



SPRAY-APPLIED THERMAL & ACOUSTICAL FINISH METAL DECK APPLICATION

TECHNICAL DATA SHEET

JUNE 2021

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:

K-13 is a **Thermal** and **Acoustical** cellulose insulation is used as an insulation/exposed finish applied to metal decking 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 six standard colors and custom integral colors.

2. BASIC USE:

K-13 is used as an exposed finish over metal decking for its acoustic and thermal benefits.

3. MATERIAL COLORS:

K-13 is available in six standard colors 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 and other complex surfaces. Metal decking 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:

RECYCLED CONTENT: 80% Pre-Consumer

REGIONAL MATERIALS: Manufactured By International Cellulose Corporation in Houston, TX.

MATERIAL INGREDIENT REPORTING: Inventoried to 1,000 PPM in accordance with the HPD Collaborative.

INDOOR ENVIRONMENTAL QUALITY:

INDOOR AIR QUALITY: UL GREENGUARD Gold Certified
May Contribute Towards:

LEED v4: Indoor Air Quality Assessment

LEED v4: Enhanced Indoor Air Quality Strategies

THERMAL COMFORT: K-13 has exceptionally low heat-loss characteristics with an R-Value of 3.7

ACOUSTICAL PERFORMANCE

LOW EMITTING MATERIALS:

M1 Classified as a Low Emitting Building Material
 Compliant With:

LEED v4: Low Emitting Materials

CDHP/ California Section 01350

SCAQMD Rule 1168

CHPS- Acoustical Ceiling



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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 423: Sound Absorption

K-13 Applied on 1.5" Metal Deck

Inches	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
1.5"	0.36	0.89	1.26	1.07	1.01	1.00	1.05
3"	0.97	1.04	1.13	0.99	0.95	0.98	1.05

K-13 Applied on 2" Metal Deck

Inches	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
1"	0.39	0.63	0.96	0.99	1.04	1.06	0.90
2"	0.55	0.99	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
1.5"	0.55	0.92	1.11	1.02	0.95	0.99	1.00
2.75"	0.69	0.98	1.17	1.03	0.97	1.04	1.05

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+	Gray: 45+

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 100psf

ASTM E 90: Sound Transmission Loss (STC)

AVG. APPLICATION THICKNESS	FLOOR ASSEMBLY
3"	50
4"	51

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

MISCELLANEOUS CODE APPROVALS & SPECIFICATIONS

Underwriters Laboratories - Classified Code Compliance Report UL ER 5499

Factory Mutual Research - Report Nos. 19678, 20399, and 24703

Federal Defense Logistics Agency Cage Code: ONJU2

Corps of Engineers Guide Specifications - CE-201.01

Department of the Navy Guide Specifications - NFGS-07218

EPA 40 CFR Part 248

Meets California Bureau of Home Furnishings Standards

Resource Conservation and Recovery Act

Federal Specification - SS-S-111C

Los Angeles - RR-24311

New York - MEA 65-96-M

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



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