

# RECENT EVOLUTION OF THE RISING DAMP PHENOMENON IN VENETIAN MASONRIES BY VISUAL-BASED APPROACH

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## Abstract

Venetian masonries are strongly affected by decay caused by rising damp exacerbated by direct contact with salty water. The recrudescence of “high water” due to the city subsidence and marine eustatism arises concern on the impact on Venetian Buildings. This research qualitatively evaluates the impact of rising damp on masonries on 15 years, by visual comparison of archive images from “Archivio Pasqucci” and in loco surveys. Some evident features linked to the presence of rising damp have been chosen for the comparison between archive images and current situation: rising damp level, biological growth, plaster loss, efflorescence, and brick erosion. Three Sestieri, Dorsoduro, San Marco, and Castello, have been investigated so far, selecting 39 masonries (17 case studies for Castello, 9 for Dorsoduro, and 13 for San Marco). The results highlighted that an increase in rising damp trend is registered throughout the three Sestieri but with different intensity: Dorsoduro shows lower increase if compared with Castello and San Marco.

*K-words: Rising damp trends, Venice, Tide flooding, visual approach*