



Section 07 21 29
Ure-K Thermal Barrier System
Specification Guide 03/10

PART 1 – GENERAL

1.01 Section Includes

- A. Sprayed cellulose thermal barrier 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 9001:2008 Certified.
B. Applicator: Licensed by manufacturer.
C. Manufacturer must subscribe to independent laboratory follow-up inspection services of Underwriters Laboratories and Factory Mutual. Each bag shall be labeled accordingly.
D. Mock-up: Apply a 100 square foot representative sample to be reviewed by the Architect and/or Owner prior to proceeding.

1.04 Submittals

- A. Submit product data that the product meets or exceeds the following specified requirements.
1. R-Value shall be 3.6 per inch per ASTM C 518.
2. Bond strength shall be greater than 100 psf per ASTM E 736.
3. Product shall be Class 1 Class A per ASTM E 84/ UL 723.
4. Tested in accordance with UBC 26-2 Test Method for the evaluation of Thermal Barriers (ASTM E 119)
5. NRC to be 0.80 @ 1.25" thick per ASTM E 1042.
6. Pass Full – Scale Corner Test.
B. Manufacturer's written certification that product contains no asbestos, fiberglass or other man-made mineral fibers.
C. Copy of manufacturer's ISO 9001:2008 Certification.
D. Minimum Fiber Recycled Content to be 75%.
E. Cannot contain any Urea-Formaldehyde Resins.

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 approved applicators contact ICC at (800) 444-1252.

2.02 Materials

- A. Ure-K Thermal Barrier System.
1. Color shall be from Manufacturer's standard color chart.
2. Comply with local Building Code requirements.

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 insure 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 receive insulation to protect from over-spray.
B. Coordinate installation of the sprayed cellulose fiber with work of other trades.
C. Prime surfaces as required by manufacturer's instructions or as determined by examination.

3.03 Installation

- A. Thickness will be determined as the minimum thickness measured as per ASTM E-605 field test procedure.
B. Install spray applied insulation according to manufacturer's recommendations.
C. Install Thermal Barrier System at 1.25" average thickness.
D. Cure insulation with continuous natural or mechanical ventilation.
E. Remove and dispose of over-spray.

3.04 Protection

- A. Protect finished installation under provision of Division 1.



A True 15 Minute Thermal Barrier

Urethane Foam

1.25" Ure-K

Ure-K Spray System for Thermal Barriers



12315 ROBIN BLVD.
HOUSTON, TX 77045
Office: (800) 444-1252
Fax: (713) 433-2029
E-mail: icc@spray-on.com
www.spray-on.com

Professionally installed by:

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Why Foam Needs a True Thermal Barrier

Thermal Barrier

Ure-K has been tested and approved as a 15 minute thermal barrier over foam plastic insulation. Ure-K covers interior applications to maintain a sufficiently low surface temperature for a minimum of 15 minutes to prevent ignition and the rapid spread of fire. The average installed thickness of Ure-K is 1.25 inches.



Thermal Insulator

Ure-K adds additional R-value to the assembly. Ure-K has an R-value of 3.6 per inch. The combination of Ure-K and urethane foam has the highest efficiency of all available insulations.



Noise Reduction

Ure-K is a monolithic coating and will provide a highly efficient sound absorption surface. Ure-K at a thickness of 1.25 inches over the surface of urethane foam will provide an overall Noise Reduction Co-efficient (NRC) of 0.90.

Installed System

Ure-K's fibers and liquid adhesive are applied to the urethane foam through equipment engineered to control the material density and the adhesive / fiber ratio.

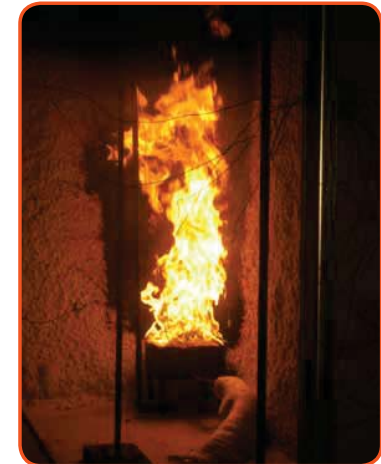
Testing

ASTM E-119 (UBC 26-2)
 NFPA 286 (Testing over 2 pound and 0.5 pound foam)
 ASTM E-84

Foam insulation systems are developed from plastic polystyrenes, polyurethanes, and polyisocyanurates. If foam is left exposed on the interior of a building, it can create a life threatening possibility in the event of a fire.

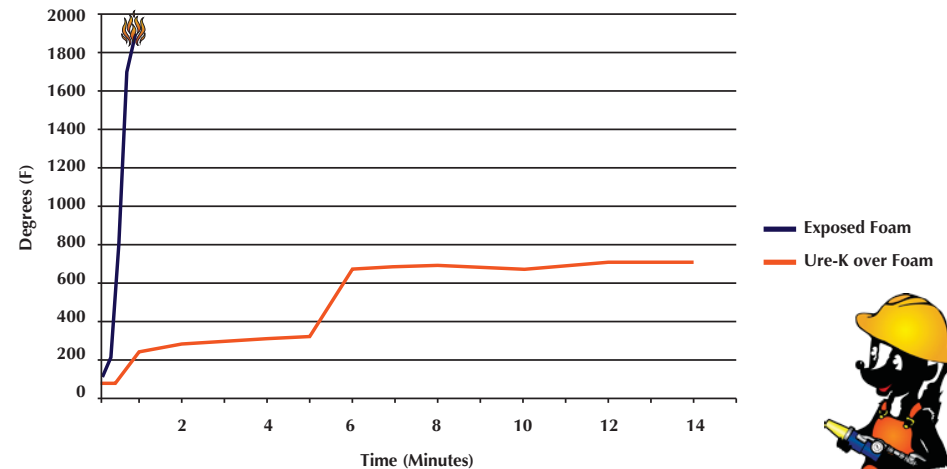


Exposed Closed Cell Foam



Ure-K at 10 minutes

Thermocouple Data



Test Terminated due to flashover. Unprotected foam reached flashover in 44 seconds.

