

# BRICKS THROUGH HISTORY

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Period	Dating	Colour / Description	size	Reference site(s)	Bibliography	Notes
Late Celtic		Yellow, purple, & pale red.	3½" x 3" x 5" (3½" x 2½" and 3½" x 1¾" also found)	From tumulus at Hale Magna, Lincolnshire	Archaeological Journal xvii, p.63 (1860)	Moulded for crude dome over a funeral deposit.
Belgic	100 BC – 1 <sup>st</sup> cent AD (Pre- Conquest)	Brick - Inadequately fired & smoothed over by hand leaving finger impressions, texture like "overbaked shortbread"		From Prae Wood, nr. Verulamium.	Wheeler and Wheeler, 1936, 178 and pl. lvi. Gerald Brodribb, Roman Brick & Tile, (1987) 2;	
Roman	Mid-1 <sup>st</sup> cent AD	<b>Lateres crudi</b> - Brown untempered clay	330 mm x 350 mm x 37 mm	Quinton	Gerald Brodribb, Roman Brick & Tile, (1987) 2;	
Roman	1 <sup>st</sup> – 4 <sup>th</sup> Cent AD	Brick - Hard and well burnt, often displaying "sandwich" effect with oxidised outer surfaces and reduced core when broken.	Varied greatly. 18 x 12 x 1½" common; usual size was a foot or so square; 1- 1½" thickness general, up to 3½" not uncommon, but there were many others.	Lacing courses at Colchester Castle; Jewry wall, Leicester; "Old Work", Wroxeter; Burgh Castle walls, Gt. Yarmouth, Norfolk; Parts of London city walls, e.g. Vine St., Aldgate, Tower Hill, etc. Pevensey castle; walls in Verulamium	Gerald Brodribb, Roman Brick & Tile, (1987); Lloyd, History of English Brickwork (1934)	Often built with thick mortar joints ¾" to 1" or more. Compare with Modern Italian bricks.
Roman	1 <sup>st</sup> – 4 <sup>th</sup> Cent AD	<b>Laterculus beasalis</b> or <b>Bessalis</b> , – main function of this small square brick was to create <i>pilae</i> (pillars or piers) to support <i>suspensura</i> (suspended floors) above the hypocaust system.	8" x 8" x 1½" (198 – 203mm square x 38-43mm)	1132 Complete examples found on 133 sites in Britain and only 6 other partials recorded.	Gerald Brodribb, Roman Brick & Tile, (1987)	Can have other uses such as in flooring, archways, and bonding.
Roman	1 <sup>st</sup> – 4 <sup>th</sup> Cent AD	<b>Bessalis,(round)</b> – a variant form where the brick is round instead of square, but with similar diameter.	219 mm diameter x 42	Only 76 Complete examples found on 22 sites in Britain and only one other partial recorded.	Gerald Brodribb, Roman Brick & Tile, (1987)	

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Roman	1 <sup>st</sup> – 4 <sup>th</sup> Cent AD	<b>Bessalis,(octagonal)</b> – a very rare variant form where the brick is octagonal instead of circular or square, but again with similar diameter.	219 mm diameter x 42	Only 264 Complete examples found in Britain – all from 1 site only.	Gerald Brodribb, Roman Brick & Tile, (1987)	At Silchester there was a composite hypocaust with its centre made of 24 close-set <i>pilae</i> , all of which were made of octagonal <i>bessales</i> standing at least 11 tiles tall.
Roman	1 <sup>st</sup> – 4 <sup>th</sup> Cent AD	<b>Tegula bipedalis</b> – largest of all Roman bricks, and versatile. Often used to bridge the gaps between the <i>pilae</i> of the hypocaust, and thus form the basis of the <i>suspensura</i> . Often also used in bath-houses, slung on iron hooks just below the wooden joists forming the vaulted roof. This would protect the joists from being rotted by steam from the bath below. Many are heavily combed so as to provide keying to the mortar.	24" x 24" x 3" (577mm square x 60mm) All <i>bipedalis</i> are extremely heavy, those from Springhead weighing on average, 139 lbs (63 kg) – the equivalent of the combined weight of 11 average <i>tegulae</i> !	Only 23 complete examples found in Britain, and only 24 other partials recorded, all from only 33 sites in total.	Gerald Brodribb, Roman Brick & Tile, (1987)	Other uses include that of bonding course brick, or used in arches to bind facing to the core.  Fragments of <i>any</i> very thick Roman brick, when found, if 70 mm or more, have come from <i>bipedalis</i> .
Roman	1 <sup>st</sup> – 4 <sup>th</sup> Cent AD	<b>Lydion</b> – one of the commonest of those used by the Romans. Used for bonding or lacing courses found in the walls of large public buildings or defences. Regular use of such courses provided the mason with a new level base to work from; the 2 <sup>nd</sup> function of the brick was to bind together the face and the core especially when the cement was still soft.	, 16" x 12" x 5½" (403 x 280 x 41 mm)	314 complete examples found on 109 sites in Britain, and only 73 other partials recorded. Two of the highest standing examples of wall are the Jewry wall at Leicester and the "Old Work" at Wroxeter.	Gerald Brodribb, Roman Brick & Tile, (1987)	<i>Lydion</i> brick were also good for flooring (e.g. at Wroxeter), and could also be used for capping of <i>pilae</i> as an alternative for <i>pedalis</i> brick.

