PLAINTIFF'S
EXHIBIT
DUP-1479

99

MATERIAL SPECIFICATION
SERIES 100
PREFORMED BLOCK AND PIPE

THERMAL INSULATION
STANDARD ENGINEERING SPECIFICATION

ISSUED OCT 1954
THIS PAGE REVISED SEPT 1967

SN 100 M
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Code	102†	102.1	
Material	Calcium silicate	Calcium silicate – inhibited	
Material Description	Reacted hydrous calcium silicate reinforced with mineral fibers	Reacted hydrous calcium silicate with inhibitor for chloride stress corrosion cracking and reinforced with mineral fibers	
Temperature Range	1200 F max		
K Factor Btu/(hr)(sq ft)(°F/in.)	0.60 max at 500 F mean		
Density	14 lb per cu ft max		
Compressive Strength	60 lb per sq in. min at 5% deformation		
Resistance to Breakage in Handling	Block must average 2" or greater in drop test per ASTM C 487.		
Dimensions	See SN20		
Other Qualifications		Stressed Type 304 stainless steel U-bend specimens at 100 C, when in contact with this insulating material in the Du Pont wick test with 1500 ppm chloride as NaCl in the test water, shall show no cracking at the end of 144 hours exposure	

The following materials have proven satisfactory in field tests and proof has been furnished by the manufacturers that their product meets the above specifications.

For 12" IPS and larger, there is an additional charge for 2-oz canvas cover. Material should be specified "without 2-oz canvas" to avoid extra charge.	*Calsilite* The Ruberoid Co	*Thermasil** Baldwin-Ehret-Hill, Inc	
	Kaylo Owens-Corning Corp	*Silicated Thermobestos*** Johns-Manville Sales Corp	
† Codes 104 and 106 are acceptable alternates unless noted on the Project Specifications.	*Thermobestos* Johns-Manville Sales Corp	*Kaylo 10 STS**** Owens-Corning Corp	
	Caltemp Fiberboard Paper Products	*Silicated Pomrod Fittings*†† B and B Eng & Supply Co	
† Expanded Perlite insulation. Molded two-piece fitting covers are available in screwed, welded, and sweat types.	*Careytemp* † Philip Carey Mfg Co		
	*Thermasil** Baldwin-Ehret-Hill, Inc		
†† Available only as fittings.			

* Thermasil is a gray material with longitudinal corrosion marks on block and pipe covering. The ends and no more than one edge of block and the edges and ends of pipe covering will show cutting marks. This material is acceptable in Baldwin-Ehret-Hill printed cartons, not in cartons overlabeled with a Baldwin-Ehret-Hill sticker. Armstrong L-K cartons with a "B" in the lower left-hand corner of the label will contain acceptable material.

** Silicated Thermobestos is a darker material than white Thermobestos. Silicated Thermobestos will appear as the name on all cartons to distinguish it from Thermobestos.

***Kaylo 10 STS is gray-blue in color. Kaylo 10 Stainless will appear as the name on all cartons to distinguish it from Kaylo.

Vendors and merchandise designations are given to describe materials and may not include all acceptable products. Substitutions are to be made only on approval of the authority initiating the use of this specification.

SUBCOMMITTEE NO. 10

DUP 0990073 — 848898

DU 045892

Code	104	106	
Material	Inorganic silicates	Asbestos fiber and sodium silicate	
Material Description	Inorganic silicates and asbestos fibers, normally used on hot surfaces operating in the temperature range shown below	Compressed fluffy amosite asbestos fiber sprayed with sodium silicate to form a mat containing a minimum of 20% sodium silicate by weight. Asbestos mat is then sprinkled with diatomaceous earth to provide an integral refractory coating	
Temperature Range	1100 F to 1800 F	1200 F max	
K Factor Btu/(hr)(sq ft)(°F/in.)	Block, 0.38 max at 500 F mean	0.54 max at 400 F mean 0.65 max at 600 F mean	
Density	Block – 14 lb per cu ft	16 lb per cu ft nom	
Compressive Strength	65 lb per sq in. min at 5% deformation	27 lb per sq in. at 10% deformation – dryo	
Resistance to Breakage in Handling	Block must average 3" or greater in drop test per ASTM C 487, tentative method of test for resistance to dropping of preformed block thermal insulation.		
Other Qualifications	Good mechanical strength. Shrinkage less than 2% at 1600 F Minimum thickness available 1½", also available in pipe covering on special order. Colored pink for identification.	Formed on a mandrel to a predetermined weight. Pressed to obtain the desired density, and baked. Pipe mach cut on die. Stressed Type 304 stainless steel U-bend specimens at 100 C, when in contact with this insulating material in the Du Pont wick test with 1500 ppm chloride as NaCl in the test water, shall show no cracking at the end of 144 hours exposure	
The following materials have proven satisfactory in field tests and proof has been furnished by the manufacturers that their product meets the above specifications.			
t Pipe covering only	*Kaylo 20* Owens-Corning Corp	*Unibestos* Pittsburgh Corning Corp	

DUP 0990074

RLV. SUP. 57

848899

DU 045893