

Execution of conservation measures at Tumbe 12 (North-East) of the necropolis in the archaeological excavation of Pompeii

Conservation measures were carried out on the south façade of Tumbe 12 in the necropolis of Pompeii. The focus was on treating a protruding plaster layer with a lightweight and flexible injection material. The choice of this material was aimed at avoiding potential damage from excessively heavy or hard foreign materials. In addition, a heavy and hard injection material could act like a compress due to its fine pore structure and draw salts into the material through capillary forces and crystallize on their surface.

Earlier observations showed that injection mortar that was too dense often led to salts escaping at the interface between the injection material and the plaster layer, which could ultimately lead to rejection of the plaster layer due to salt efflorescence. It was therefore decided not to fill the cavity or large plaster layer completely, but only partially, using hydraulic injection material. Bridges were created at regular intervals between the plaster layer and the masonry to allow salt efflorescence without affecting the plaster layer.

A coarse mortar was used to close the plaster layer, with the advice not to press it too hard. The same principle was also applied to the edges to prevent the pores from shrinking, thus minimizing the risk of crystallization of salt efflorescence at the edges.

Recipe Injection mortar (von Leo Borgatta):

- CalxNova
- fine quartz powder
- perlite,
- grey pozzolans
- water

(0,4 : 0,33 : 1 : 0,33 : 0,9)

Recipe edges mortar:

- Grober grauer Flusssand 50%
- Feiner grauer Flusssand 25%
- Basalt 25%
- Sumpfkalk: aggregates ratio – 1:3







