PLAINTIFF'S
EXHIBIT
KN-397

BALDWIN-HILL COMPANY, TRENTON 2, NEW JERSEY

DATA SHEET

Product: Duct Insulation, Plain

Description: Semi-rigid felt panels of spun mineral wool with phenolic resin binder, for insulation of heating and air-conditioning ducts, or similar large flat or slightly curved surfaces.

Uses: For heated surfaces (Use Vapor-Barrier Duct Insulation for cooled air ducts) at temperatures up to 450F, especially heating and ventilating ducts in schools, stores, offices and commercial buildings.

Features: Low thermal conductivity, light weight. Incombustible (see Underwriter's listing) - Water-resistant, easy to cut and fit.

Technical Data: Temperature limit, maximum.....450F

Sizes - Length - 48 inches
Width - 24 inches
Thickness - 3/4, 1, 1-1/2 and 2 inches

Density - - 6-7 lb./cu.ft.

Thermal Conductivity - "K" = 0.24 at 75F mean temp.

Underwriter's Laboratories Listing - "Building Units"

Fire Hazard Classification

Flame Spread..... 15-20
Fuel Contributed..... 15-30
Smoke Developed..... 0-20

Specifications: Federal Specification HH-I-542 Type II
Federal Specification HH-I-562 Type 1, Class 2, (except for breaking load requirement)
Commercial Standard CS 105, Felt
Commercial Standard CS 117, Felt
ASTM C 264-55T
ASTM C 182-56T

Packaging: Corrugated board fiber boxes holding 96 board feet each.

On customer's request, in paper-wrapped bundles, each containing 48 board feet.

354658

BALDWIN-HILL COMPANY, TRENTON 2, NEW JERSEY

DATA SHEET

Product: Duct Insulation, Vapor-Barrier

Description: Semi-rigid felt panels of Spun Mineral Wool and binder, with factory-applied vapor-barrier facing on one side, consisting of asphalt and black Kraft paper.

Uses: For insulation of cooled air ducts for ventilating and air-conditioning (may be used where duct temperature will not exceed 150F) in schools, stores, offices and commercial buildings.

On application, all joints and openings must be sealed to form a continuous vapor-barrier on the warm side.

Features: Low thermal conductivity - - lightweight
Water and vapor-resistant
No separate vapor-barrier required

Technical Data: Temperature Limit, maximum----------150F

Size:

Length	-	48 inches
Width	-	24 inches
Thicknesses	-	1, 1-1/2 and 2 inch

Density:

Nominal 7 pounds per cubic foot

Thermal Conductivity:

"K" = 0.24 at 75F mean temperature

Permeance to Water Vapor

Less than .25 perms under ASTM E-96-51T - Procedure "A".

Specifications: No specifications cover vapor-barrier product specifically.

Base Felt covered by same specifications as Plain Duct Insulation.

Packaging: Paper-wrapped bundles (Each containing 48 board feet)

* 354659

BALDWIN-HILL COMPANY, TRENTON 2, NEW JERSEY

DATA SHEET

Product: Duct Insulation, Foil Faced. (Non-Combustible)

Description: Semi-rigid felt panels of Spun Mineral Wool and binder, having one side faced with .0025 embossed aluminum foil, securely attached with a non-flammable adhesive.

Uses: For insulating rectangular, metal ducts for ventilating, air-conditioning and cooling systems in schools, stores, office buildings, factories, apartments, etc., where noncombustible finish is required.

Features: Fire-resistant due to incombustible facing combined with low fire-hazard of Plain Duct Insulation.

Low thermal conductivity - light weight.

Water and vapor-resistant.

Excellent appearance.

Technical Data: Temperature Limit
Maximum, when applied to exterior of ducts ... 450° F.

Size - Length ..... 48 inches
Width ..... 24 inches
Thickness ..... 1, 1-1/2, 2 inches

Density - Nominal 7 pounds per cubic foot

Thermal Conductivity - "K" - 0.24 at 75°F mean temperature

Permeance to Water-Vapor
Less than .25 perms under ASTM E-96-53T Method "C"

Specifications: Foil facing is an addition to Plain Duct Insulation and meets the same requirements. (Section D-3, Page 5)

Packaging: Corrugated Board Fiber Boxes, each containing 96 board feet.

- 354660

BALDWIN-HILL COMPANY, TRENTON 2, NEW JERSEY

DATA SHEET

Product: Duct Insulation, Foil-Faced. (Vapor-Barrier)

Description: Semi-rigid felt panels, of spun mineral wool and binder, having one side faced with scrim-reinforced .001" thick aluminum foil laminated with 50 lb. flame-proofed Kraft paper using a flame-resistant adhesive.

