

System tk 100

Aluminum stop log system



thyssenkrupp

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Flood protection: Urgent need for action.

People have settled near rivers and coasts for thousands of years. Over the past few centuries river courses have been straightened and constricted, flood plains reclaimed and built on, and forests cut down. The consequences of these human interventions are climate change and an increasing number of environmental disasters. Floods, formerly once-in-a-century events, are occurring more and more frequently.

Experts are agreed that urgent action is needed: flood damage already tops the European loss statistics. Some of the losses are foreseeable and can be prevented by flood protection measures matched to local requirements. Flood protection and prevention are therefore among the most urgent tasks facing the local communities concerned.

End-to-end competence.

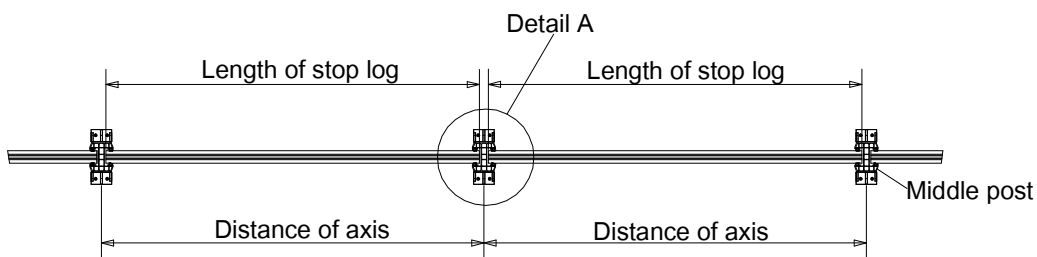
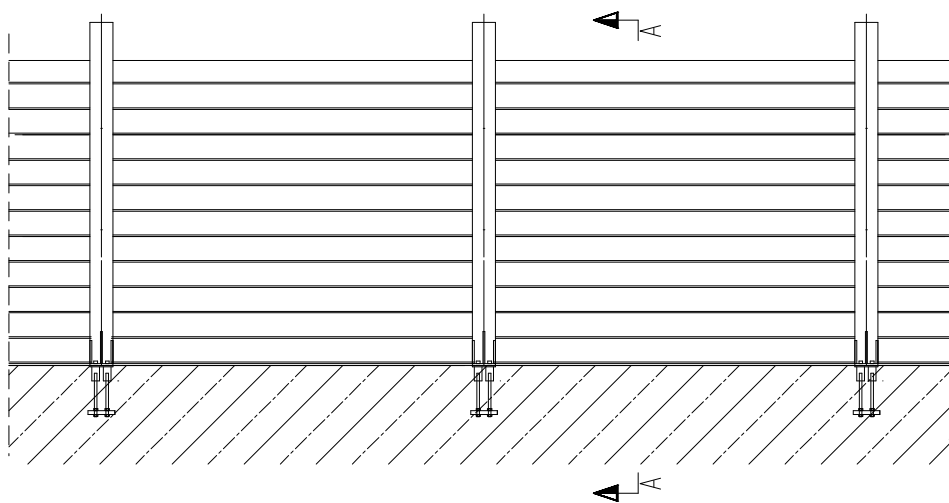
thyssenkrupp Infrastructure is a world-renowned supplier of flood protection equipment. We offer a broad spectrum of high-quality products and diverse technical services in hydraulic engineering and water management.

Content

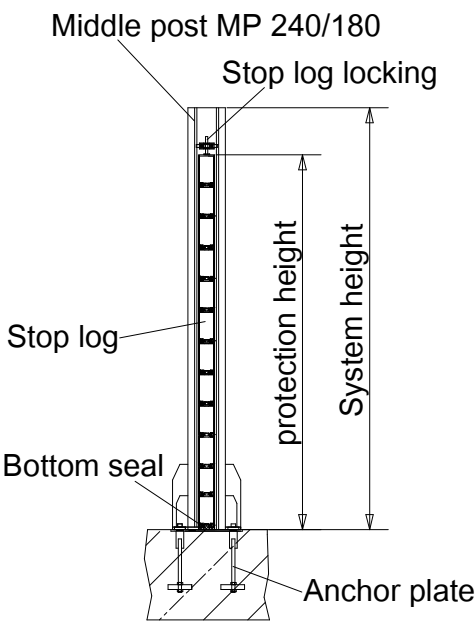
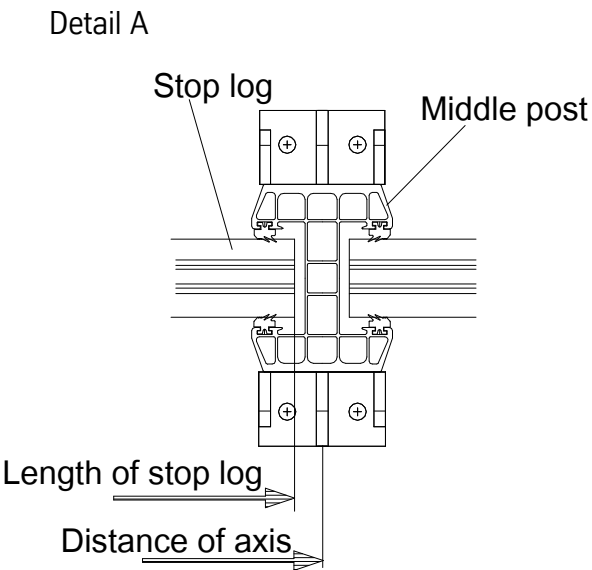
Technical handbook for mobile flood protection system tk 100

- 01 Flood protection systems**
 - 02 Flood protection wall
 - 03-04 Gap closure
- 02 Post, stop log**
 - 05 Load cases
 - 06-10 Post height and stop log length
- 03 Anchor plate systems**
 - 11-14 Anchor plate AP 100 T1 – T4
- 04 Wall connecting post**
 - 15 connecting with concrete anchor
 - 16 connecting with screw
- 05 Corner post, Anchor plate**
 - 17 Corner post
 - 18 Anchor plate 90 degree
- 06 Special systems**
 - 19-22 System pocket foundation
 - 23-25 Connection to the sheet pile
- 07 Sealing**
 - 26 Base – post - and stop log sealing
- 08 Locking system**
 - 27 Stop log locking system
- 09 Storage system**
 - 28-30 Storage boxes for stop logs and posts

