

# TECHNICAL INFORMATION SHEET 9

## BRICKWORK DIMENSIONS

Brickwork dimensions should be used whenever possible at the design stage to minimise the need for cut bricks. Tables 1 and 2 give dimensions for vertical and horizontal brickwork courses, based on the British Standard Co-ordinating size of 225mm x 112.5 x 75mm, which includes 10mm joints (this size being determined by the term CO). Table 1 and 3 should be used for 73mm bricks.

**Table 1 - HORIZONTAL BRICKWORK DIMENSIONS - 215MM BRICKS**

Number of Bricks	CO + Joint	CO (Coordinating Size)	CO - Joint	Number of Bricks	CO + Joint	CO (Coordinating Size)	CO - Joint	Number of Bricks	CO + Joint	CO (Coordinating Size)	CO - Joint			
1	1/2	122.5	112.5	102.5	34		7660	7650	7640		67 1/2	15197.5	15187.5	15177.5
1		235	225	215		34 1/2	7772.5	7762.5	7752.5	68		15310	15300	15290
1	1 1/2	347.5	337.5	327.5	35		7885	7875	7865		68 1/2	15422.5	15412.5	15402.5
2		460	450	440		35 1/2	7997.5	7987.5	7977.5	69		15535	15525	15515
2	2 1/2	572.5	562.5	552.5	36		8110	8100	8090		69 1/2	15647.5	15637.5	15627.5
3		685	675	665		36 1/2	8222.5	8212.5	8202.5	70		15760	15750	15740
3	3 1/2	797.5	787.5	777.5	37		8335	8325	8315		70 1/2	15872.5	15862.5	15852.5
4		910	900	890		37 1/2	8447.5	8437.5	8427.5	71		15985	15975	15965
4	4 1/2	1022.5	1012.5	1002.5	38		8560	8550	8540		71 1/2	16097.5	16087.5	16077.5
5		1135	1125	1115		38 1/2	8672.5	8662.5	8652.5	72		16210	16200	16190
5	5 1/2	1247.5	1237.5	1227.5	39		8785	8775	8765		72 1/2	16322.5	16312.5	16302.5
6		1360	1350	1340		39 1/2	8897.5	8887.5	8877.5	73		16435	16425	16415
6	6 1/2	1472.5	1462.5	1452.5	40		9010	9000	8990		73 1/2	16547.5	16537.5	16527.5
7		1585	1575	1565		40 1/2	9122.5	9112.5	9102.5	74		16660	16650	16640
7	7 1/2	1697.5	1687.5	1677.5	41		9235	9225	9215		74 1/2	16772.5	16762.5	16752.5
8		1810	1800	1790		41 1/2	9347.5	9337.5	9327.5	75		16885	16875	16865
8	8 1/2	1922.5	1912.5	1902.5	42		9460	9450	9440		75 1/2	16997.5	16987.5	16977.5
9		2035	2025	2015		42 1/2	9572.5	9562.5	9552.5	76		17110	17100	17090
9	9 1/2	2147.5	2137.5	2127.5	43		9685	9675	9665		76 1/2	17222.5	17212.5	17202.5
10		2260	2250	2240		43 1/2	9797.5	9787.5	9777.5	77		17335	17325	17315
10	10 1/2	2372.5	2362.5	2352.5	44		9910	9900	9890		77 1/2	17447.5	17437.5	17427.5
11		2485	2475	2465		44 1/2	10022.5	10012.5	10002.5	78		17560	17550	17540
11	11 1/2	2597.5	2587.5	2577.5	45		10135	10125	10115		78 1/2	17672.5	17662.5	17652.5
12		2710	2700	2690		45 1/2	10247.5	10237.5	10227.5	79		17785	17775	17765
12	12 1/2	2822.5	2812.5	2802.5	46		10360	10350	10340		79 1/2	17897.5	17887.5	17877.5
13		2935	2925	2915		46 1/2	10472.5	10462.5	10452.5	80		18010	18000	17990
13	13 1/2	3047.5	3037.5	3027.5	47		10585	10575	10565		80 1/2	18122.5	18112.5	18102.5
14		3160	3150	3140		47 1/2	10697.5	10687.5	10677.5	81		18235	18225	18215
14	14 1/2	3272.5	3262.5	3252.5	48		10810	10800	10790		81 1/2	18347.5	18337.5	18327.5
15		3385	3375	3365		48 1/2	10922.5	10912.5	10902.5	82		18460	18450	18440
