JAN CREMERS

## Building Openings Construction

# 

WINDOWS VENTS EXTERIOR DOORS

## Contents

Part A Introduction	
1 Openings in buildings	8
Jan Cremers 2 The historic development of the window – from its origins through to the early modern era Hermann Klos	12
3 Designing facade openings Jan Cremers	24
<ul> <li>4 Windows and doors in art and culture</li> <li>Elke Sohn</li> </ul>	32
5 Solution principles for adjustable openings Peter Bonfig	36
Part B Fundamentals I	

1	Requirements and protective functions -	
	building physics fundamentals	50
	Jan Cremers with ift Rosenheim	
2	Materials, components, types of construction	86
	Jan Cremers	
3	Building connection and structural context	120
	Jan Cremers with ift Rosenheim	
4	Working with historic windows in existing buildings	
	and architectural monuments	148
	Hermann Klos	

### Part C Fundamentals II

170
190
198
208
20

### Part D Built examples in detail

Project examples 1 to 30	220
--------------------------	-----

### Part E Appendix

Authors	278
Acknowledgments; Ordinances, guidelines and standards	279
Literature	281
Image credits	283
Index	286