

DESIGNING WITH AN EYE ON



THE ESSENCE OF GOOD DESIGN

ARCHITECTURE
CONSTRUCTION ENGINEERING
CIVIL ENGINEERING

ALFRED MEIJERS



ENVIRONMENTAL VARIABLES

'THE ESSENCE OF GOOD DESIGN'

— WITH CONSIDERATION OF ENVIRONMENTAL FACTORS —



COLOPHON

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Author: Alfred Meijers

Printed by: Pumbo.com

Cover design: Alfred Meijers

Layout design: Alfred Meijers

ISBN: 978-94-6481-910-6

NUR-CODE: 648, 656, 955, 956

THEME CODE: ARC013000, ARC004000

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Keywords:

vormgeving, gevelreiniging, gevelontwerp, uitgever, ontwerp, ontwerpen, vervuiling, bouwtechniek, architectuur, civiele techniek

Design, facade, façade design, soiling, building engineering, architectural design, engineering design, structural engineering



Shouldn't we approach facade design
from a different perspective?



The author, Alfred Meijers believes so.

The "essence of good design," as he sees it, lies in preventing undesirable forms of pollution, particularly those that stand out on facades, bridges, and viaducts. Furthermore, these objects disfigure public spaces and owners are prematurely confronted with additional costs. What underlies this issue, and why has the observation of this pollution not led to critical questions within the design and construction disciplines before?

This issue prompted the author to bring attention to the topic. He gathered numerous practical examples for this purpose. Using these examples, he discusses possible causes and design solutions. At the same time, the reader gains insight into the dilemmas designers face. According to the author, preventive design is not a limitation of design freedom — he sees it as a challenge that can lead to unexpected forms.

This book offers:

Architecture, construction technology, and civil engineering students...

an early introduction to basic design insights.

Professionals in the construction industry...

a refresher on possibly overlooked insights.

Those interested in architecture...

an insight into the design process and the dilemmas of design choices.

To Website:



Author Alfred Meijers is an architect and former senior lecturer of architecture and engineering at a Dutch university of applied sciences.



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A low-angle photograph of a modern building facade. The building features large, square windows with intricate, three-dimensional orange-colored metal grilles. A worker wearing a red cap, a grey long-sleeved shirt, and dark pants is standing on a narrow horizontal ledge or scaffolding. The worker is holding a spray gun and appears to be painting or applying a substance to the wall. The overall color palette is dominated by the orange of the grilles and the reddish-pink of the building's surface. The text "WITH A DIFFERENT VIEW ON FACADES" is overlaid in white, serif, all-caps font, slanted upwards from left to right.

WITH A DIFFERENT
VIEW ON
FACADES



SUBJECTS BOOK



PART 1: 'A LOOK AT IMPOVERISHING FACADES'

- H1 INTRODUCTION TO SOILING
- H2 OVER RAINWATER AND EDGES
- H3 MOISTURE: PENETRATING
- H4 WIND-DRIVEN RAIN

PART 2: 'ABOUT FACADES AND SURROUNDINGS'

- H1 THE SMALL SOURCES OF SOILING
- H2 UPPER SURFACES, HORIZONTAL
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- H4 SUBSURFACES, HORIZONTAL
- H5 INCLINED SURFACES: ABOVE AND BELOW

PART 3: 'A LOOK AT FACADE OPENINGS'

- H1 AROUND FACADE OPENINGS
- H2 FRAMES IN THE PLANE
- H3 AN INSIGHT INTO DEEP FACADE OPENINGS
- H4 FACADES AND EXTENSIONS
- H5 AROUND WINDOWSILLS
- H6 AROUND RAINWATER SPOUTS

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AN UNNOTICED PHENOMENON



During my travels, both within and outside the Netherlands, I noticed that the soiling of facades displayed the same characteristics everywhere — whether it concerned buildings, civil engineering structures, or anonymous objects in public spaces. Clearly, a crucial factor is missing everywhere, because, as will be shown in this book, much of this extreme soiling could have been prevented. This phenomenon prompted me to question what exactly was behind it.

When I inquired about this, I consistently received only a furrowed brow in response: people simply hadn't given it much thought. This experience inspired me to dedicate a series of lectures to this topic. Initially, the students were doubtful about the importance of the subject, but this changed as they began to observe their surroundings more consciously. Some even remarked, *"Once you start paying attention, you can't ignore it anymore."*

What makes pollution a problem?

One might say, "Buildings and civil constructions just get dirty, so what does it matter?" However, this only holds true in dry conditions, where dirt accumulates evenly on surfaces. In wet regions, however, rain and wind are the major disruptors. The more irregular and intense their influence, the more disruptive the visual impact.

And this brings us to the core of the problem: the insufficient awareness of the impact of wind and rain on facades and other visible surfaces. Wind force combined with rainwater can even be disastrous for certain facade finishes. This is certainly no obvious point, as will become clear in this book, because the consequences can be significant.

For if ambition to change is lacking, only Frank Lloyd Wright's ironic advice remains:

"A doctor can bury his mistakes, but an architect can only advise his clients to plant vines."



Already a
different view
of designing
facades?



HOW TO READ THIS BOOK?



An Appeal to Students and Designers

Design is more than just form. Every building, every bridge, and every facade is exposed to weather and the passage of time. That's why I advise students and designers: look around you more consciously. Observe the traces left by rain and wind, and ask yourself — could this have been prevented?

Preventive design is not a limitation but an opportunity. By smartly incorporating weather influences into the design, we can create a built environment that ages more gracefully, requires less maintenance, and enhances public space.

This book shows how targeted design measures can reduce pollution and preserve aesthetic quality. Practical examples illustrate how relatively simple interventions can have a significant impact.

For students, the book offers an introduction to the basic principles of good design — preferably at the very start of their studies. The practical examples show that designs often appear clean and attractive on paper, but after completion, they tend to deteriorate into a questionable state. Good design goes beyond outward appearance — it requires well-designed details. Even after completion, the design must hold up.

This is not a standard textbook, but an invitation to reflection and discussion — exactly as should happen during the design process itself. That's why the book includes both straightforward cases that are easy to explain, and situations that deliberately leave room for doubt and questions. Not everything is spelled out, because that's the reality of design.

Hopefully, this book contributes to strengthening this basic awareness. Students can read specific sections ahead of certain stages in their studies. How this works is explained in a separate teacher's guide.

Let's hope this book helps raise awareness among designers.

FITTING INTO LECTURES



The book does not specifically focus on technical detailing, but on the importance of analysis prior to the design and elaboration of facades, roofs, bridges and viaducts.

The results of this analysis ultimately determine the detailing of the parts. The interplay of wind and rainwater flows is central.



The content may be part of existing courses. Lectures are not necessary; the short texts and cases encourage reading, independent thinking, hopefully discussion and deepening.

Then, after reading a current topic, the students should apply the insights gained in their projects and tested on them.

A DIFFERENT VIEW OF FACADES?



Thank you for your interest.

Alfred Meijers, January, 2025

If you are interested, please contact me.

It has been noted again: a teacher's manual is available.

If desired, I am happy to come for a guest lecture on the subject.

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