

NOISE BARRIER MATERIALS - PRODUCT SPECIFICATIONS

KB3, KB5, G5000/5500/7200 & G8000 RANGES

Kemmetech manufacture a comprehensive range of high performance vinyl (PVC) noise barrier and radiation protection materials, in a number of grades, for use in building, engineering, factory and automotive applications where sound reduction and/or radiation protection is required.

The KB3/5, G5000 and G8000 ranges have a high density composition which provide good sound deadening properties when used either alone or in combination with other material such as metal, wood, plasterboard or mineral wool where the resulting increased surface density enhances the overall acoustic performance. The G5000 to G8000 range also provide radiation protection from 0.27mm to 0.45mm lead equivalence.

The KB3/5, G5000/5500/7200 and G8000 materials are robust and hard wearing, able to withstand the normal daily demands of wear and tear in the working environment. The material is particularly hard wearing and can be supplied with a reinforced polyester scrim to increase the tear strength of the material.

PRODUCT CODE SUFFIX DESCRIPTIONS

/S Flexible metallic or mineralised vinyl barrier material, standard grade

/R As per standard material with additional polyester reinforcement for increased strength

/1 Flexible metallic/mineralised vinyl barrier material to Class 1 fire certificate (BS476 part 7 Surface Spread of Flame)

/1R Flexible metallic/mineralised vinyl barrier material to Class 1 fire certificate (BS476 part 7 Surface Spread of Flame), with additional polyester reinforcement for increased strength

/O Flexible metallic/mineralised vinyl barrier material with aluminium foil backing to Class 0 fire certificate (BS476 part 6 Fire Propagation)

BENEFITS

- Combined high transmission loss characteristics with flexibility
- Range includes different fire and high tear strength specifications to suit all applications
- Easily die-cut to suit particular applications
- Easy to cut and handle on site

PRODUCT CHARACTERISTICS

Characteristic KB3 KB5 G5000 G5500 G7

Characteristic	KB3	KB5	G5000	G5500	G7200	G8000
Weight (/M ²)	3.33Kg	5.0kg	5.0kg	5.5kg	7.2kg	8.0kg
Thickness	1.6mm	2.5mm	1.6mm	1.8mm	2.4mm	2.6mm
Width ¹	1000mm	1000mm	1000mm	1000mm	1000mm	1000mm
Roll Length (min)	15M	10M	10M	10M	10M	10M
Colour ²	Mid Blue	Mid Blue	Charcoal	Charcoal	Charcoal	Charcoal
Fire Rating ³	Self-extinguishing	Self-extinguishing	Class 0/1-BS476/6/7	Class 0/1-BS476/6/7	Class 0/1-BS476/6/7	Class 0/1-BS476/6/7

¹ Widths from 600mm to 1200mm available subject to minimum order quantity (MOQ)

² Other colours or tints available subject to minimum order quantity (MOQ)

³ All products self-extinguishing – then subject to grade of material ordered (Class 0/1)

PHYSICAL PROPERTIES

Characteristic	KB3	KB5	G5000	G5500	G7200	G8000
Tens. Strength / mm²						
Standard - Length/Width	2.8/2.8 N	4.0/4.0 N	4.0/4.0 N	4.1/4.2 N	4.5/4.5 N	4.7/4.7 N
Reinforced - Length/Width	3.0/3.0 N	4.7/5.0 N	4.7/5.0 N	4.7/5.0 N	4.7/4.8 N	5.0/5.0 N
Elongation Break						
Standard - Length/Width	140%/140%	190%/190%	200%/200%	180%/180%	140%/140%	120%/120%
Reinforced - Length/Width	70%/80%	70%/80%	70%/80%	65%/75%	45%/40%	40%/30%
Tear Strength /mm						
Standard - Length/Width	3.6/4.5 N	6.5/7.5 N	8.5/9.0 N	9.5/10.0 N	11.0/13.0 N	12.0/14.0 N
Reinforced - Length/Width	10.0/14.0 N	12.0/18.0 N	14.0/20.0 N	14.0/20 N	15.0/21.0 N	16.0/22.0 N

NOTES

- All weights and measurements carry a +/- 10% tolerance
- Customers may specify the required weight, thickness, roll width, roll length or colour, dependent on minimum order quantities. Details and pricing on application
- Full Warrington Fire Test Data available upon request

ACOUSTIC PROPERTIES

Kemmetech sound barrier acoustic performance test results (BS 2750:1980) carried out at Salford University (Department of Applied Acoustics) under laboratory conditions in conjunction with other building materials.

Partition Composition Transmission Loss (dB)	Rw (dB)	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
KB3, 3.33Kg/M ²	18.0	12.0	12.0	14.9	18.9	22.7	25.7
KB5, G5000/S/SR/1/1R/0	27.0	18.0	17.9	22.4	28.4	34.1	38.6
G5000 plus Single-Skin And 12mm Plasterboard	32.0	25.9	25.1	28.6	31.8	34.4	33.1
G5000 plus Double-Skin 12mm Plasterboard	46.0	36.4	33.7	42.9	51.6	59.4	55.8
G5000 plus Double-Skin Plasterboard plus 50mm Mineral Wool Infill	52.0	38.8	39.0	50.7	57.9	63.1	62.1
G8000/1R	43.0	28.2	28.3	35.9	45.4	54.5	61.7
G8000/1R plus Double-Skin 12mm Plasterboard	73.0	58.2	53.9	68.6	82.5	95.0	89.2

NOTES

- Rw (dB) represents the weighted sound reduction index (BS5821:1984)
- Salford University test data available upon request.

APPLICATIONS

Product Code	Environment	Typical Application
All KB & K Designated Materials	Building	Ceiling Voids (cross-talk) External Sound Barriers Floating Floor Systems Doors & Partitions Carpet Underlays
	Factory	Duct & Pipe Lagging Flexible Connectors
	Engineering	Noise Reduction Enclosures
	Automotive	Vehicle Bulkheads
/R and /1R Materials	Factory & Engineering	Noise Reduction Curtain Applications requiring additional reinforcement or tear strength
G5000 to G8000 Materials	X-Ray/Radiation	X-Ray/Radiation Protection Curtains

INSTALLATION AND FIXING

- Mechanical methods are recommended where possible including velcro, rivets, nuts and bolts and fixed or sliding suspension systems.
- All materials are easily cut with machine or hand-cutting tools.
- Adhesives - Any solvent or polyurethane adhesive with high resistance to plasticiser migration and which suits the conditions of use. Recommended supply only service available upon request.
- Handling and Storage - KB3, KB5 and G5000 to G8000 materials are robust and hardwearing, able to withstand the normal daily demands of wear and tear in the working environment.
- The G5000 to G8000 range is a particularly hard-wearing material with the /R and /1R materials having additional tear-resistance in the form of an integral woven glass reinforcement.
- When in store, the materials should be laid flat where possible, not on-end, and care should be taken to avoid rolls being dropped or indented.

TECHNICAL INFORMATION & SAMPLES

The above information is accurate to the best of our knowledge and is intended as a guide to users. Since applications may vary greatly, customers are advised to test the materials under their own conditions of use to satisfy themselves of their suitability. Should you require any further information or samples, please contact Kemmetech on: +44 (0)1622 872724, or by email to info@kemmetech.co.uk

KEMMETECH LTD.
April 2009