

MINWOOL-1200® FLEXIBLE BATT INSULATION

MinWool-1200 Flexible Batt Insulation is 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

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, UL 723, CAN/ULC-S102-M, these unfaced insulation boards have a flame spread rating of 5 & 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 CAN4-S114-M.

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

APPLICATIONS

MinWool-1200 Flexible Batt Insulation provides excellent thermal insulation performance for mechanical, power and process systems operating from sub-ambient to 1200°F(650°C). These Flexible Batt 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

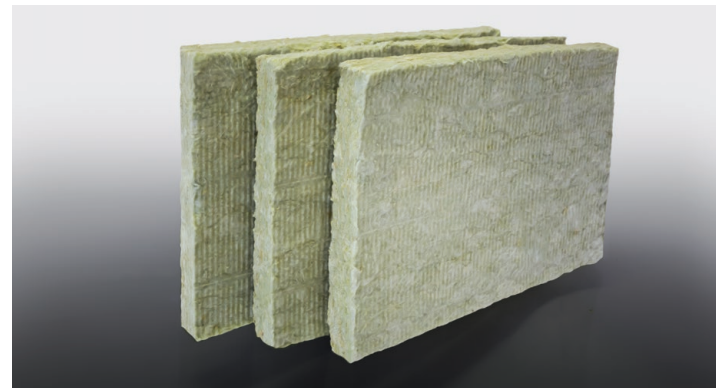
MinWool-1200 Flexible Batts are available in six nominal densities in accordance with ASTM C553 and in a range of standard thicknesses:

Type						
Nominal Density	1240	1260	1280	1210	1212	
lb/ft ³	4	6	8	10	12	
kg/m ³	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)

ASTM C553 TYPES		R-Value @ 75°F	
1-5	All Batts	IB 1240	4.2 per inch of thickness
6-7	Types 1280-1212	IB 1260-IB 1212	4.3 per inch of thickness

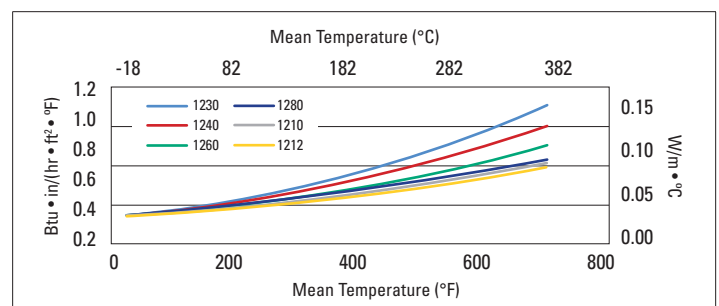


Operating Temperature Limit: 1200°F (650°C)

SPECIFICATION COMPLIANCE

ASTM C553 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 5/0 or less Faced 25/5 or less
ASTM E136 Non-Combustible	Passes
UL 723, CAN/ULC S102	Unfaced 5/0 or less Faced 25/5 or less

THERMAL CONDUCTIVITY



MINWOOL-1200® FLEXIBLE BATT
HIGH-TEMPERATURE INSULATION

DATA SHEET

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

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
1280	4	100	0.99	1.01	1.10	1.03	1.03	1.05	1.05
	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

Industrial Insulation Group 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
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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® Flexible Batt 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.