



## A TOUR OF FAÇADE AZULEJOS DECAY IN LISBON

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### ABSTRACT

In this communication we walk through the streets of Lisbon to review the degradation of the 19<sup>th</sup> century tiled façades and assess its causes. The communication opens with a synthesis of overall principles derived from the observations and proceeds to discuss the causes of the detachments from the façades, which are a degradation of the tile coverings and not of the azulejos themselves. The adherence of the glaze to the ceramic body is then shown to be a capital factor underlying azulejo decay. Within this heading crazing, spalling and blistering are successively discussed. In the conclusive notes, the glaze adherence is presented as a time dependent propriety whose chemical decay is a subject open for research.

**KEYWORDS:** azulejos; glazed ceramics decay; tiled façades; moisture crazing

### 1. INTRODUCTION

As we walk through the quarters of Old Lisbon, its riches in tiled façades becomes apparent and once we teach ourselves to look up to the building tops instead of down to the cobbled streets, we discover that in many of the older azulejo façades the finishing is not homogeneous but somewhat mimics classical architecture with an upper frieze of different design and sometimes also a pediment with a star, sun or flower on a blue or yellow background. Looking closer we notice the friezes that border the wall openings... and also the decay! Generally speaking, decay may be systematized in two types: i) the detachment of whole tiles from the façades, which is a degradation of the wall coverings and not of the actual azulejo units; and ii) the deterioration of the tiles themselves. We shall examine briefly the detachment of azulejos and then the decay of the tiles. In this last case we shall exemplify with azulejos of local manufacture, more commonly used in and around Lisbon than in the North of the country, where the Oporto productions were preferred, because each factory had its own choice of materials and production methods that often came to have consequences on the long term performance of the tiles.

### 2. SOME BASICS OF AZULEJO DECAY

(see Proceedings)

### 3. DETACHMENT FROM THE FAÇADES

(see Proceedings)



#### 4. THE ADHERENCE BETWEEN THE GLAZE AND THE BISCUIT

(see Proceedings)

#### 5. CONCLUSIVE NOTES

(see Proceedings).

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