PLAINTIFF'S
EXHIBIT
DUP-1508

OCTOBER 1954 — MATERIAL SPECIFICATION — SERIES 100 — SM
This Page Rev Oct 1972 — PREFORMED BLOCK AND PIPE — P.

Code	129	130
Material	Polystyrene foam	Asbestos board
Material Description	Preformed polystyrene foam blocks, pipe, and fitting insulation cut from extruded polystyrene foam (pipe insulation available with a variety of different joint designs), or pipe and fitting insulation molded to final shape from expanded polystyrene beads with tongue-and-groove side longitudinal joints and ship lap butt joints.	Asbestos fibers, diatomaceous silica, and inorganic b Flame-spread rating 0. Weather-resistant.
Recommended Temperature Range	− 100 F to + 160 F	1200 max
K Factor, Max Btu/(hr) (sq ft) (°F /in.)	0.24 at 50 F 0.26 at 75 F 0.28 at 100 F	0.77 at 200 F 0.79 at 400 F 0.81 at 600 F
Density	1.3 lb per cu ft minimum	36 lb per cu ft
Compressive Strength Specimen size 6" x 6" x 2", load rate 0.10" per min	Min 25 lb per sq in. at 5% deformation	Compressive, ultimate = 14,000 psi Tensile parallel to face = 420 psi Shear normal to face = 70 Shear parallel = 32
Dimensions	SM3D. All dimensions to be ± 1/16" including straightness and squareness	Thickness, in. = 1/2, 3/4, 1, 1 1/2, 1 1/2, 2 and 4 Sheet size, ft = 3, 3 1/2 x 8 and 4 x 10
Qualifications and Limitations	Uniform cell structure with max 10% open cells. No distortion or volume change, or loss of compressive strength after exposure at 140 F and 80% relative humidity for 15 days. Water absorption max 0.02% by volume after being submerged at 90 F, 90% relative humidity for 15 days and max 4% by volume for a 2" x 2" x 1" skin-free piece immersed in water just under the surface for 3 days, then wiped with a wet cloth and weighed, with no delay between steps. Not resistant to solvents other than alcohol.	Sanded both sides, may be used unpainted for interior use. When painted, use oil base or epoxy coating.

The following materials have proven satisfactory in field tests and proof has been furnished by the manufacturers that the products meet the above specifications. These manufacturers' materials also are acceptable under other vendor's labels upon certification as to their identity.

◊ Available in the form of fitting covers (see Code 114.1) from fabricators	*Styrofoam FR* ◊ Dow Chemical Co	*Marinite 36 (Type A)* Johns-Manville Sales Corp

REV. MAY 1973

DUP 0990392

4-B-38L

048417

DU 046211

97

Code	120	130
Material	Polystyrene foam	Asbestos board
Material Description	Preformed polystyrene foam blocks, pipe, and fitting insulation cut from extruded polystyrene foam (pipe insulation available with a variety of different joint designs), or pipe and fitting insulation molded to final shape from expanded polystyrene beads with tongue-and-groove side longitudinal joints and thin lap butt joints.	Asbestos fibers, diatomaceous silica, and inorganic b Flame-spread rating 0. Weather-resistant.
Recommended Temperature Range	- 100 F to + 140 F	1200 max
K Factor, Max Btu/(hr) (sq ft) (°F/in.)	0.24 at 50 F 0.26 at 75 F 0.28 at 100 F	0.77 at 200 F 0.79 at 400 F 0.81 at 600 F
Density	1.5 lb per cu ft minimum	36 lb per cu ft
Compressive Strength Specimen size 6" x 6" x 2", load rate 0.10" per min	Min 25 lb per sq in. at 5% deformation	Compressive, ultimate - 14,000 psi Tensile parallel to face 420 psi Shear normal to face - 7 Shear parallel - 3
Dimensions	SM30. All dimensions to be ± 1/16" including straightness and squareness	Thickness, in. - 1/2, 3/4, 1, 1 1/4, 1 1/2, 2 and 4 Sheet size, ft - 3, 3 1/2 4 x 8 and 4 x 10
Qualifications and Limitations	Uniform cell structure with max 10% open cells. No distortion or volume change, or loss of compressive strength after exposure at 140 F and 98% relative humidity for 15 days. Water absorption max 0.03% by volume after being subjected to 98 F, 90% relative humidity for 15 days and max 4% by volume into a 2" x 2" x 1" thickness piece immersed in water just under the surface for 5 days, then wiped with a wet cloth and weighed, with no delay between steps. Not resistant to solvents other than alcohol.	Sanded both sides, may be used unpainted for interior use. When painted, use w base or epoxy coating.

The following materials have proven satisfactory in field tests and proof has been furnished by the manufacturers that the products meet the above specifications. These manufacturers' materials also are acceptable under other vendor's labels upon certification as to their identity.

b Available in the form of fitting covers (see Code 114.1) from fabricators	*Styrofoam FR* b Dow Chemical Co	*Vanasse 36 (Type 4)* Johns-Manville Sales Corp
		Fyrecor Owens-Corning Corp

DUP 0990393

L-B-38E

048458

DU 046212

87

Code	120	130
Material	Polystyrene foam	Asbestos board
Material Description	Preformed polystyrene foam block, pipe, and fitting insulation cut from extruded polystyrene foam (pipe insulation available with a variety of different joint designs), or pipe and fitting insulation molded to final shape from expanded polystyrene beads with tongue-and-groove side longitudinal joints and ship lap butt joints.	Asbestos fibers, diatom silica, and inorganic b Flame-spread rating 3. Weather-resistant.
Recommended Temperature Range	- 100 F to + 140 F	1200 max
K Factor, max Btu (hr) (sq ft) (°F /in.)	0.24 at 30 F 0.26 at 75 F 0.28 at 100 F	0.77 at 200 F 0.79 at 400 F 0.81 at 600 F
Density	1.5 lb per cu ft minimum	36 lb per cu ft
Compressive Strength Specimen size 6" x 6" x 2", load rate 0.10" per min	Min 25 lb per sq in. at 5% deformation	Compressive, ultimate - 14,000 psi Tensile parallel to face - 428 psi Shear normal to face - 70 Shear parallel - 32
Dimensions	SN30. All dimensions to be ± 1/16" including straightness and squareness	Thickness, in. - 1/2, 1 1, 1 1/4, 1 1/2, 2 and 4 Sheet size, ft - 3, 3 1/2 4 x 8 and 4 x 10
Qualifications and Limitations	Uniform cell structure with max 10% open cells. No distortion or volume change, or loss of compressive strength after exposure at 140 F and 80% relative humidity for 15 days. Water absorption max 0.03% by volume after being subjected to 90 F, 90% relative humidity for 15 days and max 4% by volume into a 2" x 2" x 1" thickness piece immersed in water just under the surface for 3 days, then wiped with a wet cloth and weighed, with no delay between steps. Not resistant to solvents other than alcohol.	Sanded both sides, may be used unpainted for interior use. When painted, use w base or epoxy coating.

The following materials have proven satisfactory in field tests and proof has been furnished by the manufacturers that the products meet the above specifications. These manufacturers' materials also are acceptable under other vendor's labels upon certification as to their identity.

◊ Available in the form of pipe and fitting insulation from fabricators.	Styrofoam FR ◊ Dow Chemical Co	Varnaire 36 (Type 1) Johns-Manville Sales Corp
		Fyrtex Owens-Corning Corp

DUP 0990394

R-235 4-B-3 F

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DU 046213