K-13 spray-on systems®

# PROJECT PROFILE

## Recreation Facilities




## PROJECT

Splitz Bowling Alley
Westminster, CO

## ARCHITECT

Scheirman Associates Architects
Dallas, TX

## DETAILS

K-13 Black, 1" thickness
40,000 square feet

Acoustics is important to the guest's overall experience within entertainment facilities. Proposed design solutions must fit with the owner's goals, the venue's creative concept, meet budget constraints, and satisfy performance requirements.

Splitz, a "best of class" modern bowling and entertainment center, is no exception. It's state-of-the-art design lighting, sound, and service has won Splitz several awards. The facility's 4 oversized screens and high-tech audio system airs nonstop music videos and accommodates major sporting events and private parties. Additionally, the interior theme lighting can be adjusted to create different "moods" within the facility.

Splitz presented an acoustical design challenge. If left bare and untreated, the high ceilings, open design and hard surfaces would support the build-up of excessive noise reverberation within the bowling center. Without acoustical treatment, the entertainment facility would be an acoustical nightmare.

K-13 was applied at a thickness of 1" to the underside of the roof deck and left exposed. The application provides an impressive Noise Reduction Coefficient (NRC) of 0.75. The superior acoustical performance of K-13 is due to the fact that the resilient fibers absorb acoustical energy instead of reflecting it, reducing reverberation time and making speech and music more intelligible.

K-13 Black was selected to match the color scheme of the facility. It is visually unnoticeable above the drop-down lighting and provides light control within the various "mood lit" settings. However, what is highly noticeable is the superior acoustical performance of K-13.

Superior thermal and acoustic control, choice of colors and ability to conform to any substrate configuration make K-13 the best ceiling finish choice for both new construction and renovation projects. Contact ICC today at 800/444-1252 or visit our website at **www.spray-on.com**.

* Photo Credit: scheirman associates architects

## PARTIAL LIST OF SIMILAR PROJECTS

**SEGA GAME WORKS**
MINNEAPOLIS, MN
SCHAUMBURG, IL
SEATTLE, WA
COLUMBUS, OH
LONG BEACH, CA
TAMPA, FL

**HOUSE OF BLUES**
CHICAGO, IL
CLEVELAND, OH
SAN DIEGO, CA
ANAHEIM, CA (DISNEYLAND)
LAS VEGAS, NV
MYRTLE BEACH, SC

**ESPN ZONE**
ORLANDO, FL
BALTIMORE, MD

**WILD HORSE SALOON**
ORLANDO, FL

**MARGARITAVILLE UNIVERSAL STUDIOS**
ORLANDO, FL

**THE CADILLAC BAR & GRILL**
DALLAS, TX

**SEAU'S THE RESTAURANT**
SAN DIEGO, CA

**GILLEY'S NIGHT CLUB**
DALLAS, TX

**FOX SPORTS BAR**
HOUSTON, TX

**TERMINATOR II UNIVERSAL STUDIOS**
ORLANDO, FL

**WILDERNESS CAFE**
MIAMI, FL

**PIER 39 ARCADE**
SAN FRANCISCO, CA

# Section 07218
# K-13 Spray On Systems
# Specification Guide

## PART 1 - GENERAL

### 1.01 Section Includes

EDIT ACOUSTICAL WHERE REQUIRED

A. Sprayed cellulose thermal and acoustical insulation.

### 1.02 Related Items

A. Clips, hangers, supports, sleeves and other attachments to spray bases are to be placed by other trades prior to the application of sprayed insulation.
B. Ducts, piping, conduit or other suspended equipment shall not be positioned until after the application of sprayed insulation.
C. Roof penetrations to be installed prior to application.

### 1.03 Quality Assurance

A. Manufacturer must be ISO 9001:2000 Certified.
B. Applicator: Licensed by manufacturer
C. Manufacturer must subscribe to independent laboratory follow-up inspection services of Underwriters Laboratory and Factory Mutual. Each bag shall be labeled accordingly.
D. Mock-up: Apply a representative sample 100 square feet to be reviewed by the Architect and/or owner prior to proceeding.

### 1.04 Submittals

A. Submit product data and manufacturers certificate that the product meets or exceeds specified requirements.
B. Manufacturers written certification that product contains no asbestos, fiberglass, or other man-made mineral fibers.
C. Copy of manufacturers ISO 9001:2000 Certification.