Uses: For insulating rectangular, metal ducts for ventilating, air-conditioning and cooling systems in schools, stores, office buildings, factories, apartments, etc.

Features: Low thermal conductivity - light weight.

Water and vapor-resistant.

Excellent appearance.

Technical Data:

Temperature Limit, maximum			250° F
Sizes -	Length		48 inches
	Width		24 inches
	Thicknesses		1, 1-1/2, 2 inches

Density - Nominal 7 pounds per cubic foot.

Thermal Conductivity - "K" - 0.24 at 75° F mean Temp.

Permeance to Water-Vapor - Less than .25 perms under ASTM E-96-53T Method "C"

Specifications: Foil facing is an addition to Plain Duct Insulation and meets the same requirements.

Packaging: Corrugated board fiber boxes holding 96 board feet each.

354661

Date: March 1, 1959 Supersedes: December 1, 1958 Section D-3 Page: 6-B

BALDWIN-HILL COMPANY, TRENTON 2, NEW JERSEY

DATA SHEET

Product: Duct Insulation, Coated

Description: Semi-rigid felt panels, of spun mineral wool and binder, coated on one face with a white pigmented coating to prevent erosion and fiber entrainment when used inside ventilating and air-conditioning ducts.

Uses: For insulation and sound absorption in heating, ventilating and air-conditioning ducts. When used on the outside of ducts, the coating serves as a base for painting.

Features: Low thermal conductivity, light weight, sound-absorbent - Resistant to air erosion - Incombustible (See Underwriter's Listing) Water-resistant - easy to cut and fit.

Technical Data: Temperature limit; maximum----------250F

Sizes: Length - 48 inches
Width - 24 inches
Thicknesses - 3/4, 1, 1-1/2 and 2 inches.

Density: 6-7 lb./cu. ft.

Thermal Conductivity - "K" - 0.24 at 75F mean temp.

Underwriter's Laboratories Listing - Fire Hazard Classification:

"Building Units" - Flame Spread - 15 - 20
Fuel Contributed - 15 - 30
Smoke Developed - 0 - 20

Sound Absorption---------- Mounting No. 6

Coefficients at Listed Frequencies

125	250	500	1000	2000	4000	NRC
.32	.58	.78	.93	.95	.83	.80

Specifications: Federal Specification HH-I-542 Type II
Federal Specification HH-I-561 Type I, Class 2,
(except for breaking load requirement)
ASTM C 282-56T

Packaging: Corrugated board fiber boxes holding 96 board feet each.

354602

BALDWIN-HILL COMPANY, TRENTON 2, NEW JERSEY

DATA SHEET

Product: Duct Insulation, Semi-rigid

Description: Semi-rigid felt panels of spun mineral wool with phenolic resin binder, for insulation of heating and air-conditioning ducts, or similar large flat or slightly curved surfaces.

Uses: For heated surfaces (Use Vapor-Barrier Duct Insulation for cooled air ducts) at temperatures up to 450F, especially heating and ventilating ducts in schools, stores, offices and commercial buildings.

Features: Low thermal conductivity, light weight. Incombustible (see Underwriter's listing) - Water-resistant, easy to cut and fit.

Technical Data: Temperature limit, maximum----------450F

Sizes - Length - 48 inches
Width - 24 inches
Thickness - 3/4, 1, 1-1/2 and 2 inches

Density - - 6-7 lb./cu. ft.

Thermal Conductivity - "K" =0.24 at 75F mean temp.

Underwriter's Laboratories Listing - "Building Units"

Fire Hazard Classification

Flame Spread---------- 15-20
Fuel Contributed---------- 15-30
Smoke Developed---------- 0-20

Specifications: Federal Specification HH-I-542 Type II
Federal Specification HH-I-562 Type I, Class 2, (except for breaking load requirement)
Commercial Standard CS 105, Felt
Commercial Standard CS 117, Felt
ASTM C 264-55T
ASTM C 302-56T

Packaging: Corrugated board fiber boxes holding 96 board feet each.

On customer's request, in paper-wrapped bundles, each containing 48 board feet.

450086

BALDWIN-HILL COMPANY, TRENTON 2, NEW JERSEY

DATA SHEET

Product: Duct Insulation, Vapor-Barrier

Description: Semi-rigid felt panels of Spun Mineral Wool and binder, with factory-applied vapor-barrier facing on one side, consisting of asphalt and black Kraft paper.

Uses: For insulation of cooled air ducts for ventilating and air-conditioning (may be used where duct temperature will not exceed 150F) in schools, stores, offices and commercial buildings.

On application, all joints and openings must be sealed to form a continuous vapor-barrier on the warm side.

