



Data Sheet

CI-KF-DS

06-17

KwikFlex[®] Pipe & Tank Insulation

with **ECOSE[®]**  TECHNOLOGY

KwikFlex® Pipe & Tank Insulation

DESCRIPTION

Knauf Insulation KwikFlex Pipe and Tank Insulation is a 48" wide semi-rigid glass mineral wool blanket, 2.5 PCF density, in roll form. It is available faced with a factory-applied ASJ, FSK or PSK vapor retarder jacket. The glass mineral wool orientation provides excellent compressive strength while maintaining flexibility for ease of installation.

APPLICATION

Knauf Insulation KwikFlex Pipe and Tank Insulation is typically used on tanks, vessels and large-diameter (greater than 10") pipes. It can be used for any curved or irregular surfaces that require finished characteristics of rigid glass mineral wool insulation.

PRODUCT FEATURES

Excellent Thermal Properties

- Low thermal conductivity ratings to 850° F (454° C)

Low-Cost Installation

- Flexible, easy to handle and fabricate

Inventory Savings

- No need to stock multiple sizes
- Various thicknesses available to meet all your pipe and tank insulation needs

Resists Damage

- Tough and durable, resists damage in shipment and during and after installation

Health & Safety

- Complies with Oregon Revised Statute 453.085 and contains less than 0.10% decabromdiphenyl ether (DecaBDE) by mass
- Tested and certified to all requirements of EUCEB

SPECIFICATION COMPLIANCE

- UL/ULC Classified (ASJ and FSK only)
- ASTM C1393
Types I, II, IIIA, IIIB Category 2
- ASTM C795
- MIL-I-24244

APPLICATION & SPECIFICATION GUIDELINES

Precautions

- ASJ, FSK and PSK jackets should not be used if outer-surface temperature exceeds 150° F (66° C).
- During initial heat-up to operating temperatures above 350° F (177° C), a slight odor and some smoke may be given off as a portion of the bonding material used in the insulation begins to undergo a controlled decomposition.
- If natural convection is not adequate in confined areas, forced ventilation should be provided in order to protect against any harmful fumes and vapors that might be generated.
- Care must also be taken when using sealants, solvents or flammable adhesive during installation.

Storage

- Protect stored insulation from water damage or other abuse.
- Protect from welding sparks and open flame.
- Packages are not designed for outside storage.

Preparation

- Apply Knauf Insulation KwikFlex Pipe and Tank Insulation on clean, dry surfaces.

INSTALLATION GUIDELINES

For easy installation of Knauf Insulation KwikFlex Pipe and Tank Insulation simply follow these guidelines.

- Refer to the Stretch-Out Chart to find the appropriate length to cut for the specific pipe size. Be sure to add an additional 2" (51 mm) to 4" (102 mm) for your staple flap.
- Cut your stretch-out length and wrap the material around the iron pipe to ensure the proper fit.
- Staple the lap on 3" (76 mm) centers with outward clinching staples.
- Butt edges shall be firmly secured, and butt strips matching the jacket shall be applied at each joint.

CAUTION

Glass mineral wool may cause temporary skin irritation. Wear long-sleeved, loose-fitting clothing, head covering, gloves and eye protection when handling and applying material. Wash with soap and warm water after handling. Wash work clothes separately and rinse washer. A disposable mask designed for nuisance type dusts should be used where sensitivity to dust and airborne particles may cause irritation to the nose or throat.

GLASS MINERAL WOOL AND MOLD

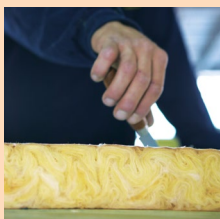
Glass mineral wool insulation will not sustain mold growth. However, mold can grow on almost any material when it becomes wet and contaminated. Carefully inspect any insulation that has been exposed to water. If it shows any sign of mold it must be discarded. If the material is wet but shows no evidence of mold, it should be dried rapidly and thoroughly. If it shows signs of facing degradation from wetting, it should be replaced.

NOTES

The chemical and physical properties of Knauf Insulation KwikFlex Pipe and Tank Insulation represent typical average values determined in accordance with accepted test methods. The data is subject to normal manufacturing variations. The data is supplied as a technical service and is subject to change without notice. References to numerical flame spread ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions.

Check with your Knauf Insulation Territory Manager to ensure information is current.

FACTS AT A GLANCE



A unique combination of flexibility and compressive strength in a blanket form.



Can be used for any curved or irregular surfaces that require the finished characteristics of rigid glass mineral wool insulation.



Wraps tightly around curved and spiral surfaces, making installation quick.

