Marcham Temple – Ceramic Building Material

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Just over 1,570 kilos of tile fragments were recovered from all zones of the site together (MF, MFNA, MFP), almost all of which was roof tile. In terms of the zones of the site this breaks down into c. 802 kilos from the MF trenches; c. 755.5 kilos from the MFNA trenches; and a tiny c. 1 kilo from the mostly prehistoric MFP trenches. The most tile-rich trenches in the MF zone were Trench 2 (large rectangular shrine building in the centre of the site) at c. 249 kilos; Trench 25 (over the area of the path running from the temple temenos entrance towards other shrines in the centre) at c. 140 kilos; Trench 18 (series of buildings around the temenos entrance) at c. 85 kilos; Trench 15 (also in area adjacent to temenos entrance and wall) at c. 85 kilos; Trench 14 (mixed area of prehistoric and Roman features in SE corner of temenos) at c. 64 kilos; and finally Trench 9 (central arena trench) at c. 56 kilos. For the MFNA trenches, which are all focused in and around the main Romano-British style temple within the temenos, the most tile-rich trenches are Trench 7 at c. 399 kilos; Trench 6 at c. 316 kilos; and Trench 8 at 74 kilos.

Clearly the bulk of the tile was found either in or around the main Romano-British temple itself or around the entrance and path through the temenos wall surrounding it and the associated buildings in this area. This all implies that the main temple at least was roofed with tile, even though most of the other shrine buildings on the site may not have been. The large amount of tile found in the Trench 2 building all seems to be from secondary deposition, where all sorts of material was dumped inside the building after it burned down, some of it possibly to make up new floor surfaces.

Although they were not weighed separately the proportions of tegulae and imbrices were commensurate with those on a roof, however as the assemblage was highly fragmented it is unlikely that they constitute a primary roof collapse or destruction. Tegulae can be dated by reference to the shape of their lower cutaways which are used to facilitate the overlapping of the tiles on the roof.[1] 156 tegula fragments had identifiable cutaways and all but six of these were Group C, normally a mid-second to mid-third century form. Three quarters of the stratified tegulae came from just four contexts in MFNA trenches 6 and 7 (MFNA contexts 6003, 6008, 6010 and 7015). The non-roof tile within MFNA Trench 7 consisted of four pieces of hypocaust tile, four lumps of opus signinum and a quantity of tesserae whilst 20 pieces of brick ranging in thickness from 35mm to 50mm came from both Trenches MFNA 6 and 7. The detail by individual contexts in the MFNA trenches in the area of the main Romano-British temple can be seen in Table 1.

Context MFNA	Weight (kg)	Tegulae (number)					brick (no)	Hypo-caust (no)	opus sign'm (no)	Tessera
		A	B	C	D	Total				
6000	15			5		5				
6002	17			1		1	1			

[1] Warry 2006

6003	30			7		7				
6008	120		1	17	2	20	3			
6010	95			24		24				
6012				1		1				
6018	23			3		3	5			
6024	1			1		1				
other	15									
Total Trench 6	316	0	1	59	2	62	9	0	0	
7000	83			14	1	15	3		1	
7004							1	1		
7012	6			2		2				
7015	140	1		50		51	1			
7016	39			3		3	1	1		several
7018	20			2		2				
7021	24			3		3	1	1	1	lots
7022	7		1			1	1		1	
7033	8						1			
7035	10								1	
7037	3						1	1		
7040	2			1		1				
7043	4			1		1				
7045	15			5		5	1			
7048	2			1		1				
7051	0.4			1		1				
7080	10			1		1				
7084				1		1				
other	26									
Total Trench 7	399	1	1	85	1	88	11	4	4	
8000	25			2		2				
8009	13			2		2				
8011	5			2		2				
other	31									
Total Trench 8	74	0	0	6	0	6		0	0	
Grand Total	**789**	**1**	**2**	**150**	**3**	**156**	**20**	**4**	**4**	

Table 1: Analysis by context for MNA trenches 6,7, and 8 only

The overwhelming predominance of Group C tegulae found in the MFNA trenches over the main Romano-British temple contrasts with the MF trenches in the main Marcham site where only half of the tegulae are of Group C form. The very

