



## GRANDI MAGAZZINI DI SETTIMIO SEVERO

BUILDING MATERIALS
BREAKDOWN

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THE WALLS, PROJECTING PIERS (SEE B), AND THE BUTTRESSES ON THE EXTERIOR OF THE BUILDING (SEE F) ARE ALL CONSTRUCTED OF BRICK-FACED CONCRETE (OPUS TESTACEUM). THE DOORWAY ARCHES, WINDOW ARCHES, AND THE ARCHES LINKING THE EXTERNAL BUTTRESSES ARE ALL MADE OF LARGE SQUARE BRICKS, CALLED BIPEDALES, WHICH ARE C. 60 CM ON EACH SIDE AND C. 4-5 CM THICK.

THE GROUND FLOOR STOREROOMS AND THE CORRIDOR (SEE J) RUNNING IN FRONT OF THEM WOULD HAVE BEEN COVERED WITH CONCRETE CROSS VAULTS RESTING ON THE BRICK-FACED PIERS PROJECTING FROM THE WALLS. THE AGGREGATE USED IN THE VAULTS AND IN THE CONCRETE CORE OF THE WALLS WAS A REDDISH-BROWN TUFA. THE UPPER LEVEL WOULD LIKELY HAVE BEEN COVERED WITH A TIMBER TRUSS ROOF, INSTEAD OF VAULTING. CERAMIC ROOF TILES WOULD THEN BE PLACED ON TOP OF IT.

THE DOORWAYS FOR THE STOREROOMS WOULD HAVE HAD THRESHOLD BLOCKS MADE OF TRAVERTINE STONE WITH A PIVOT HOLE TO ONE SIDE. EACH DOORWAY HAD FOUR TRAVERTINE ASHLAR BLOCKS EMBEDDED INTO THE SIDES OF THE DOORWAYS, TWO ON EACH SIDE (SEE J). THESE POSSIBLY HAD TO DO WITH A LOCKING MECHANISM FOR THE DOOR – HOWEVER, HOW THIS WOULD HAVE WORKED REMAINS UNCERTAIN. THE DOORS THEMSELVES WOULD HAVE BEEN MADE OF TIMBER BOARDS.

- A AERIAL VIEW OF THE MODEL SHOWING THE THREE WINGS OF THE WAREHOUSE WITH TIMBER ROOFING.
- B AERIAL VIEW OF THE MODEL WITH TIMBER ROOFING REMOVED.
- C Plan view of Storeroom fronted by Corridor. This is the left part of the highlighted area in B.
- D Plan view of ramp fronted by corridor which is highlighted in B. The ramps are supported on inclined concrete barrel vaults.
- **E** SECTION VIEW OF 3D MODEL RAMP RECONSTRUCTIONS.
- F RECONSTRUCTION OF EXTERIOR OF BUILDING WITH BUTTRESSES AND BRICK ARCHES LINKING THOSE BUTTRESSES. SMALL SLIT WINDOWS ARE PRESENT IN THE BACK OF THE ROOMS AND RAMPS.
- G Cross Section of Building Showing ramps with Corridor Fronting it on the Left.
- H CROSS SECTION OF BUILDING SHOWING STOREROOMS ON EACH LEVEL WITH CORRIDOR FRONTING THEM ON THE LEFT.
- I VIEW OF THE MODEL SHOWING BUTTRESSES ON THE EXTERIOR. THE INTERIOR FAÇADE OF THE BUILDING SHOWS THAT THE CORRIDORS WERE WALLED UP WITH ARCHED WINDOW OPENINGS IN LINE WITH THE DOORWAYS OF EACH OF THE STOREROOMS.
- J View of the corridor fronting the storerooms. The doors of the storerooms are visible to the right. The corridor, like the rooms, is covered in concrete cross vaults. The opening of each room has an arch of large bipedales bricks lining it. The doors are most probably made of timber. Two travertine blocks are positioned in the wall on either side of the doorway, possibly to hold metal bars or the like as part of a locking mechanism for the doors. The height of the doorways is 2.7m high.
- K MODEL OF A TIMBER TRUSS WHICH WOULD HAVE SPANNED THE WIDTH OF EACH WING OF THE WAREHOUSE.
- L The timber truss roof with section exposed to see the placement of the trusses at the end of the east wing. Here, it has been reconstructed as a hip roof.

