

Product Guide Specification

Specifier Notes: This product guide specification is written according to the Construction Specifications Institute (CSI) Format, including *MasterFormat*, *SectionFormat*, and *PageFormat*, contained in the CSI *Manual of Practice*.

The section must be carefully reviewed and edited by the Architect to meet the requirements of the project and local building code. Coordinate this section with other specification sections and the drawings.

Delete all "Specifier Notes" when editing this section.

SECTION 09590

ACOUSTICAL TILE RESTORATION

Specifier Notes: This section covers ProCoat Products, Inc. "ProCoustic" Acoustical Tile and Ceiling Coating for the restoration of existing acoustical ceiling tile. Consult ProCoat Products, Inc. for assistance in editing this section for the specific application.

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Restoration of existing acoustical ceiling tile.

1.2 RELATED SECTIONS

Specifier Notes: Edit the following list as required for the project. List other sections with work directly related to the acoustical tile restoration.

- A. Section 09130 - Acoustical Suspension.
- B. Section 09510 - Acoustical Tile Ceilings.

1.3 REFERENCES

Specifier Notes: List standards referenced in this section, complete with designations and titles. This article does not require compliance with standards, but is merely a listing of those used.

- A. ASTM C 423 - Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
- B. ASTM C 523 - Light Reflectance of Acoustical Materials by the Integrating Sphere Reflectometer.
- C. ASTM E 84 - Surface Burning Characteristics of Building Materials.

D. ASTM E 313 - Indexes of Whiteness and Yellowness of Near-White Opaque Materials.

E. ASTM E 795 - Mounting Test Specimens During Sound Absorption Tests.

1.4 SUBMITTALS

A. Comply with Section 01330 - Submittal Procedures.

B. Product Data: Submit manufacturer's product data, including application instructions.

C. Test Reports: Submit manufacturer's test reports from testing performed by an independent laboratory of tile coated with acoustical tile coating.

1. Sound absorption.
2. Fire Rating:
 - a. Flame spread.
 - b. Smoke developed.
3. Light reflectance.
4. Combustion toxicity.
5. Aging.

1.5 QUALITY ASSURANCE

A. Applicator's Qualifications:

1. Use applicator experienced in application of specified materials for a minimum of 5 years on projects of similar size and complexity.
2. Use applicator experienced in application of specified materials in fully occupied commercial facilities.
3. Submit list of completed projects including project name and location, name of architect, name of material manufacturer, and approximate area of acoustical ceiling tile restored.
4. Applicator's Personnel: Employ persons trained for application of specified materials.

Specifier Notes: Describe requirements for a meeting to coordinate the restoration of the existing acoustical tiles and to sequence related work. Delete this paragraph if not required.

B. Pre-restoration Meeting: Convene a pre-restoration meeting [2] [_____] weeks before start of restoration of existing acoustical tile. Require attendance of parties directly affecting work of this section, including Contractor, Architect, applicator, and manufacturer's representative. Review protection, surface preparation, application, cleaning, and coordination with other work.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.

B. Storage:

1. Store materials in a clean dry area in accordance with manufacturer's instructions.
2. Keep containers sealed until ready for use.
3. Keep from freezing.
4. Minimum Storage Temperature: 55 degrees F.

C. Handling: Protect materials during handling and application to prevent damage or contamination.

1.7 ENVIRONMENTAL REQUIREMENTS

A. Minimum Application Temperature: 55 degrees F.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. ProCoat Products, Inc., 260 Centre Street, Suite D, Holbrook, Massachusetts 02343. Phone (781) 767-2270. Fax (781) 767-2271. Web Site www.procoat.com. E-mail info@procoat.com.

Specifier Notes: There has been a number of projects where ProCoustic Acoustical Tile and Ceiling Coating has been specified by the Architect for its unique properties, and the painting subcontractor has ignored the specifications and applied a less expensive conventional paint, causing damage to the acoustical properties of the ceiling. The following section should be used to eliminate unauthorized substitutions for the ProCoustic Acoustical Tile and Ceiling Coating.

