PLAINTIFF'S
EXHIBIT
KN-401

BALDWIN-HILL COMPANY, TRENTON 2, NEW JERSEY

DATA SHEET

Product: Mono-Block

Description: Felted rigid block made of Spun Mineral Wool with a clay binder, by a patented Baldwin-Hill process. With long mineral wool fibers laid down in interwoven layers, it has greater tensile strength and better resistance to damage in handling.

Uses: For heated surfaces on steam boilers, ovens, kilns, furnaces, refinery towers, etc.

Features: Light Weight - Maximum Temperature Range - up to 1800 F. Easy to handle and apply, cuts with a knife, surface adjusts to irregularities for snug fit. Moisture-resistant, non-corrosive, stable in service and incombustible.

Technical Data: Maximum Temperature Limit - 1800 F.
Sizes: Length - 36 inches - Width - 6 and 12 inches
Thicknesses: 1, 1-1/2, 2, 2-1/2, 3, 3-1/2 and 4 inches
Density: Approximately 15 pounds per cubic foot
Thermal Conductivity - (See curve also)

Mean Temp	K
200F	.36
400	.42
600	.51
800	.625
1000	.755
1200	.90

Compressive Strength - 10 lb./sq. in. @ 5% deformation
Flexural Strength - 40 lb./sq. in.
Linear Shrinkage after heating at 1800 F - less than 4%

Chemical Analysis (typical)

SiO_2	-	43%
Al_2O_3	-	11%
CaO	-	29%
MgO	-	6%
FeO	-	8%

Surface Temperatures and Heat Losses - See Charts
Thicknesses Recommended - See Catalog

Specifications: Federal Specification HH-I-564, Form 1, Types A, B, C, D
Commercial Standard CS-117, Block, Classes A, C, D
ASTM: C 392-57T
U. S. Coast Guard, Structural Insulation 164.007/23/0

Packages: Corrugated board fiber boxes - 36 bd. ft. each - (Exception: 37.5 bd. ft. for 2-1/2" and 42 bd. ft. for 3-1/2" thickness)

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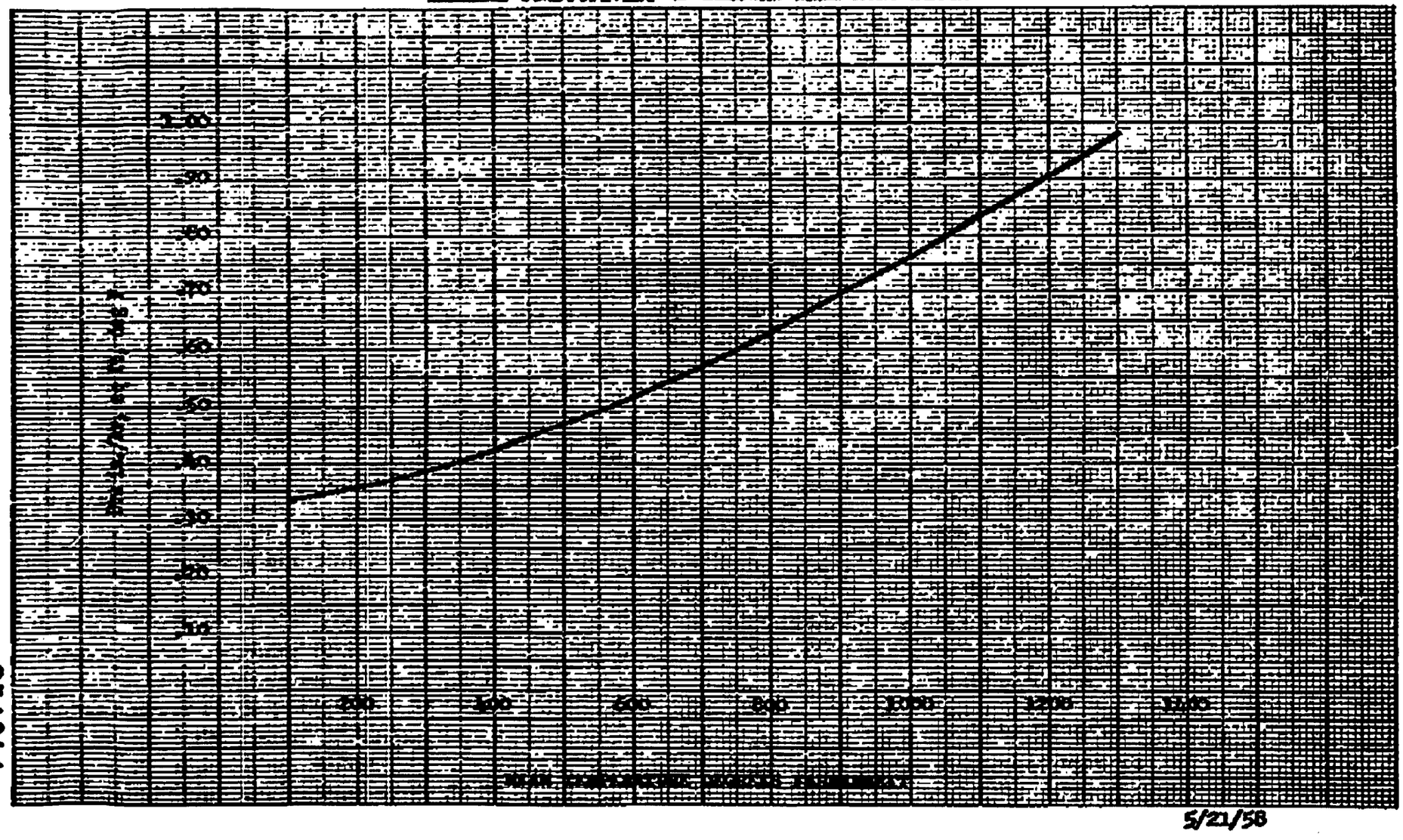
THERMAL CONDUCTIVITY OF BALDWIN-HILL MONO-BLOCK



