

CSI MasterFormat® Filing:

Division 7: Thermal & Moisture Protection

07 21 00 Thermal Insulation

07 21 29 Sprayed Insulation

Division 9: Finishes

09 81 00 Acoustic Insulation

09 81 29 Sprayed Acoustic Insulation

09 83 00 Acoustic Finishes

09 83 16 Acoustic Ceiling Coating



MANUFACTURER INFORMATION:

International Cellulose Corporation

12315 Robin Boulevard | Houston, Texas 77045

(713) 433-6701 or (800) 444-1252 | FAX: (713) 433-2029

1. PRODUCT DESCRIPTION:

The K-13 High-R System is a mechanically supported insulation system using Structalath III welded wire lath with pins and washers for applications of K-13 exceeding 5" thick to meet project requirements for higher R-Values. K-13 **Thermal** and **Acoustical** cellulose insulation used as an insulation/exposed finish for its acoustic and thermal benefits. K-13's monolithic coating absorbs excess noise and provides an **R-value of 3.7** per inch. K-13 has a **Natural Texture** and is available in five standard colors and specially-matched custom colors.

2. BASIC USE:

K-13 is typically used as an exposed ceiling finish for its acoustic and thermal benefits. It is appropriate in both interior and covered exterior applications such as parking decks.

3. MATERIAL COLORS:

K-13 is available in five standard colors and can also be specified in specially-matched custom colors.

STANDARD COLORS



Color selection will affect the final price.

4. SURFACE PREPARATION:

K-13 adheres to properly prepared substrates and conforms to any ceiling configuration including metal decking, barrel-vaults, concrete "T" corrugated decks, and other complex surfaces. Surfaces to receive K-13 are to be inspected prior to installation to determine if pre-treatment is required.

5. APPLICATION:

K-13 is installed by an international network of professional contractors licensed by ICC. These contractors are required to install K-13 using approved equipment, materials, and procedures. Due to the inherent texture of the material and application techniques, the installed material will have thickness variances. Compliance with applicable building codes and project requirements is the responsibility of the user and/or installing contractor.

SUSTAINABLE CREDIT CATEGORIES:

MATERIALS & RESOURCES:

ENVIRONMENTAL PRODUCT DECLARATION (EPD):

Product-specific Type III EPD (ISO 14025)

Program Operator: Consortium | Exp. Date: 10/16/2025

REGIONAL MATERIALS:

Manufacturing Location:

12315 Robin Blvd. | Houston, TX 77045

RECYCLED CONTENT:

K-13 Fibers = >80% Pre-Consumer

HEALTH PRODUCT DECLARATION (HPD):

HPD Version: 2.3 | Threshold Level: 100 PPM

Exp. Date: 11/22/2025

CRADLE-TO-CRADLE®:

Cradle to Cradle Certified Bronze V3.1

Certification Number: 7267 | Exp. Date: 09/15/2025

INDOOR ENVIRONMENTAL QUALITY:

LOW EMITTING MATERIALS:

UL GREENGUARD Certified

UL GREENGUARD Gold Certified

M1 Classification of Low Emitting Building Materials

California Department of Public Health (CDPH) Compliant

THERMAL COMFORT:

May contribute towards thermal comfort.

Thermal R-Values per ASTM C 518 (pg. 2)

ACOUSTICAL PERFORMANCE:

May contribute towards acoustical performance.

NRC Values per ASTM C 423 (pg. 2)

LIGHT REFLECTANCE:

May contribute towards lighting optimization.

Light Reflectance Values per ASTM D 2244 (pg. 2)

TECHNICAL DATA:

ASTM STANDARDS COMPLIANCE

ASTM C 423	Sound Absorption
ASTM C 518	Thermal Conductivity
ASTM C 739	Cellulose Fiber
ASTM C 1149	Spray-Applied Cellulose Insulation
ASTM D 2244	Light Reflectance
ASTM E 84	Surface Burning Characteristics
ASTM E 90	Sound Transmission Loss
ASTM E 736	Bond Strength
ASTM E 759	Bond Deflection
ASTM E 859	Air Erosion
ASTM E 1042	Acoustical Absorption

ASTM C 518: Thermal Conductivity

R-Value: 3.7 PER INCH

APPLICATION THICKNESS	R-VALUE
1"	3.7
2"	7.4
3"	11.1
4"	14.8
5"	18.5
6"	22.2
7"	25.9
8"	29.6
9"	33.3
10"	37

ASTM D 2244: Light Reflectance

White: 84+	Tan: 46+
Light Gray: 73+	Gray: 45+
Beige: 71+	Black: 17+

ASTM E 84: Surface Burning Characteristics

CLASS 1, CLASS A RATED per ASTM E-84, UL-723, NFPA-255, & UBC-42

Flame Spread 5

Smoke Development 5

K-13 has been rated and approved by Factory Mutual Research Corporation for use in categories: I, II, III, & IV.

ASTM E 736: Cohesion/Adhesion - Bond Strength

Bond Strength is greater than 150psf

K-13 MEETS IBC 2015 SECTION 803.12 STABILITY REQUIREMENTS FOR INTERIOR FINISH MATERIALS.

ASTM C 423: Sound Absorption

K-13 Applied on Solid Backing

Inches	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
1"	.11	.32	.84	.99	1.01	.98	.80
1.5"	.21	.46	1.06	1.13	1.02	1.00	.90
1.75"	.30	.74	1.14	1.06	.99	.98	1.00
2"	.47	.90	1.06	1.06	1.08	1.07	1.00
3"	.57	.99	1.04	1.03	1.00	.98	1.00
4"	.84	1.06	1.01	1.03	1.00	.98	1.05
5"	.99	.89	1.05	1.03	1.00	1.00	1.00

K-13 Applied on 1.5" Metal Deck

Inches	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
1.5"	.36	.89	1.26	1.07	1.01	1.00	1.05
3"	.97	1.04	1.13	.99	.95	.98	1.05

K-13 Applied on 2" Metal Deck

Inches	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
1"	.39	.63	.96	.99	1.04	1.06	.90
2"	.55	.99	1.13	1.06	1.05	1.10	1.05

K-13 Applied on 3" Metal Deck

Inches	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
1"	.50	.66	.97	1.02	1.05	1.03	.95
1.5"	.55	.92	1.11	1.02	.95	.99	1.00
2.75"	.69	.98	1.17	1.03	.97	1.04	1.05

MISCELLANEOUS CODE APPROVALS & SPECIFICATIONS

- Underwriters Laboratories – Classified Code Compliance Report UL ER 5499
- Factory Mutual Research
- Federal Defense Logistics Agency Cage Code: ONJU2
- Federal Specification – SS-S-111C
- Corps of Engineers Guide Specifications – CE-201.01
- Department of the Navy Guide Specifications – NFGS-07218
- EPA 40 CFR Part 248
- Los Angeles – RR-24311
- New York – MEA 65-96-M
- Meets California Bureau of Home Furnishings Standards
- Resource Conservation and Recovery Act

K-13 DOES NOT CONTAIN SILICA DUST, ASBESTOS, MINERAL OR GLASS FIBERS, OR PCB'S.