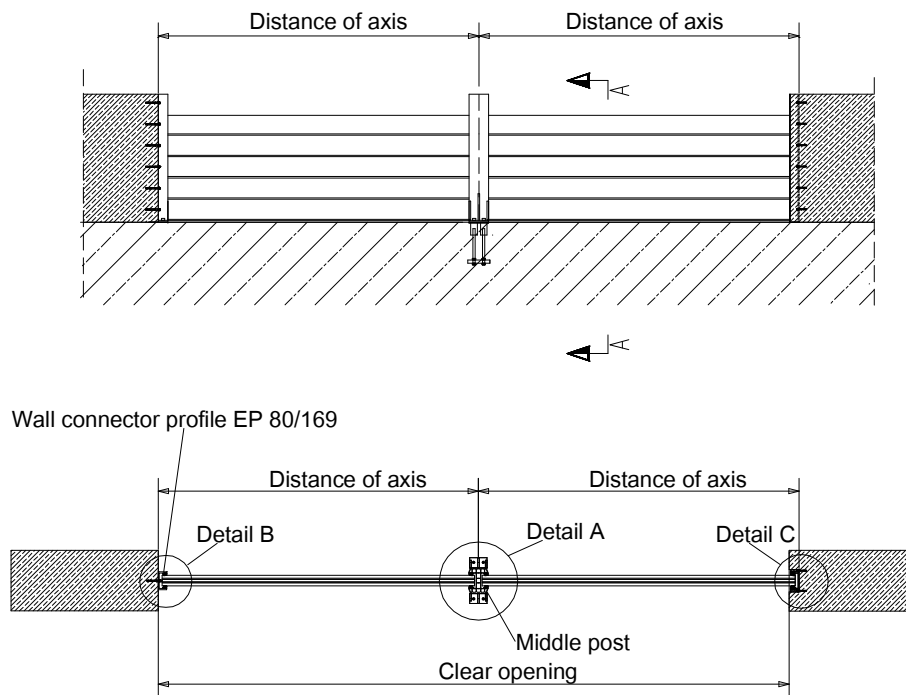
Flood protection wall



Cross section A - A



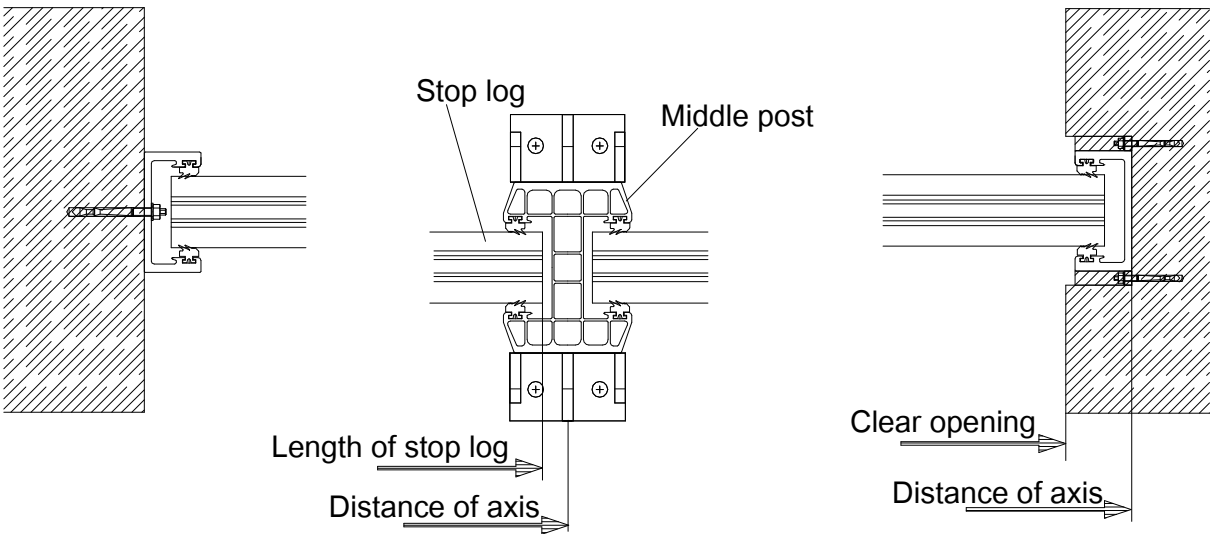
System definition: Flood protection



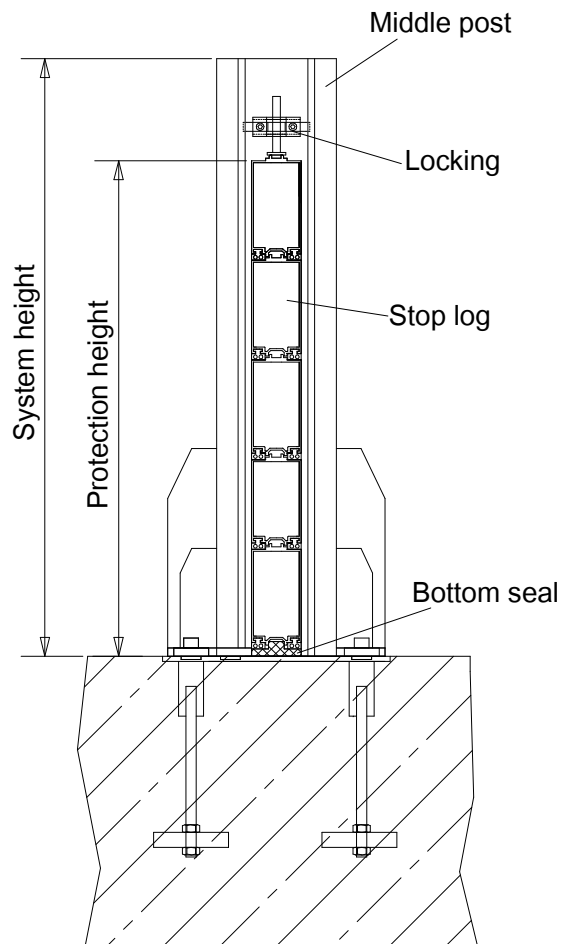
Detail B

Detail A

Detail C

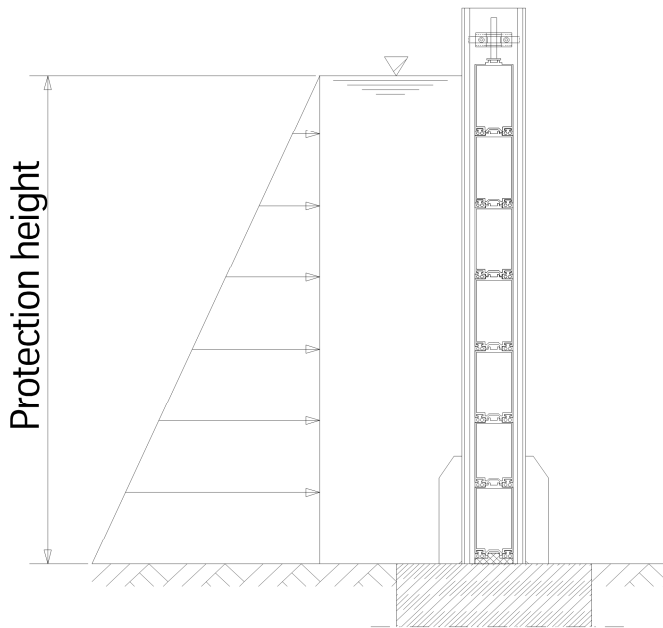


Cross section A-A



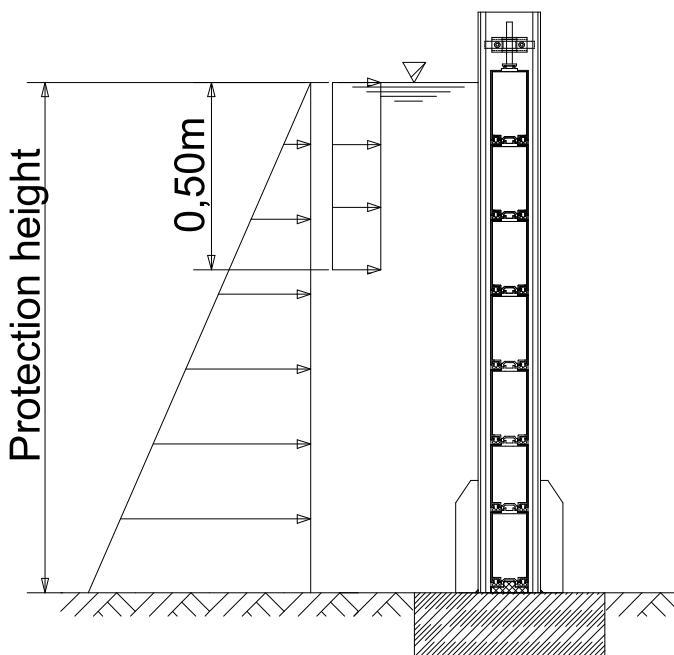
Two load cases

Load case water pressure



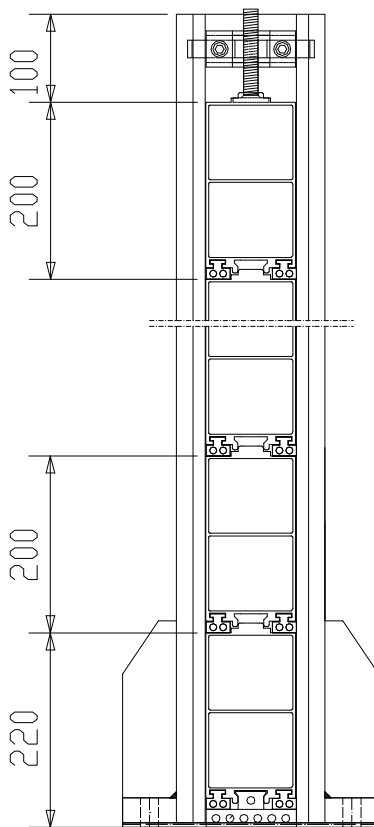
To 1)
Hydrostatic water pressure
with a weight density of 10 kN/m^3
and a safety factor of 1,35.

Load case water pressure and impact load



To 2)
In addition to the hydrostatic water
pressure an impact load of 20 kN
on an area of $50\text{cm} \times 50\text{cm}$ should
be considered.

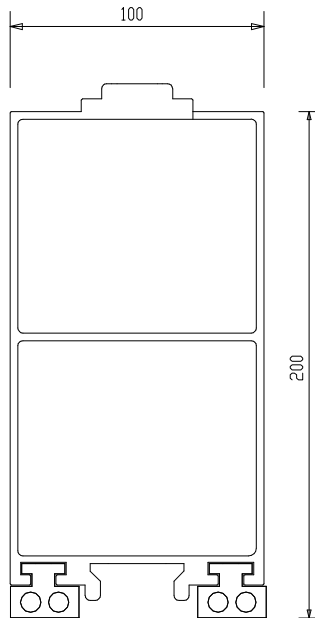
Further loads as flow pressure, wave impact, ice impact,
vehicle impact and load of people are not taken into account
here.



System 100 x 200

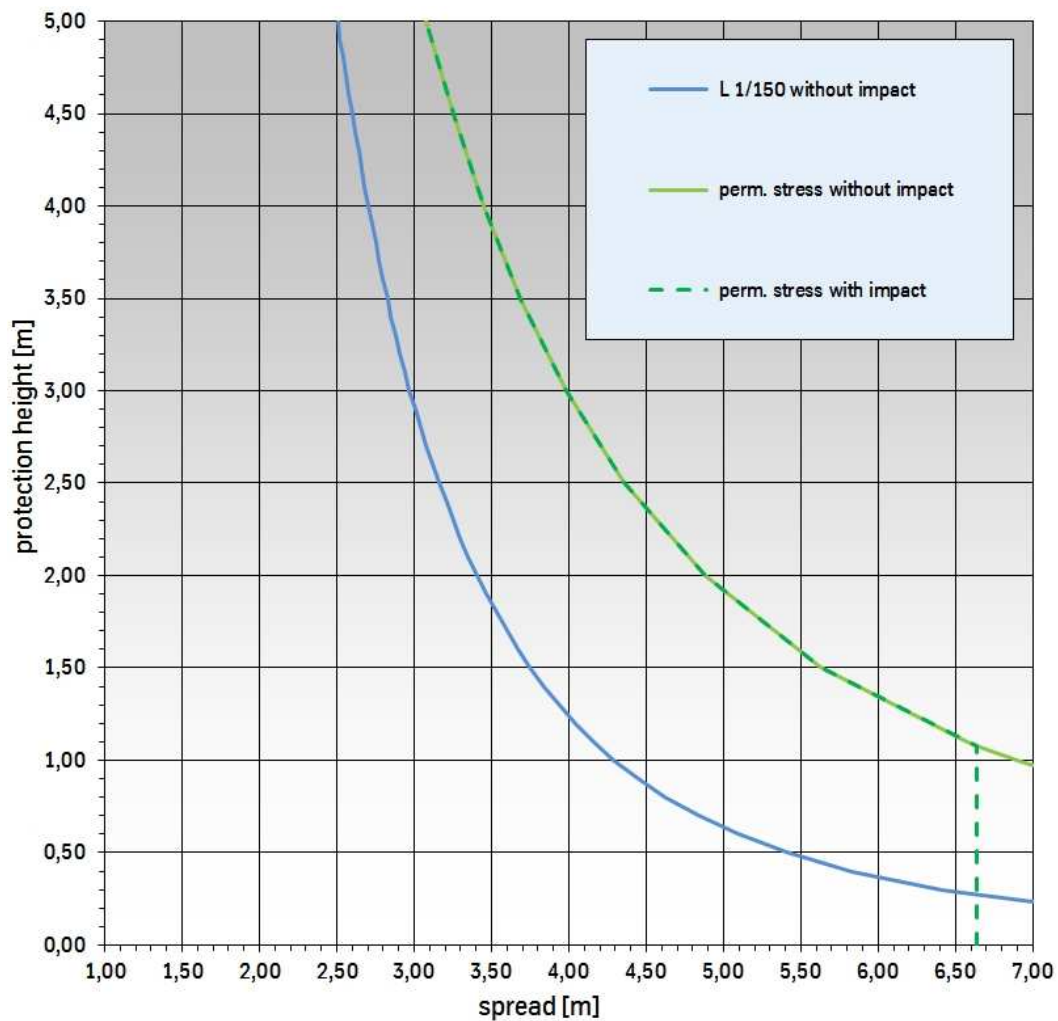
Numbers of stop log	Protection height mm	Post height mm
1	220	320
2	420	520
3	620	720
4	820	920
5	1020	1120
6	1220	1320
7	1420	1520
8	1620	1720
9	1820	1620
10	2020	2120
11	2220	2320
12	2420	2520
13	2620	2720
14	2820	2920
15	3020	3120

