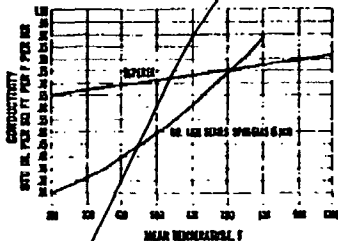


SUPEREX SG
Specification Data

GENERAL PROPERTIES

(Composite of 2% Superex and 98% No. 1800 Series Spin-Glass)
Density (dry) 10% Pw/cu ft
Linear Shrinkage (Superex)
after 24-hour soaking 2.7% at 1900F
Maximum Service Temperature 1900F

THERMAL CONDUCTIVITY



COMPRESSIVE STRENGTH

Compressed Thickness (in.)	Load to Compress, psi			
	As Received	Hot Face of Superex (24-hr test) 1600F	1800F	1900F
3.00	0	0	0	0
2.50	1.4	0.6	0.4	0.4
2.75	3.5	2.4	1.5	1.6
2.50	22.6	21.1	12.5	13.5
2.25	66.0	129.0	70.0	73.0

RECOVERY OF 3" SUPEREX SG AFTER COMPRESSION

Compressed Thickness (in.)	Thickness of Superex SG After Release (percent of original thickness)		Hot Face of Superex (24-hr test)		
	As Received	%	1600F	1800F	1900F
2.90	97	99	99	99	99
2.75	92	99	97	97	97
2.60	83	95	93	93	93

The values given herein are average typical values obtained in accordance with accepted test methods and are subject to change. Check nearest J-M product office for latest information.

Johns-Manville
22 East 40th Street, New York, N.Y. 10016
Sales offices in principal cities

Johns-Manville

PRODUCT INFORMATION

type: Block
temp limit: 1900F



J-M SUPEREX® block insulation

DESCRIPTION: J-M Superex block insulation is composed of calcined diatomaceous silica blended with other insulating materials and bonded with asbestos fiber. These light weight, large size blocks will withstand temperatures up to 1900F with negligible shrinkage. Their unique combination of low conductivity and high stability at elevated temperatures provide excellent efficiency and long, maintenance-free service.

Ever since its introduction, Superex has demonstrated its versatility as a high temperature insulation. Today, for example, it economically insulates 90% of this country's hot blast stoves.

AVAILABLE FORMS: Furnished in flat or curved blocks in the following sizes: Flat or curved, 3" or 6" wide by 18" or 36" long. Flat only, 9" or 12" wide by 18" or 36" long. Thicknesses range from 1" to 4".

USES: Superex blocks are widely used for equipment operating at temperatures to 1900F including boiler furnaces, hot blast stoves, mains and busbar pipes, hot gas flues, soaking pits, petroleum cracking furnaces, producer gas mains, and metallurgical furnaces of various types.

ADVANTAGES

High Compressive Strength

Compresses only 15" (2" thickness) under a pressure of 85 lbs per square inch.

Low Conductivity at High Temperatures

Superex has a conductivity of .82 at 1000F mean temperature.

Low Heat Shrinkage

Has a linear shrinkage of only 2.7% at 1900F.

Dimensional Uniformity

Straight, true edges and close tolerances make possible snug joints.

Light Weight

Ideal for insulating movable high temperature equipment.

Large Size Blocks

Large 12" x 36" blocks speed application and reduce the number of joints.

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PLAINTIFF'S
EXHIBIT
JM-2293

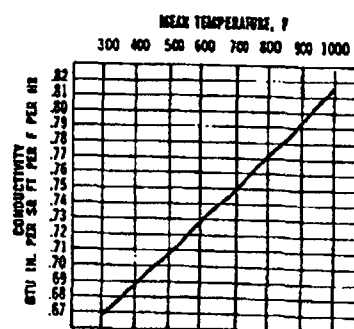
SUPEREX Specification Data

PHYSICAL PROPERTIES*

Density (dry)	24 lbs per cu ft
Tensile Strength (Modulus of rupture)	100 psi
Compressive Strength	85 psi to produce 1% compression in 2" thickness
Linear Shrinkage after 24 hr soaking heat at indicated temperature	2.7% at 1800F
Maximum Service Temperature	1800F

*The figures given in this table are average values obtained in accordance with accepted test methods.

THERMAL CONDUCTIVITY



COMPLIANCE WITH GOVERNMENT SPECS

MR-402819 B, Class 3 and 4

STANDARD SIZES AND THICKNESSES

Length, inches	Width, inches	Thickness, inches
18 and 36	3 & 6 flat or curved 9 & 12 flat only	1 through 4 1 1/2 through 4

NOTE: For special sizes and curved blocks consult your nearest Johns-Manville office.

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Johns-Manville

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

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Johns-Manville

PRODUCT INFORMATION

type: Refractory Fiber
Tape
temp. limit: 2300F



J-M CERAFELT* refractory fiber tape

DESCRIPTION: J-M Cerafelt tape is a lightweight refractory fiber insulation notable for its excellent thermal and chemical stability. Made predominantly of alumina and silica, it combines lightness, heat resistance, low conductivity and high sound-absorption qualities.

ADVANTAGES:

High Heat Resistance

Will withstand continuous exposure to a full 2300F.

AVAILABLE FORMS: Cerafelt tape is furnished in rolls of 25' (1" thick) and 50' (1/2" thick) in 1" and 2" widths.

Low Thermal Conductivity

Unusually low conductivity at high temperatures due to opacity of basic fibers to infra-red radiation.

USES: Recommended for a great variety of high temperature industrial applications such as expansion joints in kilns, furnaces and boiler walls; insulation protection in repairing open hearth roofs; on cover-type analyzers to fill openings for electrical access.

Chemically Stable

Non-alkaline and chemically stable. Contains no corrosion-promoting agents.

*J-M Trademark

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