

TABLE B-2 Average Weight¹ of Concrete Masonry Units, pounds per unit²

Thickness of Units		Lightweight Units; 103 pcf ³					Medium Weight Units; 115 pcf ³					Normal Weight Units; 135 pcf ³				
		4"	6"	8"	10"	12"	4"	6"	8"	10"	12"	4"	6"	8"	10"	12"
Individual	4" high units	8	11	13	15	20	9	13	15	17	22	10	16	18	20	26
Block	8" high units	16	23	27	32	42	18	28	32	36	47	21	33	37	42	55

1 ASTM C90 classified masonry units as follows: Lightweight: Less than 105 pcf. Medium weight: 105 pcf to less than 125 pcf. Normal weight: 125 pcf or more.

2 To convert pound weight to kilogram weight, multiply the pounds by 0.454. To convert pounds force to newtons multiply the pounds by 4.448.

3 To convert pounds per cubic foot to kilogram per cubic metre, multiply pcf by 16.018.

TABLE B-3a Average Weight of Completed Wall,¹ pounds per square foot³ and Equivalent Solid Thickness, Inches³ weight of grout 140 pcf (2240 kg/m³)

Wall Thickness		Hollow Concrete Block												Hollow Clay Block 120 pcf			Equivalent Solid Thickness ² Inches ³			
		Light Weight 103 pcf				Medium Weight 115 pcf				Normal Weight 135 pcf										
		6"	8"	10"	12"	6"	8"	10"	12"	6"	8"	10"	12"	4"	6"	8"	6"	8"	10"	12"
Solid grouted wall		52	75	93	118	58	78	98	124	63	84	104	133	38	56	77	5.6	7.6	9.6	11.6
Vertical cores grouted at	16" o.c.	41	60	69	88	47	65	80	94	52	66	80	103	33	45	59	4.5	5.8	7.2	8.5
	24" o.c.	37	55	61	79	43	58	72	85	48	61	72	94	31	42	54	4.1	5.2	6.3	7.5
	32" o.c.	36	52	57	74	42	55	68	80	47	58	68	89	30	40	51	4.0	4.9	5.9	7.0
	40" o.c.	35	50	55	71	41	53	66	77	46	56	66	86	29	39	49	3.8	4.7	5.7	6.7
	48" o.c.	34	49	53	69	40	51	64	75	45	55	64	83	28	38	48	3.7	4.6	5.5	6.5
No grout in wall		26	33	36	47	32	36	41	53	37	42	47	62	25	30	35	3.4	4.0	4.7	5.5

1 The above table gives the average weights of completed walls of various thickness in pounds per square foot of wall face area. An average amount has been added into these values to include the weight of bond beams and reinforcing steel.

2 Equivalent solid thickness means the calculated thickness of the wall if there were not hollow cores, and is obtained by dividing the volume of solid material in the wall by the face area of the wall.

This Equivalent Solid Thickness (EST) is for the determination of area for structural design only, e.g. $f_c = P/(EST)b$. It is NOT to use to obtain fire ratings. Fire rating thickness is based either on equivalent solid thickness of ungrouted units only or solid grouted walls.

3 To convert pounds per square foot to kilopascals multiply the value psf by 0.0479. To convert inches to millimetres multiply inches by 25.4.

TABLE B-3b Average Weight of Completed Wall,¹ (pounds per square foot)²

weight of grout 105 pcf (1680 kg/m³)

Wall Thickness	Hollow Concrete Block												Hollow Clay Block 120 pcf		
	Light Weight 103 pcf				Medium Weight 115 pcf				Normal Weight 135 pcf						
	6"	8"	10"	12"	6"	8"	10"	12"	6"	8"	10"	12"	4"	6"	8"
Solid grouted wall	45	65	79	100	51	68	84	106	56	74	90	115	35	49	66
16" o.c.	37	51	61	78	43	54	66	84	48	60	72	93	31	39	49
24" o.c.	35	47	55	71	41	50	60	77	46	56	66	86	30	39	49
32" o.c.	33	45	52	67	39	48	57	73	44	54	63	82	29	37	47
40" o.c.	32	43	50	65	38	46	55	71	43	52	61	80	28	36	45
48" o.c.	31	42	49	63	37	45	54	69	42	51	60	78	27	35	44
No grout in wall	26	33	36	47	32	36	41	53	37	42	47	62	25	30	35

1 The above table gives the average weights of completed walls of various thickness in pounds per square foot of wall face area. An average amount has been added into these values to include the weight of bond beams and reinforcing steel.

2 To convert pounds per square foot to kilopascals multiply the value psf by 0.0479. To convert inches to millimetres multiply inches by 25.4.

TABLE B-4 Average Weight of Reinforced and Grouted Brick Walls (psf)¹ 10 psf per 1" thickness

Wall Thickness	Weight psf	Wall Thickness	Weight psf	Wall Thickness	Weight psf	Wall Thickness	Weight psf
8"	80	9"	90	10"	100	12"	120
8½"	85	9½"	95	11"	110	13"	130

1 To convert pounds per square foot to kilopascals multiply the value psf by 0.0479. To convert inches to millimetres multiply inches by 25.4.