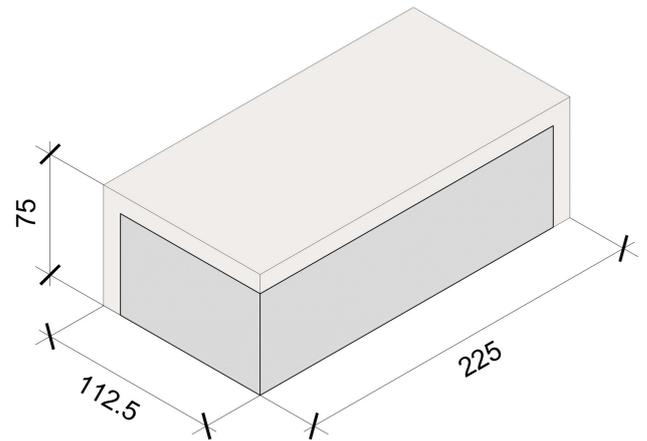
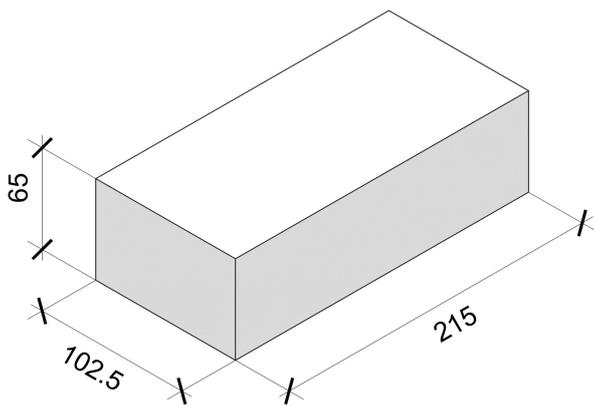


Wienerberger Technical Guidance

BRICKWORK DIMENSIONS TABLE – STANDARD UK BRICK

The versatility of the raw clay material and manufacturing process means that it is possible to fabricate bricks to a wide range of dimensions. The most widely used work size for UK clay bricks is **215 x 102.5 x 65mm**.

To accurately dimension brickwork, an allowance also needs to be made for the mortar joints. Allowing for a standard brick work size and nominal 10mm mortar joints results in the following co-ordinating size **225 x 112.5 x 75mm**.

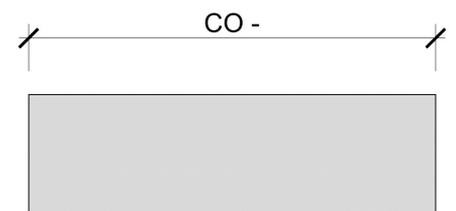
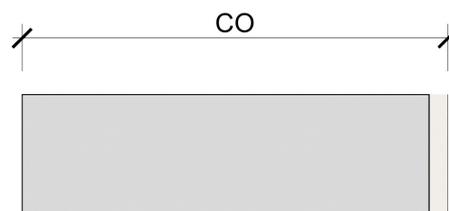
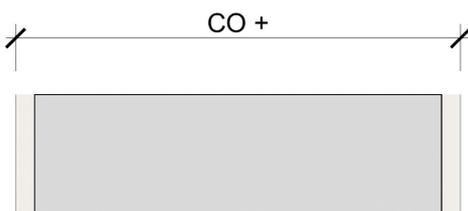


Standard UK brick size 215 x 102.5 x 65mm

Co-ordinating brick size 225 x 112.5 x 75mm

All brickwork dimensions can be determined by one of three conditions:

- CO +** Brick + 2 joints *e.g. door and window openings*
- CO** Brick + 1 joint *e.g. panels with opposite return ends (external to internal corner)*
- CO -** Brick with no joint *e.g. piers or panels between openings*



CO + (brick + 2 joints)

CO (brick + 1 joint)

CO - (brick with no joint)

Where practical, it would be deemed best practice for designers to set-out a building using brick dimensions in order to circumvent the need for unsightly cut bricks. **Table 1** and **Table 2** provide dimensions for horizontal and vertical brickwork courses based on the UK standard co-ordinating size of 225mm x 112.5 x 75mm.