15	15 1/2	3497.5	3487.5	3477.5	49		11035	11025	11015		82 1/2	18572.5	18562.5	18552.5
16		3610	3600	3590		49 1/2	11147.5	11137.5	11127.5	83		18685	18675	18665
16	16 1/2	3722.5	3712.5	3702.5	50		11260	11250	11240		83 1/2	18797.5	18787.5	18777.5
17		3835	3825	3815		50 1/2	11372.5	11362.5	11352.5	84		18910	18900	18890
17	17 1/2	3947.5	3937.5	3927.5	51		11485	11475	11465		84 1/2	19022.5	19012.5	19002.5
18		4060	4050	4040		51 1/2	11597.5	11587.5	11577.5	85		19135	19125	19115
18	18 1/2	4172.5	4162.5	4152.5	52		11710	11700	11690		85 1/2	19247.5	19237.5	19227.5
19		4285	4275	4265		52 1/2	11822.5	11812.5	11802.5	86		19360	19350	19340
19	19 1/2	4397.5	4387.5	4377.5	53		11935	11925	11915		86 1/2	19472.5	19462.5	19452.5
20		4510	4500	4490		53 1/2	12047.5	12037.5	12027.5	87		19585	19575	19565
20	20 1/2	4622.5	4612.5	4602.5	54		12160	12150	12140		87 1/2	19697.5	19687.5	19677.5
21		4735	4725	4715		54 1/2	12272.5	12262.5	12252.5	88		19810	19800	19790
21	21 1/2	4847.5	4837.5	4827.5	55		12385	12375	12365		88 1/2	19922.5	19912.5	19902.5
22		4960	4950	4940		55 1/2	12497.5	12487.5	12477.5	89		20035	20025	20015
22	22 1/2	5072.5	5062.5	5052.5	56		12610	12600	12590		89 1/2	20147.5	20137.5	20127.5
23		5185	5175	5165		56 1/2	12722.5	12712.5	12702.5	90		20260	20250	20240
23	23 1/2	5297.5	5287.5	5277.5	57		12835	12825	12815		90 1/2	20372.5	20362.5	20352.5
24		5410	5400	5390		57 1/2	12947.5	12937.5	12927.5	91		20485	20475	20465
24	24 1/2	5522.5	5512.5	5502.5	58		13060	13050	13040		91 1/2	20597.5	20587.5	20577.5
25		5635	5625	5615		58 1/2	13172.5	13162.5	13152.5	92		20710	20700	20690
25	25 1/2	5747.5	5737.5	5727.5	59		13285	13275	13265		92 1/2	20822.5	20812.5	20802.5
26		5860	5850	5840		59 1/2	13397.5	13387.5	13377.5	93		20935	20925	20915
26	26 1/2	5972.5	5962.5	5952.5	60		13510	13500	13490		93 1/2	21047.5	21037.5	21027.5
27		6085	6075	6065		60 1/2	13622.5	13612.5	13602.5	94		21160	21150	21140
27	27 1/2	6197.5	6187.5	6177.5	61		13735	13725	13715		94 1/2	21272.5	21262.5	21252.5
28		6310	6300	6290		61 1/2	13847.5	13837.5	13827.5	95		21385	21375	21365
28	28 1/2	6422.5	6412.5	6402.5	62		13960	13950	13940		95 1/2	21497.5	21487.5	21477.5
29		6535	6525	6515		62 1/2	14072.5	14062.5	14052.5	96		21610	21600	21590
29	29 1/2	6647.5	6637.5	6627.5	63		14185	14175	14165		96 1/2	21722.5	21712.5	21702.5
30		6760	6750	6740		63 1/2	14297.5	14287.5	14277.5	97		21835	21825	21815
30	30 1/2	6872.5	6862.5	6852.5	64		14410	14400	14390		97 1/2	21947.5	21937.5	21927.5
31		6985	6975	6965		64 1/2	14522.5	14512.5	14502.5	98		22060	22050	22040
31	31 1/2	7097.5	7087.5	7077.5	65		14635	14625	14615		98 1/2	22172.5	22162.5	22152.5
32		7210	7200	7190		65 1/2	14747.5	14737.5	14727.5	99		22285	22275	22265
32	32 1/2	7322.5	7312.5	7302.5	66		14860	14850	14840		99 1/2	22397.5	22387.5	22377.5
33		7435	7425	7415		66 1/2	14972.5	14962.5	14952.5	10		22510	22500	22490
33	33 1/2	7547.5	7537.5	7527.5	67		15085	15075	15065					

