

Chapter 2

‘Palazzo Edilizia’ in Salerno

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This chapter presents the forensic investigations relevant to the partial collapse of a historical masonry building in Salerno (the so called ‘Palazzo Edilizia’), which occurred in 2007 in Salerno (Italy). The investigations revealed that hidden structural defects were the main causes of this apparently unpredictable collapse.

2.1 Introduction

On the night of the 15th of June 2007, a corner of one of the most important historical buildings in Salerno, the so called ‘Palazzo Edilizia’, collapsed 80 years after its construction. Such a ruinous failure did not cause any casualties only because the collapsed side was that of the living rooms.

On the 29th of June 2007 the Judge for the preliminary criminal investigations nominated the authors as technical consultants (i.e., expert witnesses). After that, the authors carried out investigations, surveys, and tests in order to obtain useful information to understand the causes and dynamics of such a ruinous and apparently unexpected collapse [1].

The purpose of the investigations was not only to determine the causes of such a collapse but also to provide the Judge for the preliminary investigations with sufficient data to identify the parties responsible.

2.2 The investigation Process

In Italy the partial or total collapse of a construction (even if without injuries and/or fatalities) is always a crime. This means that the crime trial and the relevant investigations always start before the civil ones and, in general, their conclusions are adopted also in the civil trial.

The criminal proceeding is always initiated by the Public Prosecutor who starts to carry out the pretrial investigations. In the case of a collapse, the Public Prosecutor appoints experts (i.e., consultants) as expert witnesses to carry out the technical investigations. As,