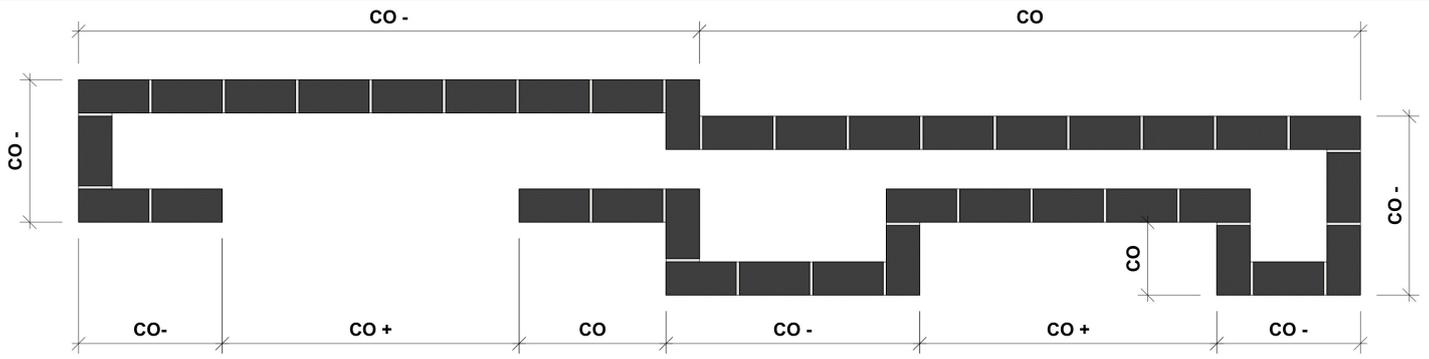


TABLE 1 - HORIZONTAL BRICKWORK DIMENSIONS

Number of Bricks		CO +	CO	CO -	Number of Bricks		CO +	CO	CO -	Number of Bricks		CO +	CO	CO -
1	1/2	122.5	112.5	102.5	23	22 1/2	5072.5	5062.5	5052.5	45	44 1/2	10022.5	10012.5	10002.5
		235	225	215			5185	5175	5165			10135	10125	10115
2	1 1/2	347.5	337.5	327.5	24	23 1/2	5297.5	5287.5	5277.5	46	45 1/2	10247.5	10237.5	10227.5
		460	450	440			5410	5400	5390			10360	10350	10340
3	2 1/2	572.5	562.5	552.5	25	24 1/2	5522.5	5512.5	5502.5	47	46 1/2	10472.5	10462.5	10452.5
		685	675	665			5635	5625	5615			10585	10575	10565
4	3 1/2	797.5	787.5	777.5	26	25 1/2	5747.5	5737.5	5727.5	48	47 1/2	10697.5	10687.5	10677.5
		910	900	890			5860	5850	5840			10810	10800	10790
5	4 1/2	1022.5	1012.5	1002.5	27	26 1/2	5972.5	5962.5	5952.5	49	48 1/2	10922.5	10912.5	10902.5
		1135	1125	1115			6085	6075	6065			11035	11025	11015
6	5 1/2	1247.5	1237.5	1227.5	28	27 1/2	6197.5	6187.5	6177.5	50	49 1/2	11147.5	11137.5	11127.5
		1360	1350	1340			6310	6300	6290			11260	11250	11240
7	6 1/2	1472.5	1462.5	1452.5	29	28 1/2	6422.5	6412.5	6402.5	51	50 1/2	11372.5	11362.5	11352.5
		1585	1575	1565			6535	6525	6515			11485	11475	11465
8	7 1/2	1697.5	1687.5	1677.5	30	29 1/2	6647.5	6637.5	6627.5	52	51 1/2	11597.5	11587.5	11577.5
		1810	1800	1790			6760	6750	6740			11710	11700	11690
9	8 1/2	1922.5	1912.5	1902.5	31	30 1/2	6872.5	6862.5	6852.5	53	52 1/2	11822.5	11812.5	11802.5
		2035	2025	2015			6985	6975	6965			11935	11925	11915
10	9 1/2	2147.5	2137.5	2127.5	32	31 1/2	7097.5	7087.5	7077.5	54	53 1/2	12047.5	12037.5	12027.5
		2260	2250	2240			7210	7200	7190			12160	12150	12140
11	10 1/2	2372.5	2362.5	2352.5	33	32 1/2	7322.5	7312.5	7302.5	55	54 1/2	12272.5	12262.5	12252.5