Aluminum stop log SL 200x100 L

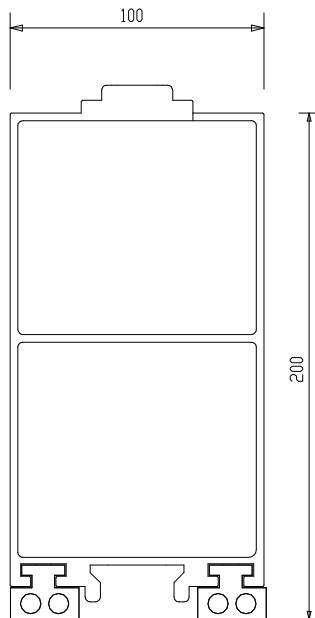


Technical data

Moment of inertia	I	443 cm ⁴
Section modulus	W	88,5 cm ³
Cross section	A	30,92 cm ²
Weight		8,35 kg/m
Material		EN AW-6063 [AlMg0,7Si] T66

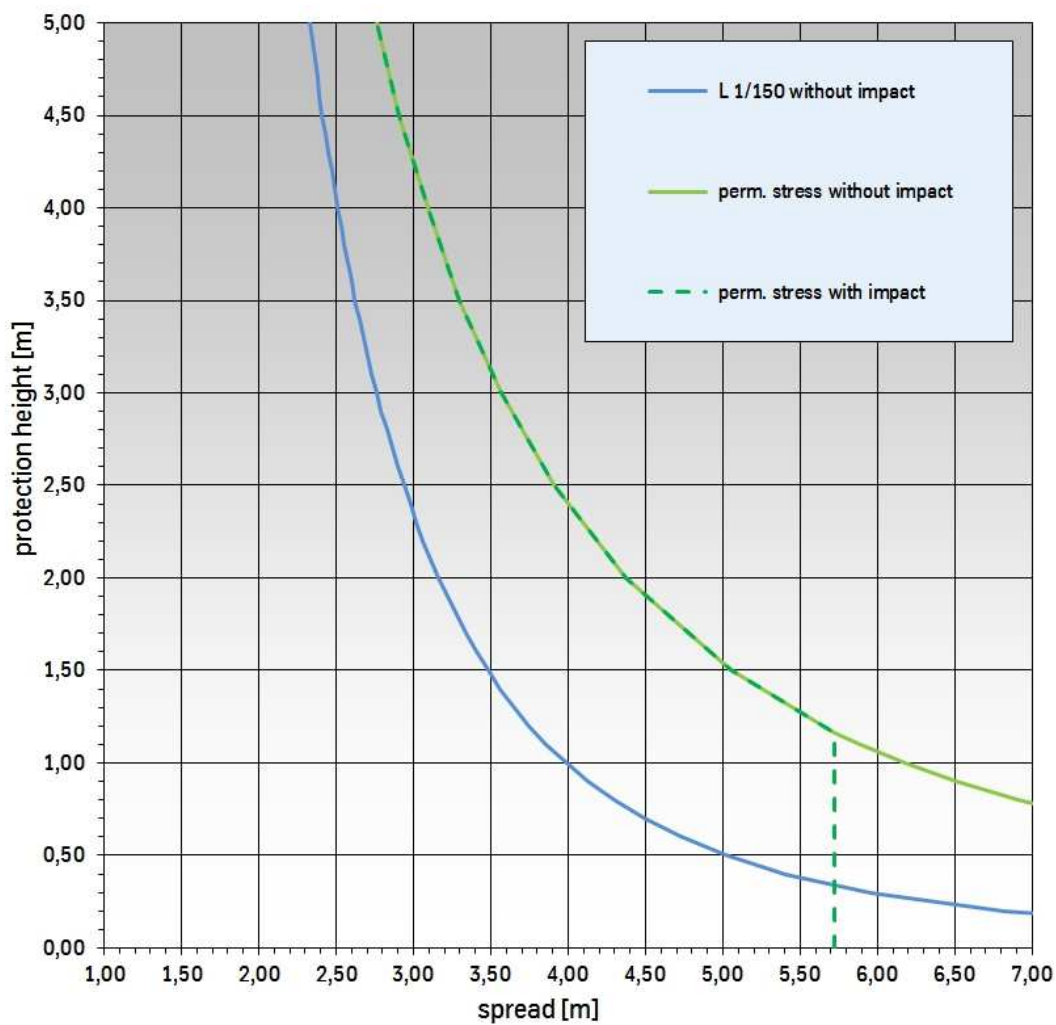


Aluminum stop log SL 200x100 S

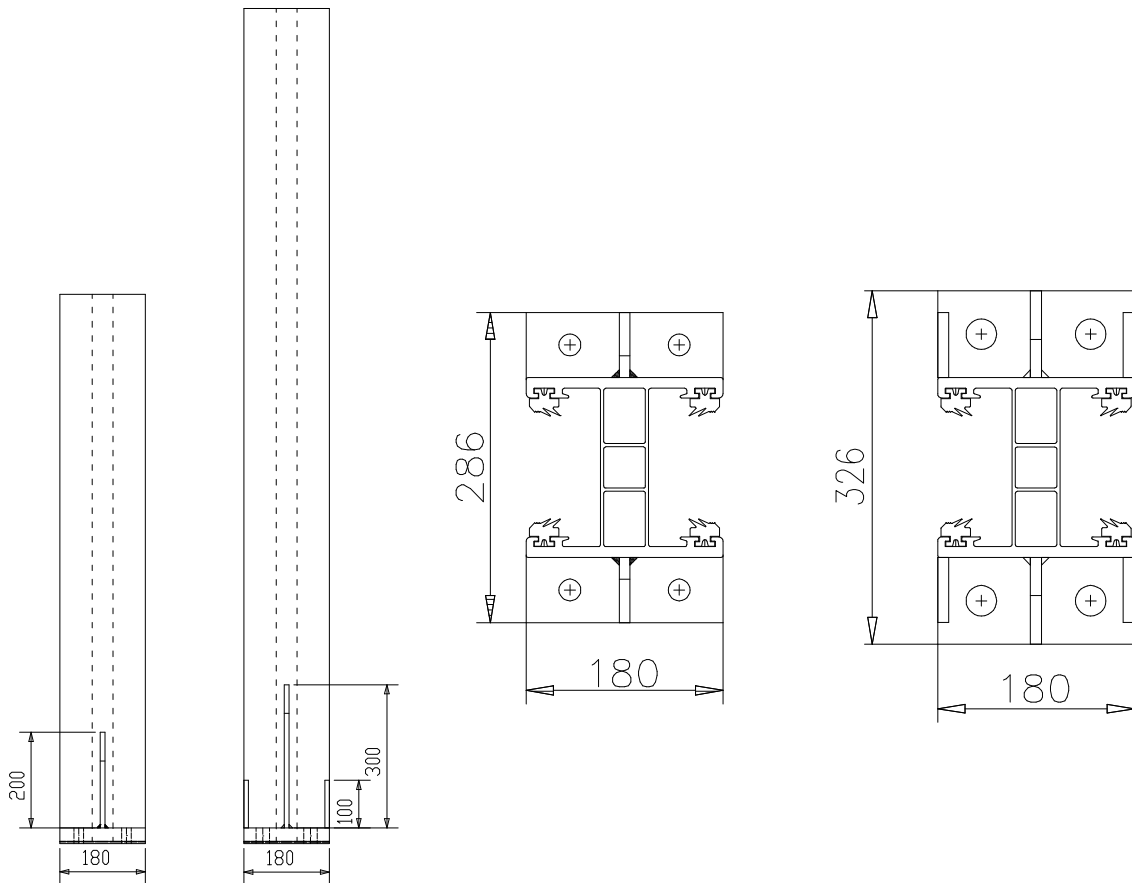


Technical data

Moment of inertia	I	355 cm ⁴
Section modulus	W	71,0 cm ³
Cross section	A	26,81 cm ²
Weight		7,24 kg/m
Material	EN AW-6063 [AlMg0,7Si] T66	



Post MP 166 x 180



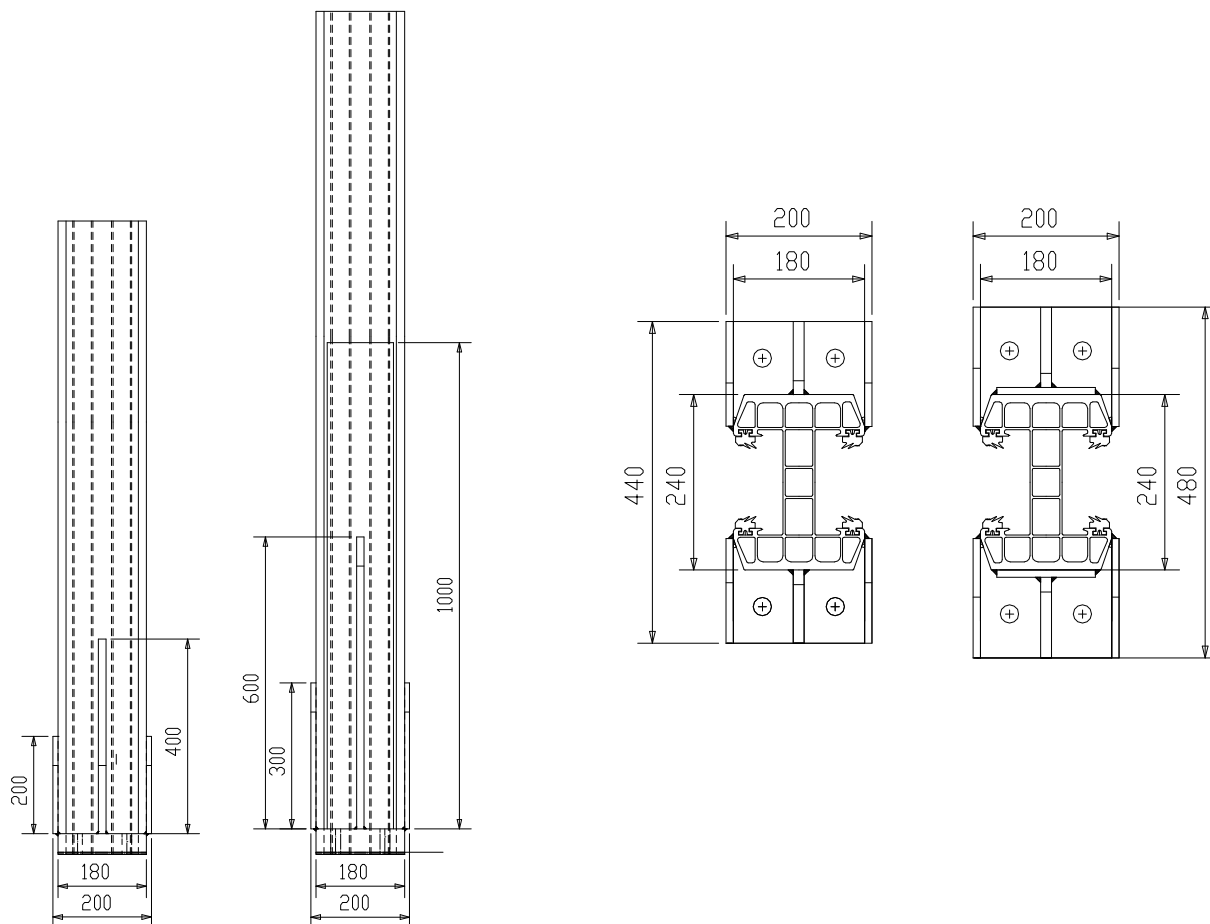
Technical data

	Storage level (mm)	max. spread (mm)	Weight (kg)	Anchor plate
MP 166x180 S	200	6000	7,0	300x200
	400	6000	10,2	
	600	6000	13,4	
	800	5000	16,6	
	1000	4000	19,9	
	1200	3500	23,2	
	1400	3000	26,4	
MP 166x180 L	1600	3000	31,5	340x200
	1800	3000	34,7	
	2000	2500	38,0	

