

Thermal Conductivity

PROPERTIES OF PVC AND OTHER MATERIALS			
Material	Density lb./cu. ft.	Thermal Conductivity (K), Btu/(hr.)(sq.ft.)(deg. F/in.)	Thermal Resistance (R) (1/K)
Polystyrene	1.6	0.23 to 0.30	3.8
Pressed wood pulp	17	0.356	2.81
Wallboard	43	0.48	2.08
PVC barrier	75	0.73	1.37
Wood (Fir)	37	0.76	1.30
Building Brick	87 to 100	2.6 to 5.2	0.2 to 0.4
Window glass	150	4 to 7	0.14 to 0.25

Thermal conductivity is the quantity of heat passing in "unit" time through a piece of "unit" area and "unit" thickness with a temperature differential of one degree between the faces. The values in this table were obtained using ASTM Test C-177.

Tensile Strength

Test	ASTM	Standard, Safety Orange and Personnel Doors	USDA	Low Temperature
Specular Transmission	D1746	80-90	70-80	70-80
Hardness Value	D2240 Inst.	79	75	69
Tensile Strength	D412	1900 psi	1700 psi	1600 psi
Ultimate Elongation	D412	300%	300%	325%
Tear Resistance	D1004	275#/in.	225#/in.	200#/in.
Stiffness	D747	0°F 8700 psi	0°F 4000 psi	0°F 2500 psi

All of TMI inc.'s flexible SAFET PVC strip and sheet products are designed and tested for both commercial and industrial applications. The materials represented in this catalog have been tested using American Standard Test Methods (ASTM).

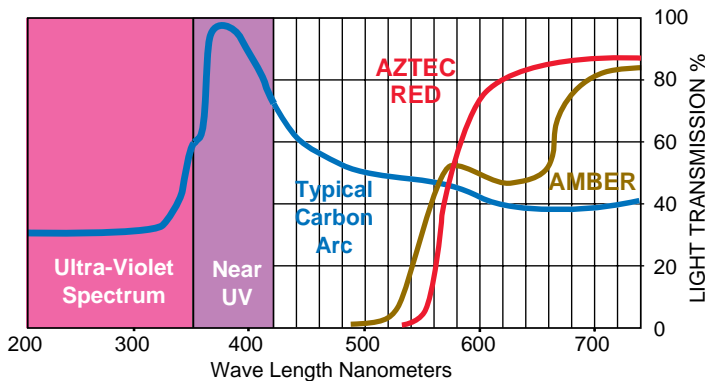
Noise Abatement

Freq. (Hz)	Transmission Loss in dB														Class
	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3100	
48" x .080" Sheet	8	11	9	12	13	16	17	18	21	21	24	25	26	28	20
48" x .160" Sheet	11	14	13	17	16	19	21	22	24	26	27	29	30	32	23
8" x .080" Strip	6	9	11	12	14	14	16	15	15	14	14	16	16	17	15
12" x .120" Strip	12	15	15	16	18	17	16	15	17	17	20	21	21	22	19

* Sound Transmission Class

Flexible PVC can reduce noise level from 10 db to 35 db depending on the thickness of the material. The figures in this table are the results from ASTM Test E-90 and clearly indicate the noise reduction potential of PVC material.

Ultraviolet Resistance



An ultraviolet inhibitor has been incorporated into the compound of our clear materials to reduce fading and yellowing. This inhibitor also improves the material's weatherability. Our Amber material is also formulated to deter the affects of ultraviolet and near ultraviolet light. This chart shows the correlation between a carbon arc and our Amber product.

Anti-Static

The Anti-Static performance at 73°F and 40% RM charge in kilo volts is as follows:

Initial	15 Seconds	30 Seconds	45 Seconds	60 Seconds	120 Seconds
2.00	0.30	0.15	.08	.03	.00

This material should be considered for "Clean Room" enclosures or high tech areas where static build-up might be a detriment.



Flame Resistance

Our flexible materials either meet or exceed the California Health and Safety Code requirements of the State Fire Marshal Code for flame retardation.