

PHYSICAL PROPERTIES

Pipe Insulation

For
copper building
to fit straight runs of
copper tubing with diam.
diameters 1 1/2 to 3".

Complete thickness recommendations to prevent condensation for various pipe operating temperatures, ambient temperatures and relative humidities are available in a separate table. Installation specifications are also available.

**COMPLIANCE WITH
ASTM STANDARDS**

31553
The location:

Johns-Manville

General Headquarters 22 East 40th Street, New York, N.Y. 10016
Offices in principal cities

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INSULATION

type: Pipe & Block
temp limit: 1200F

J-M THERMOBESTOS® pipe and block insulation

Exceptional Strength

Similar in chemistry and composition to a very fine concrete, Thermobcane will withstand unusual operating abuse without appreciable damage.

Extreme

Thermobestos is as light as many insulating materials possessing a fraction of its strength and durability.

Chemically Stable

100% increase with neither burn nor rot.

Lot Damage by Water

Can be soaked in water without damage. After drying, conductivity will be as good as new.

Easy Application

Thermobestos is purposely made in large blocks and half-sections to facilitate handling and reduce number of joints.

Low

Thermobestos offers the lowest & factor of all insulations in general use throughout the power generation and process industries.

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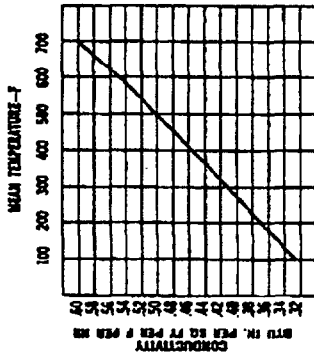
THERMOBESTOS Specification Data

PHYSICAL PROPERTIES*

Density (pcf)	11 lbs per cu ft
Tensile Strength (Coefficient of rupture)	55 psi
Compressive Strength (Based on 2" thickness of block)	155 psi to perfect 5% compression
Linear Shrinkage	1.5% after 24 hr curing period at 1200F
Maximum Service Temperature	1200F

*The above figures are based on test data obtained in accordance with accepted test methods.

THERMAL CONDUCTIVITY



Pipe Insulation

Block Insulation

STANDARD SIZES

Length, inches	Thickness, inches	Weight, lbs per cu ft
36	1 1/2, 2, 2 1/2, 3, 3 1/2, 4	11

Length, inches	Thickness, inches	Weight, lbs per cu ft
6 and 12	1 1/2, 2, 2 1/2, 3, 3 1/2, 4	11

RECOMMENDED THICKNESSES

Complete pipe and block thickness recommendations are available for steam generation, process heating, commercial full year and commercial seasonal operation applications. See Thermobestos brochure TB-1603, or J-M Insulation Product Information catalog TB-214A.

COMPLIANCE WITH GOVERNMENT SPECS

Pipe Insulation	Block Insulation
ASTM D-2781 D	ASTM D-2781 D
Class 1, Class 2, to 500F	Class 1, Class 2, to 500F
Class 3, to 750F	Class 3, to 750F
Class 4, to 1000F	Class 4, to 1000F
Class 5, to 1200F	Class 5, to 1200F

COMPLIANCE WITH ASTM STANDARDS

Pipe Insulation	Block Insulation
ASTM D-2781 D	ASTM D-2781 D
Class 1, to 500F	Class 1, to 500F
Class 2, to 750F	Class 2, to 750F
Class 3, to 1000F	Class 3, to 1000F
Class 4, to 1200F	Class 4, to 1200F

Johns-Manville

General Headquarters: 22 East 40th Street, New York, N. Y. 10016
Offices in all large cities

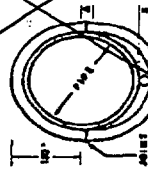
Johns-Manville

INSULATION

type: Extended Legs
for Traced
Pipe Lines
temp limit: 1200F

J-M THERMOBESTOS® extended legs for steam or electrical traced pipe lines

DESCRIPTION: Composed of hydrous calcium silicate bonded with asbestos fibers, J-M Thermobestos with extended legs is a high-temperature pipe insulation molded with 3/4" legs on each end of the half circles—or 1/2" straight beyond 180° (1/2" dimension "A" on adjacent sketch). Extended legs provide allowance for the traced line and the dimension of "B", as shown on the sketch, will be 3/4". For special size extended legs, consult J-M sales representative.



Thermobestos with extended legs also offers these advantages:

Exceptional Strength

Similar in chemistry and composition to a very fine concrete, Thermobestos will withstand unusual operating abuse without appreciable damage.

Extreme Lightness

Thermobestos is as light as many insulating materials possessing a fraction of its strength and availability.

Chemically Stable

100% inorganic, will neither burn nor rot.

Not Damaged by Water

Can be soaked in water without damage. After drying, conductivity will be as good as new.

Easy Application

Thermobestos is purposely made in large blocks and half-sections to facilitate handling and reduce number of joints.

Low Conductivity

Thermobestos offers the lowest k factor of all insulations in general use throughout the power generation and process industries.

AVAILABLE FORMS: Thermobestos is furnished in a complete selection of sectional pipe sizes up to 24" x 3" thick half-sections. Larger sizes are available in quad segments from 25" to 33" P/S in 1 1/2", 2", 2 1/2" and 3" thicknesses. For special applications, Thermobestos with extended legs can be furnished as Meta/On™—a factory-applied aluminum or stainless steel jacket.

USES: For indoor and outdoor piping and equipment, operating at temperatures to 1200F, that have either steam or electrical traced pipe lines. Especially recommended for use in the power generation and chemical and process industries.

ADVANTAGES: Traced lines present a shape problem for insulations which are furnished in half circles; to fit both the main line and the traced line would require an oval insulation a size larger than normal. An ovalize insulation does not provide a snug fit and, consequently, lacks physical