

LE SUPERFICI DELL'ARCHITETTURA: IL CASO DELLA BASILICA DI SANTA CROCE A LECCE E L'UTILIZZO DELL'OSSALATO E DEL FOSFATO DI AMMONIO. CONFRONTO CON MONUMENTI SIMILMENTE TRATTATI.

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ABSTRACT

Prior to the recent restoration work, the stone wall surfaces of the Basilica of Santa Croce located in Lecce, appeared crumbly and disintegrated. The aim of the restoration project has therefore been to attenuate the serious alterations which affected the stone-material, mainly caused by previous interventions, and to strengthen and protect the stone surfaces from corrosion provoked by acid aerosols through the utilization of ammonium phosphate and ammonium oxalate. Once examined the condition of the Basilica's façade upper portion, three years after its restoration, a campaign of scientific analysis has been developed to monitor the behaviour of the restored part. Similar analyses were extended to other buildings made of stone material similar to the Lecce's Basilica calcarenite and treated with the same products. After twenty years from the first usages of the products, a more thorough analysis of their effects is now being conducted. Such research will allow to assess through visual examinations and chemical investigations the conservation status of the stone surfaces long after their restoration; to compare it with their earlier condition; and to evaluate objectively how long-lasting and effective such treatments are. The resulting data will shed light on the critical aspects of such treatment, if any, and thus will be useful to understand how the ammonium oxalate and ammonium phosphate based treatments could be improved and adapted to the particular context of different monuments.

Key-words: stone surfaces, ammonium oxalate, ammonium phosphate, consolidation