

QUIET DOOR™ SM

DESCRIPTION:

QUIET DOOR™ is a composite of half pound mass loaded vinyl and half inch polyether foam designed to block/absorb sound in noise polluted environments. The vinyl is a flexible, high density material with a smooth surface created to reduce noise transmission and is resistant to most acids, mild alkalis and oils/grease. The foam acts as a decoupler and an absorber. As a decoupler, it limits vibration of the mass loaded vinyl. As an absorber, it captures noise radiating from structural or airborne sources. QUIET DOOR™ is available with a pressure sensitive adhesive (PSA) for an easy 'peel and stick' application.

APPLICATIONS:

QUIET DOOR™ is an effective, economical option for sound abatement. Block sound transmission through doors by applying QUIET DOOR™ to one side of the door.

PRODUCT AVAILABILITY:

- 5/8 in. thick x 4 ft. x 8 ft. Sheets with PSA (Part #: QDSM)

TECHNICAL DATA:

PROPERTIES (BARRIER)

Physical Property	Value	Test Standard
Color	Black	n/a
Thickness	Approx. 0.125"	n/a
Surface Mass	0.50 lbs/ft ²	n/a
Density	96 lbs/ft ³	n/a
Elongation	120%	ASTM D-412
Tensile Strength	407 PSI	ASTM D-412
Tear Strength	77 lbs/ 1"	ASTM D-624
Temperature Range	-40°F to 255°F	n/a
Hardness	90 Durometer, Shore A2	ASTM D-2240
Specific Gravity	1.80	ASTM D-798
Stiffness	19.60 mega pascal	ASTM 749
Flammability	Meets	UL 94 HF-1
	Meets	MVSS 302

SOUND TRANSMISSION LOSS (BARRIER)

Freq. Hz	125	250	500	1000	2000	4000	STC
(dB)	5	12	15	22	26	32	20

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PROPERTIES (FOAM)

Physical Property	Value	Test Standard
Color	Charcoal Gray	n/a
Thickness	0.50 "	n/a
Surface Density	.07 lbs/ft ²	n/a
Elongation	150% - 250%	n/a
Tensile Strength	14 - 20 PSI	n/a
Tear Resistance	1.5 - 3.0 lbs/ 1"	n/a
Temperature Range	-45°F to 250°F	n/a
Compression Set	@50% = 10%, @90% = 20%	n/a
Thermal Conductivity	0.25BTU in/hr ft ² °F	n/a
Oxidation Resistance	Excellent	n/a
Solvent Resistance	Moderate Swelling	n/a
Water Absorption	Hydrophobic	n/a
Flammability	Meets	UL 94 HF-1
	Meets	MVSS 302

NORMAL SOUND ABSORPTION/NOISE REDUCTION (FOAM)

Freq. Hz	125	250	500	1000	2000	4000	NRC
(%)	0.05	0.07	0.15	0.24	0.50	0.88	0.25

ADHESIVE

Physical Property	Value	Test Standard
Material	Acrylic	n/a
Thickness	Approx. 0.004"	n/a

The information contained herein is typical and based upon the results of controlled laboratory tests. The information is accurate to the best of American Micro Industries, Inc.'s knowledge. Product performance may vary based on the particular application and installation techniques utilized.

