

AN ACOUSTICAL FINISH CASE STUDY FROM INTERNATIONAL CELLULOSE



<b>PROJECT</b>	Abington High School Abington, PA
<b>ARCHITECT</b>	Hayes Large Architects Altoona, PA
<b>DETAILS</b>	SonaKrete Standard White @ 3/4"

High School auditoriums serve both the student body and community by providing a theatre-like environment for school events and often times civic, choral and orchestral programs. As a result of unsightly roof leak damage, and the need to upgrade the HVAC and lighting systems, the entire 11,500 square feet of asbestos-based plaster on lath ceiling had to be demolished.

Acoustic performance, appearance and cost were the three deciding factors that lead the Hayes Large design team to call on ICC, the world's leading producer of spray-applied acoustic finishes, for help. Maintaining the original look was very important. Custom pre-formed, curved fiberglass panels, in combination with a new drywall ceiling, created the substrate to which standard white SonaKrete was sprayed at 3/4", provid-

ing an outstanding NRC of .75. SonaKrete is a LEED Certified, spray-applied, hand trowelled, premium acoustic finish which eliminates the popcorn look of many other "similar" products. When it comes to durability and light reflectivity, SonaKrete is in a league all its own. Best of all, SonaKrete provides for an easier and faster application. This results in SonaKrete being more cost effective than traditional sprayed acoustic plaster systems.

SonaKrete is ideal for any architectural space requiring both acoustic performance and beautiful aesthetics. SonaKrete is available in Standard White and Arctic White. Custom matched integral colors are also available. SonaKrete is also ideal for worship centers, museums, libraries, offices, lobbies, boardrooms, correctional facilities, and wherever performance, appearance and durability call for only the very best. Contact International Cellulose at **1-877-790-9367** for samples and complete technical data or visit our website at **www.sonakrete.com**. Would you like to learn more? ICC even offers architects an AIA/CES program on the subject of Spray-Applied Acoustic Finishes.

**Other Unique SonaKrete Applications**



**Riverside Theater**  
Vero Beach, FL



**Bedens Brook Club**  
Skillman, NJ



**Johnson & Johnson University**  
Providence, RI



**American Eagle**  
Pittsburgh, PA



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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[www.sonakrete.com](http://www.sonakrete.com)