

# Technical Specifications Floor Underlayment

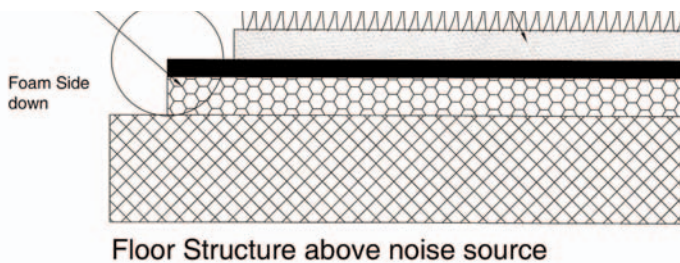


## Floor Underlayment

Acoustic Floor 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. Floor 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.

Floor 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 underlayment add a second decoupled mass, but it will also seal areas such as hatches where leakage can take place.



### Material configuration or options

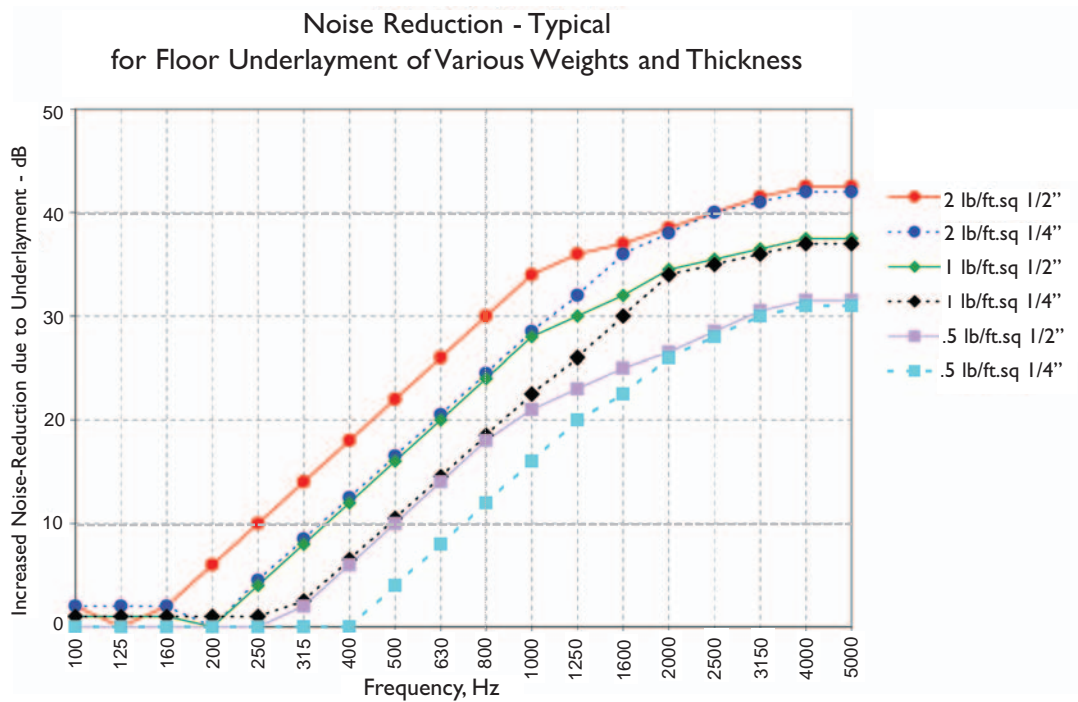
Materials	Total Thickness	Foam	Mass Layer
2 lb/ft, sq 1/2"	3/4 inch	1/2 inch thick	2 pounds per square foot
2 lb/ft, sq 1/4"	1/2 inch	1/4 inch thick	2 pounds per square foot
1 lb/ft, sq 1/2"	5/8 inch	1/2 inch thick	1 pound per square foot
1 lb/ft, sq 1/4"	3/8 inch	1/4 inch thick	1 pound per square foot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

# 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)	1.80
ASTM D 798	
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/l" (Barrier) ASTM D 624	77
Temp Range, Fahrenheit (Composite)	-40 to 255 degrees

## Enhanced Noise Reduction due to Floor Underlay



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