

Bird Reef Insulation is Produced in
the Phillipsdale, Rhode Island Plant of

PLAINTIFF'S EXHIBIT

BIR-1170

**BIRD
& SON**
QUALITY PRODUCTS SINCE 1929

BIRD

ROOF

INSULATION

AVAILABLE IN VARIOUS TYPES. ONLY

BIRD 022009

Maximum Insulation and Moisture Resistance



Asphalt Impregnated Fiberboard Roof Insulation

HERE'S WHY YOU SHOULD SPECIFY BIRD ROOF INSULATION

FACTS ABOUT BIRD ASPHALT IMPREGNATED FIBERBOARD ROOF INSULATION

"C" Values

"C" Values*	Thickness Bird Roof Insulation (Nom.)
.36	1"
.24	1 1/2"
.19	2"
.15	2 1/2"

Intermediate "C" value thicknesses available on special orders.

* "C" value means the thermal conductivity of a specific thickness of a specific material.

- * Specially treated and engineered rigid wood fiber insulation.
- * Available in thicknesses of 1/2", 1", 1 1/2", 2", 2 1/2", and 3" thicknesses greater than 1/2" are manufactured by laminating 1/2" thicknesses.
- * Manufactured in a size of 24" x 48" for ease in handling.
- * Meets all requirements of Federal Specification LLL-535 (Class C).
- * Meets specifications for Commercial standard (CS42 49) of U.S. Dept. of Commerce and of A. S. T. M. Spec. C208 571.
- * Meets Factory Mutual requirements for Class I construction when used with approved adhesives or approved adhesives and vapor barriers.
- * Manufactured to provide exceptional strength to permit normal traffic during application of the roofing without damage to the insulation.
- * Manufactured and processed to offer the highest insulating value to reduce fuel costs and costs of operating air conditioning units.
- * Manufactured with special sizing to provide a smooth surface to permit a ready bond with roofing asphalt while remaining highly-resistant to the absorption of the roofing asphalt.

"U" Values

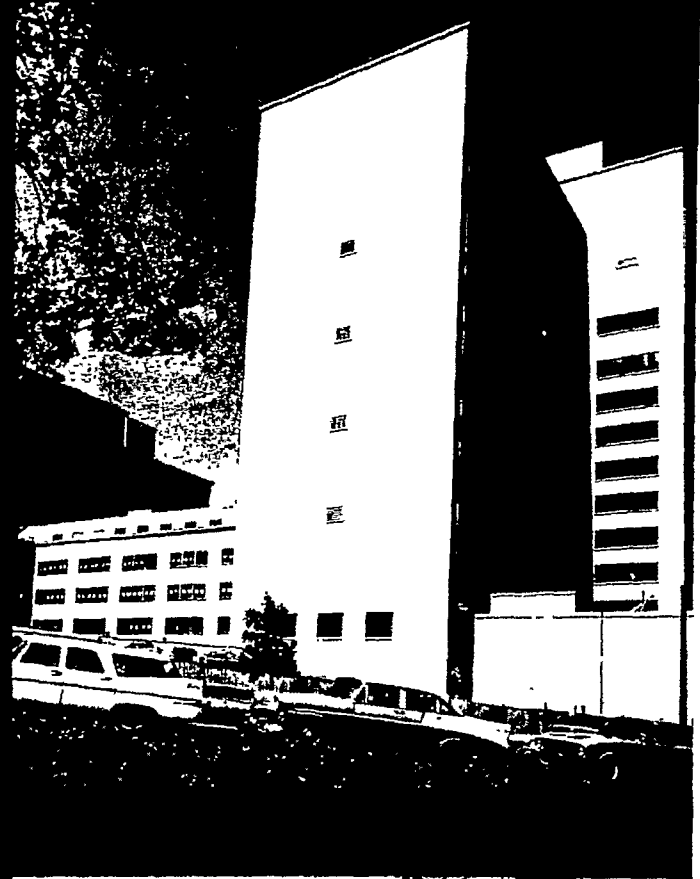
Heat Transfer Through Roof Decks. Coefficients of Transmission (U) of Flat Roofs Covered with Built-Up Roofing. No Ceiling — Underside of Roof Exposed.

