

AN ACOUSTICAL FINISH CASE STUDY FROM INTERNATIONAL CELLULOSE



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|------------------|---|
| <b>PROJECT</b>   | Maple Lane School<br>Centralia, WA                          |
| <b>DETAILS</b>   | SonaKrete® Standard White<br>5,800 Sq.Ft. @ 1/2"<br>NRC .65 |
| <b>ARCHITECT</b> | Merritt Architecture PLLC<br>Tacoma, WA                     |

Maple Lane School is a medium/maximum security facility that provides serious and middle offenders an academic program as well as on-campus work experience. They also have programs specifically designed for older youth experiencing serious mental and emotional issues. Maple Lane School even has an in-patient chemical dependency treatment program and they specialize in the treatment of sex offenders.

We all know that the building materials used for correctional facilities are typically all hard surfaces, thus creating an acoustically harsh environment. Studies demonstrate that noise increases blood pressure, interferes with concentration

and sleep. Noise can even trigger aggressive behavior in the inmates and quite possibly the security staff.

SonaKrete® is a spray-applied, hand-trowelled, premium acoustic finish which was specifically developed to satisfy the architectural demand for a smoother, more durable finish, thus eliminating the popcorn or cottage cheese look of other sprayed acoustic finishes. SonaKrete® is available in white, arctic white and custom integral colors, offering versatile options that help meet both your acoustic needs and budget constraints, and SonaKrete® will likely qualify for multiple LEED Credits.

*With SonaKrete®, quiet never looked so good*

Contact ICC at (877) 790-9367 for samples and complete technical data. Please also pay a visit to [www.sonakrete.com](http://www.sonakrete.com). Would you like to learn even more? ICC offers architects an AIA/CES HSW one hour Lunch-N-Learn program on the subject of *Spray-Applied Acoustic Finishes*. Why not give us a call right now and get us on your schedule?

## Other Unique SonaKrete Applications



Riverside Theater  
Vero Beach, FL



Bedens Brook Club  
Skillman, NJ



Badger Mutual Insurance  
Milwaukee, WI



American Eagle  
Pittsburgh, PA

## Section 09 83 16 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 5"x7" samples from the manufacturer.

#### 1.04 Quality Assurance

- A. The Manufacturer must be ISO 9001:2000 Certified.
- B. The Applicator: 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.



SonaKrete is manufactured with a minimum of 80% recycled content which makes it ideal for LEED credits.



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