

Oxford, St Aldates

Ceramic Building Material

By Cynthia Poole

Introduction

A large quantity of ceramic building material (CBM) amounting to some 1262 fragments weighing 120kg was recovered by hand excavation from a variety of contexts. Medieval roof tile constitutes the majority of the assemblage, most of which was found in phases 3 and 4 (late 11th -14th century). A small quantity of other forms were found in later phase deposits and include 68 fragments (*c* 25kg) of post-medieval date. Much of this was brick ranging from Tudor to 20th-century engineering bricks made in typical post-medieval red sandy fabric. The remaining post-medieval CBM, mainly of late 18th- to early 20th-century date, consisted of paving bricks or paviments, floor tile, stoneware sewer pipes and glazed bathroom type wall tile. No complete objects, apart from a few bricks from phase 8 demolition rubble, were recovered, though a small number of complete lengths and breadths were recorded for the medieval roof tile. The mean fragment weight of 91g is high for an assemblage dominated by roof tile, which with the relatively low abrasion present may indicate fairly rapid deposition in features or deposits following disuse and demolition, with little later disturbance or attrition of deposits. This report focusses on the medieval tile with only brief reference to later material. Some additional details of the post-medieval assemblage may be found in the archive.

Methodology

Very limited recording has been undertaken owing to the extreme time limitations placed on the analysis of an assemblage of this size. Similarly severe limitations occurred during the assessment stage, and the brief notes made then can in no wise be regarded as recording. So that this report had some basis in fact it was decided to use two of the three days assigned to producing a report recording a limited number of contexts that might provide a snapshot of the assemblage in the two main phases represented, phases 3 and 4,

The recording of the selected contexts with gross quantification of other contexts has been produced on an Excel spreadsheet; recording adhered as far as was feasible with guidelines set out by the Archaeological Ceramic Building Materials Group (ACBMG 2007). The record includes quantification, and fabric type, form, surface finish including presence of glaze, dimensions and presence of features such as peg holes, imprints etc. Fabrics were characterised on the basis of broad macroscopic characteristics occasionally supplemented by the aid of x20 hand lens.

Fabrics

The fabrics have been assigned where possible to the Oxford fabric series for medieval tile from the Oxford region, which was originally devised for the Hamel site, Oxford (Robinson 1980) and to the related reference collection housed by Oxford Archaeology. The fabrics have been amply described in previous publications (eg Cotter 2006) and are not repeated here. The fabrics were dominated by fabric group VII, with examples of all subtypes VIIA, VIIB, and VIIBB represented. The coarse red sandy fabric IIIB was less common, whilst only small numbers of fabric group IV was represented, mostly occurring amongst the postmedieval assemblage. It was noted that fabrics closely allied to fabric IIIB and fabric IVA/B were commonly used for post-medieval brick suggesting similar local or regional clay sources were being exploited at the later period. These were all in use during the thirteenth- to

fifteenth-centuries with the group IV fabrics appearing from the fourteenth-century. Only four fragments, including both peg and ridge tile, were tentatively identified as the early limestone tempered fabric IB dated to late 12th-early 13th century and four fragments of glazed ridge tile as fabric IIIA, which probably originates from Brill, and is broadly of 14th century date.

Character of the assemblage

Roof tile

Flat roof tile constitutes the majority of the assemblage and where items could be more precisely identified as peg tile or ridge tile, it is clear that both are represented amongst the plain fragments, which included both glazed and unglazed examples.

A minimum of 261 fragments (31129g) have been positively identified as peg tiles, which can be divided into two forms. The more common variety is the standard type with two peg holes (type 2) placed in the upper corners of the tile. The peg holes were circular or, where punched at a diagonal, oval measuring 11-19mm commonly tapering to 8-12mm at the base. A very common feature was a thickened halo of surplus clay on the underside encircling the peg hole and measuring *c* 25-35mm in diameter. On a couple of tiles the surplus ring of clay had been trimmed off leaving a smooth cut circle around the hole. The peg holes were centred 24-45mm from the top edge and 35-72mm from the side edges. On four pieces both peg holes were present set 27, 34, 38 and 40mm apart. The finish on these tiles varied from quite crude and rough to fairly regular and smooth. Edges were variable most often left rough sanded as they came out of the moulded, but sometimes smoothed resulting in a concave profile or occasionally lips of clay had been knife trimmed. They ranged in thickness from 12 to 23mm with a peak at 18mm. Fourteen tiles had complete or near complete lengths and widths surviving (Table 3). Examples of glazing in pale green, olive green, amber and brown across the lower half was observed on 22 tiles. This usually occurred as a thick continuous veneer with an abrupt margin to the glazing at a height of *c* 85-135mm from the base. Where evidence of glazing occurred on upper sections of peg tiles it was in the form of splashes or drips. Peg tiles recorded of this type were made predominantly in fabrics VIIB, VIIBB and VIIBB/IIIBB, with single examples in VIIA and IIIB. It was noted that at least four lower right hand corners had the edges set at angle of 85°, creating a tapered form. Where both lower corners survived the left hand was a right angle. A tapered tile may have been deliberately produced for a curved area of roof.

