

PREFACE

Millions of dollars are spent annually to remove stains from the facades of buildings. To shed the image of construction industry as being “backward and low in productivity”, buildings would have to be designed and built to be more maintainable so that resources spent on maintenance works could be minimised.

The facade is the building skin that encloses and protects the occupants from weather elements, and it also gives the first impression for the building. With increasing awareness on minimising life-cycle costs, building clients and owners are specifying for buildings that require minimal maintenance costs. Facades that are designed without consideration for locational influences, dirt retention abilities, rainwater runoff drainage and access for cleaning and maintenance will often experience premature staining and incur high cleaning and maintenance costs. An in-depth understanding on the factors that degrade the visual image of the building because of facade staining is therefore important.

This book aims to highlight the various factors that need to be considered during the design, construction and post occupancy stages to minimise the problems with staining. Facade elements studied include exposed brickwork, concrete, natural stones, tiles, metal, glazing and plaster/painted walls. The implications of environmental, material, design and maintenance aspects with regards to staining of facades are discussed.

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