

BUILDING *FACADE* *MAINTENANCE, REPAIR,* *and INSPECTION*

STP 1444

Editors:
Jeffrey L. Erdly and
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Building Façade Maintenance, Repair, and Inspection

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Foreword

The Symposium on *Building Façade Maintenance, Repair, and Inspection* was held in Norfolk, VA on October 12–13, 2002. ASTM International Committee E06 on Performance of Buildings served as its sponsor. Symposium chairmen and co-editors of this publication were Jeffrey L. Erdly and Thomas A. Schwartz.

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Overview

Building facades are not static. They move in response to wind effects and temperature changes. They interact with the structural frames that support them. They degrade with age and, occasionally, lose attachment to the building. Loss of façade materials is a growing problem. Only eight U.S. cities have adopted some form of local ordinance requiring inspection of building facades to detect unsafe conditions, and these ordinances vary considerably in thoroughness, effectiveness, and enforcement. In some cases, façade ordinances have done little to reduce the threat and, in fact, have resulted in a false sense of security concerning the safety of building facades. Facades that have been inspected have lost significant façade materials within a year or two of the inspection.

The papers published in this special technical publication (STP) were presented at a symposium entitled *Building Façade Maintenance, Repair and Inspection*, held in Norfolk, Virginia on October 12–13, 2002. ASTM International Committee E06 on performance of buildings sponsored the symposium as a parallel effort with the final development of ASTM’s Standard E 2270, “*Standard Practice for Periodic Inspection of Building Facades for Unsafe Conditions*,” which received final approval in the spring of 2003.

The first known building code, Hammurabi’s Code of Laws (1700 B.C.), included the following: “if a builder build a house for someone and does not construct it properly and the house which he build fall in and kill it’s owner, then that builder shall be put to death.” While the sentence of death seems harsh, the underlying implication of a responsibility to protect those using our buildings during their everyday life is clear. It is the intent of the papers in this book, combined with ASTM Standard E 2270, to provide a rational guide for building owners and governing authorities to help ensure the safety of our aging building infrastructure.

The papers contained in this publication provide insight with regard to four major headings. They include: 1) Purpose and Background to Façade Ordinances; 2) Addressing Historic Buildings; 3) Investigation and Data Collectino Techniques; and 4) Material and Repair Techniques. The authors who generated these papers, architects, Engineers, public and private institutional facility owners, and contractors, bring to their work first hand knowledge and experience that covers the wide diversity of architecture within North America.

These papers, combined with ASTM Standard E 2270, represent a starting point for this important work. ASTM committee E06.55, through its ongoing task group, will be expanding its work to include additional annex information. The proposed topics include, but are not limited to, public sidewalk protection, safety of inspections, hazardous materials, safety considerations for inspection openings, mechanisms of distress, structural movement, and material-specific guidelines.

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