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Roman	1 <sup>st</sup> – 4 <sup>th</sup> Cent AD	<b>Pedalis</b> – Since the Roman <i>pes</i> is the basic unit for all sizes of brick & tile, then it is not surprising that there would be a brick measuring exactly one square foot. Its chief function was to act as capping or base brick for <i>pilae</i> made of the smaller <i>bessalis</i> .	11" x 11" x 1¾" (281mm square x 46 mm).	Only 201 complete examples found on 71 sites in Britain, and only 2 partials recorded.	Gerald Brodribb, Roman Brick & Tile, (1987)	Among other possible uses of the <i>pedalis</i> , there are several examples of its use to make a hearth (Newport IOW, Pevensey, and Watercreek).
Roman	1 <sup>st</sup> – 4 <sup>th</sup> Cent AD	<b>Tegula scipedale or Sesquipedalis</b> – suitable brick to make a pavement on which to mount the <i>pilae</i> of the hypocaust. Can often have <i>mamma</i> attached near each corner, the bricks being laid face downward so that the <i>mammae</i> would act as a key into the mortar in which they were embedded.	16½" x 16½" x 2½" (406mm square x 52mm)	Only 42 complete examples found on 26 sites in Britain, and only 10 other partials recorded.	Gerald Brodribb, Roman Brick & Tile, (1987)	Could also be used as flooring (e.g. at Beauport Park), and can also be seen in arches at Ostia and in Rome.
Roman	1 <sup>st</sup> – 4 <sup>th</sup> Cent AD	<b>Cuneatus or Solid Voussoir</b> – a tapered brick used to make curved arches, enabling a constant thickness of mortar to be employed.	(382 mm x 292 mm x 63-42 mm, or 372 mm x 146 mm)	62 complete examples found on 20 sites in Britain, and only 14 partials from 7 other sites recorded.	Gerald Brodribb, Roman Brick & Tile, (1987)	
Roman	1 <sup>st</sup> – 4 <sup>th</sup> Cent AD	<b>Cuneatus 'Armchair'</b> – there is one form which, because of its unusual shape, sometimes with "wings" has been referred to by Graham Webster as "armchair" voussoir. The purpose is to accommodate flat tiles, and thereby form a series of open spaces or voids which would lighten the weight of the whole roof. This could also provide ducts for heated air if necessary.	(358 mm x 355 mm x 54 mm)	Only 7 complete examples found in Britain, and only 9 other partials recorded – all from only 13 sites.	Gerald Brodribb, Roman Brick & Tile, (1987)  Webster, G. The Roman Town Bath-House (1963); The Chester Historian, 10 (1960).	At Chesters the voussoir was made of tufa, but there are at least 12 sites where those made of clay have been found.

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Roman	1 <sup>st</sup> - 4 <sup>th</sup> Cent AD	<b>Un-named "Semi-circular"</b> Brick – in Roman Britain wherever circular bricks have been found they appear to have been used to make <i>pilae</i> , except for these bricks, which were used to make columns.	(338 mm x 56 mm deep)	Only 22 complete examples found on 15 sites in Britain, and only 6 partials recorded. e.g Wykhurst Farm, Caerlon, Fishbourne.	Gerald Brodribb, Roman Brick & Tile, (1987)	Of the 28 examples from 15 sites, all but 6 are complete. Since a great quantity were required even for a single column, the finds seem very few.
Roman	1 <sup>st</sup> - 4 <sup>th</sup> Cent AD	<b>Un-named "Quadrant"</b> Brick – like four equal-sized slices of a round cake.	(188 mm x 54 mm deep)	Only 24 complete examples found on 19 sites in Britain, and only 6 partials recorded. e.g Springhead, Darenth, Fishbourne, Stebbing.	Gerald Brodribb, Roman Brick & Tile, (1987)	At Fishbourne, among the clay quadrants was one cut from stone, presumably fashioned in order to fill a shortage; at Stebbing quadrants were used to form circular <i>pilae</i> , which appears to be a unique use.
Roman	1 <sup>st</sup> - 4 <sup>th</sup> Cent AD	<b>Un-named "Oblong"</b> Brick – Oddest of all the Roman bricks. Some variations are pointed at each end, which come from the kiln at Holt. Others are T-shaped, L-shaped, or stepped, and could have been used as cornice-bricks.	- vary in size but average out at about 381 mm x 140 mm x 47 mm.	16 complete examples found on 13 sites in Britain and only 11 other partials recorded.	Gerald Brodribb, Roman Brick & Tile, (1987)	There are 16 complete examples as well as 11 fragments which seem mostly to be halves of a whole brick.
Roman	1 <sup>st</sup> - 4 <sup>th</sup> Cent AD	<b>Opus spicatum</b> small bricks laid down in a herringbone pattern in walls or pavements cf. a modern day parquet-floor.	(114 mm x 62 mm x 26 mm)	574 Complete examples found on 30 sites in Britain, and no partials ever recorded.	Gerald Brodribb, Roman Brick & Tile, (1987)	
Roman	1 <sup>st</sup> - 4 <sup>th</sup> Cent AD	<b>Opus reticulatum</b> A decorative form of walling or flooring made up of various specially shaped bricks or tiles.			Gerald Brodribb, Roman Brick & Tile, (1987)	

