MINWOOL-1200® INDUSTRIAL BOARD

WATER-REPELLENT, HIGH-TEMPERATURE MINERAL WOOL INSULATION

DATA SHEET

MINWOOL-1200® INDUSTRIAL BOARD INSULATION

MinWool-1200 Industrial Board Insulation is a water-repellent mineral wool insulation made of inorganic fibers derived from basalt, a volcanic rock, with a thermosetting resin binder. Advanced manufacturing technology ensures consistent product quality, with high fiber density and low shot content, for excellent performance in high-temperature thermal control and fire resistance applications.

ADVANTAGES

Water-Repellent. MinWool-1200 Industrial Board insulation is water-repellent to help mitigate the risk of water intrusion. MinWool-1200 Industrial Board performs in accordance with BS EN 1609:2013 , absorbing less than 0.35 kg/m² of water during water absorption tests at temperatures up to 425°F (218°C).

Thermal Performance. Good thermal conductivity values help maximize control of heat loss, contributing to reduced operating costs and greater energy savings.

Lightweight, Low Dust. Easy to handle and fabricate, these boards are easy to cut with a knife. Clean handling properties help reduce irritation and minimize job clean-up time and expense.

Low Smoke & Flame Spread. When tested in accordance with ASTM E84, these unfaced insulation boards have a flame spread rating of 0 and a smoke developed rating of 0. The faced insulation has a flame spread rating of 25 and a smoke developed rating of 5.

Non-Combustible. MinWool-1200 Industrial Board is rated as noncombustible in accordance with ASTM E136 and ISO 1182.

Mold Resistant. MinWool-1200 Industrial Board does not support growth of fungi.

APPLICATIONS

MinWool-1200 Industrial Board Insulation provides excellent thermal insulation performance for mechanical, power and process systems operating from sub-ambient to 1200˚F(650˚C). These industrial board insulations are easily fabricated, cutting cleanly and easily with a knife. Very low in-service shrinkage helps prevent gaps from forming at joints, preventing costly thermal leaks. The insulation is designed to be field-jacketed. It may be installed directly on hot surfaces; system shut-down and staged heat-up are not required.

AVAILABLE FORMS AND SIZES

MinWool-1200 Industrial Boards are available in five nominal densities in accordance with ASTM C612 and in a range of standard thicknesses:

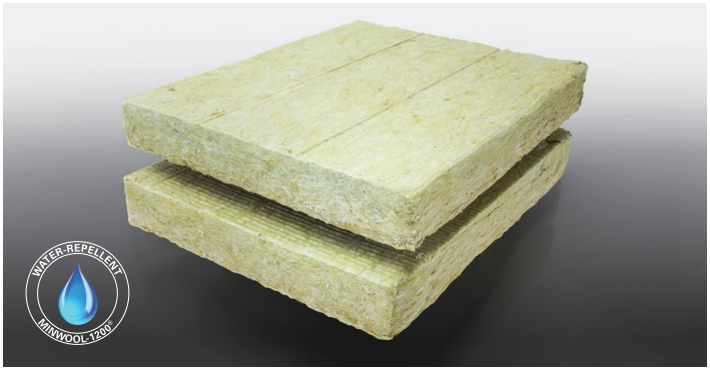
Type					
Nominal Density	1240	1260	1280	1210	1212
lb/ft³	4	6	8	10	12
kg/m³	64	96	128	160	192

Standard Sizes: 24" x 48" (610mm x 1219mm)
36" x 48" (914mm x 1219mm)

Standard Thicknesses: 1½" to 4"(38 mm to 102 mm) industrial boards are available with FSP (Foil Scrim Polyethylene) facings on a made-to-order basis. Minimum order quantities will apply. Other thicknesses may be available upon request.

ASTM C612 TYPES	
1A-4A	1240
4B	1260, 1280, 1210, 1212

R-Value @ 75°F	
IB 1240	4.2 per inch of thickness
IB 1260-IB 1212	4.3 per inch of thickness

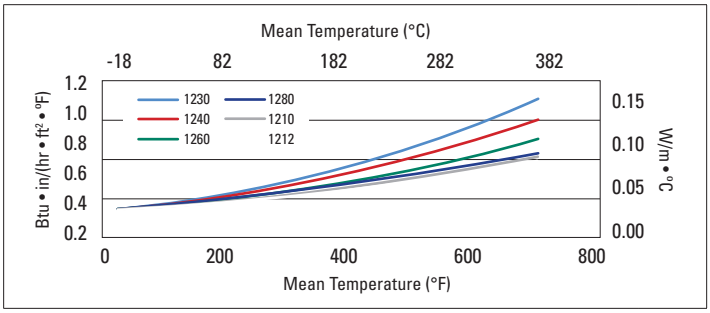


Operating Temperature Limit: 1200°F (650°C)

SPECIFICATION COMPLIANCE

ASTM C612 Material Specification	Complies
ASTM C356 In-Service Shrinkage	0% at 1050˚F (566˚C); <2% at 1200˚F (650˚C)
ASTM C447 Maximum Service Temperature	1200˚F (650˚C)
ASTM C665 Corrosivity to Steel	Passes
ASTM C795/C871/C692 Corrosion: Austenitic Stainless Steel	Passes
ASTM C1104 Water Vapor Sorption	<1% by Weight, <.02% by Volume @ 120˚F (50˚C), 95% RH
ASTM C1335 Shot Content	<25%
ASTM C1338 Fungi Resistant	Passes
ASTM E84 Flame Spread/Smoke Developed	Unfaced 0/0 or less Faced 25/5 or less
ASTM E136 and ISO 1182 Non-Combustible	Passes
BS EN 1609:2013 Water Absorption	<0.35 kg/m²

THERMAL CONDUCTIVITY



*MinWool-1200 Industrial Board Insulation as tested in accordance with ASTM C518.

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THERMAL PERFORMANCE (IP UNITS) *

Apparent Thermal Conductivity					
MeanTemp (°F)	1240	1260	1280	1210	1212
25	0.21	0.22	0.22	0.22	0.22
75	0.24	0.23	0.23	0.23	0.23
100	0.26	0.25	0.25	0.25	0.25
200	0.32	0.30	0.30	0.30	0.30
300	0.40	0.36	0.36	0.35	0.35
400	0.49	0.42	0.42	0.41	0.40
500	0.62	0.53	0.49	0.47	0.46
600	0.75	0.63	0.56	0.54	0.52
700	0.90	0.75	0.64	0.62	0.59

THERMAL PERFORMANCE (SI UNITS) *

Apparent Thermal Conductivity					
Mean Temp (°C)	1240	1260	1280	1210	1212
-4	0.030	0.032	0.032	0.032	0.032
24	0.035	0.033	0.033	0.033	0.033
38	0.037	0.036	0.036	0.036	0.036
93	0.046	0.043	0.043	0.043	0.043
149	0.058	0.052	0.052	0.050	0.050
204	0.071	0.061	0.061	0.059	0.058
260	0.089	0.076	0.071	0.068	0.066
316	0.108	0.091	0.081	0.078	0.075
371	0.130	0.108	0.092	0.089	0.085

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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
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
1210	1 ½	40	0.22	0.77	1.00	1.02	0.99	0.99	0.95
	2	50	0.43	0.89	1.00	0.99	0.98	0.99	1.00
	3	75	0.88	0.88	0.96	1.01	1.01	1.01	1.00
	4	100	0.91	0.88	0.96	1.02	1.01	1.01	0.95

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

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