Technical data

Moment of inertia	I	2679 cm ⁴
Section modulus	W	323 cm ³
Cross section	A	54,06 cm ²
Weight		14,6 kg/m
Material	EN AW-6082 [AlMgSi1] T6	

Post MP 240 x 180



	Storage level (mm)	max.spread (mm)	Weight (kg)	Anchor plate
MP 240x180 S	1200	6000	40,5	440x200
	1400	5500	45,2	
	1600	5000	49,9	
	1800	4500	54,6	
	2000	3500	59,3	
	2200	3000	64,0	
	2400	2500	68,6	
MP 240x180 L	2600	3000	86,8	480x200
	2800	2500	91,5	
	3000	2000	96,2	

Technical data

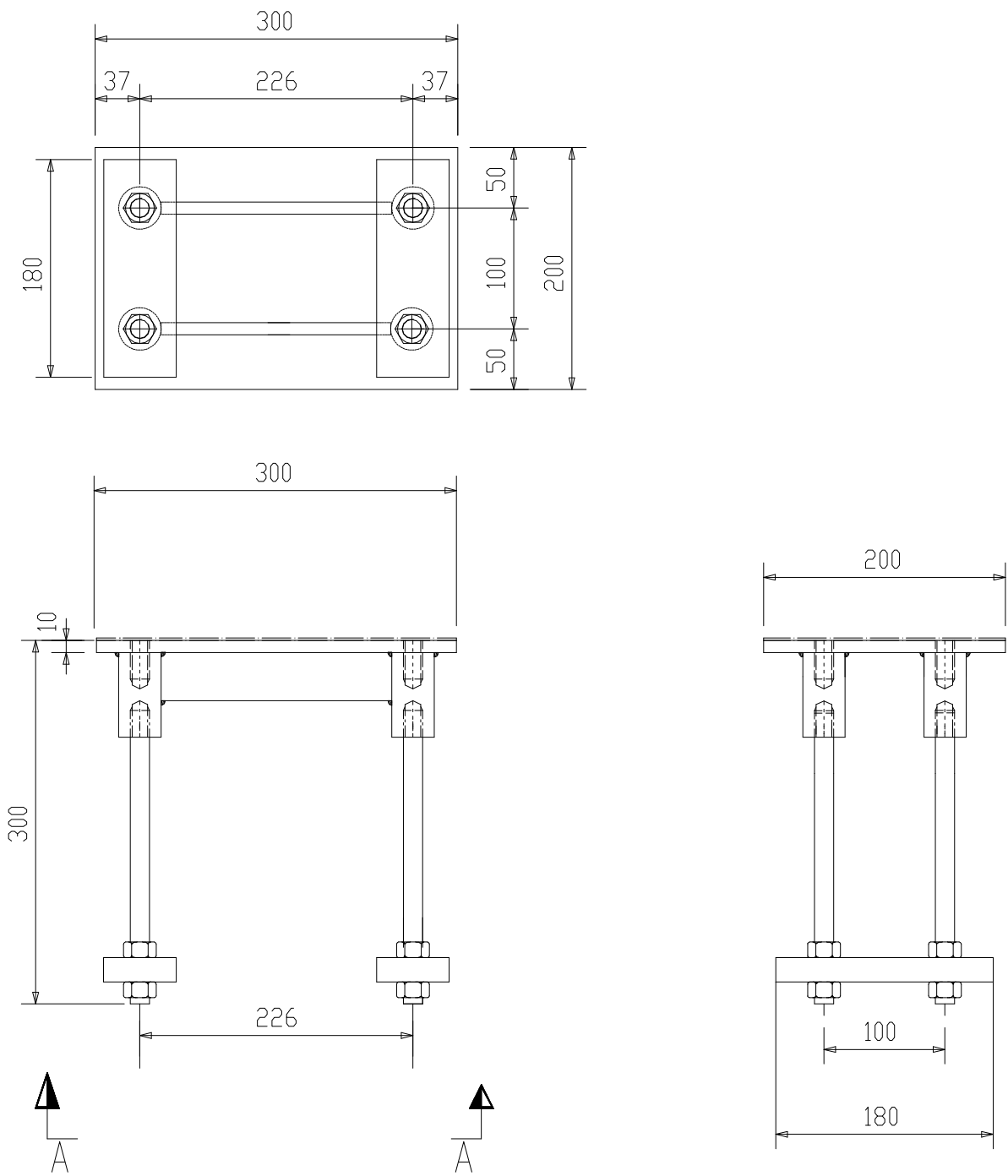
Moment of inertia	I	7125 cm ⁴
Section modulus	W	594 cm ³
Cross section	A	80,96 cm ²
Weight		21,9 kg/m
Material		EN AW-6082 [AlMgSi1] T6

Anchor plate: AP100 T1

Steel grades

Stainless steel	1.4301	Top plate / threaded sleeve
Steel	S 355	Connecting plate

View A-A

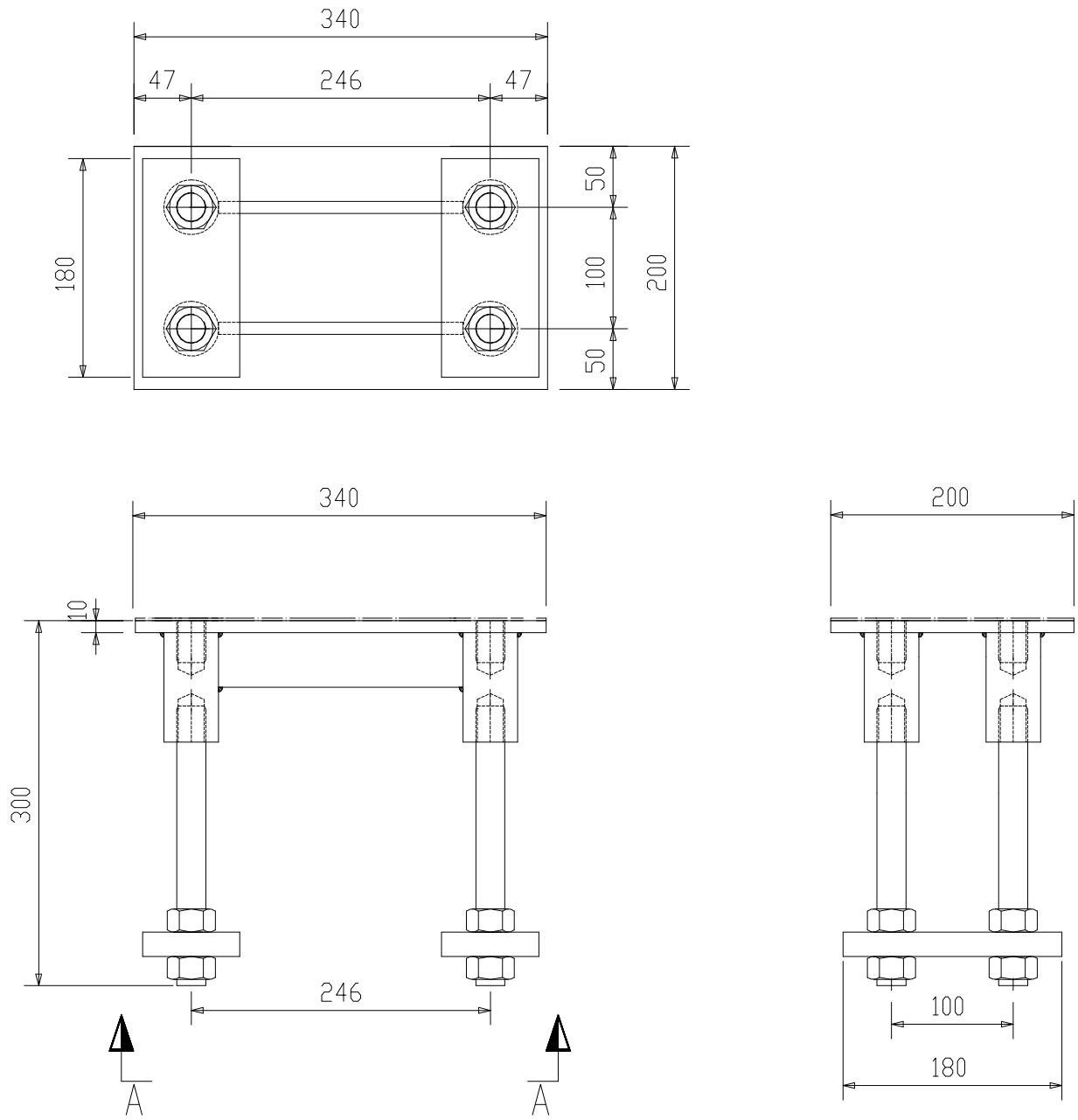


Anchor plate: AP100 T2

Steel grades

Stainless steel	1.4301	Top plate / threaded sleeve
Steel	S 355	Connecting plate
Steel	8.8	Threaded bolt / Nuts