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Roman	1 <sup>st</sup> Cent AD (up to 90 AD)	<b>Tegula mammata</b> Brick bearing on the reverse surface, deliberately made irregular lumps of clay. Designed to provide a cavity behind walls by means of mounting vertically a flat brick having bosses about 70mm deep attached near the corners, and held in place with cramps or T-shaped nails.	(430 mm x 330 mm x 50 mm [ext fl]) There are 2 types: Type A bearing round shallow mammatae with avr. base diameter of 44 mm and depth of 17mm; Type B have conical mammae with a base diameter averaging 57 mm and a greater depth of 60 mm.	There are over 50 sites providing examples of Teg. mammata. eg. Cirencester, Dorchester (Woolaston Rd), Braughing, Usk.	Gerald Brodribb, Roman Brick & Tile, (1987)	Variously named: "nipple-tiles" (Winbolt, 1922, 104); "studded tiles"(Lethaby, 1923, 25); "knobbed bricks" (Wright, 1939, 78); "bossed tiles" (Wheeler, 1936, 141; Cunliffe, 1971,43)
Roman	1 <sup>st</sup> - 4 <sup>th</sup> Cent AD	<b>Tegula</b> Roofing-Tile – decoration rare; Often flanged on the 2 long sides (c 50 mm depth); often the tile is wider at top than bottom. Nail-holes may be present but usually not. Some rare examples have a large central hole or a moulded hood or vent serving as an exit hole for smoke.	(430 mm x 330 mm x 50 mm [ext fl]). Weight 13.6 lbs (29.98 kg)	615 complete examples found on 212 sites in Britain and 395 other partials recorded.	Gerald Brodribb, Roman Brick & Tile, (1987)	Can also be used for flooring, bonding courses, foundation courses for walls, capping for pilae, hypocaust pilae, locker bases, steps, wall-cavities, draining, base of hearths, capping for tops of walls, ovens, and flue dampers.
Roman	1 <sup>st</sup> - 4 <sup>th</sup> Cent AD	<b>Tegula imbricata, or Imbrex</b> Roofing-Tile of semi-circular shape, similar to a drain-pipe cut into half along its length, but often tapered, becoming narrower at one end than the other. Used to cover over the flanges of two adjacent <i>tegulae</i> .	(398 mm x 177-137 mm x 50 mm tall). Weight 5.6 lbs (12.34 kg)	320 complete examples found on 127 sites in Britain and 111 other partials recorded.	Gerald Brodribb, Roman Brick & Tile, (1987)	Can also be used, inverted, as a drain (cf Norton Disney, Folkestone, Brecon, Towcester), or if cemented together, as pilae (cf. Rockbourne); several inverted as a hearth (Castlefield), as makeshift flues (Beauport Park, Verulamium), and often as ridge-tiles.

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Roman	1 <sup>st</sup> - 4 <sup>th</sup> Cent AD	<b>Ridge Tile</b> – semi-circular curved tile similar to imbrex, but thicker and untapered. Used to cover the join where two tiles meet on the ridge of a roof. Generally used only with roofing tiles made of stone, only very rarely used with <i>tegulae</i> .	(377 mm x 234 mm x 133 mm tall)	Only 8 complete examples found in Britain and only 24 other partials recorded – all from only 22 sites.	Gerald Brodribb, Roman Brick & Tile, (1987)	Examples found at Littlecote, Alcester, Sparsholt, Winchester, Cirencester, Newport I.O.W. and Charterhouse Mendip.
Roman	1 <sup>st</sup> - 4 <sup>th</sup> Cent AD	<b>Antefix</b> – a moulded clay tile sometimes slotted into the end of the lowest course of <i>imbrex</i> on a roof or set at the end of the ridge. It often carried some emblem.			Gerald Brodribb, Roman Brick & Tile, (1987)	
Roman	1 <sup>st</sup> - 4 <sup>th</sup> Cent AD	<b>Parietalis or Facing Tile</b> – most interior walls were plastered and then painted. This tile provided an alternative and was used to line the wall to form a kind of decorative dado. Often decorated by roller impression. Many have a rough diamond-shaped or lattice scoring on reverse side to aid adhesion of plaster.	(402 mm x 270 mm x 28 mm)	Only 5 complete examples found in Britain and only 25 other partials recorded, all from only 18 sites.	Gerald Brodribb, Roman Brick & Tile, (1987)	Tile vertically attached to walls can also provide a space through which hot-air can pass in manner of box-flue tiles. This space could be created with use of bobbin-spacers between wall and tile.
Roman	1 <sup>st</sup> - 3 <sup>rd</sup> Cent AD	<b>Half Box Flue-Tile</b> – this type is basically a teg. Mammata, but instead of mammae, there is a deep flange and a cut-away section on the flange extending for about half the length.	(453 mm x 337 mm x 79 mm [ext fl])	26 sites in Britain have produced examples totalling 42 complete or partial examples. None have been found <i>in situ</i> . Se. Exeter, London, Langtwit Major, Corbridge, Loughor, Holt	Gerald Brodribb, Roman Brick & Tile, (1987)	Examples from Exeter (Bidwell, 1979. 33 n.4); Holt (Nash-Williams, 1969, pl.6, 9); also described by grimes (1930, 135, 5 ii) and Webster (1963, fig. 11).

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Roman	1 <sup>st</sup> - 4 <sup>th</sup> Cent AD	<b>Tubulus or Box-Flue tile</b> – basically a hollow tile about the size of an open-ended shoe-box, which can easily be mortared and fixed to a wall to form a continuous battery. Usually set vertically, but occasionally set horizontally (eg at Great Witcombe) to carry hot air: it is in fact a square pipe built up in sections.	(366 mm x 190 mm x 131 mm)	306 complete examples found on 166 sites in Britain and 340 other partials recorded.	Gerald Brodribb, Roman Brick & Tile, (1987)	A variety of Surface treatment can be found: Combed, Scored, Roller-printed, or left plain. Other uses include substitute pilae, also as drains at many sites.
Roman	1 <sup>st</sup> - 4 <sup>th</sup> Cent AD	<b>Double-Box Flue-Tile</b> – a variation of the box-flue where the box is partitioned into two sections by means of a central divider. one from Ashtead (Lowther, 1930, 146-7) has two V-shaped vents.	(345 mm x 301 mm x 160 mm)	16 complete examples found in Britain and 31 other partials recorded, all from only 13 sites.	Gerald Brodribb, Roman Brick & Tile, (1987)	A variety of Surface treatment can be found: Combed, Scored, Roller-printed, or left plain. A very large example which is taller than any other box of the usual type comes from Angmering.
Roman	1 <sup>st</sup> - 4 <sup>th</sup> Cent AD	<b>Tubulus cuneatus or Hollow Voussoir</b> – designed for the same purpose as solid voussoirs, but they could also provide airspace either for insulation or for the flow of heated air. Whereas in box-tiles the open part comes at the top and bottom, in the voussoir it is the sides that are open. 30 voussoirs are needed to make an arch with a span of 8 ft 4 ins (2.55 m).	(255 mm x 173-144 mm x 137 mm)	71 complete examples found in Britain from 28 different sites; There are also a number of partials which have the face intact, 110 of these coming from another 42 different sites. Eg. Bath; Silchester (Hope, 1907, 442); Beauport Park;	Gerald Brodribb, Roman Brick & Tile, (1987)	A variety of Surface treatments can be found: Combed, Scored, Roller-printed, or simply left plain. Since no voussoir has been found attached to a flue leading to it, it must be assumed that on many occasions the arch was made of voussoirs merely to lighten the weight or provide insulation, and not to carry hot air.



