

Kimberly-Clark Corporation

Neenah, Wisconsin

KIMSUL A PRODUCT OF
Kimberly-Clark

INSULATION



NEW YORK 17, N. Y., 250 PARK AVENUE
ATLANTA 3, GEORGIA, 900 PEACHTREE ST., N. E.
CHICAGO 3, ILLINOIS, 8 S. MICHIGAN AVENUE
SAN FRANCISCO 4, CALIF., 155 SANSOME STREET

Reflective and Pyrogard



KIMSUL* is unique among building insulations and acoustical materials because it is made of many individual plies—each one a continuous separate layer of soft, clean, creped, asphalt-treated cellulose fibers. Each ply is controlled carefully in manufacture both as to thickness and crepe structure. The result is

a flexible blanket, inherently uniform in thickness—an important factor in a thermal or sound insulating material. The Kimsul plies and cover of the creped Pyrogard* or creped Reflective Vaporseal are held together with rows of strong stitching that prevent sifting and settling. No heat-leaking thin spots, no money-wasting thick spots in the Kimsul blanket. Reduced to $\frac{1}{4}$ its installed volume for easier shipment, handling and storage, the Kimsul blanket is expanded in installation. The stitching controls expansion to the density of a high degree of efficiency.

KIMSUL IS NOW MADE IN THREE TYPES—KIMSUL 48 SHEATHING BLANKET—PYROGARD KIMSUL REFLECTIVE KIMSUL.

Kimsul 48—Sheathing Blanket is Reflective Kimsul Insulation manufactured by the Kimberly-Clark Corporation to a width of over 48 inches, pre-cut to eight foot lengths which makes it possible to build a more heat-tight, air-tight and vapor-tight dwelling wall at lower cost than ever before.

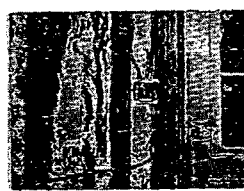
Kimsul "48" Sheathing Blanket retains the recognized insulating qualities of chemically treated wood fibres arranged in multi-ply layers of air cells that are well known in Kimsul insulation material. It is a recognized fact that this construction of an insulating material produces outstanding results.

Sheathing Blanket's wood fibre construction, extremely tough, three-ply, heat reflective, vapor sealing cover give the American home building industry a material which minimizes the problems of vapor and heat transmission which have always been most difficult to solve economically.

SOME FEATURES OF KIMSUL 48 SHEATHING BLANKET



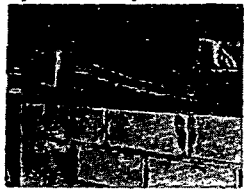
Positive insulation in close framing areas. No heat loss or cold air leaks in areas that couldn't be sealed before Kimsul "48".



Positive insulation around electrical receptacles and behind conduit. Repairs and replacements of these items do not damage the insulating material.



Complete insulation between the cold exterior wall and metal ductwork. Minimizes heating expense... gives greater comfort.



Positive seal of exposed sub-floor ends. Eliminates cold drafts and heat losses.

* T. M. Reg. U. S. Pat. Off.

Pyrogard and Reflected KIMSUL*

Kimsul is also available for all conventional ceiling, wall, and floor construction in Pyrogard and Reflective types. . . The differences in the two types are: Reflective Kimsul has a cover of aluminum foil that acts both as a vapor barrier to shut out condensation, and as a highly efficient reflective surface to turn back radiant heat. Reflective Kimsul has strong reflective tacking flanges for easy, secure attachment to framing. For heat flow downward, Reflective Kimsul provides additional insulating value. Pyrogard Kimsul has the fire-resistant cover.

Fire-Resistant—Special permanent chemical treatment makes Kimsul resist fire. **Pyrogard* Fire-Resistant Cover**—(safety feature of Pyrogard Kimsul) resists flame-spread.

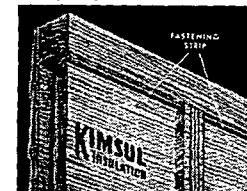
Creped Aluminum Foil Cover—(a feature of Reflective Kimsul) reflects heat, shuts out condensation.