		2485	2475	2465			7435	7425	7415			12385	12375	12365
12	11 1/2	2597.5	2587.5	2577.5	34	33 1/2	7547.5	7537.5	7527.5	56	55 1/2	12497.5	12487.5	12477.5
		2710	2700	2690			7660	7650	7640			12610	12600	12590
13	12 1/2	2822.5	2812.5	2802.5	35	34 1/2	7772.5	7762.5	7752.5	57	56 1/2	12722.5	12712.5	12702.5
		2935	2925	2915			7885	7875	7865			12835	12825	12815
14	13 1/2	3047.5	3037.5	3027.5	36	35 1/2	7997.5	7987.5	7977.5	58	57 1/2	12947.5	12937.5	12927.5
		3160	3150	3140			8110	8100	8090			13060	13050	13040
15	14 1/2	3272.5	3262.5	3252.5	37	36 1/2	8222.5	8212.5	8202.5	59	58 1/2	13172.5	13162.5	13152.5
		3385	3375	3365			8335	8325	8315			13285	13275	13265
16	15 1/2	3497.5	3487.5	3477.5	38	37 1/2	8447.5	8437.5	8427.5	60	59 1/2	13397.5	13387.5	13377.5
		3610	3600	3590			8560	8550	8540			13510	13500	13490
17	16 1/2	3722.5	3712.5	3702.5	39	38 1/2	8672.5	8662.5	8652.5	61	60 1/2	13622.5	13612.5	13602.5
		3835	3825	3815			8785	8775	8765			13735	13725	13715
18	17 1/2	3947.5	3937.5	3927.5	40	39 1/2	8897.5	8887.5	8877.5	62	61 1/2	13847.5	13837.5	13827.5
		4060	4050	4040			9010	9000	8990			13960	13950	13940
19	18 1/2	4172.5	4162.5	4152.5	41	40 1/2	9122.5	9112.5	9102.5	63	62 1/2	14072.5	14062.5	14052.5
		4285	4275	4265			9235	9225	9215			14185	14175	14165
20	19 1/2	4397.5	4387.5	4377.5	42	41 1/2	9347.5	9337.5	9327.5	64	63 1/2	14297.5	14287.5	14277.5
		4510	4500	4490			9460	9450	9440			14410	14400	14390
21	20 1/2	4622.5	4612.5	4602.5	43	42 1/2	9572.5	9562.5	9552.5	65	64 1/2	14522.5	14512.5	14502.5
		4735	4725	4715			9685	9675	9665			14635	14625	14615
22	21 1/2	4847.5	4837.5	4827.5	44	43 1/2	9797.5	9787.5	9777.5	66	65 1/2	14747.5	14737.5	14727.5
		4960	4950	4940			9910	9900	9890			14860	14850	14840