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Roman	1 <sup>st</sup> - 4 <sup>th</sup> Cent AD	<b>“Springer”</b> Brick – an unusual variety of voussoir in which two corners of the face are at right angles, leaving a taper on one edge only. This odd variation served to act as a foot-piece set at the base of a curved arch, or to change the angle of a line of box tiles.	(230 mm x 195-166 mm x 121 mm)	Only 24 complete examples found on 8 sites in Britain (Clausentum, Chilgrove, Winchester, Mintey, Great Weldon, Colchester & Canterbury) and only 3 other partials recorded.	Gerald Brodribb, Roman Brick & Tile, (1987)	The examples from Canterbury are worth mentioning. There were 15 of them, and were all found in the hypocaust of a small room reused to create <i>pilae</i> by being set on top of one another.
Roman	1 <sup>st</sup> - 4 <sup>th</sup> Cent AD	<b>Spacer bobbins</b> – used to create a wall cavity by forming a space between the wall and a vertically mounted tile held in position by a T-shaped skewer or cramp running through the bobbin. Some have the appearance of a spool or cotton-reel.	(57 mm diameter)	70 complete examples found on 18 sites in Britain and only 52 other partials recorded. One found at Garden Hill, Sussex (Money, 1974, 278-280 fig. 2 & pl. 57) was still threaded onto its holdfast.	Gerald Brodribb, Roman Brick & Tile, (1987)	Other sites include Canterbury (Tatton-Brown, 1980, 401); Wroxeter, Binchester, Corbridge, Brockley Hill, Bothwellhaugh, Langton.
Roman	1 <sup>st</sup> - 4 <sup>th</sup> Cent AD	<b>Tubuli lingulati, or Pipes</b> , – used to convey water, usually made of earthenware ( <i>tubuli fictiles</i> ) but clay was more effective for drawing water from a spring when 2 digits thick (1½”) and had a socket, rabbet, or tongue ( <i>lingua</i> ), to link with its neighbour. Shapes include square (Greetwell), hexagonal (York), Bulbous (Holt), Flared ended (Cambridge), Chamfered ended (Ashtead), full-length tapered (Colchester), oval (Water Newton), Folded (Colchester), syringe (Caerleon).	varied in size and form. Length ranged from 940 mm (Folkestone) to 230 mm (Caerleon), and external diameter from 23 mm (London) to 57 mm (London).	123 Complete examples found on 40 sites in Britain and only 42 other partials recorded.	Gerald Brodribb, Roman Brick & Tile, (1987)	An unusual alternative use for tubular pipes is in vaulting ( e.g. at Hunting baths, Leptis Magna), the pipes being 750 mm long and 135 mm wide. Such use derives from the use of amphorae or crocks to lighten the weight of a roof. Another use was to disperse rain-water by down-piping inserted in the wall externally (Darenth), or to act as a chimney or flue in early days of hypocaust

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						heating (Red House, Corbridge).
Roman	1 <sup>st</sup> - 4 <sup>th</sup> Cent AD	<p><b>Tesserae</b> – small specially cut cubes of tile or stone used to form a tessellated floor in mosaic pattern.</p> <p>brick red, chopped-up tegulae.</p> <p>Blue, yellow, white, black and grey.</p>	<p>1 inch square [25mm] tile</p> <p>Range in size from 10 x 10 x 9 mm to 20 x 14 x 10 mm and from ¼ inch [6 mm] to ½ inch [3 mm] cubes</p>	Widespread on Villa and Mansio sites such as Southwick villa or Alfoldean.		<p>Brick (cut-down tile [tegulae] tesserae),</p> <p>Chalk, often with flint surfaces; blue Lias; micaceous sandstone, possibly with quartz capping; and grey dolomite. Some pieces with mortar adhering.</p>
Saxon	5 <sup>th</sup> -11 <sup>th</sup> Cent AD			Saxon Tower, Trinity Church, Colchester	John Woodforde, <i>Bricks to build a House</i> (1976)	Rare, often reused Roman - if bricks used at all. Saxons preferred timber.
Medieval	Up to 15 <sup>th</sup> century		Most bricks were approx. 1¾ ins. thick		Woodforde, <i>Ibid</i>	
Medieval	c.1160	Dark Red	13 x 6 x 2 ins.	Nave arches of Polstead Church, Suffolk	L S Hartley, <i>Polstead Church and Parish</i> (1965)	Ante-date those of Coggeshall ( <i>see below</i> ) by about 30 years but are essentially the same.
Medieval	1189	London roofs to be made of slate or tile ('tegulae'), this fire precaution being reaffirmed in 1212 and later.			Jane A. Wight, <i>"Brick Building in England from the Middle Ages to 1550"</i> p.64	