The second type of peg tile (type 1) had a single peg hole set centrally close to upper edge of the tile. Only one tile of this type has been positively identified where the complete width survived (ctx1046). This was made in fabric VIIB and was characterised by a smooth undulating surface and smooth edges with arrises deliberately smoothed and rounded with any surplus lip of clay smoothed over the edge, to create a very distinctive finish. A very similar finish had been noted on generic roof tile and had been noted as possible ridge tile. The definite peg tile of this type had a distinct curve, which without the peg hole might have caused it to be identified as ridge tile with a fairly angular profile. The peg hole measured 17mm in diameter and was centred 35mm from the top edge and 100mm from the left hand edge and 90mm from the right. The peg hole had been left blind with a small hole 5mm wide piercing the skin. A thickened circle of surplus clay 31mm in diameter occurred on the underside. Two other fragments (ctx 1079, Id.75 & 78) may be of this type: the peg holes measuring 15 and 18mm in diameter were centred 35 and 44mm from the top edge and 85mm from the left edge. Two other examples (ctx 4047, Id279 & ctx 10012, Id297) are less certain as the peg holes are 77-78mm from the side edge, which could fall in the extremes of type 2 tiles. These four possible examples included two in fabric VIIB and two in IIIB.

A total of 53 fragments (5492g) of ridge tile were identified made predominantly in fabrics VIIA, VIIB, VIIBB and IIIB, but with a small number in the slightly later 14th-century fabrics IIIA and IVA/B. Of these 44 had evidence of glaze, most commonly amber, but also light green, olive green and brown. The only crested ridge tile (ctx 4053) was a single fragment made in fabric IB, which retained only the scars of the spurs and thumb pressed depressions at the base of the spurs. Other ridge tile probably had a plain apex either curved or angular in form. The ridge tile was generally quite thick ranging from 11 to 25mm, with 15-19mm being the most common. The three pieces in fabric IIIA (ctx 7001, 10015) were noticeably thinner at 9 and 13mm and had an amber-green and brown glaze.

One unusual example found in a 13th-14th-century garden soil (4001) was made in fabric VIIB and has what appears to be a circular peg hole piercing the apex. The hole measured 15mm in diameter tapering to 11mm and had a thin basal halo of surplus clay 18mm in diameter and was centred 70 and 140mm from end and side edges respectively. The tile appears to have had a fairly angular profile about 75mm high with an estimated width of about 220-230mm.

A rare example of roof furniture was a sherd from a large type of cylindrical vessel, generally thought to be chimney pots (or possibly a brazier), though no complete examples are known. The fragment of vessel is made in the OXAC Cotswold ware pottery fabric: this was grey-brown in colour with pink inner surface and contained a high density shell and limestone grit up to 2mm in size. It has smooth surfaces and a flat rim 33mm wide forming T-shaped cross section with the wall, which was 17mm thick. The diameter measures *c* 80-90mm. The exterior and rim has blackened patches.

Unintentional or accidental markings on the tiles mostly took the form of finger marks from handling during production. Occasional grass impressions occurred on the base of a few tiles. The only animal impressions were two hoof prints, probably of ovicaprid (cx 1079) and possibly part of a paw print (cx11004).

Three roof tiles (ctx 4008, 4047), two of which were glazed green-brown and olive green, had been deliberately chipped into a circular or sub-circular disc, measuring 67, 70 and 78mm wide. It has been suggested these were used as lids for pots.

Floor tile

Only three fragments of medieval floor tile were recovered, one from an 11th-12th century pit fill (1102) and the others residually in postmedieval layers (4014, 11001). All were made in fabric IIIB. That from the medieval pit was unglazed, had a fairly rough finish, was without keying and measured 30mm thick. Its surface was burnt and blackened and had probably been used as a hearth tile rather than in a floor. The other two were plain glazed tiles, coated with a dark brown and brown-green glaze. One had a flat unkeyed base and the other had stab marks in the base typical of the 'stabbed Wessex' tradition of floor tile. The 'stabbed Wessex' tile was unusually thick at 31mm thick. The other measured 22mm thick and had been scored and snapped to form a small square quarter tile 71 by 73mm (suggesting the full sized tile measured *c* 140mm wide).

