

Ceramic Façades in Portugal - Conservation Issues

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Abstract The use of glazed tiles on external façades became popular in Portugal in the 19th Century in a trend that was shared with Brazil. Nowadays the use of this material in external walls, providing colouring and texture, is a definite mark of Portuguese heritage. Many city centres have diverse patterns that were produced in several industrial sites, located throughout the country. The city of Ovar, with a small city centre is considered an open air Glazed Ceramic Tile Museum due to the diversity of patterns that it presents. Ceramic façades are often in a degraded state and many times, are not intervened accordingly, resulting in the total removal of ceramics and replacement by other types of external cladding. However, a few studies centred in the city of Ovar, together with the work of the city council towards the preservation of these buildings, have shed some light into the path that needs to be tread.

Ceramic tiles are usually placed with an air lime mortar and traditionally, there are no joints. Occasionally, small joints are filled with mortar with very fine stone powder. The main problems found in these façades are detachment due to the action of water or to differential behaviour of materials and loss of glaze in the tiles. Conservation actions have been performed replacing old tiles by replicas and the use of air lime mortars has been continued. However, the need to improve the process has brought about some issues: replicas and ancient tiles are very different and have a different behaviour, without joints, air lime mortars will have difficulty in hardening. Due to these issues, several tests have been performed on old façades, old tiles and old mortars and compared with areas that have been intervened and with new tiles and specifically designed mortars. This paper intends to present the specific problems linked to the conservation of these façades and create the basis for possible solutions.

1 Conclusion

There is a vast heritage of façades decorated with glazed ceramic tiles in Portugal, mostly dating from the 19th Century and beginning of the 20th Century. Part of this heritage is degraded, although studies have been initiated towards its conservation and there is ongoing work towards its physical preservation. However, the knowledge of the composition, degradation state and behaviour of the materials and of the wall-mortar-tile system is not sufficient and research must be undertaken in order to enable effective and compatible conservation actions.

A recently started research project – AZULEJAR – hopes to contribute towards this conservation by increasing the knowledge of the applied materials and systems and studying solutions that will improve the quality and performance of conservation actions.

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