

INSULATING VALUES FOR STEEL DOORS

A. THERMAL INSULATION

<u>DOOR CORE</u>	<u>U-FACTOR</u>	<u>R-VALUE</u>	<u>(RSI)</u>
Polyurethane	0.09	11.1	(1.9)
Polystyrene	0.15	6.6	(1.1)
Temperature Rise Rated	0.30	3.25	(0.6)
Honeycomb	0.40	2.5	(0.4)
Steel-stiffened (Fiberglass or anything else)	0.85	1.2	(0.2)
(Solid core wood door)	(0.45)	(2.2)	(0.4)

The lower the U-factor, or the higher the R-value, the better the insulating properties of the door.

B. ACOUSTICAL INSULATION

<u>DOOR CORE</u>	<u>STC* RATING</u>	
Polyurethane	34 }	
Polystyrene	34 }	Estimate only (not certified)
Honeycomb	32 }	
Steel-stiffened	24 }	
(Solid core wood door)	(26) }	
Temperature rise	34-35 }	

*STC = Sound Transmission Class.

The higher the STC rating, the better the sound-deadening characteristics of the door.