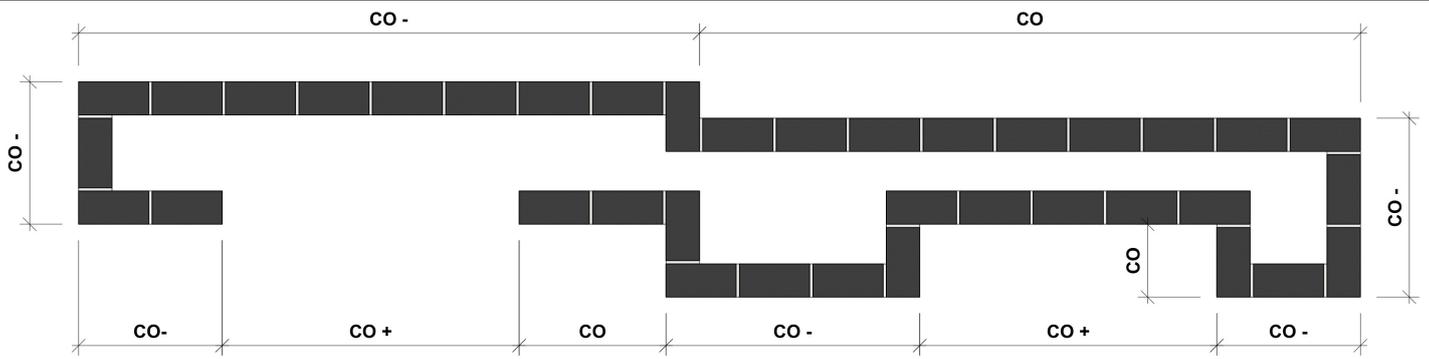


TABLE 1 - HORIZONTAL BRICKWORK DIMENSIONS (CONTINUED)

Number of Bricks	CO +	CO	CO -	Number of Bricks	CO +	CO	CO -	Number of Bricks	CO +	CO	CO -
66½	14972.5	14962.5	14952.5	88½	19922.5	19912.5	19902.5	110½	24872.5	24862.5	24852.5
67	15085	15075	15065	89	20035	20025	20015	111	24985	24975	24965
67½	15197.5	15187.5	15177.5	89½	20147.5	20137.5	20127.5	111½	25097.5	25087.5	25077.5
68	15310	15300	15290	90	20260	20250	20240	112	25210	25200	25190
68½	15422.5	15412.5	15402.5	90½	20372.5	20362.5	20352.5	112½	25322.5	25312.5	25302.5
69	15535	15525	15515	91	20485	20475	20465	113	25435	25425	25415
69½	15647.5	15637.5	15627.5	91½	20597.5	20587.5	20577.5	113½	25547.5	25537.5	25527.5
70	15760	15750	15740	92	20710	20700	20690	114	25660	25650	25640
70½	15872.5	15862.5	15852.5	92½	20822.5	20812.5	20802.5	114½	25772.5	25762.5	25752.5
71	15985	15975	15965	93	20935	20925	20915	115	25885	25875	25865
71½	16097.5	16087.5	16077.5	93½	21047.5	21037.5	21027.5	115½	25997.5	25987.5	25977.5
72	16210	16200	16190	94	21160	21150	21140	116	26110	26100	26090
72½	16322.5	16312.5	16302.5	94½	21272.5	21262.5	21252.5	116½	26222.5	26212.5	26202.5
73	16435	16425	16415	95	21385	21375	21365	117	26335	26325	26315
73½	16547.5	16537.5	16527.5	95½	21497.5	21487.5	21477.5	117½	26447.5	26437.5	26427.5
74	16660	16650	16640	96	21610	21600	21590	118	26560	26550	26540
74½	16772.5	16762.5	16752.5	96½	21722.5	21712.5	21702.5	118½	26672.5	26662.5	26652.5
75	16885	16875	16865	97	21835	21825	21815	119	26785	26775	26765
75½	16997.5	16987.5	16977.5	97½	21947.5	21937.5	21927.5	119½	26897.5	26887.5	26877.5
76	17110	17100	17090	98	22060	22050	22040	120	27010	27000	26990
76½	17222.5	17212.5	17202.5	98½	22172.5	22162.5	22152.5	120½	27122.5	27112.5	27102.5
77	17335	17325	17315	99	22285	22275	22265	121	27235	27225	27215
77½	17447.5	17437.5	17427.5	99½	22397.5	22387.5	22377.5	121½	27347.5	27337.5	27327.5
78	17560	17550	17540	100	22510	22500	22490	122	27460	27450	27440
78½	17672.5	17662.5	17652.5	100½	22622.5	22612.5	22602.5	122½	27572.5	27562.5	27552.5
79	17785	17775	17765	101	22735	22725	22715	123	27685	27675	27665
79½	17897.5	17887.5	17877.5	101½	22847.5	22837.5	22827.5	123½	27797.5	27787.5	27777.5
80	18010	18000	17990	102	22960	22950	22940	124	27910	27900	27890
80½	18122.5	18112.5	18102.5	102½	23072.5	23062.5	23052.5	124½	28022.5	28012.5	28002.5
81	18235	18225	18215	103	23185	23175	23165	125	28135	28125	28115
81½	18347.5	18337.5	18327.5	103½	23297.5	23287.5	23277.5	125½	28247.5	28237.5	28227.5
82	18460	18450	18440	104	23410	23400	23390	126	28360	28350	28340
82½	18572.5	18562.5	18552.5	104½	23522.5	23512.5	23502.5	126½	28472.5	28462.5	28452.5
83	18685	18675	18665	105	23635	23625	23615	127	28585	28575	28565
83½	18797.5	18787.5	18777.5	105½	23747.5	23737.5	23727.5	127½	28697.5	28687.5	28677.5
84	18910	18900	18890	106	23860	23850	23840	128	28810	28800	28790
84½	19022.5	19012.5	19002.5	106½	23972.5	23962.5	23952.5	128½	28922.5	28912.5	28902.5
85	19135	19125	19115	107	24085	24075	24065	129	29035	29025	29015
85½	19247.5	19237.5	19227.5	107½	24197.5	24187.5	24177.5	129½	29147.5	29137.5	29127.5
86	19360	19350	19340	108	24310	24300	24290	130	29260	29250	29240
86½	19472.5	19462.5	19452.5	108½	24422.5	24412.5	24402.5	130½	29372.5	29362.5	29352.5
87	19585	19575	19565	109	24535	24525	24515	131	29485	29475	29465
87½	19697.5	19687.5	19677.5	109½	24647.5	24637.5	24627.5	131½	29597.5	29587.5	29577.5
88	19810	19800	19790	110	24760	24750	24740	132	29710	29700	29690