View A-A

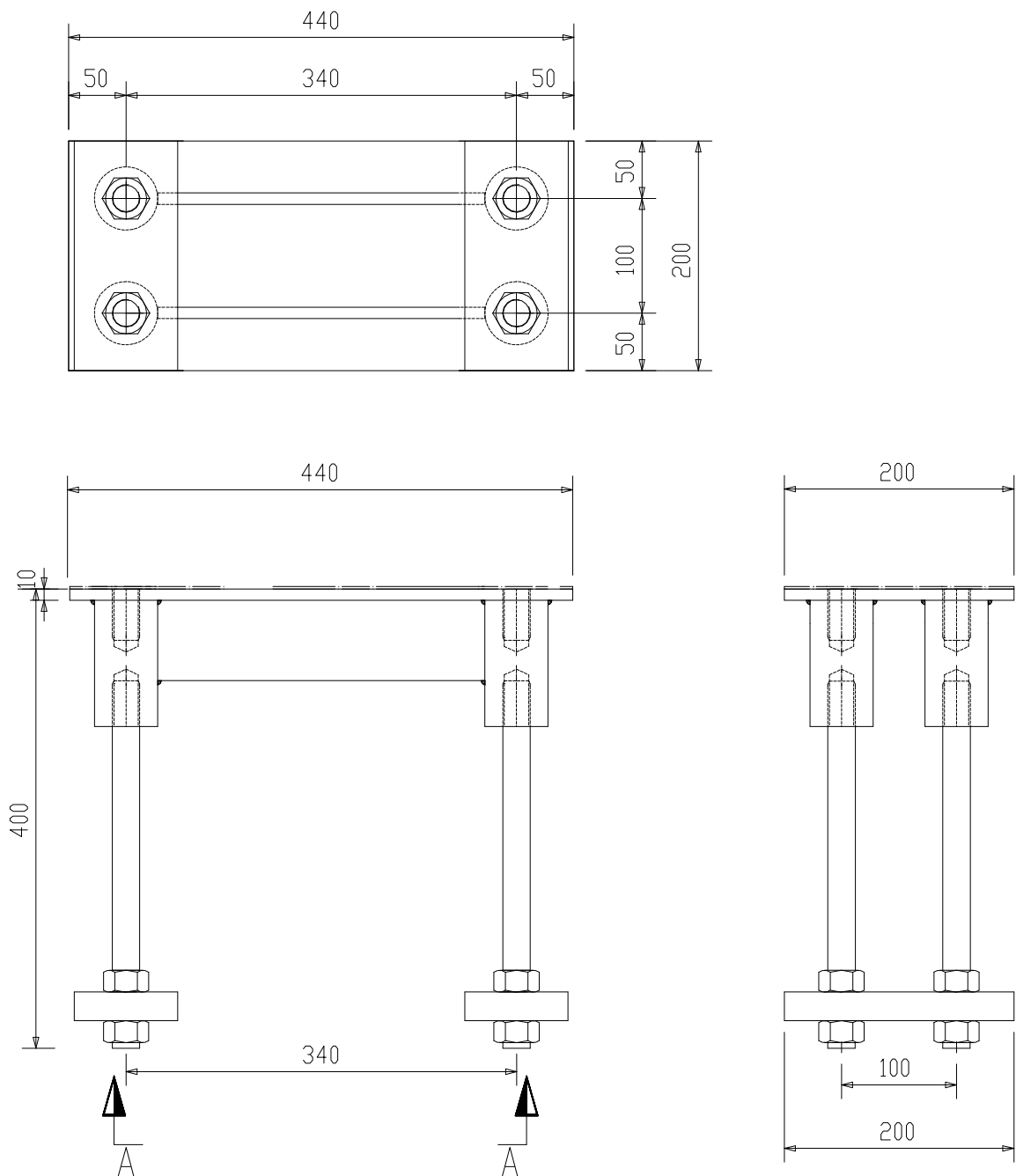


Anchor plate: AP100 T3

Steel grades

Stainless steel	1.4301	Top plate / threaded sleeve
Steel	S 355	Connecting plate
Steel	8.8	Threaded bolt / Nuts

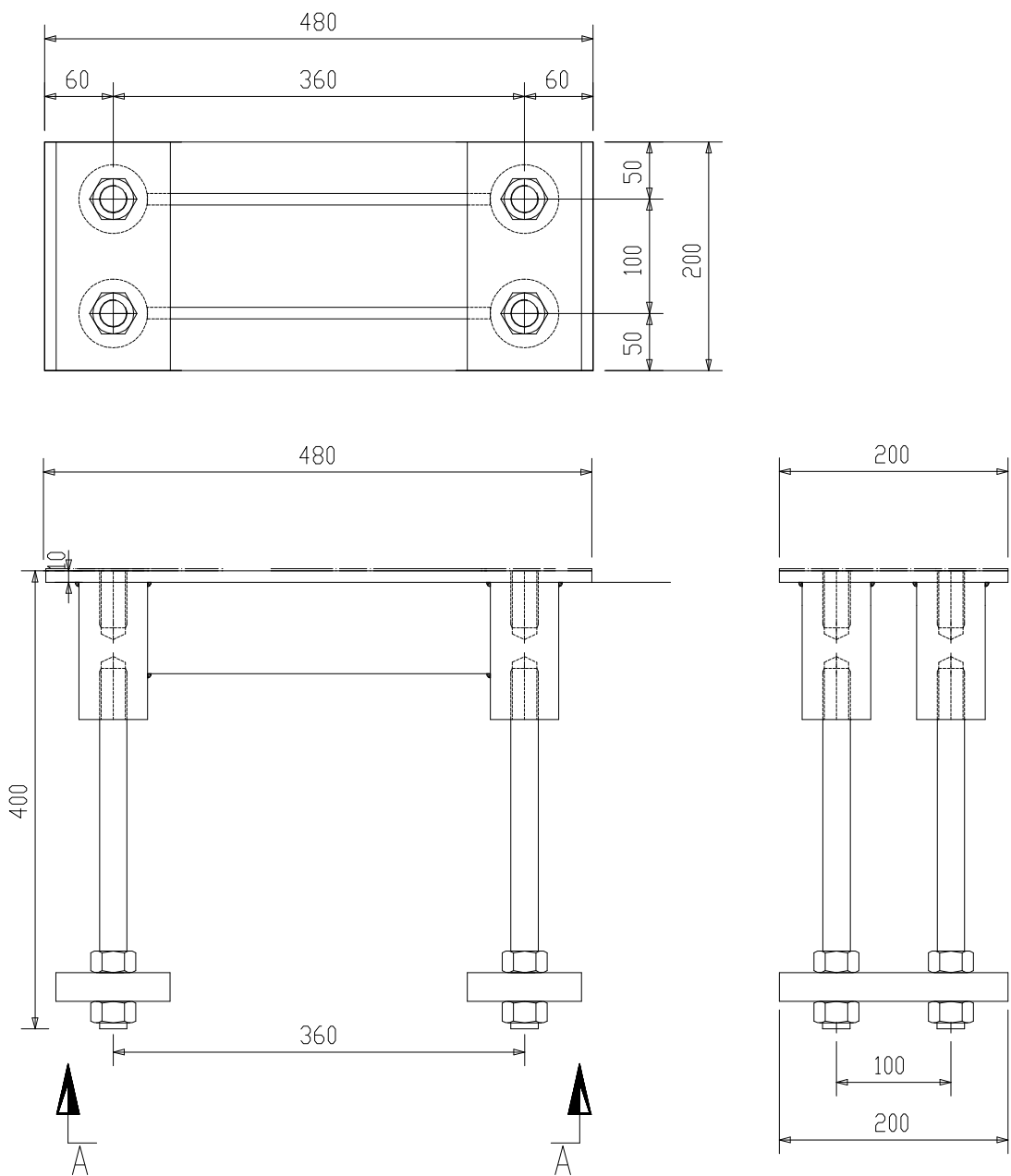
View A-A



Anchor plate: AP100 T4

Steel grades		
Stainless steel	1.4301	Top plate / threaded sleeve
Steel	S 355	Connecting plate
Steel	8.8	Threaded bolt / Nuts

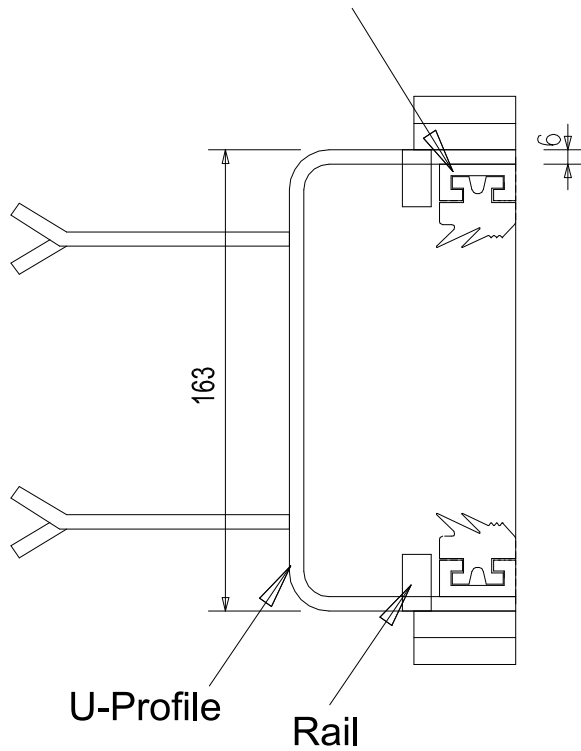
View A-A



Wall connecting post

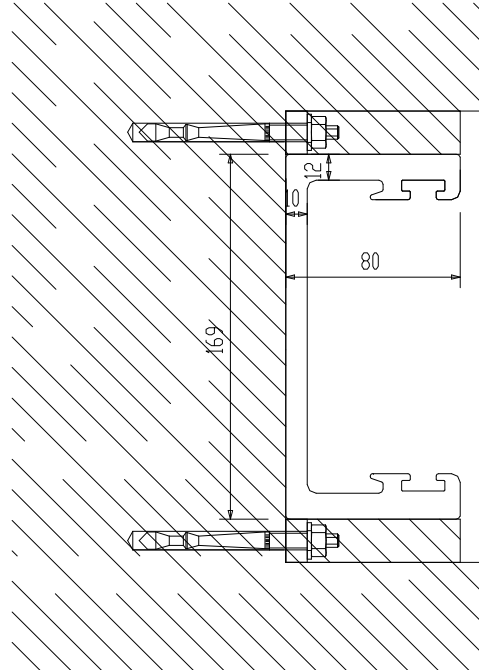
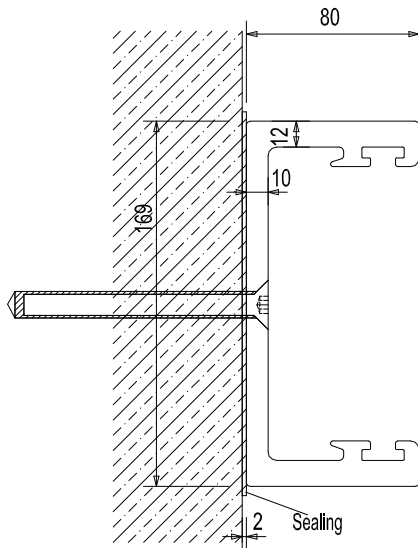
(Embedded during concreting)