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Medieval	c.1190-1220	Known as " <i>The Medieval Great Brick</i> ".  Bright Red	Chapel quoins 12 x 6 x 1 ¾"; East window 1½" thick & regular in size; also window bricks 12" x 5½" to 6" x 1¾"	Abbey Bldgs, Little Coggeshall, Essex - In the sub-vault of the Dorter is a brick doorway c.1200, having jambs & 2-centred arch of two moulded orders.	Lloyd, <i>Op.cit.</i>	Pre-Flemish style. Rare after 1300. Gradually ousted in 13 <sup>th</sup> cent by bricks of handier size.
Medieval	c.1260-1280	Known as the " <i>One-hand brick</i> "  Vary in colour, most being cream or greenish-yellow, with occasional pinks or reds.	9" x 4½" x 2" (some 2½" thick) or less.	Little Wenham Hall, Suffolk; vaulting at Allington Castle, Kent (c.1280); Salmestone Grange, Margate; St Olave's Priory, Yarmouth.	Lloyd, <i>Op.cit.</i>	True Flemish or Low Country type Rough in texture, often warped. Probably made locally. Irregular bond.
Medieval	1264	Although the word "brique" (brick) was in use in France, it does not appear to have been used in this country till nearly 100 years later, and not generally until the 15 <sup>th</sup> cent.			" <i>New English Dictionary</i> " – Brick.  Lloyd, <i>Op.Cit.</i> p.10. Wight, <i>Op. cit.</i> p.65.	<i>Briche</i> , quoted by Godefroy, 1264, and Old French <i>brique</i> .
Medieval	1278	200k+ " <i>Quarellorm de Flandria</i> " also described as " <i>Tegulae murali</i> " imported from Ypres		For Tower of London	Exchequer Records  Wight, <i>Op. cit.</i> p.63	Latin 'quarrellorum' translates literally as 'squares'
Medieval	1283	Another Exchequer order for such tiles		Also for use at the Tower of London (probably for floors)	Exchequer Records  Wight, <i>Op. cit.</i> p.63	
Medieval	1303	Bricks were referred to as <i>Tegulae</i> , and sold as such at the Corporation brickyard, Hull (called ' <i>teglaria</i> ').			Pipe Rolls and Hull Mins. And Chambln's Accts. Lloyd, <i>Op.cit.</i> p.10 Wight, <i>Op. cit.</i> p.64.	
Medieval	1307-1327	'walltile' of English manufacture used		Lodge Chapel, Ely.	Wight, <i>Op. cit.</i> p.64.	
Medieval	c.1315-20		9" x 4¾" x 2"(S. Transept) 9¾" x 4¾" x 2 ½" (N Transept).	N & S transepts of Holy Trinity Church, Hull	Lloyd, <i>Op.cit.</i>	Brickwork is English bond.
Medieval	1321	William de la Pole recorded as having a ' <i>teglaria</i> ' (brick-kiln)		Hull.	Wight, <i>Op. cit.</i> p.64	

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Medieval	c. 1330-1410	Mainly red.	10½" x 5¼" x 2"  11 x 5½ x 2 ins.	Nave vaulting at Beverley Minster, & at the North Bar, Beverley.  Town Walls, Hull (c.1321)	Arthur Leach, <i>Building of Beverley Bar</i> ; John Bilson, <i>The North Bar, Beverley</i> ; <i>Trans. E. Riding Antiq. Soc. Vol. iv, p.47, 1896.</i>	Joints ½" thick and bond is irregular.
Medieval	1334-5	Bricks referred to as <i>Tegularum muralium</i> . Willelmus referred to as " <i>Tegulatori</i> " (tiler or bricklayer)		Ely Abbey.	"Sacrist R. of Ely," F.R.Chapman, Camb., 1907. vi. P.67. Lloyd, <i>Op.cit.</i> p.10. Wight, <i>Op. cit.</i> pps.64 & 65.	
Medieval	1340	A 'stayre (Stair) and 'dongon' (dungeon) built ' <i>in petris et brikis</i> ' (of stone and bricks)		Windsor castle	Wight, <i>Op. cit.</i> p.65.	
Medieval	1344	'Tegulae' manufacture mentioned. A further mention made in 1404.		Beverley Minster.	Wight, <i>Op. cit.</i> p.64.	
Medieval	1349	Flanders tiles imported		Palace of Westminster (for a fireplace)	Wight, <i>Op. cit.</i> , p.63	
Medieval	1353	Bricks called " <i>Waltighel</i> " (Wall Tiles) made at Hull		Hull	Lloyd, <i>Op.cit.</i> p.10. Wight, <i>Op. cit.</i> p.64.	
Medieval	1357	1,000 Bricks called " <i>Flaundrestieil</i> " supplied by Johanni Lovekyn		Palace of Westminster (for a fireplace)	Exch. K.R. Accts., 472, No.4. Lloyd, <i>Op.cit.</i> p.10. Wight, <i>Op. cit.</i> P.63.	
Medieval	1364	Exchecuer records show plaster and 'walteghell' bought for the making of fireplaces.		York Castle.	Wight, <i>Op. cit.</i> p.64.	
Medieval	1365	7,000 Flanders tiles, that is Bricks, supplied by Henry Yevele, mason		For pavings and chimneys at Tower of London and Palace of Westminster, including the Jewel Tower	Wight, <i>Op. cit.</i> P.63.	