Features: Low thermal conductivity - - lightweight
Water and vapor-resistant
No separate vapor-barrier required

Technical Data: Temperature Limit, maximum----------150F

Size:

Length	-	48 inches
Width	-	24 inches
Thicknesses	-	3/4, 1, 1-1/2 and 2 inch

Density:

7 - 8 pounds per cubic foot

Thermal Conductivity:

"K" - 0.26 at 75F mean temperature

Permeance to Water Vapor

Less than .25 perms under ASTM E-96-53T - Procedure "A".

Specifications: No specifications cover vapor-barrier product specifically.

Base Felt covered by same specifications as Plain Duct Insulation.

Packaging: Paper-wrapped bundles (Each containing 48 board feet)

450087

BALDWIN-HILL COMPANY, TRENTON 9, NEW JERSEY

DATA SHEET

Product: Duct Insulation, Foil-Faced.

Description: Semi-rigid felt panels of Spun Mineral Wool and binder, having one side faced with .0025 embossed aluminum foil, securely attached with a non-flammable adhesive.

Uses: For insulating rectangular, metal ducts for ventilating, air-conditioning and cooling systems in schools, stores, office buildings, factories, apartments, etc., where non combustible finish is required.

Features: Fire-resistant due to incombustible facing combined with low fire-hazard of Plain Duct Insulation. Acceptable in "fireproof" buildings.

Low thermal conductivity - light weight.

Water and vapor-resistant.

Excellent appearance.

Technical Data: Temperature Limit, maximum.....250°F.

Size - Length - 48 inches
Width - 24 inches,
Thickness - 1, 1-1/2, 2 inches

Density - 6-7 pounds per cubic foot

Thermal Conductivity:

"K" .....0.24 at 75 F mean temperature

Permeance to Water-Vapor

Less than .25 perms under ASTM E-96-53T Method "C"

Specifications: No Military, Federal or ASTM specifications covering foil-faced products, except as options on Plain Duct Insulation.

Packaging: Corrugated Board Fiber Boxes, each containing 96 board feet.

450088

BALDWIN-HILL COMPANY, TRENTON 2, NEW JERSEY

DATA SHEET

Product: Duct Insulation, Foil-Faced.

Description: Semi-rigid felt panels, of spun mineral wool and binder, having one side faced with scrim-reinforced .001" thick aluminum foil laminated with 50 lb. flame-proofed Kraft paper using a flame-resistant adhesive.

Uses: For insulating rectangular, metal ducts for ventilating, air-conditioning and cooling systems in schools, stores, office buildings, factories, apartments, etc.

Features: Low thermal conductivity - light weight.

Water and vapor-resistant.

Excellent appearance.

Technical Data:

Temperature Limit, maximum			250° F
Sizes -	Length		48 inches
	Width		24 inches
	Thicknesses		1, 1-1/2, 2 inches
Density -	6 - 7 pounds per cubic foot.		
Thermal Conductivity - "K" -	0.24 at 75° F mean Temp.		
Permeance to Water-Vapor	Less than .25 perms under ASTM E-96-53T Method "C"		

Specifications: Foil facing is an addition to Plain Duct Insulation and meets the same requirements. (Section D-3, Page 5)

Packaging: Corrugated board fiber boxes holding 96 board feet each.

450088

BALDWIN-HILL COMPANY, TRENTON 2, NEW JERSEY

DATA SHEET

Product: Duct Insulation, Coated

Description: Semi-rigid felt panels, of spun mineral wool and binder, coated on one face with a white pigmented coating to prevent erosion and fiber entrainment when used inside ventilating and air-conditioning ducts.

Uses: For insulation and sound absorption in heating, ventilating and air-conditioning ducts. When used on the outside of ducts, the coating serves as a base for painting.

Features: Low thermal conductivity, light weight, sound-absorbent - Resistant to air erosion - Incombustible (See Underwriter's Listing) Water-resistant - easy to cut and fit.

Technical Data: Temperature limit; maximum.....450F

Sizes: Length - 48 inches
Width - 24 inches
Thicknesses - 3/4, 1, 1-1/2 and 2 inches.

Density: 6-7 lb./cu. ft.

Thermal Conductivity - "K" - 0.24 at 75F mean temp.

Underwriter's Laboratories Listing - Fire Hazard Classification:

"Building Units" -	Flame Spread -	15 - 20
	Fuel Contributed -	15 - 30
	Smoke Developed -	0 - 20

Sound Absorption..... Mounting No. 6

Coefficients at Listed Frequencies

125	250	500	1000	2000	4000	NRC
.32	.58	.70	.93	.95	.83	.80

Specifications: Federal Specification HH-I-542 Type II
Federal Specification HH-I-562 Type I, Class 2, (except for breaking load requirement)
ASTM C 388-56T

Packaging: Corrugated board fiber boxes holding 96 board feet each.

4500101