### 1.05 Delivery, Storage and Handling

A. Deliver in original, unopened containers bearing name of manufacturer, product identification and reference to U.L. testing.
B. Store materials dry, off ground and under cover.
C. Protect liquid adhesive from freezing.

## PART 2 - PRODUCTS

### 2.01 Acceptable Manufacturers:

A. International Cellulose Corporation
12315 Robin Boulevard
Houston, Texas 77045
(713) 433-6701 or (800) 444-1252
FAX: (713) 433-2029
www.spray-on.com icc@spray-on.com
B. For apporved applicators contact ICC at 800-444-1252

### 2.02 Materials:

A. K-13 Spray-On Systems
****COLOR SELECTION WILL AFFECT PRICE**
1. Color shall be as indicated in Schedule 3.05
****ADD THERMAL RESISTANCE VALUES IF APPLICABLE**
2. Apply at a minimum thickness to provide R values as indicated in Schedule 3.05
3. Comply with ASTM E-736 for field tested bond strength; tested @ > 5 years:
a. Not less than 400 psf
b. Not less than 600 times its weight @ 1"
4. Comply with ASTM E-84/U.L. 723, Tested at a minimum of 5" thickness Class I, Class A
Flame Spread: 5
Smoke Development: 5
5. Comply with local building code requirements.
6. Comply with ASTM E-1042
****EDIT NRC RATING IF APPLICABLE**
7. NRC Rating:
a. Install at a minimum thickness to achieve an NRC rating as indicated in the Schedule 3.05.

**K-13 Sprayed Thermal and Acoustical Insulation ASTM C-423 on Solid Backing***

| | 125 | 250 | 500 | 1000 | 2000 | 4000 | NRC |
|---|---|---|---|---|---|---|---|
| 1.00" | .08 | .29 | .75 | .98 | .93 | .96 | .75 |
| 1.00"** | .47 | .90 | 1.10 | 1.03 | 1.05 | 1.03 | 1.00 |
| 2.00" | .26 | .68 | 1.05 | 1.10 | 1.03 | .98 | .95 |
| 3.00" | .57 | .99 | 1.04 | 1.03 | 1.00 | 1.00 | 1.00 |

**K-13 Sprayed Thermal and Acoustical Insulation Applied at 1.5" Ribbed Metal Deck***

| | 125 | 250 | 500 | 1000 | 2000 | 4000 | NRC |
|---|---|---|---|---|---|---|---|
| 1.50" | .36 | .89 | 1.26 | 1.07 | 1.01 | 1.00 | 1.05 |
| 3.00" | .97 | 1.04 | 1.13 | .99 | .95 | .98 | 1.05 |

*Some values interpolated **On Lath

8. Non- corrosive per UMB-80
9. Bond deflection per ASTM E-759: 6" Deflection in 10' span no spalling or delamination.
10. Cohesive strength at time of application per Method WS-2000: >700 grams.

## PART 3 - EXECUTION

### 3.01 Examination

A. Examine surfaces and report unsatisfactory conditions in writing. Do not proceed until unsatisfactory conditions are corrected.
B. Verify surfaces to receive spray insulation to determine if priming/sealing is required to ensure bonding and/or to prevent discoloration caused by migratory stains.

### 3.02 Preparation

A. Provide masking, drop cloths or other satisfactory coverings for materials/surfaces that are not to recieve insulation to prevent damage from over-spray.
B. Coordinate installation of the sprayed cellulose fiber with work of other trades.
C. Prime surfaces as required by manufacturers instructions or as determined by examination.

### 3.03 Installation

A. Average thickness to achieve NRC value of 0.65 or greater.
B. Install spray applied insulation according to manufacturers recommendations.
C. Cure insulation with continuous natural or mechanical ventilation.
D. Remove and dispose of over-spray.

### 3.04 Protection

A. Protect finished surface under provisions of Division 1.

### 3.05 Schedule

A. ***Provide a schedule when insulation requires listing by color, insulation value, NRC values and other attributes.***

INTERNATIONAL CELLULOSE CORPORATION®

P.O. BOX 450006
HOUSTON, TX 77245
800/444-1252
713/433-2029 (FAX)
**www.spray-on.com**