

DM, DE & DL SERIES DOORS - THERMAL & SOUND TRANSMISSION

“U” FACTOR

Measures the heat in BTU's * transmitted through one square foot, in one hour for each degree Fahrenheit difference in temperature between the air on each side. Thus, the lower the “U” factor, the better the insulating properties of the door. All “U” factors given in chart apply to the central panel area.

SOUND TRANSMISSION CLASS (S.T.C.)

Was derived graphically from the transmission loss measurement over a nine frequency range by an independent testing laboratory. The higher the class rating, the better the sound deadening properties of the door.

The results shown below for Republic doors are the results of actual tests conducted by independent testing laboratories.

REPUBLIC STANDARD DOORS				
DOOR SERIES	DESCRIPTION	“U” FACTOR	SOUND TRANSMISSION CLASS	“R” FACTOR
DL/DM/DE-4	1-3/4” Full Flush With Paper Honeycomb core	0.34	38	2.94
DL/DM/DE-4 Insulated	1-3/4” Full Flush With Polystyrene Core	0.13	35	7.61
DL/DE-4 Insulated	1-3/4” Full Flush With Polyurethane Core	0.10	33	10.11
DL/DE-4 250 ⁰ Temp Rise Door	1-3/4” Full Flush With Gypsum Fiberboard Composite Core	0.26	38	3.85
COMPARATIVE DATA				
	Wood Hollow Core Door	-	21	
	Solid Wood Core Door	.51	21	1.96
	Acoustical Door	-	40+	

*BRITISH THERMAL UNIT (BTU) = the amount of heat required to increase the temperature of one pound of water one degree Fahrenheit.

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