2. Lay out pattern per reflected ceiling drawings. Where not otherwise indicated, lay out in such manner that margins on opposite sides of rooms are equal or greater than 1/2 tile in width.
 3. Where acoustical ceilings of different heights abut, install acoustical material matching ceiling at vertical surface at ceiling break match ceiling, unless otherwise indicated.
- B. Suspension system: Refer to Section 095300 – Acoustical Ceiling Suspension Assemblies for installation requirements.

EDIT NOTE: RETAIN PARAGRAPH ABOVE OR BELOW PER PROJECT REQUIREMENTS.

- C. Suspension System: **[Insert acoustical tile ceiling system suspension system installation requirements here.]**
- D. Acoustical Ceiling Panels:
 1. Refer to manufacturer's written installation instructions.
 2. Install panels with proper faces exposed.
 3. Install lay in acoustical ceiling panels flush and level in suspension system.
 4. Install panels with hand protection to avoid soiling.

EDIT NOTE: RETAIN ARTICLE BELOW FOR PHONSTOP V.

3.3 INSTALLATION, ADHESIVELY APPLIED ACOUSTICAL TILE CEILINGS AND WALLS

- A. Comply with manufacturer's instructions and recommendations for installation of acoustical tiles:
- B. Refer to manufacturer's written installation instructions.
 1. Apply primer to substrate.
 2. Use adhesive to level substrate up to 10 mm thick.
 3. Apply adhesive using 3/8 inch notched trowel to back of each tile.
 4. Install tiles with **[square] [chamfered]** faces exposed.

EDIT NOTE: RETAIN BELOW IF RETAINING SPRAY-ON COLORING FOR INTERIOR OR EXTERIOR USE.

5. Apply paint.

EDIT NOTE: RETAIN BELOW IF RETAINING PLASTER INSTALLATION.

6. For interior seamless installation:
 - a. Install tiles with square faces exposed.
 - b. Apply primer to tile face.
 - c. Install plaster base coat.
 - d. Install plaster finish coat.

EDIT NOTE: RETAIN BELOW IF TILE EXPOSED TO EXTERIOR.

7. Apply sealer to exterior exposed tile.

3.4 CLEANING

- A. Clean adjacent surfaces and remove unused product and debris from site.

- B. After installation is completed, clean soiled surfaces of materials.
- C. Remove and reinstall improperly installed material.
- D. Remove damaged or discolored material, or material that cannot be properly cleaned, and install new material.

END OF SECTION