

## Material configuration or options

	'		
Materials	Total Thickness	Foam	Mass Layer
2 lb/ft,sq 1/2" 2 lb/ft,sq 1/4" 1 lb/ft,sq 1/2" 1 lb/ft,sq 1/4" .5 lb/ft,sq 1/2" .5 lb/ft,sq 1/4"	3/4 inch 1/2 inch 5/8 inch 3/8 inch 9/16 inch 5/16 inch	1/2 inch thick 1/4 inch thick 1/2 inch thick 1/4 inch thick 1/2 inch thick 1/4 inch thick	2 pounds per square foot 2 pounds per square foot I pound per square foot I pound per square foot I/2 pound per square foot I/2 pound per square foot

## Carpet Underlayment

SOUNDOWN Acoustic Carpet Underlayment is an important part of a boat's sound reduction package. This easy to install product can be used at any point in the insulation process. Carpet underlayment is effective as a primary treatment for living areas of the boat, such as salons or staterooms where flooring is the dominant source of noise in situations where it is difficult to install proper engine room insulation. Underlayment products consist of a foam layer supporting

an acoustic vinyl barrier. The foam layer acts to decouple the mass layer from the floor vibrations, creating an effective barrier against noise radiating from the floor due to structureborne or airborne sources of noise excitation.

Carpet underlayment is also very effective as part of a full insulation package. In cases where greater attenuation levels are required, carpet underlayment will improve upon the engine room insulation package. Not only will the carpet underlayment add a second decoupled mass, but it will also seal areas such as hatches where leakage can take place.





2010.1.A

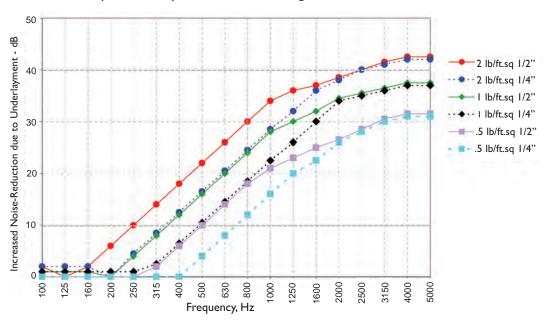
## Typical Physical Properties

Thickness	1/4" to 3/4"		
Weights (per ft <sup>2</sup> )	.55 lbs. to 2.2 lbs.		
Flammability	Call for Specific Data		
Specific Gravity (Barrier)  ASTM D 798	1.80		
Hardness (Barrier) Shore A 2 ASTM D 2240	90 Nominal		

Stiffness, MPA (Barrier) ASTM 749	19.60		
Tensile, PSI (Barrier) ADSTM D 412	407		
Elongation, % (Barrier) ASTM D 412	120		
Tear, lbs/1" (Barrier) ASTM D 624	77		
Temp Range, Fahrenheit (Composite)	-40 to 255 degrees		

## Enhanced Noise Reduction due to Carpet Underlay

Noise Reduction - Typical for Carpet Underlayment of Various Weights and Thickness



Material Symbol	Foam Thickness		Mass Layer Density		Overall Thickness	
	Inches	mm	lb/ft 2	Kg/m <sup>2</sup>	Inches	mm
	1/2	12	2	9.76	3/4	19
	1/4	6	2	9.76	1/2	12
_	1/2	12	I	4.88	5/8	16
	1/4	6	I	4.88	3/8	9
_	1/2	12	.5	2.44	9/16	14
	1/4	6	.5	2.44	5/16	8