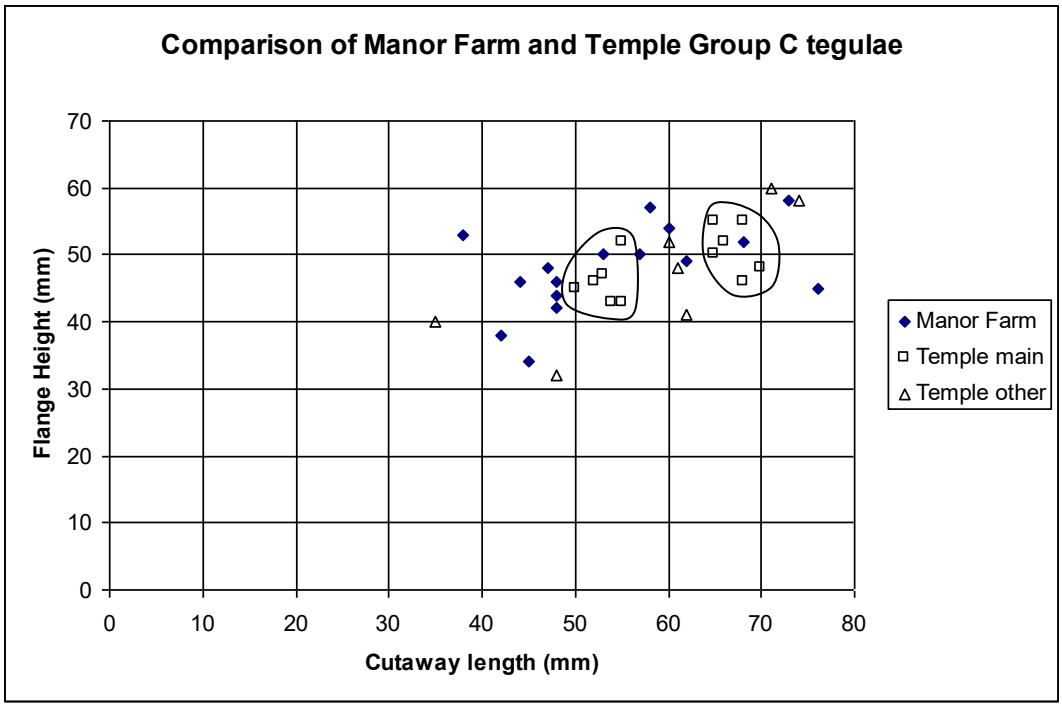
fragmentary nature of the temple tegulae meant that on only 32 of the tegulae could the length of the cutaway be measured and only 19 of these had the full height of the flange remaining. The cutaway length was determined by inserts placed in the lower end of the mould in which the tegulae were formed and as a consequence it is a good way of distinguishing between different batches or sources of production. In Table 2 the cutaway lengths for the Group C tegulae are tabulated against the contexts from which they arose. It can be seen that context MFNA 6008 has a cluster of tegulae with a cutaway length of 50-54mm and context MFNA 7015 a cluster with a length of 65-70mm which clearly represent discrete production batches or tile sources. The other tegulae with a cutaway length of 65-70mm are most likely part of this production batch but all the other length cutaways turn up as single finds and are probably part of the background scatter found throughout the Marcham site.

Length (mm) / Context	<50	50-54	55-59	60-64	65-70	>70
6003					2	
6008		6		1		
6010				1	2	
6018	1					
7000			1			1
7012				1		
7015			1	1	7	
7016				1		
7021					1	
7051	1					
7084					1	
8009						1
8011			1			
Total	2	6	3	6	13	2

Table 2: Lower cutaway lengths of Group C tegulae in MFNA trenches

To test this further all of the Group C tegulae with both a complete cutaway length and lower flange height from the temple trenches are plotted below against all of the Group C tegulae that have been found on the rest of the Marcham site. It can be seen that the tiles forming the background scatter in the main temple area in the MFNA zone appear to match those on the rest of the site where they were also background scatter but, apart from single interlopers in each cluster, the main temple tegulae are discrete from those on the rest of the site. Interestingly both interlopers come from MF Trench 15 at Marcham[2] which was adjacent to some form of entrance through the *temenos* wall. We can therefore say that whatever the process of demolition and renovation of the main temple within the temenos, it was self-contained and did not lead to a spread of tiles across the rest of the site.

[2] Only one other tegula with a cutaway was found in MF Trench 15 and this had a length of 48mm which is only just below that of the temple cluster



Morphologically longer cutaways are earlier and shorter ones later. It is therefore reasonable to extrapolate and say that the main MFNA contexts 7015, 6010 and 6003 comprise Group C tegulae from a single second century manufacturing source whereas context MFNA 6008 comprises tiles from a single third century source. Just five tegulae from stratified contexts within the temple were not Group C. Three of these were Group A or B which date from the first to the mid-second century and may well represent the background scatter of these forms which are also found on the main Marcham site. The other two were Group D which is a later third/fourth century form; a large cluster of these tegulae was found in Marcham Trench 2 but these appear to be made by a different manufacturer to the temple ones.[3] It is perhaps significant that these Group D tegulae come from context MFNA 6008 which appears to be third century on the basis of the cutaway lengths of the Group C tegulae.

Broadly the same number of tegulae as imbrices will be required on a roof and together tiles of this period would weigh about 8.7kg.[4] The overall assemblage from the MFNA trenches weighed c. 755kg and, as almost all this was roof tile, we may calculate that this equates to 87 tegulae and a similar number of imbrices. By way of confirmation, as each tegula has two lower cutaways, the 156 cutaways recovered would represent 78 tiles. The area of the main temple[5] within the temenos was approximately 400m^2 and ten tegulae are required to each square metre[6] on the roof or around eleven taking account of the pitch of the roof. This means that the building will have required 4400 tegulae for its roof of which just 2% were recovered in the excavation. This compares with Silchester where the recovery rate is very approximately 1%.[7]

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[3] The tegulae from Marcham Trench 2 were unusual in having two finger channels running down the inside of each flange unlike the temple tegulae which had the more usual single channel or no channel at all.

[4] Brodribb 1987,11

[5] Assuming the temple measured 20m by 20m

[6] Warry 2006, 106

[7] Warry forthcoming

Most of the tiles were made in an orange red fabric that is typical of the area, however Contexts (6008) and (7015) in MFNA 6 and MFNA 7 trenches and a fragment in MF Trench 33 from context (33003) contained fragments of a white "Eccles" type fabric created by the addition of chalk. A proportion of both tegulae and imbrices appeared to have been coated with coloured slip sometimes painted onto just the outer surface and others on both sides (presumably by dipping). The colours were mainly cream or dark blue but these are not necessarily the colours as they would have originally appeared. It seems likely that there was a deliberate attempt to dramatise the temple roof by coloured patterning and this was presumably also the purpose of the tiles specially produced in white fabric. Signatures on the tegulae all appeared to be semi-circular, generally made with three fingers.

Bibliography

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