C-rail and profile sealing



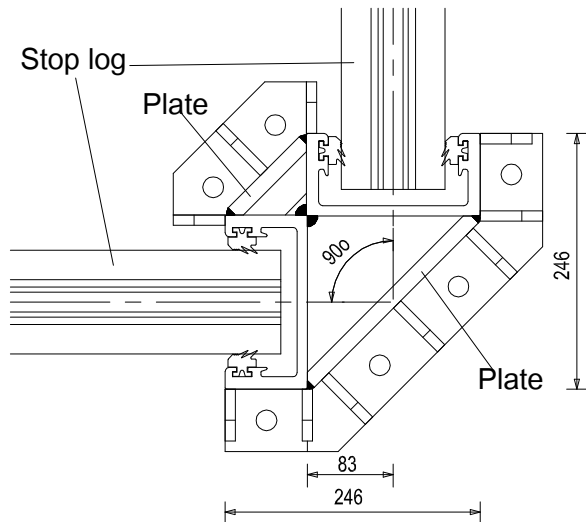
Material: Stainless steel 1.4301

End post EP 80 x 169

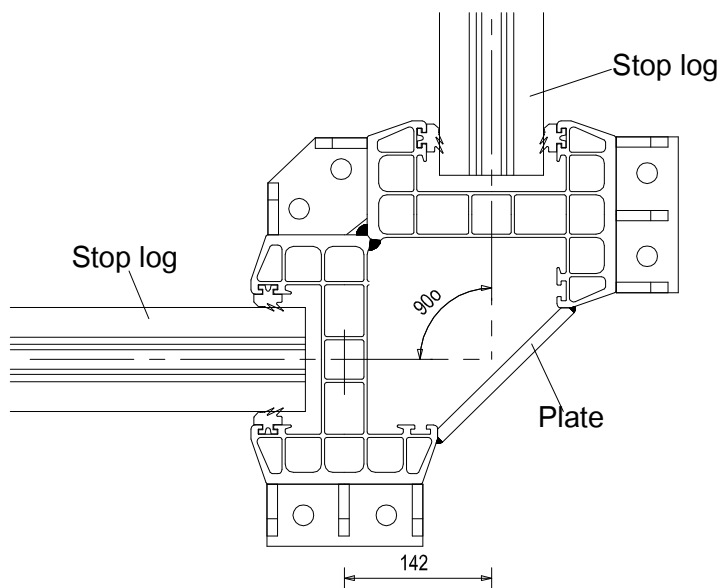


Technical data		
Moment of inertia	I	1611 cm ⁴
Section modulus	W	191 cm ³
Cross section	A	37,47 cm ²
Weight		10,1 kg/m
Material		EN AW-6082 T6

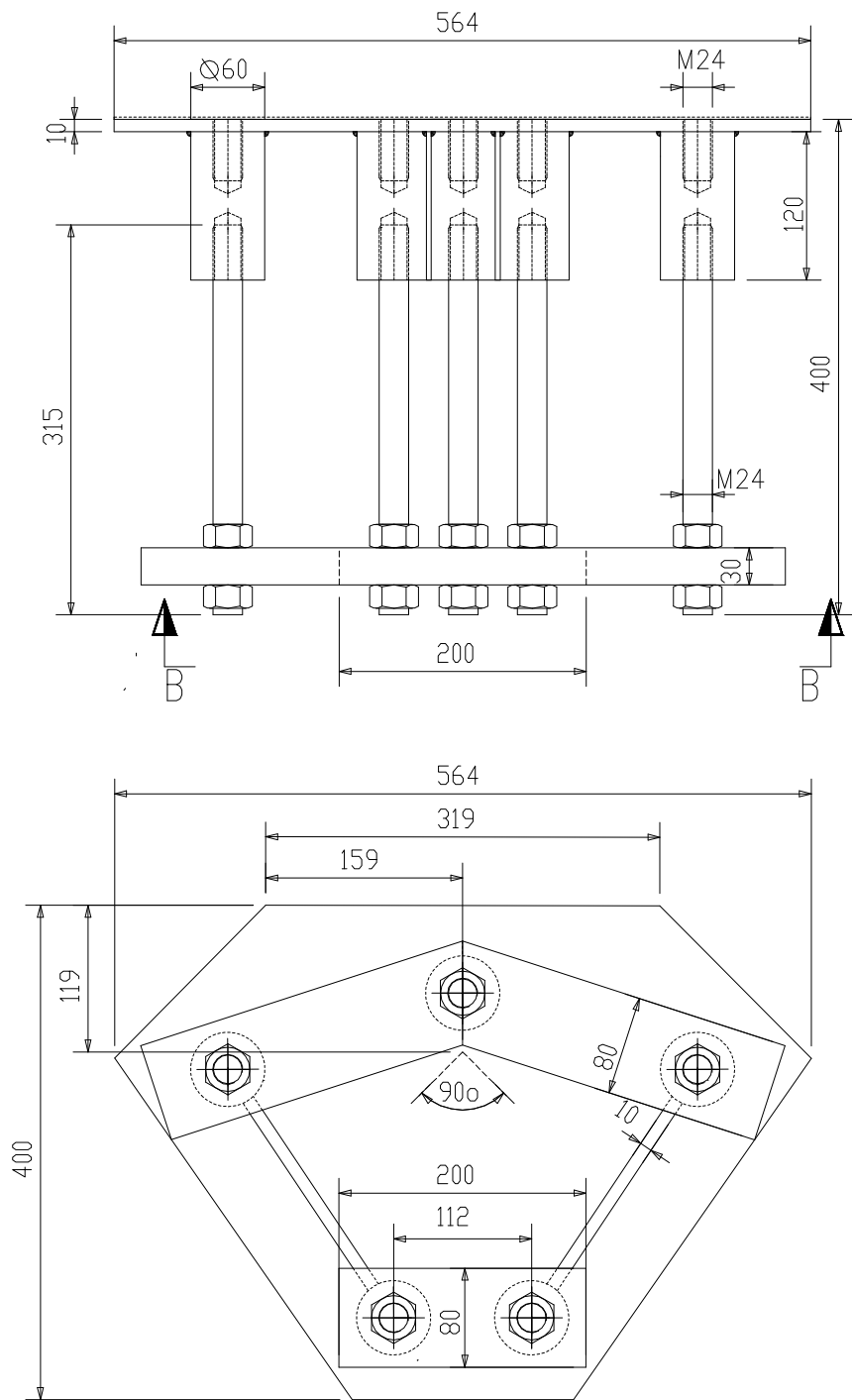
Corner post 90° with endpost profile



Corner post 90° with post MP 240x180



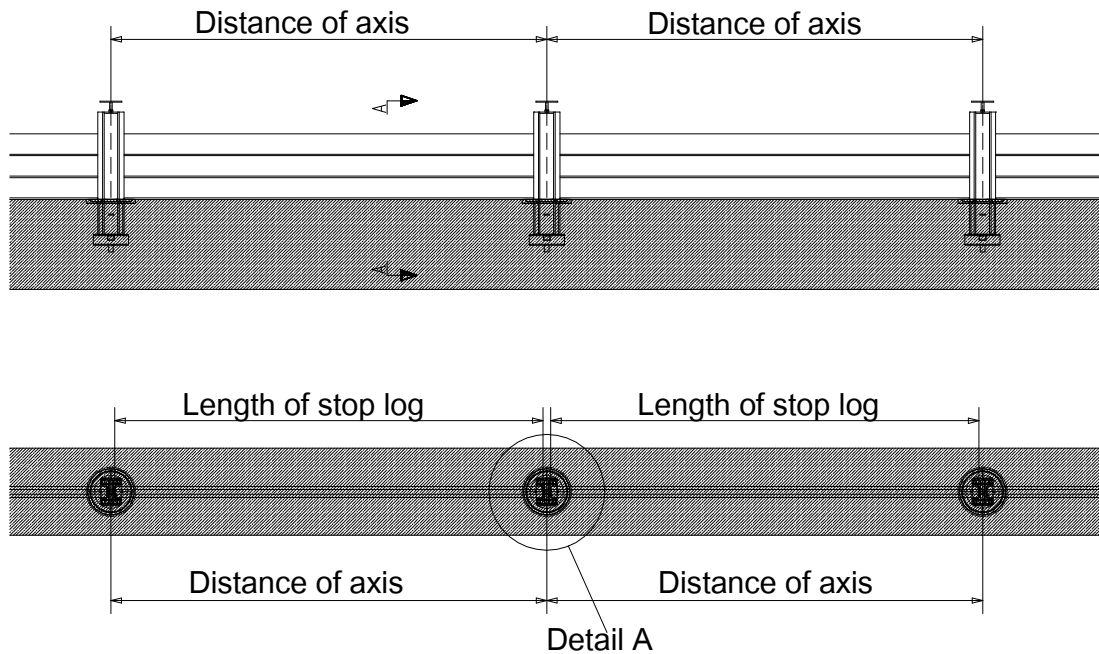
Anchor plate: 90° post



Steel grades

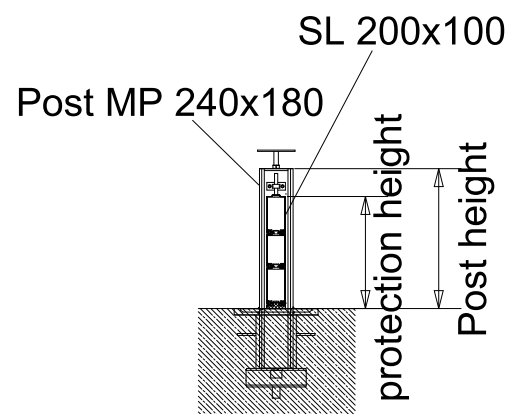
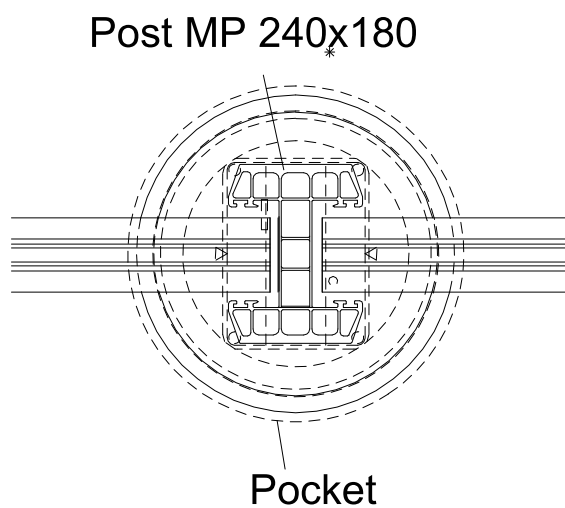
Stainless steel	1.4301	Top plate / Threaded sleeve
Steel	S 355	Connecting plate
Steel	8.8	Threaded bolts / Nuts