TABLE 2 - VERTICAL BRICKWORK DIMENSIONS

(65mm bricks with 10mm mortar joints)

Course & Joint		Course & Joint		Course & Joint		Course & Joint	
1	75	51	3825	101	7575	151	11325
2	150	52	3900	102	7650	152	11400
3	225	53	3975	103	7725	153	11475
4	300	54	4050	104	7800	154	11550
5	375	55	4125	105	7875	155	11625
6	450	56	4200	106	7950	156	11700
7	525	57	4275	107	8025	157	11775
8	600	58	4350	108	8100	158	11850
9	675	59	4425	109	8175	159	11925
10	750	60	4500	110	8250	160	12000
11	825	61	4575	111	8325	161	12075
12	900	62	4650	112	8400	162	12150
13	975	63	4725	113	8475	163	12225
14	1050	64	4800	114	8550	164	12300
15	1125	65	4875	115	8625	165	12375
16	1200	66	4950	116	8700	166	12450
17	1275	67	5025	117	8775	167	12525
18	1350	68	5100	118	8850	168	12600
19	1425	69	5175	119	8925	169	12675
20	1500	70	5250	120	9000	170	12750
21	1575	71	5325	121	9075	171	12825
22	1650	72	5400	122	9150	172	12900
23	1725	73	5475	123	9225	173	12975
24	1800	74	5550	124	9300	174	13050
25	1875	75	5625	125	9375	175	13125
26	1950	76	5700	126	9450	176	13200
27	2025	77	5775	127	9525	177	13275
28	2100	78	5850	128	9600	178	13350
29	2175	79	5925	129	9675	179	13425
30	2250	80	6000	130	9750	180	13500
31	2325	81	6075	131	9825	181	13575
32	2400	82	6150	132	9900	182	13650
33	2475	83	6225	133	9975	183	13725
34	2550	84	6300	134	10050	184	13800
35	2625	85	6375	135	10125	185	13875
36	2700	86	6450	136	10200	186	13950
37	2775	87	6525	137	10275	187	14025
38	2850	88	6600	138	10350	188	14100
39	2925	89	6675	139	10425	189	14175
40	3000	90	6750	140	10500	190	14250
41	3075	91	6825	141	10575	191	14325
42	3150	92	6900	142	10650	192	14400
43	3225	93	6975	143	10725	193	14475
44	3300	94	7050	144	10800	194	14550
45	3375	95	7125	145	10875	195	14625
46	3450	96	7200	146	10950	196	14700
47	3525	97	7275	147	11025	197	14775
48	3600	98	7350	148	11100	198	14850
49	3675	99	7425	149	11175	199	14925
50	3750	100	7500	150	11250	200	15000