B. Material Substitutions:

1. Do not substitute other materials for acoustical tile coating specified in this section.
2. If coated with materials not specified in this section, remove existing acoustical tile ceiling and replace with new acoustical tiles approved by Architect.

2.2 RESTORATION MATERIALS

- A. Acoustical Tile Coating: ProCoustic Acoustical Tile and Ceiling Coating.
1. Sound Absorption, ASTM C 423 and E 795: Improve Noise Reduction Coefficient of tile from 0.55 to 0.60.
 2. Fire Rating, ASTM E 84: Class A flame spread when applied to surface of acoustical ceiling tiles at a rate of 300 square feet per gallon.
 - a. Flame Spread: Reduce from 25 to 15.
 - b. Smoke Developed: Reduce from 10 to 5.
 3. Light Reflectance, ASTM C 523: Improve reflectance of light of tile from 0.81 to 0.88.
 4. Combustion Toxicity Test: Pass.
 5. Aging, ASTM E 313: New acoustical tile with ProCoustic coating has a higher Whiteness Index than:
 - a. New acoustical tile with high quality latex ceiling paint coating.
 - b. New acoustical tile with manufacturer's standard coating.
 6. Adhere to Grid: Does not cause tile to adhere to grid system after coating has dried.
 7. Physical Form: Smooth pourable liquid. Nontoxic.
 8. Primary Composition:
 - a. Vehicle: Vinyl acrylic resin.
 - b. Pigment: Titanium dioxide, calcium carbonate, silicate wetting and stabilizing agents, and water.
 9. Weight: 10.6 pounds per gallon.
 10. Specific Gravity: 1.26.
 11. Viscosity: 70 to 75 Krebs at 75 degrees F.
 12. Solids: 40 percent plus or minus 1 percent.

Specifier Notes: ProCoustic can be made available in almost any color. Consult ProCoat Products, Inc. for additional information.

13. Color: [White] [_____].

B. Grid Cleaning Solution: ProCoat Grid Cleaning Solution.

1. Chemically compatible with acoustical tile coating.
2. Does not leave a film to prevent acoustical tile coating from bonding to nonporous surfaces.

- C. Acoustical Tile Cleaner: ProCoat Acoustical Tile and Ceiling Cleaner.
 - 1. Chemically compatible with acoustical tile coating.
 - 2. Does not leave contaminants that could bleed through and discolor acoustical tile coating.
 - 3. Odorless, biodegradable, and fabric safe.
 - 4. Does not contain caustic bleaches.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine ceilings to receive restoration of acoustical tile. Notify Architect if ceilings are not structurally sound. Do not begin application until unacceptable conditions have been corrected.

3.2 PROTECTION

- A. Cover walls, floors, equipment, furnishings, merchandise, and other surfaces to be protected against dry-fall spray dust with plastic sheets or drop cloths.
- B. Mask light fixtures, sprinkler heads, smoke detectors, security lights, and other items to be protected against direct spray.

3.3 SURFACE PREPARATION

- A. Prepare surfaces in accordance with manufacturer's instructions.
- B. Replace damaged and broken tiles with new tiles or used tiles approved by Architect.
- C. Pretreat ceiling water stains with a primer/sealer.
- D. Apply grid cleaning solution to grids and other nonporous surfaces to be coated to remove dirt, oil, grease, nicotine, and other contaminants to ensure proper bonding of acoustical tile coating.
- E. Pretreat tiles saturated with grease or nicotine with acoustical tile cleaner to prevent discoloration of acoustical tile coating.

3.4 APPLICATION

- A. Apply acoustical tile coating in accordance with manufacturer's instructions at ceiling locations indicated on the drawings.
- B. Spray acoustical tile coating on acoustical ceiling tiles and exposed suspension grid system.

3.5 CLEANING

- A. Remove protective plastic sheets, drop cloths, and masking materials.
- B. Remove remaining spray dust.

END OF SECTION