

Calculated STC Ratings for Medium Weight Concrete Masonry Walls <sup>§</sup>					
Nominal Wall Thickness (inches)	Density	Hollow Units	Grout Filled	Sand Filled	Solid Units
4	105	44	46	46	46
	110	44	46	46	46
	115	44	47	46	46
	120	45	47	46	47
6	105	45	50	48	49
	110	45	50	49	49
	115	45	51	49	50
	120	45	51	49	50
8	105	46	54	51	52
	110	47	54	52	53
	115	47	55	52	53
	120	47	55	52	54
10	105	48	58	54	55
	110	48	58	54	56
	115	48	58	55	57
	120	49	59	55	57
12	105	49	62	57	59
	110	49	62	57	59
	115	49	62	58	60
	120	50	63	58	61

<sup>§</sup> Based on grout density of 140 lb/ft<sup>3</sup> and sand density of 90 lb/ft<sup>3</sup>. Percent solid thickness of units based on mold manufacturer's literature for typical units as follows: 4 in = 73.8% solid, 6 in = 55% solid, 8 in = 53% solid, 10 in = 51.7% solid, and 12 in = 48.7% solid. STC values for grout-filled and sand-filled units assume the materials completely fill all void areas in and around the units. STC values for solid units are based on bed and head joints solidly filled with mortar.

**Figure 8-51** STC ratings for medium weight concrete masonry walls. (Adapted from *The Masonry Society's Standard Method for Determining the Sound Transmission Class Rating for Masonry Walls, TMS 0302-00.*)

Calculated STC Ratings for Normal Weight Concrete Masonry Walls <sup>§</sup>					
Nominal Wall Thickness (inches)	Density	Hollow Units	Grout Filled	Sand Filled	Solid Units
4	125	45	47	46	47
	130	45	47	46	47
	135	45	47	47	47
	140	45	49	47	48
	145	46	48	47	48
	150	46	49	47	48
6	125	46	51	49	51
	130	46	51	49	51
	135	46	52	50	51
	140	46	52	50	52
	145	47	52	50	52
	150	47	52	50	53
8	125	47	55	52	54
	130	48	55	53	55
	135	48	56	53	55
	140	48	56	53	56
	145	49	56	54	56
	150	49	57	54	57
10	125	49	59	56	58
	130	49	60	56	59
	135	50	60	56	59
	140	50	60	57	60
	145	50	61	57	61
	150	51	61	57	61
12	125	50	63	59	62
	130	51	63	59	63
	135	51	64	59	63
	140	51	64	60	64
	145	52	65	60	65
	150	52	65	61	66

<sup>§</sup> Based on grout density of 140 lb/ft<sup>3</sup> and sand density of 90 lb/ft<sup>3</sup>. Percent solid thickness of units based on mold manufacturer's literature for typical units as follows: 4 in = 73.8% solid, 6 in = 55% solid, 8 in = 53% solid, 10 in = 51.7% solid, and 12 in = 48.7% solid. STC values for grout-filled and sand-filled units assume the materials completely fill all void areas in and around the units. STC values for solid units are based on bed and head joints solidly filled with mortar.

**Figure 8-52** STC ratings for normal weight concrete masonry walls. (Adapted from *The Masonry Society's Standard Method for Determining the Sound Transmission Class Rating for Masonry Walls, TMS 0302-00.*)