

Design & specification considerations

BRICKWORK DIMENSIONS TABLES– Larger Formats

Brickwork dimensions should be used whenever possible at the design stage to minimise the need for cut bricks. All brickwork dimensions are then determined by one of 3 conditions.

1. Brick + 2 joints CO+ e.g. door and window openings
2. Brick + 1 joint CO brick panel with opposite return end
3. Brick only CO- brick piers or panels between openings

HORIZONTAL BRICKWORK DIMENSIONS

Table 1 440mm

Number of Bricks	CO + Joint	CO (Coordinating Size)	CO - Joint
1/2	235	225	215
1	460	450	440
1 1/2	685	675	665
2	910	900	890
2 1/2	1135	1125	1115
3	1360	1350	1340
3 1/2	1585	1575	1565
4	1810	1800	1790
4 1/2	2035	2025	2015
5	2260	2250	2240
5 1/2	2485	2475	2465
6	2710	2700	2690
6 1/2	2935	2925	2915
7	3160	3150	3140
7 1/2	3385	3375	3365
8	3610	3600	3590
8 1/2	3835	3825	3815
9	4060	4050	4040
9 1/2	4285	4275	4265
10	4510	4500	4490
10 1/2	4735	4725	4715
11	4960	4950	4940
11 1/2	5185	5175	5165
12	5410	5400	5390
12 1/2	5635	5625	5615
13	5860	5850	5840
13 1/2	6085	6075	6065
14	6310	6300	6290
14 1/2	6535	6525	6515
15	6760	6750	6740
15 1/2	6985	6975	6965
16	7210	7200	7190
16 1/2	7435	7425	7415
17	7660	7650	7640
17 1/2	7885	7875	7865
18	8110	8100	8090
18 1/2	8335	8325	8315
19	8560	8550	8540
19 1/2	8785	8775	8765
20	9010	9000	8990
20 1/2	9235	9225	9215
21	9460	9450	9440
21 1/2	9685	9675	9665
22	9910	9900	9890
22 1/2	10135	10125	10115
23	10360	10350	10340
23 1/2	10585	10575	10565
24	10810	10800	10790
24 1/2	11035	11025	11015
25	11260	11250	11240
25 1/2	11485	11475	11465
26	11710	11700	11690
26 1/2	11935	11925	11915
27	12160	12150	12140
27 1/2	12385	12375	12365
28	12610	12600	12590
28 1/2	12835	12825	12815
29	13060	13050	13040
29 1/2	13285	13275	13265
30	13510	13500	13490
30 1/2	13735	13725	13715
31	13960	13950	13940
31 1/2	14185	14175	14165
32	14410	14400	14390
32 1/2	14635	14625	14615
33	14860	14850	14840

Table 2 327.5mm

Number of Bricks	CO + Joint	CO (Coordinating Size)	CO - Joint
1/2	178.75	168.75	158.75
1	347.5	337.5	327.5
1 1/2	516.25	506.25	496.25
2	685	675	665
2 1/2	853.75	843.75	833.75
3	1022.5	1012.5	1002.5
3 1/2	1191.25	1181.25	1171.25
4	1360	1350	1340
4 1/2	1528.75	1518.75	1508.75
5	1697.5	1687.5	1677.5
5 1/2	1866.25	1856.25	1846.25
6	2035	2025	2015
6 1/2	2203.75	2193.75	2183.75
7	2372.5	2362.5	2352.5
7 1/2	2541.25	2531.25	2521.25
8	2710	2700	2690
8 1/2	2878.75	2868.75	2858.75
9	3047.5	3037.5	3027.5
9 1/2	3216.25	3206.25	3196.25
10	3385	3375	3365
10 1/2	3553.75	3543.75	3533.75
11	3722.5	3712.5	3702.5
11 1/2	3891.25	3881.25	3871.25
12	4060	4050	4040
12 1/2	4228.75	4218.75	4208.75
13	4397.5	4387.5	4377.5
13 1/2	4566.25	4556.25	4546.25
14	4735	4725	4715
14 1/2	4903.75	4893.75	4883.75
15	5072.5	5062.5	5052.5
15 1/2	5241.25	5231.25	5221.25
16	5410	5400	5390
16 1/2	5578.75	5568.75	5558.75
17	5747.5	5737.5	5727.5
17 1/2	5916.25	5906.25	5896.25
18	6085	6075	6065
18 1/2	6253.75	6243.75	6233.75
19	6422.5	6412.5	6402.5
19 1/2	6591.25	6581.25	6571.25
20	6760	6750	6740
20 1/2	6928.75	6918.75	6908.75
21	7097.5	7087.5	7077.5
21 1/2	7266.25	7256.25	7246.25
22	7435	7425	7415
22 1/2	7603.75	7593.75	7583.75
23	7772.5	7762.5	7752.5
23 1/2	7941.25	7931.25	7921.25
24	8110	8100	8090
24 1/2	8278.75	8268.75	8258.75
25	8447.5	8437.5	8427.5
25 1/2	8616.25	8606.25	8596.25
26	8785	8775	8765
26 1/2	8953.75	8943.75	8933.75
27	9122.5	9112.5	9102.5
27 1/2	9291.25	9281.25	9271.25
28	9460	9450	9440
28 1/2	9628.75	9618.75	9608.75
29	9797.5	9787.5	9777.5
29 1/2	9966.25	9956.25	9946.25
30	10135	10125	10115
30 1/2	10303.75	10293.75	10283.75
31	10472.5	10462.5	10452.5
31 1/2	10641.25	10631.25	10621.25
32	10810	10800	10790
32 1/2	10978.75	10968.75	10958.75
33	11147.5	11137.5	11127.5