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HEAT LOSS: Btu per Hr, Sq Ft
100
200
300
400
TEMPERATURE OF HOT FACE - DEGREES FAHRENHEIT
800
1000
1200
1400
1600
1800
TEMPERATURE OF COOL SURFACE - DEGREES FAHRENHEIT
220
200
180
160
140
120
100
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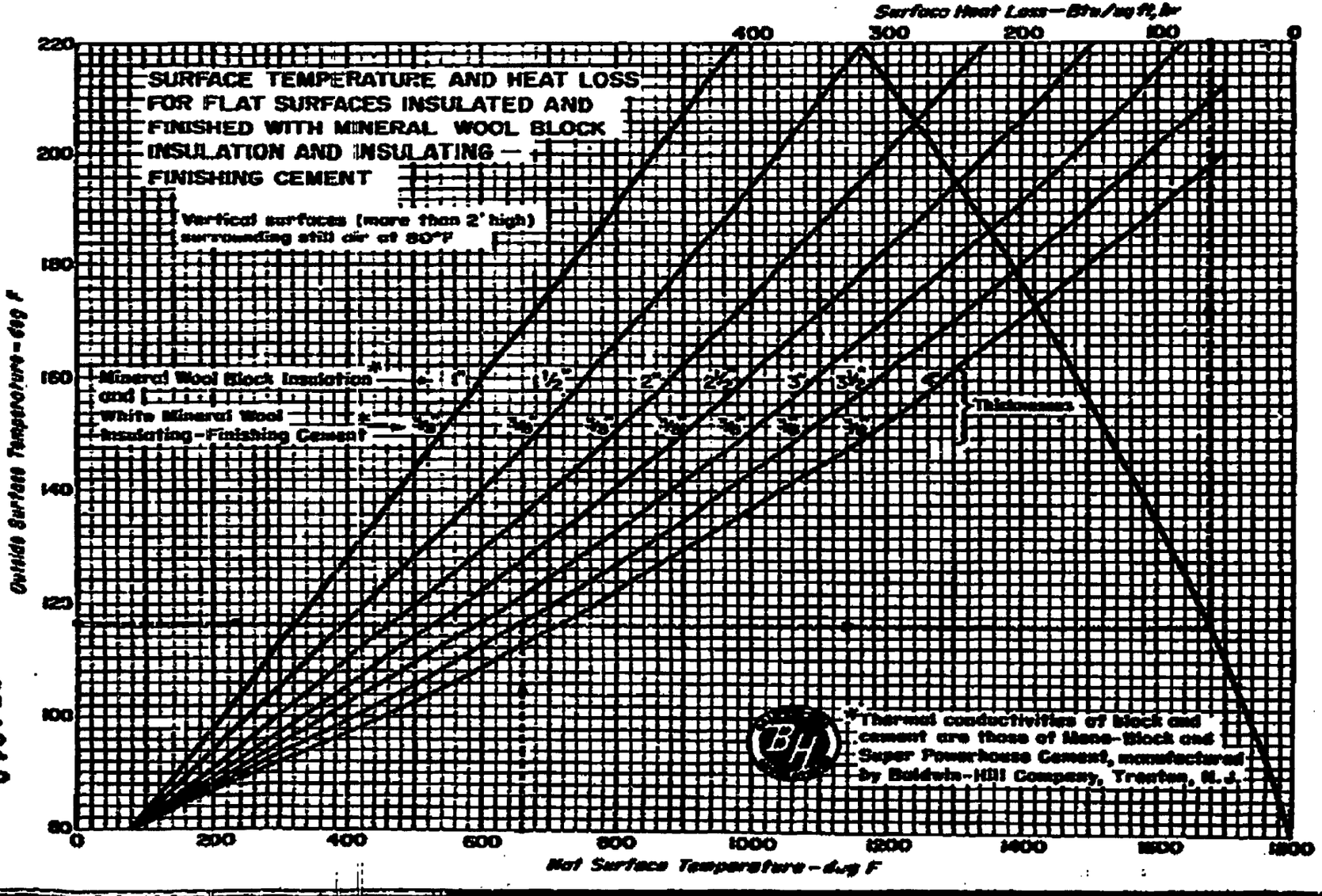
Surface Heat Loss—Btu/sq ft, hr
400
300
200
100
0
220
200
180
160
140
120
100
80
SURFACE TEMPERATURE AND HEAT LOSS FOR FLAT SURFACES INSULATED AND FINISHED WITH MINERAL WOOL BLOCK INSULATION AND INSULATING — FINISHING CEMENT
Vertical surfaces (more than 2' high) surrounding still air at 80°F
Outside Surface Temperature—deg F
Mineral Wool Block Insulation* and White Mineral Wool Insulating-Finishing Cement*
1"
1½"
2"
2½"
3"
3½"
4"
Thickness
0
200
400
600
800
1000
1200
1400
1600
1800
Hot Surface Temperature—deg F
*Thermal conductivities of block and cement are those of Mono-Block and Super Powerhouse Cement, manufactured by Baldwin-Hill Company, Trenton, N.J.

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