System pocket foundation



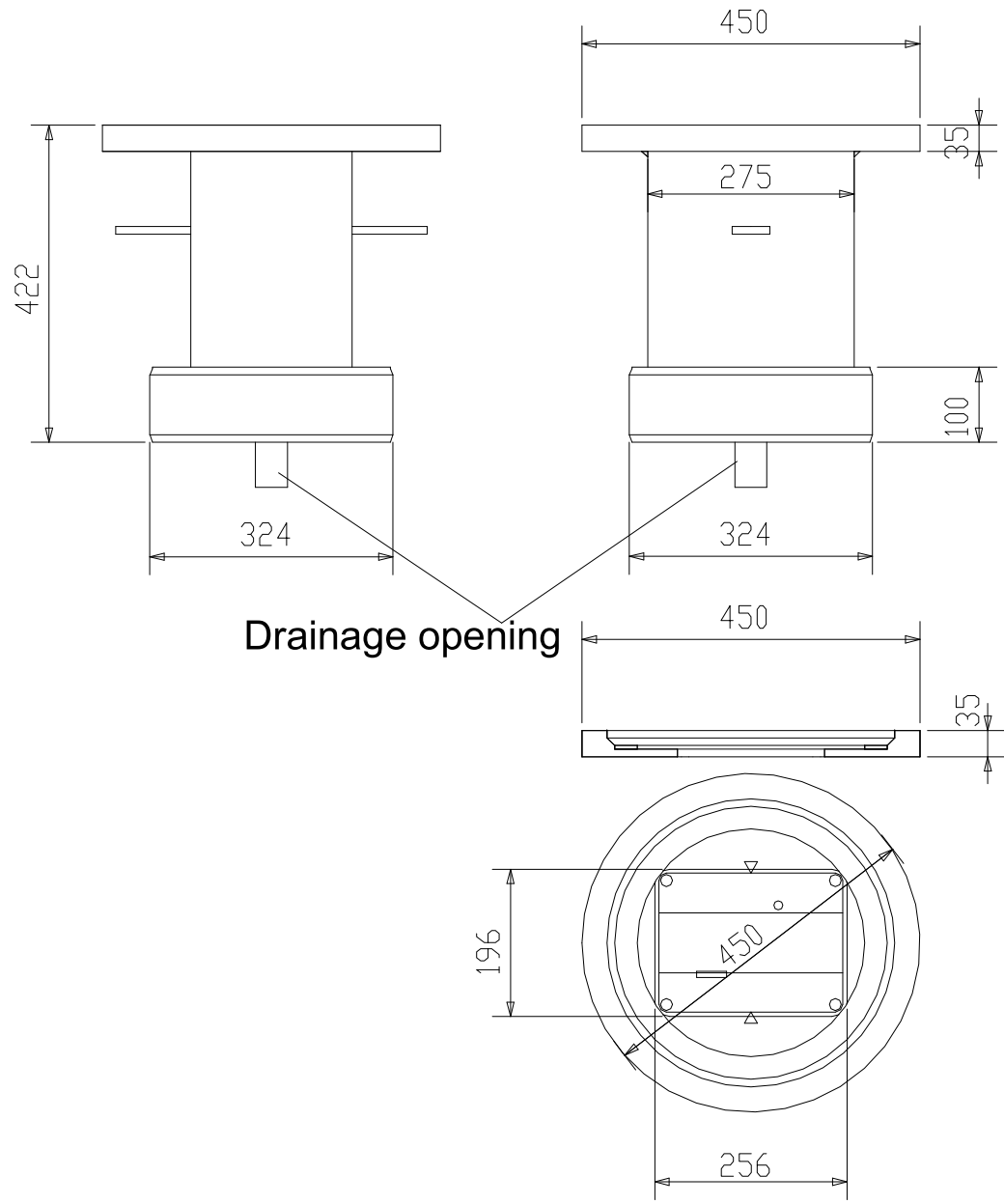
Detail A

Cross section A - A



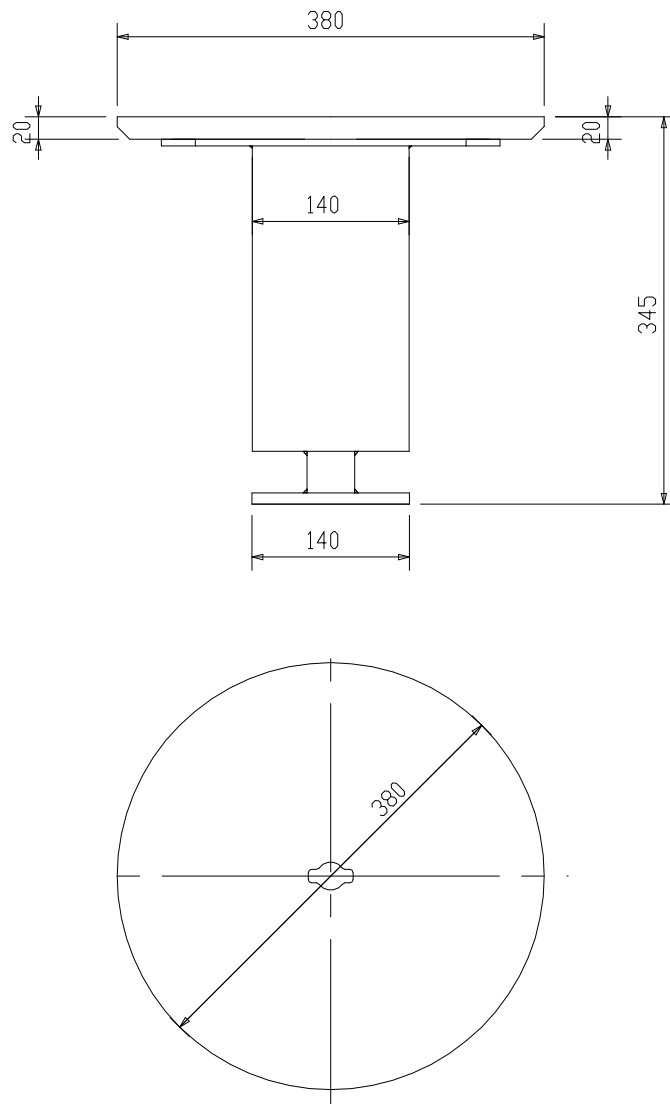
*also available for small systems

Pocket



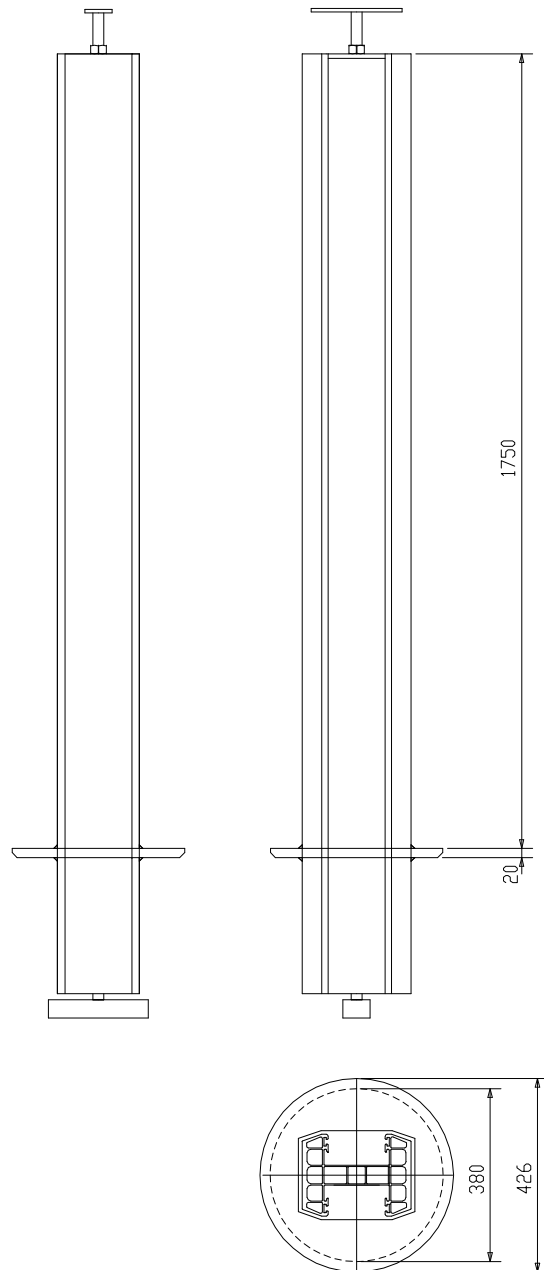
Hot dip galvanized steel S355

Pocket cover



Hot dip galvanized steel S355

Fast construction post with pocket

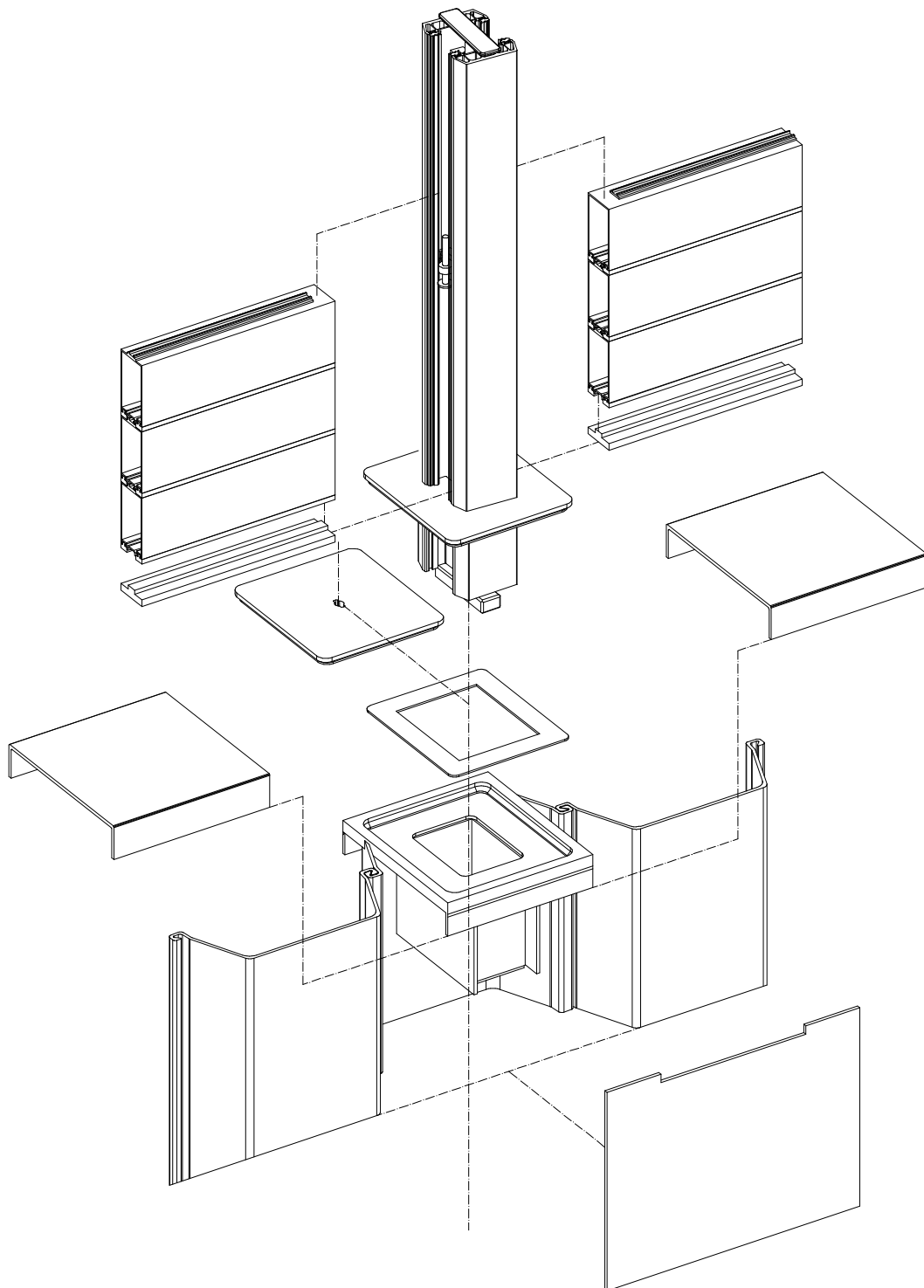


Steel grades

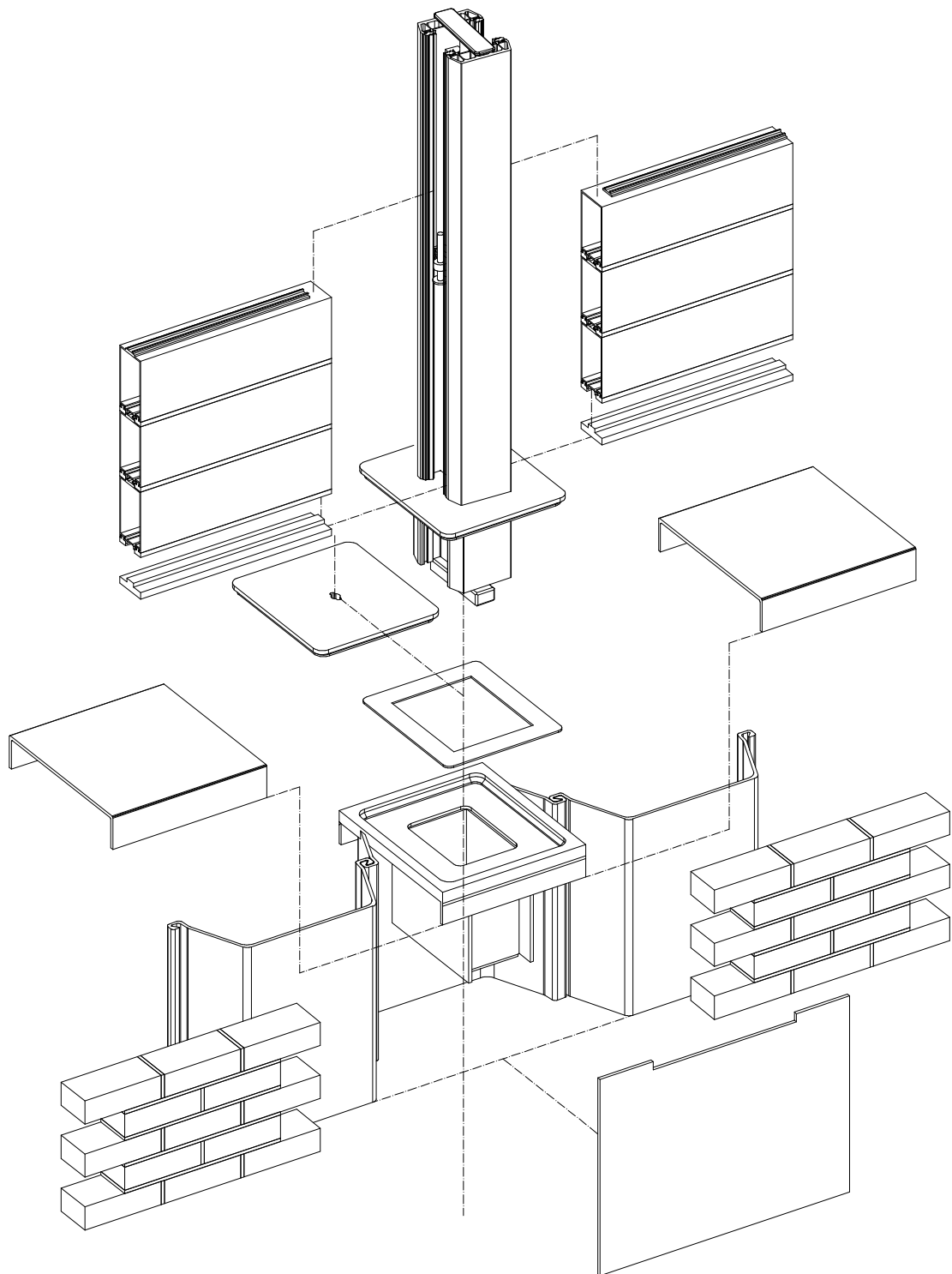
