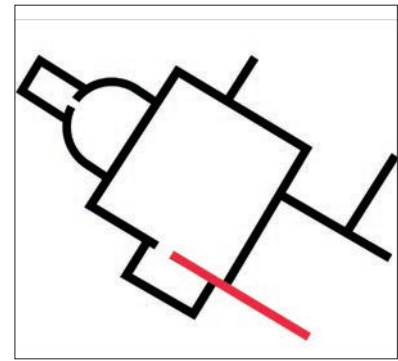
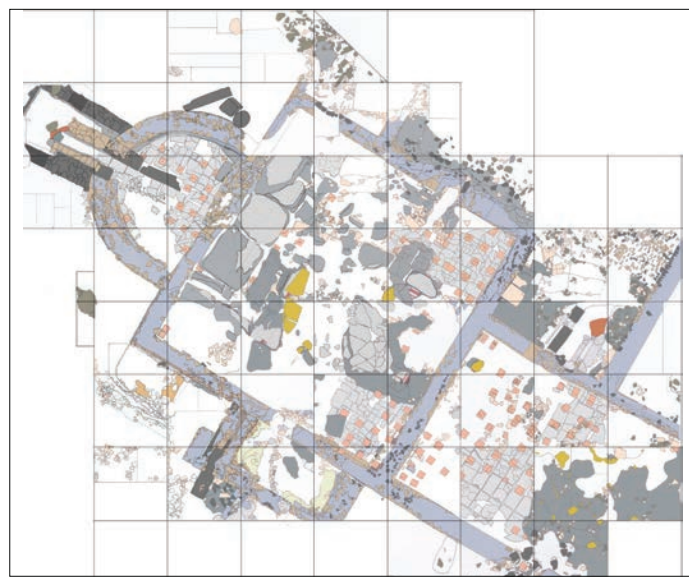


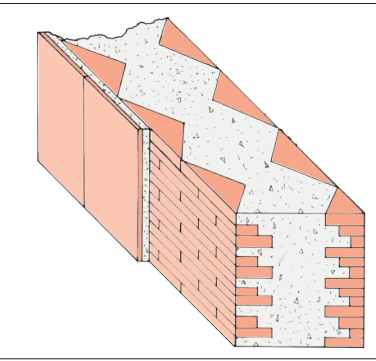
# BATH COMPLEX - WALL TYPES

## CARSULAE BATHS RESEARCH PROJECT - SAN GEMINI PRESERVATION STUDIES



### WALL K

OPUS TESTACEUM



Wall K is made of opus testaceum and it is 74.5cm thick on average (the thickness increases from 73cm to 76.5cm towards the southeast end). The outer row of tegulae typically has the long side of the triangle on the outside surface, whilst the interior row of tegulae is laid with one of the short sides exposed on the surface. There is no sign of a step or any kind of cladding on the inside or the outside. There is a possible opening between the tepidarium and the cladrium, although it's hard to tell whether it's ancient or modern (machine knocking through perhaps). Next to this, there is a section of smooth brick surface almost at floor height that indicates another possible opening. At the bottom of the outer side, under the opening between the tepidarium and the caldarium there is a bottom section of opus reticulatum. There is a 7-10cm gap between the wall and the pilae. There is a 108cm wide filled opening on the east end of the wall.

Wall thickness (cm): 73, 73.6, 74, 75.6, 76.5



Wall K - Interior at Plunge Basin



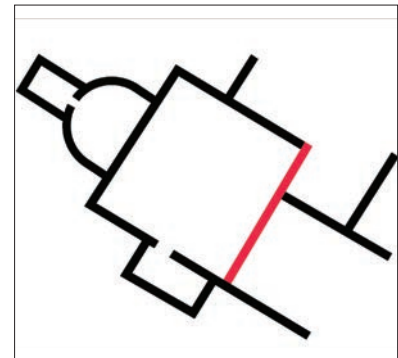
Wall K - Top



Wall K - Interior

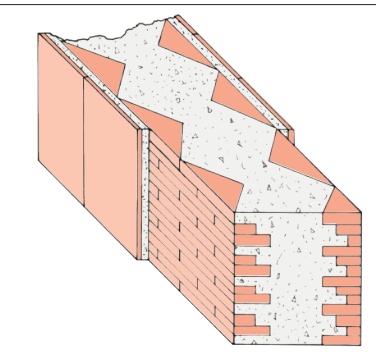


Wall K - Exterior



### WALL M

OPUS TESTACEUM



Wall M is an opus testaceum wall, 61.9cm thick on average. The tegulae are arranged with the longest side of the triangle facing outwards on both sides. There are remains of terracotta facing tiles on both sides set into cement, in some places abutting the pilae. It's not clear if this was their original position, although they are found consistently along both sides. The pilae are around 10-15cm from the outer brick surfaces on both sides.