A complete 19th century unglazed quarry tile (ctx4008) measured 22mm thick and 152mm square. It was machine pressed and had a shallow circular recess with ogival corners in the base stamped with "PLAIIS / O.P." A semi-circle of cloth or sacking had also been pressed into the base surface.

Brick

Brick only comes into use on the site with the appearance of Tudor bricks made in orange-red sandy fabric very similar to fabric IIIB and measuring between 50 and 60mm thick. One had a breadth of 112mm. Later brick of 17th- to 19th-century date in finer sandy red fabrics or laminated orange sandy fabrics with cream marl streaks, similar to the earlier group IV fabrics. These measured 62-68mm thick, 108-111mm wide and 226-228mm long. A Stafford blue engineering paving brick, measured 48mm thick with a rectangular flat based frog 68mm wide and 9mm deep is of 20th-century date though must have been intrusive in a phase 4 rubble layer (1020).

Conclusions

The assemblage is dominated by roofing tile, which includes some unusual pieces including peg tile with a single central peg hole and a ridge tile with a peg hole, two varieties not previously noted in Oxford. The possible chimney pot is also a rare find, though one had previously been found at St Aldates (Haldon 1977, fig.19.16) dated to 1150-1175 and another is known from the Hamel (Mellor 1980, fig.9.18), where it is dated to the early 13th-century. Ceramic building material was used on the site predominantly for roofing during phases 3 and 4, which are dated to the late 11th- to 14th-centuries, though it is unlikely that tile came into use before the late 12th-century towards the end of phase 3.

The medieval buildings standing on the site were roofed with glazed and unglazed peg tile surmounted by plain glazed ridge tile without crests as is typical of many buildings in Oxford at this period. The roof tile in phase 3 deposits of late 11th-12th century date was concentrated in area 1 and provides significant evidence for the early use of tile in the group VII fabrics. Flat roof tiles of plain rectangular form are referred to in documentary evidence and roof tile has been found in later 12th century contexts in several English towns and cities including London (Smith 1998-9) and Eynsham Abbey, Oxfordshire (Mitchell 2003). An assemblage of roof tile very similar in character and of similar date to the St Aldates assemblage was recently found at Merton College relating to buildings of 12th- to 13th-century date preceding the college foundation (Poole forthcoming). Nearly all the roof tile deposited during phase 4 was recovered from area 4, much of it coming from the garden soil layers. The tile was still predominantly in group VII fabrics, but included a proportion in fabric IIIB.

Later roof tile in fabric IIIA and fabric IVA/B, which appear from the 14th-century, occurred in small quantities mostly in post-medieval levels.

About a dozen fragments of medieval roof tile had burnt edges, indicating they had been used (or re-used) set on edge in the floors of hearths or ovens.

The very small quantity of plain floor tile suggests this was restricted to small areas of flooring and that in general other materials such as timber boards, stone paving or trampled earthen floors were the norm. Previous excavations at St Aldates produced similarly small quantities of floor tile (Durham 1977, 140) though including two decorated 'stabbed-Wessex' type floor tiles.

Table 1: Peg tiles with complete or near complete width and / or length (incomplete dimensions are preceded by >)

Context	Id	Length mm	Width mm	Thickness mm	Fabric	Comments
1046	40	>210	190	14-20	VIIB	Type 1
1079	65	>160	197	14-20	VIIB	Lower half; olive green glaze
1079	76	280	>140 [est. c.155]	15	VIIBB	Type 2; dark brown-olive glaze. RH peg hole blind.
1090	107	>205	206	18	VIIBB	Lower half; amber glaze
1090	108	>195	214	17	VIIBB	Lower half
1090	109	290	198	15	VIIA/B	Type 2
1090	110	300	202	15	VIIB	Type 2; amber glaze
1101	120	c 342	>100	18	VIIB	Type 2; olive green glaze
1135	139	>205	220 (base)-210 (middle)	16	VIIBB/IIIB	Lower half; olive green-brown glaze. Tapered form.
1135	140	>255 [est c.325]	210 (top) - 220 (middle)	20	VIIBB	Type 2; amber glaze. Tapered form.
1135	141	>95mm	212-215mm	17	VIIB	Lower half; weathered glaze remnants
11004	315	>105	172	17	IIIB	Type 2

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