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Medieval	c.1370 - 1380	Red  Red, pink, yellow, grey & green.	15 x 6 x 2 ins.  8-12 x 4-7 ins	Waltham Abbey Gatehouse, Essex; Cow Tower, Norwich; Jesus College, Cambridge	Lloyd, <i>Op.cit.</i>	Latest observed use of the "Medieval Great Brick."
Medieval	1390	The stores of the English-governed fortified town of Calais (France) included 626,000 'brikes'		Calais	Wight, <i>Op. cit.</i> p.65.	
Medieval	1391	Beverley town records of arrangement of rental of land for a brick-field to make 'waltye'		Beverley	Wight, <i>Op. cit.</i> p.64.	
Medieval	1400	5,000 'Flaunderstile' bought		For 3 fireplaces + flues at the Palace of Eltham.	Wight, <i>Op. cit.</i> p.64	
Medieval	1404	Bricks called " <i>Walletiell</i> "  Tiles called " <i>Thaktiell</i> "		Used at York minster.	Fabric Rolls, York Minster. Lloyd, <i>Op.cit.</i> p.10. Wight, <i>Op. cit.</i> p.65.	
Medieval	1405-06	<i>Brike</i> , at Hornchurch; perhaps ballast to London.			"Hist Agricul. and Prices", J.E.T. Rogers, iv. 434. Lloyd, <i>Op.cit.</i> p.11	
Medieval	c1409-1410	<i>Squynchon</i> is the term used to describe chamfered bricks, probably purpose moulded. " <i>St Johanni Elward pro mille squynchon</i> ."  'Waltye' again mentioned.	No size given.	Used for jambs or arches; bricks chamfered on 2 angles were used for vault ribs under the Bar.	Accounts of the bldg. of North Bar, Beverley, p 47; The Building of Beverley bar" by Arthur Leach. Trans E.Riding Antiq. Soc., iv., p.31; "Hist. MSS. Com., Beverley," p.47; Lloyd, <i>Op.cit.</i> p.11; Wight, <i>Op. cit.</i> p.65.	Bricklayers were called <i>Tilewallers</i> .  Tilers were <i>Tile Thakkers</i> .
Medieval	1416-17	The papers of the Stonor family mention building work at their manorhouse at Stonor, Oxon., for which bricks (made at Nettlebed) were used: the words used are 'brykes', 'brike' and 'de Bricke'.		Stonor, Oxfordshire.	Mins. Accts of Thos. Warefield, manor of Stonore., 112, 15.  Lloyd, <i>Op.cit.</i> p.11  Wight, <i>Op. cit.</i> p.65.	Michael ffemyng was one of "les fflemynges" employed to make "de Brike" at Crocknend (in nettlebed parish, Oxfordshire) for building at Stonore.

# BRICKS THROUGH HISTORY

Medieval	1418	'Tegulas de brike' made at Deptford, in a 'Tilekylne'. ( <i>brick-kiln</i> );		For London Bridge	Wright, <i>Op. cit.</i> pps.64 & 65.	Henry Sonderygylites, 'brykeman' was employed by the Wardens of London bridge to make 'bryktil' at Deptford, where his 'tilkylne for making bryke' was now enlarged.
Medieval	1419	London fire precaution regulations stated chimneys were to be made of stone, tiles or brick.		London	Wight, <i>Op. Cit.</i> p.65.	
Medieval	1422	Brick kiln, originally known as 'teglaria', called a 'tilery' or 'tilehouse'		Hull	Wight, <i>Op. cit.</i> p.64.	
Medieval	1425	An accounts list of a brickyard records 'Item v forms for making of tile'.		Hull	Wight, <i>Op. cit.</i> pps.64 & 65.	We also have 'camerariis' (Latin 'camera', a vault, related to Greek term for an arched construction) for kilners.
Medieval	1426	Regulations to standardise the size of 'tyle' (brick), for which a form (mould) was to be kept at the Moot Hall.		Chelmsford	Wight, <i>Op. cit.</i> p.64	
Medieval	1426	Licence to crenellate with stones, lime and 'brick'.		Moor Park, Ricknamsworth, Herts.	Wight, <i>Op. cit.</i> p.65.	
Medieval	1427	Exchequer records reveal that 2,000 'breke' purchase for making chimneys		Langley, Herts.	Wight, <i>Op. cit.</i> p.65.	
Medieval	1430	'Lateres vocatos le brike' (walling blocks called brick) feature in a building contract for burning of bricks at the manor of Chevington (Suffolk).		Bury St Edmunds Abbey	Wight, <i>Op. cit.</i> pps.64, 65, & 66.	also mention of 2 "breke brennereys" (brick-burners)

# BRICKS THROUGH HISTORY

Medieval	c. 1431-1449	Range from saffron yellow to pale pink.  Peach-coloured.	7 x 3 ½ x 1½ ins	Parapet of Tattershall Castle Hurstmonceaux Castle (1440)	Lloyd, <i>Op.cit.</i>	Possibly imported by Dutch settlers. English bond introduced
Medieval	1432	Accounts, written in Latin, refer to ' <i>tegulatores</i> ' for bricklayers.		Caister castle.	Wight, <i>Op. cit.</i> p.66.	
Medieval	1437	William Versey, King's serjeant, to search for brick-earth to make ' <i>tegulae</i> ' called 'brike' (bricks)		Palace at Sheen (Richmond) and other Royal Works.	Wight, <i>Op. cit.</i> pps.64 & 65.	
Medieval	1436	Alien Subsidy Roll lists Henry Henryson of Teutonic origins, a 'brikemaker',		Ipswich	Wight, <i>Op. cit.</i> p.66.	
Medieval	1438	A property transfer describes William se la Pole, Duke of Suffolk, as having land at Hull bounded by 'muro tegular' (brick walls)		Hull	Wight, <i>Op. cit.</i> p.64.	
Medieval	1440	Record of rental for making 'walyte'		Beverley	Wight, <i>Op. cit.</i> p.65.	
Medieval	1440	There is a description 'enviround abowte with bryke wallis'.			Bokenham, in his translation of Ranulf Higden's ' <i>Polychronicon</i> '. Wight, <i>Op, cit</i> , p.65.	
Medieval	1441	Records show that ' <i>lapides vocati brykkes</i> ' (stones called bricks) or ' <i>brekeston</i> ' were used in reconstruction of town walls,		Calais.	Wight, <i>Op. cit.</i> p.65.	
Medieval	1440s	The term 'wall tile' is used in the building accounts of Tattershall castle, Lincs, for the <i>smaller</i> bricks; also the same accounts have ' <i>Bawdin Docheman</i> ' (Baldwin Dutchman) as the 'brekemaker'.		Tattershall castle, Lincolnshire.	Wight, <i>Op. cit.</i> pps.65 & 66. W. Douglas Simpson, ' <i>The affinities of Lord Cromwell's Towerhouse at Tattershall</i> ', article in <i>Journal of the British Archaeological Association</i> , New Series XL, 1935.	

