



## **TILES DEGRADATION DUE TO GLAZE-CERAMICS INTERFACE DEFECTS: STUDY ON SIMULATED TILES**

Sílvia R. M. Pereira; Laboratório Nacional de Engenharia Civil; Lisboa;  
spereira@Inec.pt;  
João M. Mimoso; Laboratório Nacional de Engenharia Civil; Lisboa;  
jmimoso@Inec.pt;

### **ABSTRACT**

In this communication we report the method and results of accelerated salt ageing tests on a set of simulated azulejos. Thin 0.7 mm glass plates were glued with epoxy resin on to unglazed ceramic biscuits to mimic the composite ceramic-glaze azulejo system. Several common defects on the glaze/ceramic interface were replicated: glaze delamination with or without glaze pores; unglazed ceramic biscuit; and a glaze pore on a non delaminated glaze interface. The tiles were immersed in a NaCl solution and let dry at 40°C. The effects of salt crystallization as a degrading agent were recorded over time to gain insight on the salt decay forms of actual azulejos with similar glaze defects.

The fact that a delaminated sample broke its glass layer immediately at the water imbibition stage with demineralised water was also considered representative of the massive damage that may be incurred by defective tiles solely because of the hydric expansibility of their ceramic body.

**PALAVRAS-CHAVE: Azulejos, glazed tiles, salt decay, tiles simulation, crystallization**

### **1. INTRODUCTION**

(texto no Livro de Actas)

### **2. MATERIALS AND METHODS**

(texto no Livro de Actas)

### **3. RESULTS AND DISCUSSION**

(texto no Livro de Actas)

### **4. CONCLUSIONS**

(texto no Livro de Actas)



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