Sound Transmission Loss for Glass Series

Determining sound transmission class - The American Society for Testing and Materials (ASTM) has developed a sound transmission class, or STC rating, in which a single number rating is used for describing the sound isolation performance of a glass material. This number rating is derived from individual transmission losses at specified test frequencies (ASTM E-90; ASTM E-413). The higher the STC values, the greater the noise reduction.

Acoustical Performance of Glass Fabrications

	OVERALL THICKNESS		INSIDE	CONSTRUCTION SPACE	OUTSIDE	STC VALUE
	IN.	MM.				
Laminated Glass	1/4"	7.24	1/8"	0.030" PVB	1/8"	35
	3/8"	9.53	1/4"	0.030" PVB	1/8"	36
	3/8"	10.5	1/4"	0.060" PVB	1/8"	37
	1/2"	12.1	1/4"	0.030" PVB	1/4"	38
	9/16"	12.9	1/4"	0.060" PVB	1/4"	39
	5/8"	16.2	3/8"	0.030" PVB	1/4"	40
	3/4"	19.9	1/2"	0.060" PVB	1/4"	41
Laminated - Insulating Glass	1"	26.1	1/4" Laminated	1/2" Airspace	1/4"	39
	15/16"	24.6	1/4" Laminated	1/2" Airspace	3/16"	39
	1 1/8"	29.3	3/8" Laminated	1/2" Airspace	1/4"	40
	1 7/16"	37.3	1/4" Laminated	1" Airspace	3/16"	42
Double Laminated Insulating Glass	1"	27.9	1/4" Laminated	1/2" Airspace	1/4" Laminated	42
	1 3/4"	45.9	1/2" Laminated	1" Airspace	5/16" Laminated	46
Non Laminated Insulating Glass	1/2"	14.5	1/8"	1/4" Airspace	1/8"	28
	1"	27.9	1/4"	1/2" Airspace	1/4"	35
	1 1/2"	40.6	1/4"	1" Airspace	1/4"	37
Monolithic Glass	1/4"	5.59	1/4"	-	-	31
	1/2"	12.4	1/2"	-	-	36