1.1 Ceramic Building Materials and Fired Clay

by Terence Paul Smith

Introduction

1.1.1 A small quantity (1.2 kg) of ceramic building material and a larger quantity (15.8 kg) of fired clay were examined for the assessment. The material labelled 'CBM' included a quantity of fired clay, which has been reclassified for this assessment. There was also some slag present: this has been removed from the assemblage and is not considered in this assessment. In a very few cases, tiny fragments may be either ceramic building material or fired clay.

Methodology

1.1.2 The ceramic building material has been examined with a view to determining fabrics – but without any full analysis of these – and forms where appropriate. Quantities have been recorded by count and by weight. The fired clay fragments have been counted and weighed, and notes made of the most distinctive fabrics and any unusual inclusions. Exceptionally reduced (blackened) or vitrified material has been noted. The presence of original surfaces, imprints and tempering has been noted. The data have been entered into an Excel database. All the material has been retained.

Quantification

1.1.3 The total weight of ceramic building material scanned for the assessment is 1.2 kg and the total weight of fired clay is 15.8 kg; of the latter, 5.9 kg may be daub. Quantification of ceramic building material by count and weight are listed in Table 1.6. Quantification of fired clay by count and weight are listed in Table 1.7. A list of probable/possible daub by context is presented in Table 1.8.

Ceramic Building Material

Roman

- 1.1.4 The Roman tile assemblage is very small at only 1.2 kg. It was recovered from contexts 8060, 8097, 8498, and 8499. All these contexts have already been spot-dated to the period *c*. AD 150-250/270. Both the forms (types) present, *tegulae* and *imbrices*, are roofing tile. None is complete. Count and weight of Roman tiles by types are listed in Table 1.9.
- 1.1.5 The four pieces are all in a similar fabric (*Fabric 1* in the database), orange in colour with tiny black iron oxide, white calcium carbonate, and mica specks in a smooth matrix, with the use of fine moulding sand.

Post-Roman building material

- 1.1.6 A small fragment (21 g) of plain tile was recovered from context 8465. It is in a fairly fine orange/red fabric (*Fabric 2* in the database) somewhat similar to MoL fabric 2271. It is impossible to date a small fragment like this: plain tiles were in use in Kent from the 12th century to recent times. The standard form had two holes for fixing with either pegs or nails.
- 1.1.7 A tiny fragment (5 g) of an unidentifiable ceramic material was recovered from context [8298], which also contained part of a Roman *imbrex*.

Fired clay

- 1.1.8 The bulk of the material examined for this assessment, coming from a total of 62 contexts, was fired clay, including pieces that had originally been classified by the excavators as ceramic building material. Fired clay and daub constitute 91% of the material scanned for this assessment.
- 1.1.9 Much of the material consists of small fragments, often abraded and/or burned. The latter is consistent with the fact that much of it is associated with hearths or furnaces and specifically with iron smelting, as witnessed by the amounts of slag, some of it included amongst the fired clay. Some pieces, however, are or may be daub; these are shown in Table 1.8.
- 1.1.10 The possible lath impression (context 8192) is very uncertain. Some of the wattle impressions are more convincing. The possible post impressions (contexts 8128, 8514) are of circular posts.
- 1.1.11 Other pieces with smooth faces came from contexts 8015, 8020, 8097, 8137, 8580, and 8601. The last shows two flat faces at right-angles to each other. The context suggests that this may be part of a hearth wall or some similar feature.

Provenance

1.1.12 The provenance of the material is not known, although it seems likely that the fired clay is more or less local. The ceramic building materials too are probably Kentish products, as tiles in Fabric 1 occur on other Roman sites in north Kent.

Conservation

- 1.1.13 Some of the fired clay which is associated with iron smelting may be worthy of detailed inspection and further assessment by a specialist in the field of furnaces and iron smelting.
- 1.1.14 The following items should be kept:
 - One of the Roman *tegulae* or *imbrices*, since the fabric may need to be compared with others
 - Any fired clay which is associated with iron smelting and which is to be looked at by a specialist in that field.
- 1.1.15 There is little point in retaining the rest of the material, whether ceramic building material or fired clay, in the long term. There are no special requirements for long-term storage, other than the use of robust packaging materials and a dry environment.

Comparative Material

1.1.16 The tile fabrics found on the site should be compared with the Canterbury Archaeological Trust's tile fabric type series, which may provide information on sources and date-ranges. Comparisons might fruitfully be made with material from other Roman sites in north Kent, although this would have to be considered as a long-term, non-site-specific project.

Potential for Further Work

1.1.17 The tile fabrics provide potential evidence for the sources of the building materials used at or near the site in the Roman period. It is unlikely that the one small fragment of post-Roman peg tile will prove at all useful in this respect. The fired clay and daub is a potential source of information on iron smelting. But it contributes only minimally, if at all, to knowledge of building techniques using

wattle-and-daub, since (a) the material is fragmentary and mostly very abraded; (b) some of the features – such as the possible lath impression and some of the possible wattle impressions – are far from certain; and (c) most appears not to be in primary contexts.

- 1.1.18 The material does not require illustration.
- 1.1.19 The furnace fired clay should be examined by an appropriate specialist.