

KINETICS™

Barrier Materials

Model KNM

Description

Kinetics Model KNM mass-loaded, limp, vinyl barrier materials are used for enclosing noise sources, either draped around equipment, suspended between equipment and quiet areas, or lagged to the equipment casing. KNM Barrier Materials can be used effectively to lag piping systems, reducing valves, etc., and are highly effective as crosstalk barriers and septums. KNM materials are available in 0.50 psf to 1.0 psf (2.5 to 4.9 kg/m²) surface weight, in 54" wide x 20 yard (1372 mm x 18.2 m) rolls, with acoustical ratings of STC-21 to STC-26. Product is easy to cut and install.

Kinetics Model KNM-C Clearview Noise Barriers are transparent, limp, heavy PVC and are recommended for use in applications where it is necessary to maintain visual contact, yet achieve a high degree of noise reduction. KNM-C materials are available in 48" wide by 20 yard (1219 mm x 18.2 m) rolls with acoustical ratings of STC-21 and STC-26.

Application

- Pipe and duct noise lagging
- Machinery cover Liners
- Ceiling noise barrier
- Crosstalk barrier
- Wall and door septum
- Noise Control curtain panels and enclosures
- OEM applications



Physical Properties

Product	KNM-50C	KNM-50B	KNM-50RB	KNM-100C	KNM-100B	KNM-100RB
Wt. Lbs./Sq. Ft. (kg/m ²)	0.50 (2.5)	0.50 (2.5)	0.50 (2.5)	1.00 (4.9)	1.00 (4.9)	1.00 (4.9)
Tensile Strength Lbs./In. (kg/mm)	201 (3.6)	55 (1.0)	300 (5.3)	400 (7.1)	105 (1.9)	300 (5.3)
Tear Strength, Lbs./In. (kg/mm)	70 (1.2)	10 (0.2)	100 (1.8)	140 (2.5)	20 (0.4)	100 (1.8)
Flammability						
Flameout, Sec.	3	3	3	3	0	0
Afterglow, Sec.	0	0	0	0	0	0
Char Length, In. (mm)	0.5 (13)	1.7 (43)	0.2 (5)	0.5 (13)	0.2 (5)	0.2 (5)

Sound Transmission Loss, dB

Product	Weight Sq. Ft. (cm ²)	125	250	500	1000	2000	4000	STC
KNM-50C	0.50 (464)	11	12	15	20	26	32	21
KNM-50B	0.50 (464)	11	12	15	20	26	32	21
KNM-50RB	0.50 (464)	11	12	15	20	26	32	21
KNM-100C	1.00 (929)	15	19	21	28	33	37	26
KNM-100B	1.00 (929)	13	17	21	28	33	40	26
KNM-100RB	1.00 (929)	15	19	21	28	33	37	26

Note: Barrier materials used for pipe/duct lagging are tested as wrapped around the noise source (pipe/duct). See Insertion Loss Data per ASTM E1222-90 using Model KNM-100ALQ and KNM-200AL pipe/duct lagging.

Product Description

KNM-50C 1/2 PSF (2.5 kg/m²) Kinetics Clearview barrier material, nonloaded and nonreinforced. Clearview is very limp, tough and water clear. Available in 48" x 20 yard (1219 mm x 18.2 m) rolls.

KNM-100C 1 PSF (4.9 kg/m²) Kinetics Clearview barrier material, nonloaded and nonreinforced. Clearview is very limp, tough and water clear. Available in 48" x 20 yard (1219 mm x 18.2 m) rolls.

KNM-50B 1/2 PSF (2.5 kg/m²) Kinetics limp barrier material, unreinforced and loaded with barium sulphate. Available in black color in 54" x 20 yard (1372 mm x 18.2 m) rolls.

KNM-100B 1 PSF (4.9 kg/m²) Kinetics limp barrier material, unreinforced and loaded with barium sulphate. Available in black color in 54" x 20 yard (1372 mm x 18.2 m) rolls.

KNM-50RB 1/2 PSF (2.5 kg/m²) Kinetics limp barrier material, reinforced with a fiberglass screen, and loaded with barium sulphate. Available in light tan color in 54" x 20 yard (1372 mm x 18.2 m) rolls.

KNM-100RB 1 PSF (4.9 kg/m²) Kinetics limp barrier material, reinforced with a fiberglass screen, and loaded with barium sulphate. Available in grey color in 54" x 20 yard (1372 mm x 18.2 m) rolls.

Specifications

Barrier material shall meet the sound transmission loss and physical properties performance and the flammability standards listed in this brochure.

Barrier material shall have a minimum continuous operating temperature range from -40°F to 180°F (-40°C to 82.2°C), be resistant to water, oils, weak acids, alkalies, and fungi, and have excellent weather resistance.

Barrier material to be Model KNM by Kinetics Noise Control, Inc.



United States

6300 Ireland Place
P.O. Box 655
Dublin, Ohio 43017
Phone: 614-889-0480
Fax: 614-889-0540

Canada

3570 Nashua Drive
Mississauga, Ontario
L4V 1L2
Phone: 905-670-4922
Fax: 905-670-1698

www.kineticsnoise.com
sales@kineticsnoise.com

Kinetics Noise Control, Inc. is continually upgrading the quality of our products. We reserve the right to make changes to this and all products without notice.