

AN ACOUSTICAL FINISH CASE STUDY FROM INTERNATIONAL CELLULOSE



Ambient acoustics within courthouses is critical. The proper acoustical treatment within a courtroom setting ensures that the legal proceedings can be heard clearly by all parties involved. The Tioga County Courthouse is no exception.

Built in 1935, the architectural nature of the courthouse raised concerns due to its historical significance. The interior design, featuring high ceilings and elaborate millwork, had to be preserved during the renovation while still meeting the requirements for a high level of intelligibility. The high ceilings and hard surfaces within the courtrooms created an acoustical nightmare due to excessive reverberation.

SonaKrete™ was chosen as the ideal acoustical finish for this project. The SonaKrete™ system features an attractive “hand-trowelled” finish. It was applied to the courtroom’s ceilings in the standard color white and applied to the walls in a custom color, “Tioga Blue.” The result is a beautifully restored, historic courthouse that features superior acoustics. When it comes to aesthetics, physical toughness, economy of installation and performance, SonaKrete™ is in a league of its own.

SonaKrete™ is a hand-trowelled, premium finish which eliminates the popcorn look of other sprayed acoustic products. SonaKrete™ also qualifies for LEED credits. It is available in white, arctic white and custom integral colors.

Contact ICC at **1-800-790-9367** for samples and complete technical data. Please pay us a visit at **www.sonakrete.com**. Would you like to learn even more? ICC also offers architects an AIA/CES Lunch-N-Learn program on the subject of Spray-Applied Acoustic Finishes.

<b>PROJECT</b>	Tioga County Courthouse Wellsboro, PA
<b>ARCHITECT</b>	Kropcho Jr. & Associates Towanda, PA
<b>DETAILS</b>	SonaKrete Standard White Custom Color Blue

**Other Custom Integral Color  
SonaKrete Applications**



**Valdosta University  
Valdosta, GA**



**Lunello Restaurant  
Cedar Grove, NJ**



**Sunfire Grill  
Crescent Bar, WA**



**Continental Restaurant  
Atlantic City, NJ**



SonaKrete is manufactured with a minimum of 80% recycled content which makes it ideal for "Sustainable Design" LEED projects.

**Section 09 83 00  
SonaKrete™ Acoustical Finish  
Specification Guide**

**INTRODUCTION**

This specification is designed to enable the design professional or specification writer to select the NRC value that best suits the project's requirements. Please edit the NRC value in section 3.03 Line A.

**PART 1 – GENERAL**

**1.01 Section Includes**

- A. SonaKrete™ acoustical finish system.

**1.02 Project Scheduling**

- A. Clips, hangers, supports, sleeves and other attachments to the substrate are to be placed by other trades prior to the application of acoustical finish.
- B. Ducts, piping, conduit or other suspended equipment shall not be positioned until after the application.

**1.03 Submittals**

- A. Submit one copy of the manufacturer's ISO 9001:2000 Certification.
- B. Submit 2 copies of the test reports indicating compliance with the following:
  - 1. NRC values per ASTM C-423 conducted by a NVLAP certified testing laboratory:

Inches	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	NRC
.25"	.01	.07	.39	.69	.83	.87	.50
.375"	.06	.11	.46	.77	.84	.89	.55
.50"	.01	.16	.49	.89	1.03	.97	.65
.75"	.25	.48	.81	.85	.85	.94	.75

- 2. Class 1 Fire Rating per ASTM E-84

- C. Submit one copy of the manufacturer's written certification that the materials contain no asbestos, fiberglass or other man-made mineral fibers.
- D. Applicator's certificate: Manufacturer's approval of applicator.
- E. Submit 2 8"x8" samples from the manufacturer.

**1.04 Quality Assurance**

- A. The Manufacturer must be ISO 9001:2000 Certified.
- B. The Applicator: Must be approved by International Cellulose in performing work of this Section.
- C. Field samples:
  - 1. Construct one field sample panel, 10'x10', to specified thickness to illustrate texture and color.
  - 2. Prepare the sample using the same tools and techniques to be used for the actual application.
  - 3. Locate the sample where directed.
  - 4. The applicator will inform the project architect when the sample is ready for review.
  - 5. Do not start the actual application until the architect has approved the field sample.

**1.05 Delivery, Storage and Handling**

- A. Deliver in original, unopened containers bearing name of manufacturer and product identification.

- B. Store materials dry, off ground and under cover.
- C. Protect liquid adhesive, sealers & additives from freezing.

**1.06 Project Conditions**

- A. The air temperature in the room must be a minimum of 40° F and maintained until the material has cured.
- B. The substrate temperature must be a minimum of 40° F.
- C. The General Contractor to provide ventilation to ensure proper curing.

**PART 2 – PRODUCTS**

**2.01 Acceptable Manufacturers**

- A. International Cellulose Corporation  
12315 Robin Boulevard  
Houston, Texas 77045  
877-790-9367  
FAX: (713) 433-2029

**2.02 Materials**

- A. SonaKrete™ Acoustical Finish System
- B. SonaPrep
- C. Water – Potable
- D. Color shall be:
  - White     Arctic White
  - Custom Color \_\_\_\_\_

**PART 3 – EXECUTION**

**3.01 Examination**

- A. Examine the substrate surfaces and report unsatisfactory conditions in writing. Do not proceed until unsatisfactory conditions are corrected.
- B. Drywall substrates require a minimum Level 3 finish and are to be sealed with SonaPrep.
- C. Plaster substrates require a brown coat finish and are to be sealed with SonaPrep.
- D. Consult International Cellulose for other substrates.

**3.02 Preparation**

- A. Provide masking, drop cloths or other satisfactory coverings for materials/ surfaces that are not to receive acoustical finish.
- B. Coordinate the installation of the acoustical finish with work of other trades.

**3.03 Application**

- E. Install to a thickness to achieve an NRC of \_\_\_\_\_.
- F. Install the acoustical finish according to the manufacturer's written instructions.
- G. After achieving the required thickness and while still wet, float the material to match the approved field sample.
- H. Cure the material with continuous natural or mechanical ventilation.

**3.04 Protection**

- A. Protect finished installation under provisions of Division 1.

**End of Section**



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