Type of Deck	Thickness of Deck Inches	Thickness of Bird Asphalt Impregnated Roof Insulation						
		0	1/2"	1"	1 1/2"	2"	2 1/2"	3"
Metal Deck	—	.90	.40	.26	.19	.16	.13	.11
Wood Deck	Nom. 1"	.48	.29	.21	.16	.14	.11	.10
	Nom. 2"	.32	.22	.17	.14	.12	.10	.09
	Nom. 3"	.23	.17	.14	.12	.10	.09	.08
Poured Concrete	2"	.79	.36	.25	.18	.15	.13	.10
	4"	.70	.35	.24	.18	.15	.12	.10
	6"	.63	.34	.23	.17	.15	.12	.10
Poured Gypsum Over 1/2" Gypsum Form Board	2"	.36	.24	.18	.14	.12	.11	.09
Gypsum Plank	2"	.51	.30	.21	.16	.14	.12	.10

Bird Roof Insulation and Accessories Packaging Data

Size	Pcs per Bdl.	Sq. Ft per Bdl.	Wgt. per Bdl.	Cant Strips	Size	Pcs./Bdl.	Lin. Ft./Bdl.	Wgt./Bdl.
1 1/2"	14	112'	73 lbs.	Face	5 1/2"	12	96'	80 lbs
1"	7	56'	78 lbs	Length	96"			
1 1/2"	5	40'	85 lbs	Face	4"	32	128'	66 lbs
2"	4	32'	92 lbs	Length	48"			
2 1/2"	3	24'	86 lbs.					
				Tapered Edge Strips	Pcs./Bdl.	Lin. Ft./Bdl.	Wgt./Bdl.	
				1 1/2" - 1/4"				
				Face	12			
				Length	48	12	48	55 lbs.

MAXIMUM INSULATION AT NO PREMIUM COST



general specifications

Bird Roof Insulation is specially treated to withstand dampness and the effects of a flash rain storm. Every effort should be made to keep it dry before, during, and after application. Apply only as much insulation board as can be properly covered with finished roofing the same day.

Insulation boards shall be laid in parallel courses with end joints of each course breaking with those of adjoining courses. Where two layers of insulation are specified, the boards of the second layer shall be laid parallel with those of the first layer. Second layer joints shall break with those of the first layer. Adjoining edges of boards shall be brought to a moderate contact without being forced into place.

Where the roof meets vertical surfaces, such as parapets, penthouses, etc., boards shall be cut in a neat, workmanlike manner to insure proper contact without forcing.

Cant strips shall be provided wherever roof surfaces meet vertical surfaces. These cant strips shall be set on top of roof insulation and securely fastened in place.

nailing strips

Wood nailers, 4 inches wide, the same thickness as the insulation shall be provided at all roof edges and openings to receive nails for holding the metal flanges of roof flashings.

when to use vapor barriers

Vapor barriers are recommended beneath the insulation on all heated buildings where the average January weather is below 45° F, and on all buildings in which excessive moisture conditions prevail, such as paper mills, laundries, textile mills, etc.

water cut-offs

At the end of each day's work, all exposed edges of the roof insulation shall be protected by temporary water cut-offs. These cut-offs shall be removed when work is resumed.

nailable roof decks

When applied over a vapor barrier, on nailable decks, the Bird rigid fibre board insulation shall be laid in a hot mopping of Steep Roofing Asphalt. If slope of roof deck is over 1 inch the insulation shall be fastened by nailing as well as mopping.

steel roof decks

On steel roof decks the vapor barrier shall be mapped to the deck with hot steep roofing asphalt and the insulation shall be laid over the vapor barrier in hot steep roofing asphalt. When the deck has a slope of 1 inch or more per foot each insulation panel shall be secured to the steel deck with acceptable vapor-proof mechanical fasteners, in addition to the mopping of asphalt.

poured concrete decks

The deck shall be coated with Bird Asphalt Primer over which the roof insulation shall be laid in a solid mopping of steep roofing asphalt. If a vapor barrier is required it shall be laid over the Primer in a solid mopping of steep roofing asphalt followed by the insulation also laid in a solid mopping. On roof slopes of 1 inch or more wood nailing strips shall be provided in the deck when the deck does not permit nailing.

precast gypsum or concrete decks

Joints between slabs shall be caulked. Coat each slab with Primer to within 4 inches of joints. The insulation or vapor barrier shall be laid in hot steep roofing asphalt holding moppings back 4 inches from all joints. The insulation shall be laid over the vapor barrier in a solid mopping of steep roofing asphalt. On roof slopes of 1 inch or more the deck shall be a nailable type or wood nailing strips shall be provided.

**BIRD ROOF INSULATION AVAILABLE
IN EASTERN U.S. ONLY**

Perth Amboy, N.J.
Shreveport, La.



Chicago, Ill.
Charleston, S.C.

42463