**BRICKWORK DIMENSIONS (Continued)**

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

**Table 2 - Vertical Brickwork Courses Dimensions Table**

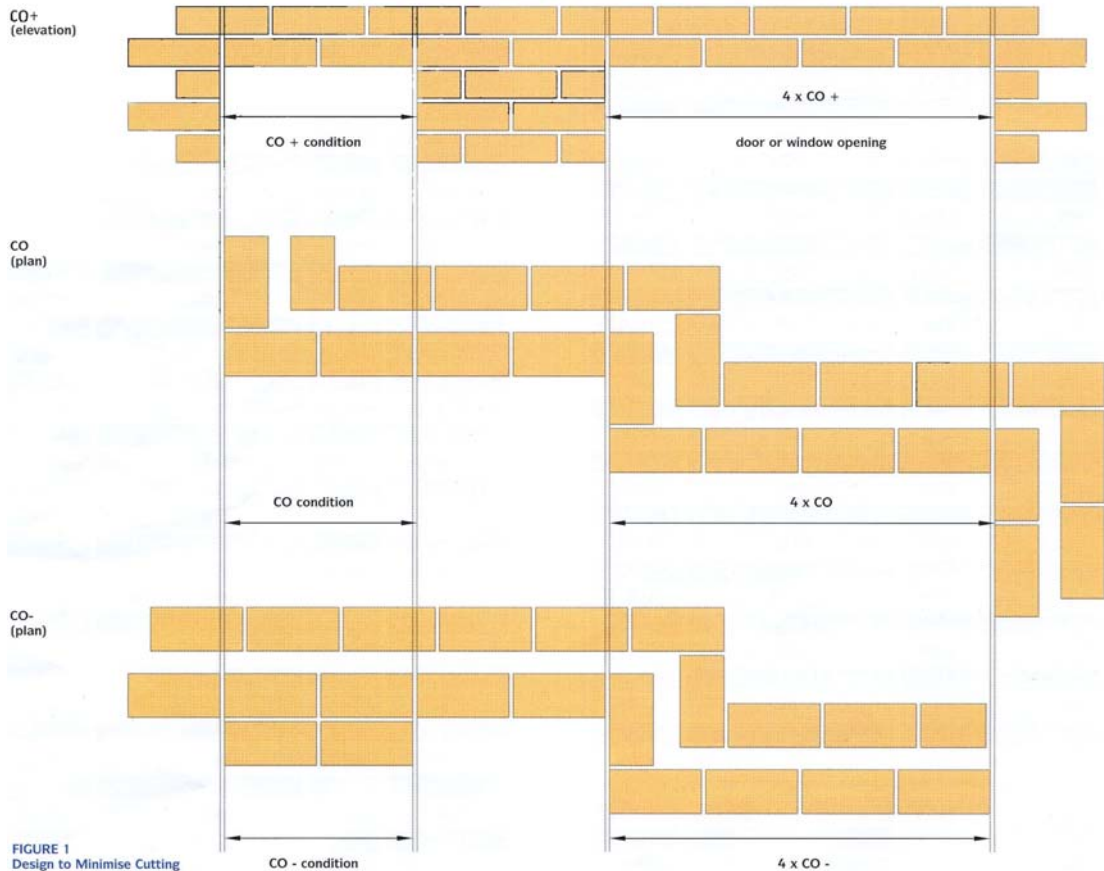
using 65mm bricks and 10mm mortar joints

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 3 - Vertical Brickwork Courses Dimensions Table**

using 73mm bricks and 10mm mortar joints

Course + Joint	17	1411	34	2822	
1	83	18	1494	35	2905
2	166	19	1577	36	2988
3	249	20	1660	37	3071
4	332	21	1743	38	3154
5	415	22	1826	39	3237
6	498	23	1909	40	3320
7	581	24	1992	41	3403
8	664	25	2075	42	3486
9	747	26	2158	43	3569
10	830	27	2241	44	3652
11	913	28	2324	45	3735
12	996	29	2407	46	3818
13	1079	30	2490	47	3901
14	1162	31	2573	48	3984
15	1245	32	2656	49	4067
16	1328	33	2739	50	4150



For further help and advice contact the Design & Technical Helpline on **0844 800 4576**

Issue 3 Jan 2010