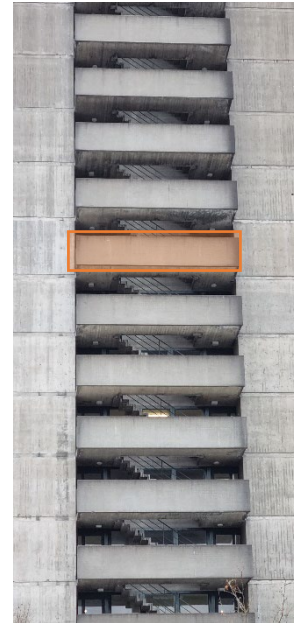
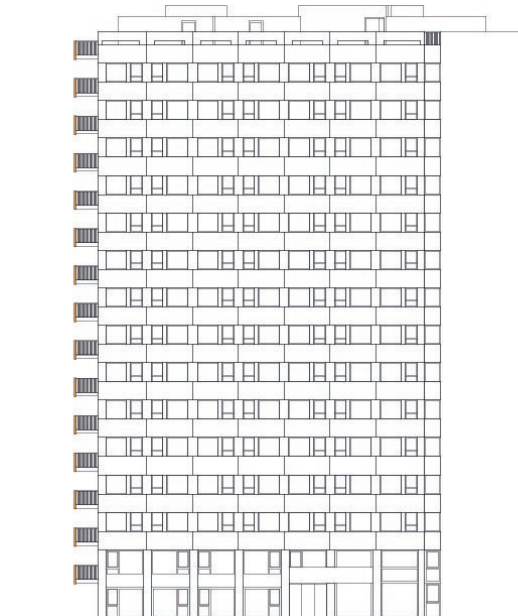
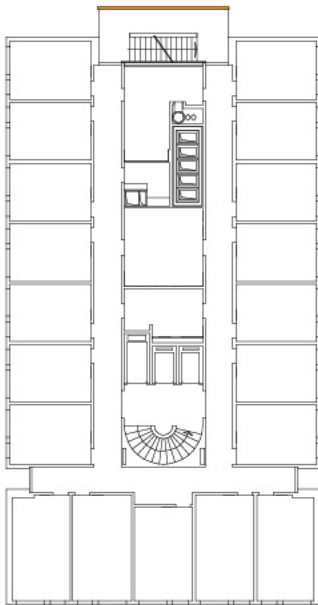


Type 01

Category: Facade elements

## Balcony railings

### Location



### Balcony railings



### Color and finishing





Type 01

Category: Facade elements

## Balcony railings

### Description

Exposition	Outdoor, exposed to rain and water flow		
Color	Shade of grey, closest RAL 7023 or 7003		
Finishing	Horizontal wood plank patterns		
Actual location	N facade		
Initial function	Facade self-supporting element		
Accessibility	Easy – No further demolition required before		
Anchor points	Available		
Overlays	Type	Fixation	Thickness
	None	-	-
Connexion type	Embedded connection to the balcony slab		
Deconstruction tool	Diamond saw		

### Condition and durability

Condition assessment	7 % good
	86 % acceptable
	7 % deviant
Carbonatation depth [mm]	Avg. 16 (max 19)
Toxic substance	PCB in joints
<b>Mechanical characteristics</b>	
Density	2500 kg/m <sup>3</sup>
Concrete compressive strength	41 N/mm <sup>2</sup>
Concrete young modulus	38'600 N/mm <sup>2</sup>
Reinforcement tensile strength	450 N/mm <sup>2</sup>
Reinforcement young modulus	205'000 N/mm <sup>2</sup>

Element	Geometry			Inventory					Environmental impacts	
	Dimensions (W x L x T) [mm]	Reinforcement [mm]	Cross-section resistance [kNm]	Quantity [u]	Weight [kg/u]	Total area [m <sup>2</sup> ]	Total volume [m <sup>3</sup> ]	Significance	Initial production [kgCO <sub>2</sub> -eq/u]	Conventional demolition [kgCO <sub>2</sub> -eq/u]
19	6850 x 1310 x 120	Ø 4 S = 100	6,25	45	2692	403,8	48,5	0,7%	240	27

### Additional information

<b>Additional note</b>	<ul style="list-style-type: none"> <li>&gt; The elements are connected to the balcony slabs by stirrups Ø 8 spaced every 250 mm.</li> <li>&gt; The carbonatation depth is lower than the 20-mm concrete cover of the rebars.</li> <li>&gt; For horizontal storage of the balcony element, support spacers should be placed every 1.8 m.</li> </ul>
<b>Attention point</b>	<ul style="list-style-type: none"> <li>&gt; Vertical rebars are not anchored at the section end. The resistance is reduced in those areas.</li> <li>&gt; The waterproofing joints sealant placed between the facade elements probably contain polychlorinated biphenyls (PCB). These joints must be completely removed by a specialized company. The removal can be done with a cutter, while avoiding heating the joints or producing dust.</li> <li>&gt; Contamination with PCBs of the concrete neighboring the joints should be checked by further sampling. Most probably, it will be necessary to remove 1cm of the edge that was in contact with the joint.</li> </ul>