Wall thickness (cm): 61, 62, 62.5, 62



Wall M - Interior East Side



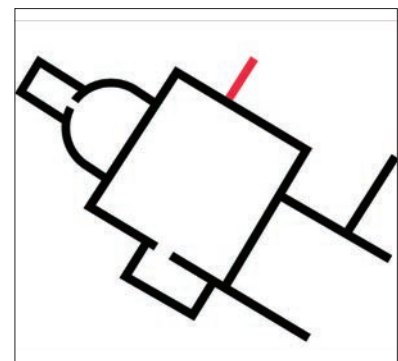
Wall M - Interior East Side at Furnace 4



Wall M - Top

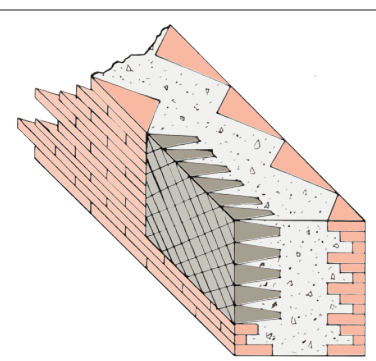


Wall M - Top



### WALL P

OPUS MIXTUM



Wall P is built of opus mixtum and is approximately 58cm thick. There is a section of opus reticulatum under two layers of opus testaceum. The wall is mostly buried and not yet excavated.

Wall thickness (cm): 58 (no more measurement due to lack of excavation and on-going works)



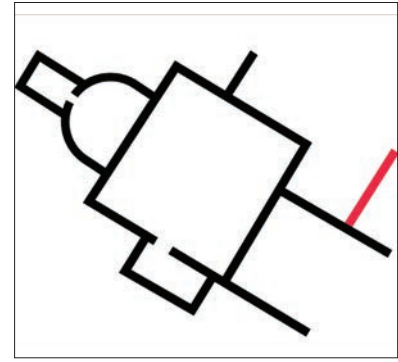
Wall P - Top



Wall P - West Side

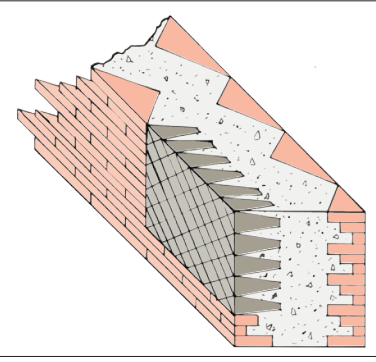


Wall P - At Intersection with Wall O



### WALL R

OPUS MIXTUM



Wall R is 61.3cm thick on average and is constructed of opus mixtum. The opus reticulatum is not consistently located on both sides of the wall in the same locations. This discounts the likely hood that there was an opening that may have been filled with the opus reticulatum. Closer to the figdarium opus reticulatum appears next to opus testaceum the entire height of the wall. On the eastern side of the wall opus reticulatum appears as a panel on top of the opus testaceum wall.

