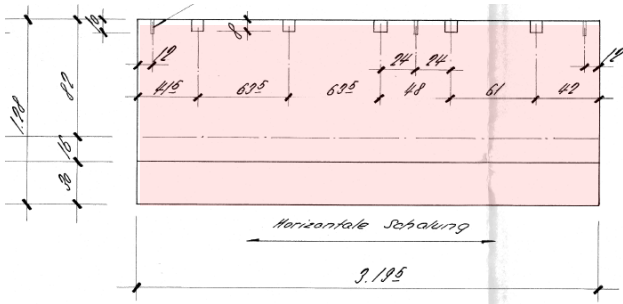


Type 03 Category: Facade elements
Window apron walls

Subtype n°14, dimensions

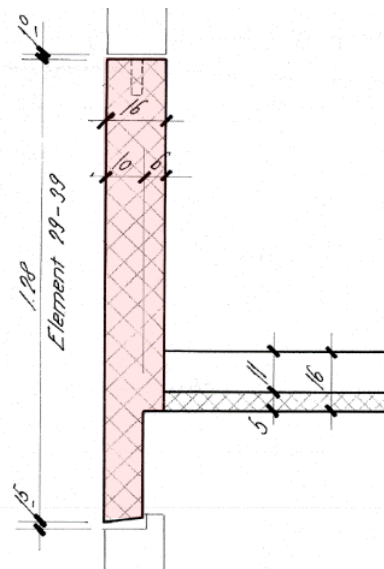
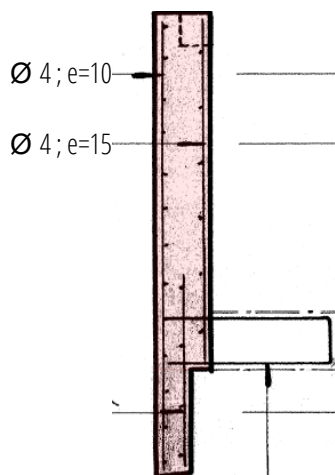
1:50



Subtype n°14, cross-section

Connection

1:20



Type 03 Category: Facade elements
Window apron walls

Description			
Exposition	Outdoor, exposed to rain and water flow		
Color	Grey with a yellowish tint, closest RAL 7044		
Finishing	Horizontal wood plank patterns		
Actual location	E, W and S facades		
Initial function	Facade self-supporting element		
Accessibility	Moderate – One/two elements to dismantle before		
Anchor points	Not available		
Overlays	Type	Fixation	Thickness
From concrete	Mortar	-	5 mm
	Cork	Glued	30 mm
	Plaster	-	10 (ev. 5) mm
To surface	Wallpaper (or painting)	-	-
Connexion type	Connected to other facade elements and to slabs		
Deconstruction tool	To facade elements	To slab	
	Diam. saw	Diam. Saw or hydro-blasting	

Condition and durability	
Condition assessment	43 % good
	54 % acceptable
	3 % deviant
Carbonatation depth [mm]	Avg. 2-16 (max 19)
Toxic substance	PCB; asbestos
Mechanical characteristics	
Density	2500 kg/m ³
Concrete compressive strength	41 N/mm ²
Concrete young modulus	38'600 N/mm ²
Reinforcement tensile strength	450 N/mm ²
Reinforcement young modulus	205'000 N/mm ²

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 ²]	Total volume [m ³]	Significance	Initial production [kgCO ₂ -eq/u]	Conventional demolition [kgCO ₂ -eq/u]
39	1380 x 1280 x 160	Ø 4 S = 100-150	6,2 - 4,2	72	706,5	127,2	20,3	0,3%	63	7
14, 34, 35, 96	3195 x 1280 x 160	Ø 4 S = 100-150	6,2 - 4,2	420	1636	1717,6	274,8	4,0%	146	16
11, 30, 31	3235 x 1280 x 160	Ø 4 S = 100-150	6,2 - 4,2	117	1656	484,5	77,5	1,1%	147	17
95	3250 x 1280 x 160	Ø 4 S = 100-150	6,2 - 4,2	9	1664	37,4	6,0	0,1%	148	17
15, 17, 36, 38	3415 x 1280 x 160	Ø 4 S = 100-150	6,2 - 4,2	78	1748	341,0	54,6	0,8%	156	17
91, 92, 93, 94	3420 x 1280 x 160	Ø 4 S = 100-150	6,2 - 4,2	18	1751	78,8	12,6	0,2%	156	18
13, 16, 33, 37	3425 x 1280 x 160	Ø 4 S = 100-150	6,2 - 4,2	78	1759	342,0	54,9	0,8%	157	18
10, 12, 2, 32	3440 x 1280 x 160	Ø 4 S = 100-150	6,2 - 4,2	78	1761	343,4	55,0	0,8%	157	18

Type 03

Category: Facade elements

Window apron walls

Additional information

Additional note	<ul style="list-style-type: none"> > The carbonation depth is lower than the 20-mm concrete cover of the rebars. > The depth of carbonation is less important for the elements of the southern facade. > For horizontal storage of the window apron walls, support spacers should be placed every 2.8 m, and the outdoor side should be facing downwards.
Attention point	<ul style="list-style-type: none"> > 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. > 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. > The cork is tested negative in the four sampling areas to polycyclic aromatic hydrocarbon (PAH) but should be handled with care. > Asbestos was detected in some of the plaster covering.