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Medieval	1467	Fire precaution regulations ordered that <i>'no chimneys of tre (wood)... be suffred...but that the owners make hem of bryke or stone'</i> .		Worcester.	Wight, <i>Op. cit.</i> p.65.	
Medieval	c1477-78	Tiles for Roofing  Bricks – <i>"to be well dried before they are put into Kylne and thoroughly burned."</i>	Length 10½ x Breadth 6¼ x Thickness ¾ <sup>ths</sup> ins.  9 x 4¾ x 2¼ ins	Plain tile, als Thak-tile, als Roof-tile, als Crest-tile, als Corner-tile, als Gotter-tile.	Statute 17 Edward IV., C.4. "Statutes of the Realm," ii., pp. 463-5.	Start of legislation to rationalise brick sizes.
Late Med. – Stuart	From late 15 <sup>th</sup> cent for next 200 years	Dark, but mellow red.	The thickness measurement was 2 ins. or a little over	e.g. St James's Palace; Eton.	Lloyd, <i>Op.cit.</i>	
Medieval	c. 15 <sup>th</sup> - 16 <sup>th</sup> century	Development of elaborate patterns in brick of various colours, and vitrified headers.	8½-9½" long x 2-2¼" thick; four course (4 bricks & 4 joints) usually rise about 11-12". Often bricks differed in length by as much as 2" and up to ¾" in thickness.	Caister castle, Yarmouth; Heron Hall, Essex; Little Leeze Priory, Layer Marney hall, Sandon Church, Essex. Hatfield Palace.	Lloyd, <i>Op.cit.</i>	Old English bond & diaper patterns. Thorough burning of Medieval bricks often caused shrinkage and distortion.
Tudor	1503-04	Place Bricks  Stock Bricks	9 x 4¼ x 2½ ins.  9 x 4¼ x 2¾ ins.		Act of 19 Henry VII., c.7.	The Master and Wardens of the Company of Tylers and Bricklayers are given power to enforce the Act.
Tudor	1535	<i>'Come on, ley us bryke and burne it. And they bryke for stone'</i>			Coverdale's translation of the Bible (Genesis, Ch.XI, v.3) Wight, <i>Op. cit.</i> p.65.	
Tudor	1535	Commissioners survey of convent itemises two chimneys of 'brykkes' (rare plural)		Swine, nr. Hull.	Wight, <i>Op. cit.</i> p.65.	
Tudor	c. 1571 (13 Eliz).		"9 x 4½ x 2¼ ins. When burnt" (228.6mm x 114.3mm x 57.15mm)		Charter, Tylers' and Bricklayers Company.	confirmation of the 1477 legislation to rationalise brick sizes.



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Tudor	1586	William Camden in his <i>Britannia</i> described the walls of Hull as being of 'lateritio muro' (brick walling)		City walls, Hull	Wright, <i>Op. cit.</i> p.64.	
Tudor	1589/1590		10 x 5 x 2½ ins. (254mm x 27mm x 63.5mm)		York Assizes, 32 Eliz I. quoted <i>Trans. E Riding Antiquarian Soc vol. iv, 1896 p.47.</i>	Further attempt to fix the size of bricks.
Stuart	17 <sup>th</sup> century c1620-1650	Hard pale brick, known as a "Dutch Dinker"	Avr size 6½ x 3 x 1½ ins., (Weighing 1lb 6oz – 1lb 14 oz.) four course rising 8 ins range between 6⅞ x 2⅞ x 1¼ and 6⅞x 3¼ x 2" (165.1mm x 76.2mm x 38.1mm)	Building with "Dutch" gable at Topsham; walls of Kew Palace & of Raymond Hall, Norfolk (1630s); town walls of Great Yarmouth	Lloyd, <i>Op.cit.</i>  British Bric Soc., N/I issue 29, p01.	Dutch import. Flemish bond introduced.
Stuart	1625		9 x 4¾ x 2¼ ins. when burnt.		Proclamation 1 Ch I. Lloyd, <i>Op.cit.</i>	Regs substantially those of 17 Edw IV. Price regulated to 8/- per 1000 at the Kiln.
Stuart	1687	pink	7 x 3¼ x 1½ ins	Gabled & dated wall at Sarre, Kent	Woodforde, <i>Op.cit.</i>	Dutch import "Klompje brick"
Georgian	1703		10 x 4 x 2¼ ins	Used under coping bricks to project 2½ ins each side, diagonally, to make tothing or indented work.	"The City and Country Purchaser," R. Neve, 1703, London, p.39	"Cogging Bricks" – first mention
Georgian	1725		9 x 4¼ x 2½ ins. for Place Bricks; 9 x 4¼ x 2⅞ ins. for Stock Bricks.		Statute, 12 Geo, I., c.35  Lloyd, <i>Op.cit.</i>	An act to prevent abuses of bricks etc. & to ascertain the dimensions thereof.
Georgian	1729-30		8¾ x 4¾ x 2½ ins., within 15 miles of City of London.		Statute 3 Geo. II., c.22.  Lloyd, <i>Op.cit.</i>	An Act for amending the Acts therein relating to making of bricks.
Georgian	c1750-1784		During 2 <sup>nd</sup> half of 18 <sup>th</sup> century just over 2¼ ins. thick was usual		Woodforde, <i>Op.cit.</i>	Heading bond was in favour during the 18 <sup>th</sup> cent.