Wall thickness (cm): 63, 60, 61



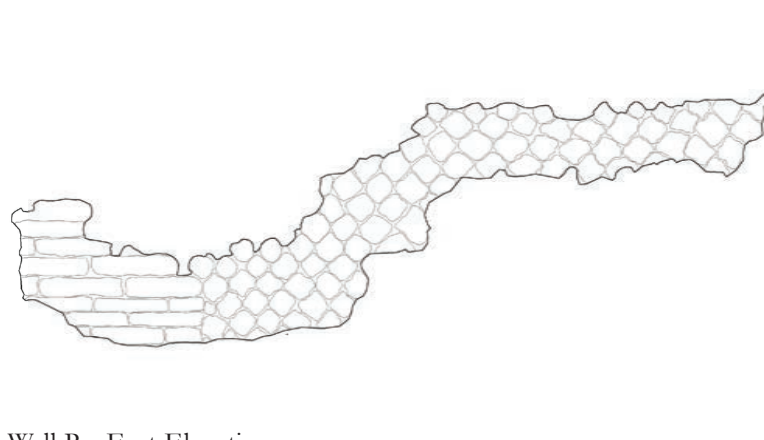
Wall R - West Side



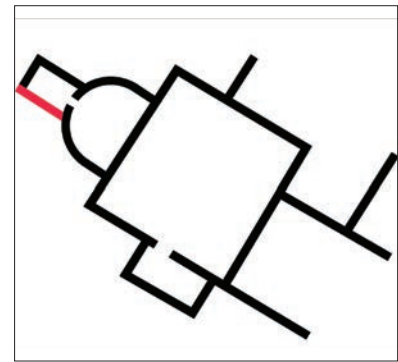
Wall R - Top



Wall R - West Side Within Furnace 4

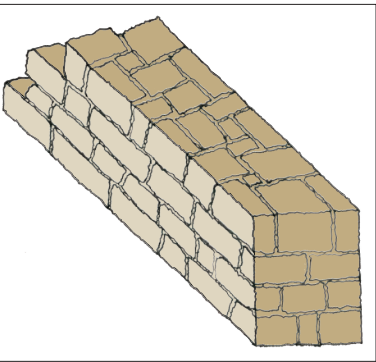


Wall R - East Elevation



### WALL T

OPUS LATERICIUM



Wall T is built of rough small limestone blocks called opus latericum. The wall appears to be solid stone construction with no significant amounts of opus caementitium. Wall T is 64.5cm thick on average for the eastern most portion measuring 147 cm from apse wall and then it steps back to become 45cm thick. The exterior surface is flush.

Wall thickness (cm): 62, 67, 45



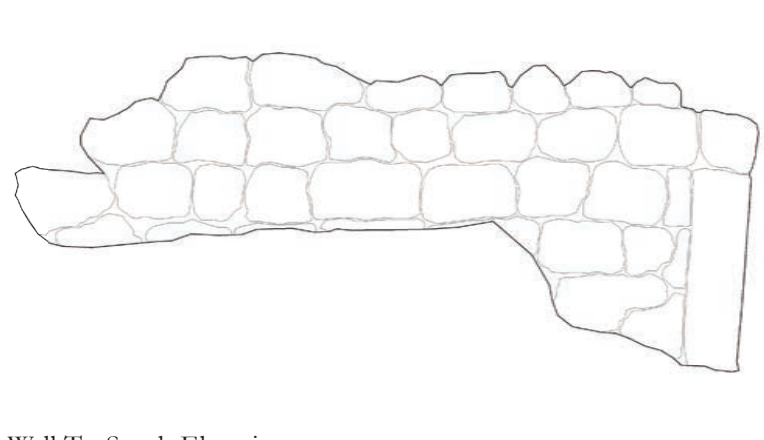
Wall T - Interior



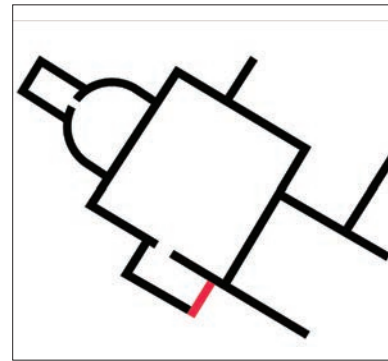
Wall T - Interior and Top



Wall T - Exterior

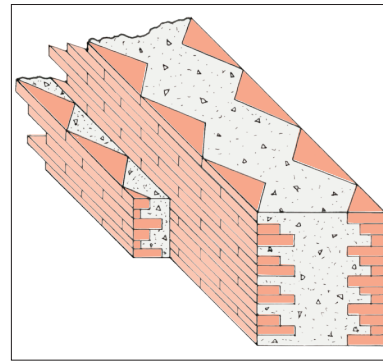


Wall T - South Elevation



### WALL L

OPUS TESTACEUM



Wall L is an opus testaceum wall around 58.5cm thick. On the interior side there is a 19cm wide ledge supposedly running all the way along the walls of this room to support a plunge pool, though there is no visual evidence of this present.

Wall thickness (cm): 59, 58



Wall L - Exterior



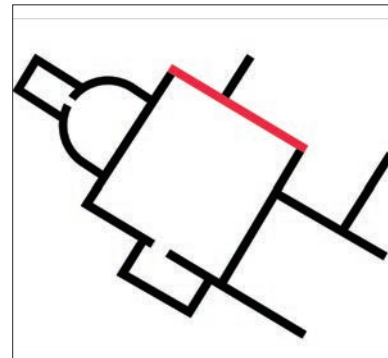
Wall L - Interior



Wall L - Top



Wall L - Top



### WALL O

OPUS TESTACEUM



Wall O is an opus testaceum wall, approximately 60cm thick. There are two openings on this wall, both potentially arched. On the south side there is a terracotta tile at the bottom of the wall (this would have been the wall of the hypocaust). The pilae are close to the wall, only 5.5cm away from the surface of the structural wall. In theory openings 1 and 2 each lead to a furnace. Opening one is located at the west end of the wall and is still partially un-excavated. The spring-point of the east side of the opening sits about 105 cm above the hypocaust floor. Opening two is to the east and has the lower most voussiors of an arch on both sides. The arch opening measures 105 cm wide, with the spring-point is at 124 cm above the hypocaust floor.

