



MinWool-1200® Pipe

HIGH TEMPERATURE INSULATION

DESCRIPTION

IIG MinWool-1200 Pipe 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.

APPLICATIONS

MinWool-1200 Pipe Insulation provides excellent thermal insulation performance for mechanical/power and process piping systems operating from sub-ambient to 1200°F (649°C). This molded pipe insulation is 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 shutdown and staged heat-up are not required.

ADVANTAGES

Excellent 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 reduce the potential for gaps forming at joints.

Good Compressive Strength. Molded pipe sections maintain structural integrity under severe operating conditions. Thickness stays uniform; there is less jacket damage.

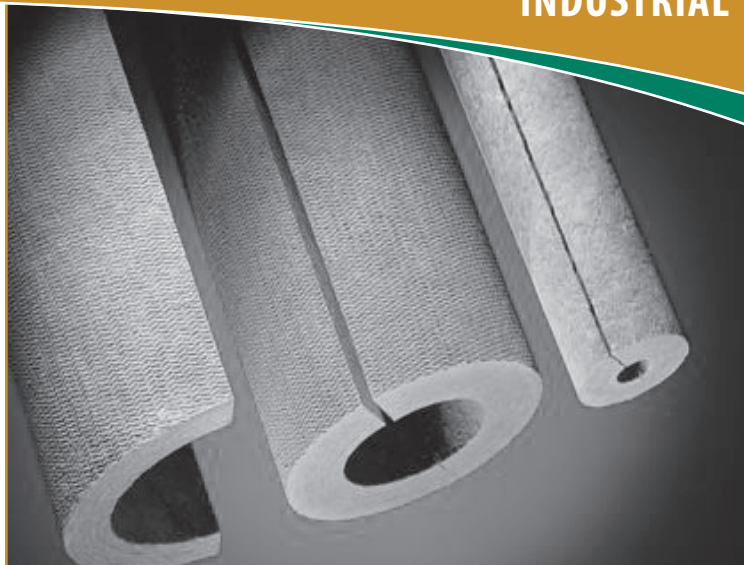
Lightweight, Low Dust. Easy to handle and fabricate, MinWool-1200 is easy to cut with a knife. No sawing is required. Clean handling properties help reduce irritation and minimize job clean-up time and expense.

Low Smoke & Flame Spread. MinWool-1200 has a flame spread rating of 5 and a smoke developed rating of 0 when tested in accordance with ASTM E 84, UL 723, CAN/ULC-S102-M.

Noncombustible. MinWool-1200 is rated as non-combustible in accordance with ASTM E 136 and CAN4-S114-M.

Unique Bio-Soluble Fiber. IIG MinWool-1200 has been tested and exceeds the safety requirements for solubility.

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



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SPECIFICATION COMPLIANCE

ASTM C547	Types I, II, IV
ASTM E84 Flame Spread/Smoke Developed	5/0
ASTM E136	Noncombustible
ASTM C585	Complies
ASTM C795	Complies
ASTM C1338	Passes
ASTM C665 Corrosiveness, Steel	Passes
CAN/CGSB-51.9	Class 3
NRC Reg. Guide 1.36	Passes
Bio-Soluble Fiber	Passes

PHYSICAL PROPERTIES

Maximum Recommended Continuous Service Temperature	1200°F (649°C)
Recovery after 10% Compression	100%
Shot Content	<20%

AVAILABLE TYPES

Standard Thicknesses: 1, 1½, 2, 2½, 3, 3½, 4, 4½, 5, 5½, 6" (25, 38, 51, 64, 76, 89, 102, 114, 127, 140, 152mm)

Also Available:

Boiling Water Tested (BWT) pipe insulation, specifically formulated to pass the D.O.D. Tri-Services test for continued performance following intermittent flooding conditions

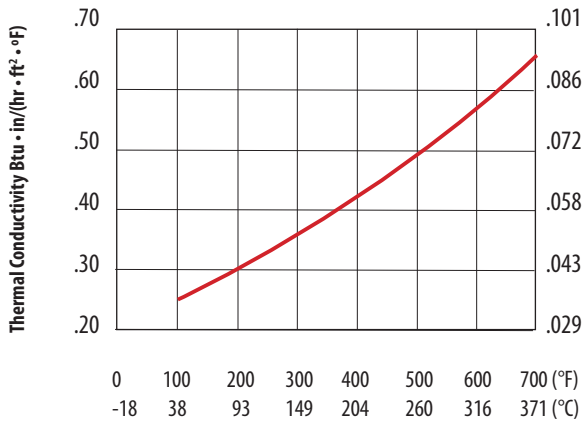
Pipe Sizes		
(in.)	(mm)	Form
½ - 6	15-150	One Piece
7-24	175-600	Two Piece
25-44	625-1100	Four Piece

For pipe sizes 19" to 24" (457 mm to 600 mm), some thick wall pieces are shipped as four piece quads.

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THERMAL CONDUCTIVITY (“k”) *



LINEAR SHRINKAGE AFTER 24 HRS. AT TEMPERATURE

Temperature		Shrinkage
°F	°C	(%)
1050	566	0
1200	649	<2

Mean Temperature	°F	75	100	200	300	400	500	600	700
	°C	24	38	93	149	204	260	316	371
Btu · in/(hr · ft² · °F)		0.23	0.25	0.30	0.35	0.41	0.48	0.56	0.65
W/m · °C		0.033	0.036	0.043	0.050	0.059	0.069	0.081	0.094

* MinWool Pipe Insulation as tested in accordance with ASTM C335.



GOVERNMENT 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 price page IIG-CSP-3 for Certification Procedures and Charges. Call customer service for more information.

APPLICATION RECOMMENDATIONS

MinWool-1200 Pipe insulation can be directly installed on heated piping. One-piece hinged sections are opened, placed over the pipe, closed and secured with wires, bands, or tape. Two-piece half sections are placed on the pipe and wired, banded, or taped in place.

The insulation may be finished with various rigid jacketing depending on requirements for physical abuse, weather and chemical resistance. Jacketing may be secured using screws, rivets, or bands. If a vapor retarder is required, screws, rivets or any other penetrations must be sealed.

For temperatures over 600°F (316°C), good insulation practice suggests double-layer applications. Single-layer installation requires good workmanship to minimize heat transfer and hot or cold joints. This insulation may be installed in single or multiple layers at all temperatures up to 1200°F (649°C). In multiple-layer applications, each layer must be secured in place before the next layer is installed. Joints in multiple-layer applications should be staggered to reduce heat transfer.

Industrial Insulation Group, LLC is a Calsilite/Johns Manville joint venture. IIG manufactures MinWool-1200® mineral fiber pipe, block and a variety of other insulations; Thermo-12® Gold Calcium Silicate pipe and block insulation; Super Firetemp® fireproofing board; SprouleWR-1200® Perlite pipe and block insulation; high temperature adhesives, and insulating finishing cement.

The physical and chemical properties presented 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. Numerical flame spread and smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Check with the Customer Service Office to assure current information. All Industrial Insulation Group products are sold subject to the IIG Limited Warranty and Limitation of Remedy. For a copy of the IIG Limited Warranty and Limitation of Remedy, email - info@iig-llc.com.


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