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Georgian	1769		8¾ x 4 x 2½ ins within 15 miles of City of London, sizes as 12 Geo I beyond 15 miles.		Statute 10 Geo III., c.49.  Lloyd, <i>Op.cit.</i>	Continued the last 4 Acts.
Georgian	1776		8½ x 4 x 2½ ins every part of Britain		Statute 17 Geo III., c.42. Lloyd, <i>Op.cit.</i>	Refers to expiry of laws heretofore made regulating dimensions of bricks for sale.
Georgian	1784				Statute 24 Geo. III., c. 24. Lloyd, <i>Op.cit.</i>	Introduction of Tax on brick to help pay for the American War.
Georgian	1784-1801	Known locally in Leics as “Wilke’s Gobs”, and at Measham as “Jumb Bricks”.  Dark-red, slop moulded, no frog, and usually well burnt.	From 11 x 5 x 2¾ ins to 12 x 6 x 3¼ ins.  Standard size of the Measham bricks was 235 x 110 x 110mm.	The Brickyards, Measham, & property in West Street Horncastle Leics; screen wall at Weir House, Bodenham, Herts.	Kenneth Hudson, <i>Building Materials</i> (1972)  British Brick Soc., newsletter no. 29, p. 7 (1982)	The 18 <sup>th</sup> century Great Brick. 3¼ ins thick and unusually long; Made to reduce the effect of the regs. of the Brick Tax (1784-1850)
Georgian	1787				Act 27 Geo. III., c.13 Lloyd, <i>Op.cit.</i>	Duty on imported brick 7/2 per M. Drawback on exported bricks 6/8 per M; Sch. F Duties of Excise 2/6 per M
Georgian	1794				Act 34 Geo. III., c.15 Lloyd, <i>Op.cit.</i>	Duty raised to 4/- per M.
Georgian	1801		Bricks emerge up to max. of 10 x 5 x 3 ins. which is just about 150 cu ins.		Act 41 Geo. III. c.91  British Brick Society, Newsletter no. 26 p.01	Introduction of the size ban whereby bricks over 10 x 5 x 3” were charged with double duty. was enacted in 1801 not 1803. Nathaniel Lloyd in <i>English Brickwork</i> got it wrong. The 1803 Act merely <i>confirmed</i> all the duties of Excise.
Georgian	1803				Statute 44 Geo III., c.69. “Consolidation Act”  Lloyd, <i>Op.cit.</i>	Duty under 150 cu.ins. 5/- per M. Double duty imposed on bricks more than 150 cu ins.

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Georgian - Victorian	C1803 – 1890s		Throughout 19 <sup>th</sup> century most bricks were 3 ins. thick.		Woodforde, <i>Op.cit.</i>	
Victorian	1839				2&3 Vic., c.24  Lloyd, <i>Op.cit.</i>	Duty under 150 cu. ins. 5/10 per M; over 150 cu. ins. 10/- per M.
Victorian	1850				13 Vic., c.9.  Lloyd, <i>Op.cit.</i>	Repeal of all Duties, Drawbacks and Excise.
Victorian	c.1850's		9 x 4¼ x 2 ins, although thickness continued to vary up to 3½ inch.		Woodforde, <i>Op.cit.</i>	Standardisation of the Imperial measurement brick.
Victorian	c.1880's	Semi-dry pressed brick using Oxford clay.			Woodforde, <i>Op.cit.</i>	Introduction of the "Fletton" brick.
Modern	1941		8¾ x 4¼ ins with a choice of 3 thicknesses – Type 1 brick 2 ins; Type 2 brick 2½ ins; & Type 3 brick 2¾ ins.		A.B. Searle, <i>Modern Brick Making</i> (1956)	British Imperial Standard for Common Bricks made of clay (no 657) introduced.
Modern	1970's		British Standard Metric size 215 x 102.5 x 65 mm (8¾ x 4¼ x 2¾ ins.)		Woodforde, <i>Op.cit.</i>	cf Little Wenham bricks c 1260-80 which are only fractionally different in size.

# BRICKS THROUGH HISTORY

Brick sizes are useful for dating only in a rough and ready way compared with the shape of a building and with architectural features. Medieval brick-makers were not meticulous in constructing their moulds and the bricks of an old building may vary, even in a single course, by over half an inch in all dimensions. Sometimes bricks are present which were antique at the time of building: second-hand bricks have been made use of ever since the departure of the Romans.

A study [of this table-ed.] will reveal broad changes in the thickness of bricks which are of some interest in considering the age of an old house. Up to the mid-fifteenth century most bricks were 1 3/4 inches thick. For the next 200 years the measurement was 2 inches or a little over. During the second half of the eighteenth century just over 2 1/2 inches was usual, although here and there bricks can be seen which are 3 1/2 inches thick and unusually long; these great bricks almost certainly date from the period 1784-1803 during which it was possible to reduce the effect of the regulations of the Brick Tax, 1784-1850. Throughout the nineteenth century most bricks were 3 inches thick.

John Woodforde, *Bricks to build a House* (1976) pp.84-85.

Right: A sample from thirteen centuries. At the base, a 1<sup>st</sup>-century Roman brick. Next, a 12<sup>th</sup> century Great Brick.  
Woodforde, *Ibid.*



12x6x3" Tax Brick 1784-1801  
"Wilkie Gob"



Hand-brick, found at Ingoldmells.  
Length, 4 inches.

Hand-made Celtic brick



6 1/2 x 2 1/4 x 1 1/4", 17<sup>th</sup> Cent  
Flemish brick 1620-1650  
"Dutch Dinker"



Selection of local frog-marked bricks