Moisture-Resistant—asphalt treatment of each ply sheds water.

Resists Mold, Rot, Vermin—The materials of which Kimsul are made offer no subsistence to vermin or insects. Special chemical treatment resists mold and fungus.

"k" Factor—0.27 Btu/sq ft/hr/F.

Air Space—is a prime requisite. Use a vapor-permeable building paper under exterior finish. Ventilation in attics and floors should never be omitted. Use approximately one sq ft of louver area for 1000 sq ft of ceiling area.



Reflective KIMSUL insulates. Edge of fastening flange folded over face of framing completes the vapor seal.

RESISTANCE FACTORS AND PRODUCT SPECIFICATIONS

TYPE	GRADE	RESISTANCE VALUES (1)				APPROX. SQ FT PER ROLL STANDARD ROLL WIDTHS		APPROX NET WEIGHT PER 1,000 SQ FT	APPROX SHIPPING WEIGHT PER 1,000 SQ FT
		WALL Heat Flow Horizontal	CEILING Heat Flow Up	FLOOR Heat Flow Down	FLOOR Heat Flow Down				
						16, 20, 24 inch	48 inches		
Pyrogard Kimsul (Red Package)	Commercial Thick	1.85	1.85	1.85	1.85	200 Sq Ft	500 Sq Ft	68 Lbs	75 Lbs
	Standard Thick	3.70	3.70	3.70	3.70	200	500	120	126
	Double Thick	7.40	7.40	7.40	7.40	100	250	225	236
Reflective Kimsul (Grey Package)	Medium Thick	5.07	4.63	6.87	6.94	200	500	134	140
	Double Thick	7.80	7.40	9.64	9.70	100	250	195	205

APPROX. SQ FT PER ROLL OR CARTON ("48")

Kimsul "48"	Grade	Resistance	Approx. Sq Ft per Roll or Carton ("48")	Approx. Shipping Weight per Roll or Carton ("48")
"48" A	Commercial Thick	3.28	640 Sq Ft	75 Lbs
"48" B	Standard Thick	3.28	832	97
"48" C	Double Thick	3.28	1024	120

SOUND DEADENING AND ABSORPTION

Kimsul is effective both in deadening sound and absorbing it. It will absorb sound originated by diaphragmatic action, and sound leaks, as well as cushioning furring strip type construction. Kimsul prevents bridging or short circuiting of sound-resisting construction during erection. The average coefficients of sound absorption of Kimsul are:

Double Thick 75%
Standard Thick 55%
Commercial Thick 40%

Kimsul should be spaced from one to six inches from reflecting surface, with cover side away from sound source to obtain greater absorption at lower frequencies.

CONSTRUCTION DETAILS AND HEAT FLOW (U) FACTORS

KIMSUL GRADE	HEAT FLOW HORIZONTAL		HEAT FLOW UP		HEAT FLOW DOWN		HEAT FLOW DOWN	
	"U"	%	"U"	%	"U"	%	"U"	%
Uninsulated	.25	—	.69	—	.48	—	.28	—
Pyrogard Commercial Thick	.15	40	.25	64	.20	58	.10	43
Kimsul 48 Sheathing Blanket	.14	43	—	—	—	—	—	—
Pyrogard Standard Thick	.12	52	.17	75	.15	69	.12	57
Pyrogard Double Thick	.08	68	.10	85	.09	81	.08	71
Reflective Medium Thick	.10	60	.15	78	.10	79	.09	68
Reflective Double Thick	.08	68	.10	85	.08	83	.07	75

* "K" Factor (KIMSUL plies) 0.27* authority of J. C. Peebles, Armour Institute. (Does not include value of reflective cover.) * Factors expressed in Btu/hr/sq ft/°F. k, per inch of thickness; "U", per assembled section of construction. Calculation based on FHA Technical Circular No. 7, dated Jan. 1949. % = % of uninsulated heat flow stopped in the insulated construction. Resistance of Kimsul 48 is 3.28 authority F. B. Rowley, University of Minnesota. (Includes value of reflective cover w/o air space.)

* T. M. Reg. U. S. Pat. Off.