

MINWOOL-1200® MARINE BOARD

HIGH-TEMPERATURE MINERAL WOOL MARINE BOARD INSULATION

DATA SHEET

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MinWool-1200 Marine Board insulation is made of inorganic basalt fibers, with a thermosetting resin binder. Advanced manufacturing technology ensures consistent product quality, with high fiber density and low shot content, for excellent performance in shipboard thermal control and fire resistance applications.

BENEFITS

Thermal Performance. Good thermal conductivity values help maximize control of heat loss, contributing to reduced operating costs and greater energy savings. High dimensional stability and low shrinkage, and excellent vibration resistance help ensure long-term service performance.

Good Physical and Chemical Properties. Low water vapor sorption means these insulations will not mold or mildew. They resist growth of funqi and bacteria.

Lightweight, Low Dust, Easy to Handle and fabricate, these insulations are easy to cut with a knife. No sawing is required. Clean handling properties help reduce irritation and minimize job clean-up time and expense.

Surface Burning Characteristics. Marine Board insulation has a flame spread rating of 5 and a smoke developed rating of 0 when tested in accordance with ASTM E84, UL 723, CAN/ULC-S102.

Non-Combustible. Marine Board is noncombustible when tested in accordance with the IMO FTP Part 1 test protocol, and ASTM E136.

APPLICATIONS

Marine Board insulation is a noncombustible insulation specifically designed and manufactured for use as thermal insulation for shipboard bulkheads and decks. Combining low moisture absorption and low linear shrinkage with excellent fungi, bacteria, and vibration resistance, this insulation offers the properties most sought in marine applications.

APPLICATIONS RECOMMENDATIONS

Marine Board insulation can be installed directly in bulkhead and deck applications by attaching with welded pins with speed washers, or studs with nuts. Fasteners should be installed on 12" (305mm) spacing (max) and not more than 6" (153mm) from the edge of the insulation. The insulation is normally impaled over the pins or studs, with joints tightly butted.

AVAILABLE FORMS AND SIZES

Standard Sizes: 24" x 48" (610mm x 1219mm) Standard Thicknesses: 1½ - 4" in ½" Increments

(38, 51, 64, 76, 89, 102mm)

AVAILABLE TYPES

Туре					
Nominal Density	1240	1260	1280	1210	
lb/ft³	4	6	8	10	
kg/m³	64	96	128	160	



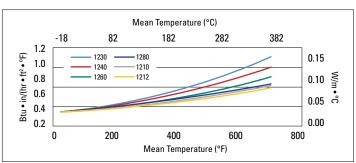
SPECIFICATION COMPLIANCE

ASTM C356 Linear Shrinkage	<1% at 1200°F (650°C)
ASTM C612 Standard Specification for Mineral Fiber Block & Board Thermal Insulation	Type I, II, III and IVA
ASTM C665 Corrosivity to Steel	Does not Cause or contribute
ASTM C1104 Water Vapor Sorption	<1% by Weight @ 120°F (50°C), 95% RH
ASTM C1338 Fungi and Bacterial Resistance	Does not Promote
ASTM E84 Surface Burning Characteristics	5/0
ASTM E136 Noncombustible	Passes
IMO FTP Part 1	Passes
ASTM C1335 Shot Content	25% max.

US Coast Guard Certificate

Noncombustible Materials......164.109/7/1

THERMAL CONDUCTIVITY



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THERMAL PERFORMANCE (IP UNITS) *

Apparent Thermal Conductivity						
MeanTemp (°F)	1240	1260	1280	1210		
25	0.21	0.22	0.22	0.22		
75	0.24	0.23	0.23	0.23		
100	0.26	0.25	0.25	0.25		
200	0.32	0.30	0.30	0.30		
300	0.40	0.36	0.36	0.35		
400	0.49	0.42	0.42	0.41		
500	0.62	0.53	0.49	0.47		
600	0.75	0.63	0.56	0.54		
700	0.90	0.75	0.64	0.62		

THERMAL PERFORMANCE (SI UNITS) *

Apparent Thermal Conductivity						
Mean Temp (°C)	1240	1260	1280	1210		
-4	0.030	0.032	0.032	0.032		
24	0.035	0.033	0.033	0.033		
38	0.037	0.036	0.036	0.036		
93	0.046	0.043	0.043	0.043		
149	0.058	0.052	0.052	0.050		
204	0.071	0.061	0.061	0.059		
260	0.089	0.076	0.071	0.068		
316	0.108	0.091	0.081	0.078		
371	0.130	0.108	0.092	0.089		

^{*}MinWool-1200 Marine Board Insulation as tested in accordance with ASTM C518.

SOUND ABSORPTION COEFFICIENTS

Thickness			1/3 Octave Band Center Frequencies, Hz						
Type	(in)	(mm)	125	250	500	1000	2000	4000	NRC
1240	1 ½	40	0.13	0.48	1.02	1.08	1.02	1.01	0.90
	2	50	0.20	0.61	1.07	1.06	1.04	1.07	0.95
	4	100	0.88	1.14	1.17	1.08	1.06	1.10	1.10
	6	150	1.32	1.14	1.11	1.09	1.06	1.07	1.10
1260	1 ½	40	0.18	0.62	1.08	1.08	1.03	1.07	0.95
	2	50	0.25	0.85	1.15	1.10	1.04	1.06	1.05
	3	75	0.80	1.07	1.11	0.99	0.98	0.96	1.05
	4	100	0.99	1.01	1.10	1.03	1.03	1.05	1.05
1280	1 ½	40	0.13	0.64	1.08	1.04	1.04	1.07	0.95
	2	50	0.32	0.90	1.11	1.01	1.01	1.05	1.00
	4	100	1.11	0.91	1.03	1.06	1.06	1.07	1.00

PRODUCT CERTIFICATION

When ordering material to comply with any government specification or any other listed specification, a statement of that fact must appear on the purchase order. Government regulations and other listed specifications require specific lot testing, and prohibit the certification of compliance after shipment has been made. There may be additional charges associated with specification compliance testing. Please refer to IND-CSP-3 for Certification Procedures and Charges. Call customer service for more information.

QUALITY STATEMENT

Johns Manville products are designed, manufactured and tested to strict quality standards in our own facilities. This along with third party auditing is your assurance that this product delivers consistent high quality.

ADDITIONAL INFORMATION AND SDS

Please visit our website at www.jm.com/industrial Customer Service, Technical & General Information: (800) 866-3234



717 17th St. Denver, CO 80202 (800) 866-3234 JM.com Technical specifications as shown in this literature are intended to be used as general guidelines only. Please refer to the Safety Data Sheet and product label prior to using this product. The physical and chemical properties of the MinWool-1200 Marine Board Insulation listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Check with the Regional Sales Office nearest you for current information.

All Johns Manville products are sold subject to Johns Manville's standard Terms and Conditions, which includes a Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville standard Terms and Conditions or for information on other Johns Manville thermal insulation and systems, visit www.jm.com/terms-conditions or call (800) 654-3103.