

SOUND CONTROL

Figure 6

Acoustical Performance of Glass and Wall Constructions*

	Overall Thickness	Inside	Construction Space	Outside	STC Value
Laminated Glass ¹	1/4" (7.24 mm)	1/8"	0.030" Saflex®	1/8"	35
	3/8" (9.53 mm)	1/4"	0.030" Saflex	1/8"	36
	3/8" (10.5 mm)	1/4"	0.060" Saflex	1/8"	37
	1/2" (12.1 mm)	1/4"	0.030" Saflex	1/4"	38
	1/2" (12.9 mm)	1/4"	0.060" Saflex	1/4"	39
	5/8" (16.2 mm)	3/8"	0.030" Saflex	1/4"	40
	3/4" (19.9 mm)	1/2"	0.060" Saflex	1/4"	41
Laminated- Insulating Glass ²	1" (26.1 mm)	1/4" laminate	1/2", air	1/4"	39
	1 5/16" (24.6 mm)	1/4" laminate	1/2", air	3/16"	39
	1 1/8" (29.3 mm)	3/8" laminate	1/2", air	1/4"	40
	1 7/16" (37.3 mm)	1/4" laminate	1", air	3/16"	42
	2 7/16" (62.7 mm)	1/4" laminate	2", air	3/16"	45
	4 1/2" (113.5 mm)	1/4" laminate	4", air	3/16"	48
	4 5/8" (119.1 mm)	1/2" laminate	4", air	3/16"	49
	1" (27.9 mm)	1/4" laminate	1/2", air	1/4" laminate	42
	4 3/4" (120.7 mm)	1/2" laminate	4", air	1/4" laminate	51
Airsaced Glass ¹	1/2" (14.5 mm)	1/8"	1/4", air	1/8"	28
	1" (27.9 mm)	1/4"	1/2", air	1/4"	35
	1 1/2" (40.6 mm)	1/4"	1", air	1/4"	37
Monolithic Glass ¹	1/4" (5.59 mm)	1/4"	—	—	31
	1/2" (12.4 mm)	1/2"	—	—	36
Walls ¹	1/2" Gypsum board (both sides) screwed to 3 5/8" metal studs				36
	4" Face brick, mortared together				45
	6" Lightweight concrete block, two coats of paint each side				46
	4" Hollow lightweight masonry block plastered on both sides				48
	8" Dense concrete block wall, two coats of paint each side				52
	Double layer gypsum wall board, both sides, 3 5/8" metal studs, 3" sound attenuation blanket				54

TYPICAL
I.G.U. MAKEUP

¹Tested under ASTM E90-83, panels caulked in place with wooden stops and glazing putty.

²Tested under ASTM E90-83, laminated outside pane consisted of either 1/8"-0.030" Saflex-1/8" (total 1/4" thick), 1/4"-0.030" Saflex-1/8" (total 3/8" thick), 1/4"-0.030" Saflex-1/4" (total 1/2" thick), or 1/4"-0.030" Saflex-1/2" (total 3/4" thick); panels caulked in place in single frame with wooden stops and glazing putty. Units with less than 1" airspace were factory sealed. All other units were constructed in place.

*See note under Figure 5.