Stretch-Outs*

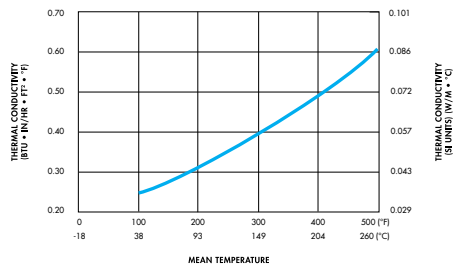
Nominal Iron Pipe Size	Iron Pipe Outside Diameter	Thickness			
		1" (25 mm)	1½" (38 mm)	2" (51 mm)	3" (76 mm)
10" (254 mm)	10¾" (273 mm)	40⅞" (1,019 mm)	43¼" (1,099 mm)	46⅜" (1,178 mm)	52⅝" (1,337 mm)
12" (305 mm)	12¾" (324 mm)	46⅜" (1,178 mm)	49½" (1,257 mm)	52¾" (1,340 mm)	59" (1,499 mm)
14" (356 mm)	14" (356 mm)	50⅜" (1,280 mm)	53½" (1,359 mm)	56⅝" (1,438 mm)	62⅞" (1,597 mm)
16" (406 mm)	16" (406 mm)	56⅝" (1,438 mm)	59¾" (1,518 mm)	62⅞" (1,597 mm)	69⅞" (1,756 mm)
18" (457 mm)	18" (457 mm)	62⅞" (1,597 mm)	66" (1,676 mm)	69¼" (1,756 mm)	75½" (1,918 mm)
20" (508 mm)	20" (508 mm)	69⅞" (1,756 mm)	72⅞" (1,838 mm)	75½" (1,918 mm)	81¾" (2,076 mm)
22" (559 mm)	22" (559 mm)	75½" (1,918 mm)	78⅞" (1,997 mm)	81¾" (2,076 mm)	88" (2,235 mm)
24" (610 mm)	24" (610 mm)	81¾" (2,076 mm)	84⅞" (2,156 mm)	88" (2,235 mm)	94⅞" (2,397 mm)
26" (660 mm)	26" (660 mm)	88" (2,235 mm)	91⅞" (2,315 mm)	94⅞" (2,397 mm)	100⅞" (2,556 mm)
28" (711 mm)	28" (711 mm)	94⅞" (2,397 mm)	97½" (2,477 mm)	100⅞" (2,556 mm)	106⅞" (2,715 mm)
30" (762 mm)	30" (762 mm)	100⅞" (2,556 mm)	103¾" (2,635 mm)	106⅞" (2,715 mm)	113⅞" (2,873 mm)
32" (813 mm)	32" (813 mm)	106⅞" (2,715 mm)	110" (2,794 mm)	113⅞" (2,873 mm)	119½" (3,035 mm)
34" (864 mm)	34" (864 mm)	113⅞" (2,873 mm)	116¼" (2,953 mm)	119½" (3,035 mm)	125¾" (3,194 mm)
36" (914 mm)	36" (914 mm)	119½" (3,035 mm)	122⅞" (3,115 mm)	125¾" (3,194 mm)	132" (3,353 mm)
38" (965 mm)	38" (965 mm)	125¾" (3,194 mm)	128⅞" (3,273 mm)	132" (3,353 mm)	138¼" (3,512 mm)
40" (1016 mm)	40" (1,016 mm)	132" (3,353 mm)	135⅞" (3,432 mm)	138¼" (3,512 mm)	144⅞" (3,673 mm)
42" (1067 mm)	42" (1,067 mm)	138¼" (3,512 mm)	141½" (3,594 mm)	144⅞" (3,673 mm)	150⅞" (3,832 mm)

*Additional 2" (51 mm) to 4" (102 mm) should be added for lap.

Technical Data

Property (Unit)	Test	Performance
Corrosiveness	ASTM C665	Does not accelerate corrosion of steel
Corrosion	ASTM C1617	Pass
Maximum Service Temperature	ASTM C411	850° F (454° C)
Water Vapor Permeance	ASTM E96, Procedure A	0.02 perms or less (FSK, ASJ, PSK facings)
Puncture Resistance	TAPPI Test T803, Beach Units	FSK and PSK facings: 25, ASJ facing: 50
Compressive Strength	ASTM C165	Not less than 25 PSF (1.2 kPa) at 10% deformation
Shrinkage	ASTM C356	Negligible
Mold Growth	ASTM C1338	Pass
Surface Burning Characteristics (flame spread/smoke developed)	UL 723, ASTM E84 (only ASTM E84 applies to PSK facing)	25/50

Thermal Efficiency | ASTM C177



Mean Temperature	k	k(Si)
75° F (24° C)	0.24	0.035
100° F (38° C)	0.25	0.036
200° F (93° C)	0.32	0.046
300° F (149° C)	0.39	0.056
400° F (204° C)	0.49	0.070
500° F (260° C)	0.61	0.088

Forms Available

Thickness	Width ¹	Length
1" (25 mm)	48" (1,219 mm)	52' (15.85 m)
1½" (38 mm)		30' (9.14 m)
2" (51 mm)		26' (7.92 m)
2½" (64 mm)		21' (6.40 m)
3" (76 mm)		18' (5.48 m)

¹Cut-to-length sizes also available.

KNAUF INSULATION



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LEED Eligible Product

Use of this product may help building projects meet green building standards as set by the Leadership in Energy and Environmental Design (LEED) Green Building Rating System.

LEED v2009

MR Credit 4.1 - 4.2 Recycled Content
MR Credit 5.1 - 5.2 Regional Materials

LEED v4

Knauf Insulation offers several products for both envelope and mechanical systems that have ingredient disclosure and transparency. Please contact transparency@knaufinsulation.com for products that currently contribute to MR credits.



Versions of this product have surface burning characteristics that are classified by Underwriters Laboratories and therefore subject to auditing for fire performance compliance.



This product has been tested and is certified to meet the EUCEB requirements.