Wall thickness (cm): 60 (no more measurement due to lack of excavation and on-going works)



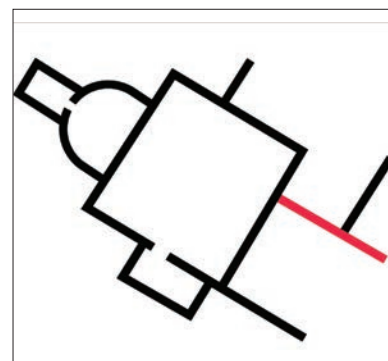
Wall O - Top at Furnace Opening



Wall O - Interior Northeast Corner



Wall O - Interior South Side



### WALL Q

OPUS TESTACEUM



Wall Q is an opus testaceum wall, 61.3cm thick on average with two openings, both filled in antiquity. At opening number 2 (potential opening) there is a space left out in the inner brickwork (opus testaceum), whilst on the outside we can see a continuous layer of cement and opus reticulatum masonry. Opening 1 is filled with rubble and shows the remains of an arch (spring-points and lower most voussiors). The arch is 173cm in diameter at the spring points, the width of the opening below it is 143cm. Each voussiors brick is 12.5cm x 42cm x 4.5cm. The spring-point of the are is at 65 cm above the hypocaust floor. Among the rubble fill of opening one there are two terracotta elements with curved edges aligned with one another, likely curved brick made for plaster covered columns.

Wall thickness (cm): 60, 62, 62



Wall Q - Potential Second Opening



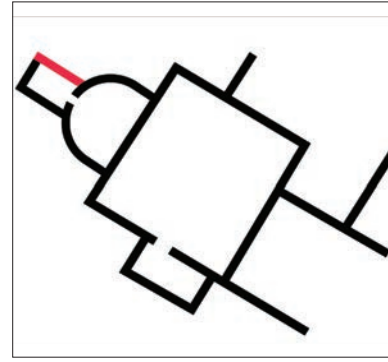
Wall Q - South Side at Furnace Opening



Wall Q - Top

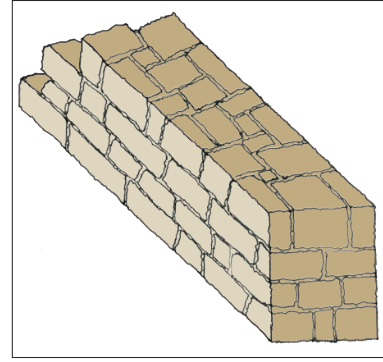


Wall Q - North Side at Furnace



### WALL S

OPUS LATERICIUM



Wall S is built of rough small limestone blocks called opus latericum. The wall appears to be solid stone construction with no significant amounts of opus caementitium. Wall S is 46cm thick on average and it has a 53cm wide opening with occasional tegulae blocks on the sides.

Wall thickness (cm): 46, 46



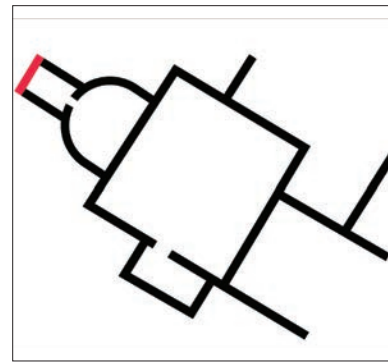
Wall S - Interior of Furnace 1



Wall S - Interior and Top

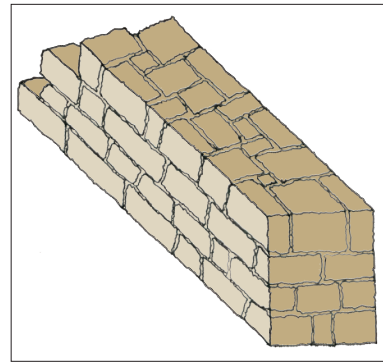


Wall S - Opus Latericum Detail



### WALL U

OPUS LATERICIUM



Wall U is built of rough small limestone blocks called opus latericum. The wall appears to be solid stone construction with no significant amounts of opus caementitium. Wall U is only partially excavated, therefore we have no data of its thickness or its outside surface.

Wall thickness (cm): (no more measurement due to lack of excavation and on-going works)



Wall U - Interior



Wall U - Opus Latericum Detail