Table 3 290mm

Number of Bricks	CO + Joint	CO (Coordinating Size)	CO - Joint
1/2	160	150	140
1	310	300	290
1 1/2	460	450	440
2	610	600	590
2 1/2	760	750	740
3	910	900	890
3 1/2	1060	1050	1040
4	1210	1200	1190
4 1/2	1360	1350	1340
5	1510	1500	1490
5 1/2	1660	1650	1640
6	1810	1800	1790
6 1/2	1960	1950	1940
7	2110	2100	2090
7 1/2	2260	2250	2240
8	2410	2400	2390
8 1/2	2560	2550	2540
9	2710	2700	2690
9 1/2	2860	2850	2840
10	3010	3000	2990
10 1/2	3160	3150	3140
11	3310	3300	3290
11 1/2	3460	3450	3440
12	3610	3600	3590
12 1/2	3760	3750	3740
13	3910	3900	3890
13 1/2	4060	4050	4040
14	4210	4200	4190
14 1/2	4360	4350	4340
15	4510	4500	4490
15 1/2	4660	4650	4640
16	4810	4800	4790
16 1/2	4960	4950	4940
17	5110	5100	5090
17 1/2	5260	5250	5240
18	5410	5400	5390
18 1/2	5560	5550	5540
19	5710	5700	5690
19 1/2	5860	5850	5840
20	6010	6000	5990
20 1/2	6160	6150	6140
21	6310	6300	6290
21 1/2	6460	6450	6440
22	6610	6600	6590
22 1/2	6760	6750	6740
23	6910	6900	6890
23 1/2	7060	7050	7040
24	7210	7200	7190
24 1/2	7360	7350	7340
25	7510	7500	7490
25 1/2	7660	7650	7640
26	7810	7800	7790
26 1/2	7960	7950	7940
27	8110	8100	8090
27 1/2	8260	8250	8240
28	8410	8400	8390
28 1/2	8560	8550	8540
29	8710	8700	8690
29 1/2	8860	8850	8840
30	9010	9000	8990
30 1/2	9160	9150	9140
31	9310	9300	9290
31 1/2	9460	9450	9440
32	9610	9600	9590
32 1/2	9760	9750	9740
33	9910	9900	9890

Design & specification considerations

Vertical brickwork courses for 50mm, 65mm, 140mm and 215mm including a nominal 10mm mortar joint.

Table 4 - Vertical Brickwork Courses Dimensions Table

using **50mm** bricks and 10mm mortar joints

Course + Joint	17	1020	34	2040	
1	60	18	1080	35	2100
2	120	19	1140	36	2160
3	180	20	1200	37	2220
4	240	21	1260	38	2280
5	300	22	1320	39	2340
6	360	23	1380	40	2400
7	420	24	1440	41	2460
8	480	25	1500	42	2520
9	540	26	1560	43	2580
10	600	27	1620	44	2640
11	660	28	1680	45	2700
12	720	29	1740	46	2760
13	780	30	1800	47	2820
14	840	31	1860	48	2880
15	900	32	1920	49	2940
16	960	33	1980	50	3000

Table 5 - Vertical Brickwork Courses Dimensions Table

using **65mm** bricks and 10mm mortar joints

Course & joint	17	1275	34	2550	
1	75	18	1350	35	2625
2	150	19	1425	36	2700
3	225	20	1500	37	2775
4	300	21	1575	38	2850
5	375	22	1650	39	2925
6	450	23	1725	40	3000
7	525	24	1800	41	3075
8	600	25	1875	42	3150
9	675	26	1950	43	3225
10	750	27	2025	44	3300
11	825	28	2100	45	3375
12	900	29	2175	46	3450
13	975	30	2250	47	3525
14	1050	31	2325	48	3600
15	1125	32	2400	49	3675
16	1200	33	2475	50	3750

Table 6- Vertical Brickwork Courses Dimensions Table

using **140mm** bricks and 10mm mortar joints

Course & joint	17	2550	34	5100	
1	150	18	2700	35	5250
2	300	19	2850	36	5400
3	450	20	3000	37	5550
4	600	21	3150	38	5700
5	750	22	3300	39	5850
6	900	23	3450	40	6000
7	1050	24	3600	41	6150
8	1200	25	3750	42	6300
9	1350	26	3900	43	6450
10	1500	27	4050	44	6600
11	1650	28	4200	45	6750
12	1800	29	4350	46	6900
13	1950	30	4500	47	7050
14	2100	31	4650	48	7200
15	2250	32	4800	49	7350
16	2400	33	4950	50	7500

Table 7- Vertical Brickwork Courses Dimensions Table

using **215mm** bricks and 10mm mortar joints

Course + Joint	17	3825	34	7650	
1	225	18	4050	35	7875
2	450	19	4275	36	8100
3	675	20	4500	37	8325
4	900	21	4725	38	8550
5	1125	22	4950	39	8775
6	1350	23	5175	40	9000
7	1575	24	5400	41	9225
8	1800	25	5625	42	9450
9	2025	26	5850	43	9675
10	2250	27	6075	44	9900
11	2475	28	6300	45	10125
12	2700	29	6525	46	10350
13	2925	30	6750	47	10575
14	3150	31	6975	48	10800
15	3375	32	7200	49	11025
16	3600	33	7425	50	11250

For further information or advice regarding this topic please contact Ibstock's Design & Technical Helpline on **0844 800 4576** or email technical@ibstock.co.uk

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