

THERMAL INSULATION DEFINITIONS & TABLES

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ENTER "X" VALUE

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||||| BTU: BRITISH THERMAL UNIT

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"K" FACTOR: THERMAL CONDUCTIVITY

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"C" FACTOR: CONDUCTANCE

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"R" VALUE: RESISTANCE

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"U" VALUE: TOTAL TRANSMISSION OF HEAT

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					R		
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	R:	14.3	=			14.3	
	K:	0.24	=		4.16666666666667		
	C:	0.24	=		4.16666666666667		
	U:	0.24	=		4.16666666666667		
	" EPS	3				12.51	

The quantity of heat necessary to raise the temperature of one pound of water by one fahrenheit degree.

K=BTU Per Sq. Ft. Per Hour Per Degree F Per Inch Of Thickness.
Expresses the quantity of heat (BTU's) which will flow through a one square foot section of 1" thickness of the material during one hour when there is a 1 degree F. difference in hot to cold side temperature.

C=BTU Per Sq. Ft. Per Hour Per Degree F From Surface To Surface.
An Alternate to "K", the measurement of heat flow across a product which does not have uniform characteristics (non-homogeneous) through its cross section.
C=K
Thickness

The "R" value (resistivity or resistance) for any given product is nothing more than the reciprocal of thar product's "K" or "C" factor and expresses the ability of that product to resist heat flow or transmission
R=1/C, R=Thickness/K, Rt=R1+R2+R3 ETC.
Rt=total thermal resistance of assembly

U=BTU Per Sq. Ft. Per Hour Per Degree F From Air To Air.
The "U" Value of a wall, roof, ceiling or floor is quite similar

to both "K" & "C" factors in that it is the measurement of the quantity of heat (BTU's) which will flow through a specific building section one foot square in area during one hour when there is a hot side to cold side temperature difference of 1 degree F.

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K		C		U		IN.EPS	
0.0699300699300699		0.0699300699300699		0.0699300699300699		3.429	
	0.24		0.24		0.0699300699300699	0.999200639488409	
	0.24		0.24		0.24	0.999200639488409	
	0.24		0.24		0.24	0.999200639488409	
0.0799360511590728		0.0799360511590728		0.0799360511590728		3	