Aluminum	Post EN AW 6063 T66
Optional	Post EN AW 6060 T66
Steel	Locking S 355

Special system: Connection to sheet pile

without cladding system

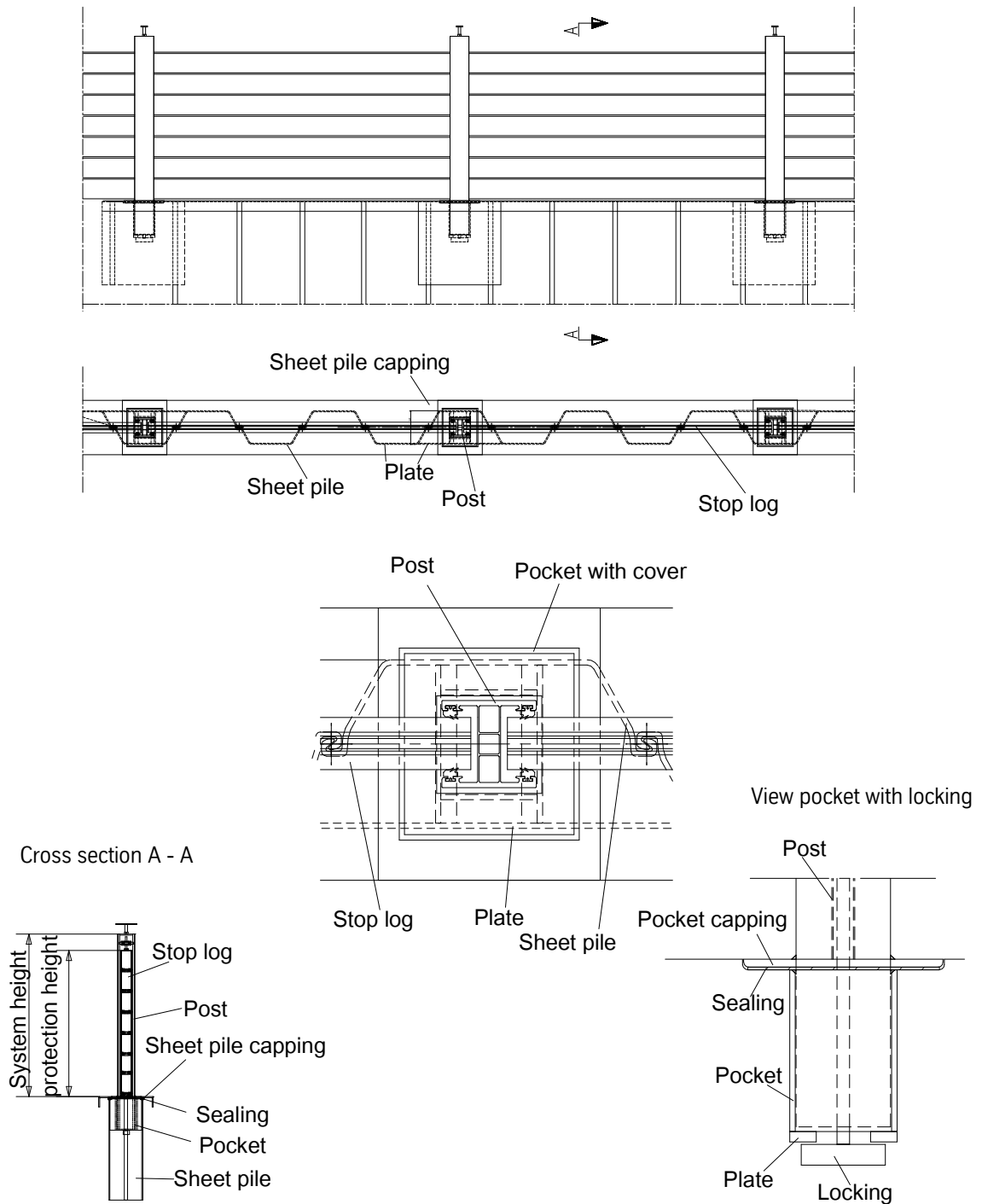


Special system: Connection to sheet pile with cladding system



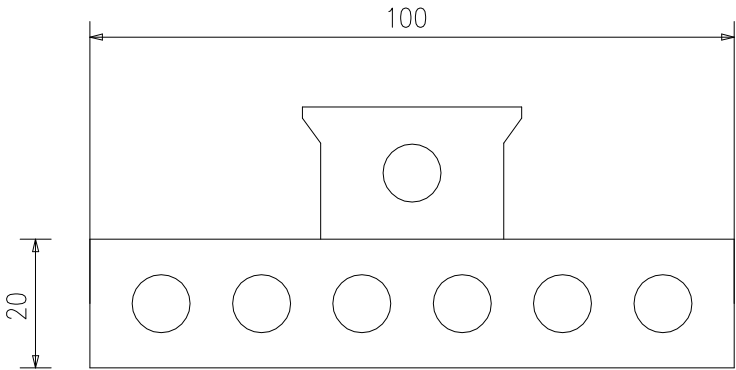
Special system: Connection to sheet pile

(wall details)

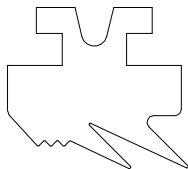


Sealing system

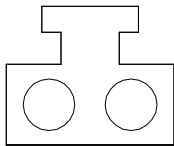
Base seal



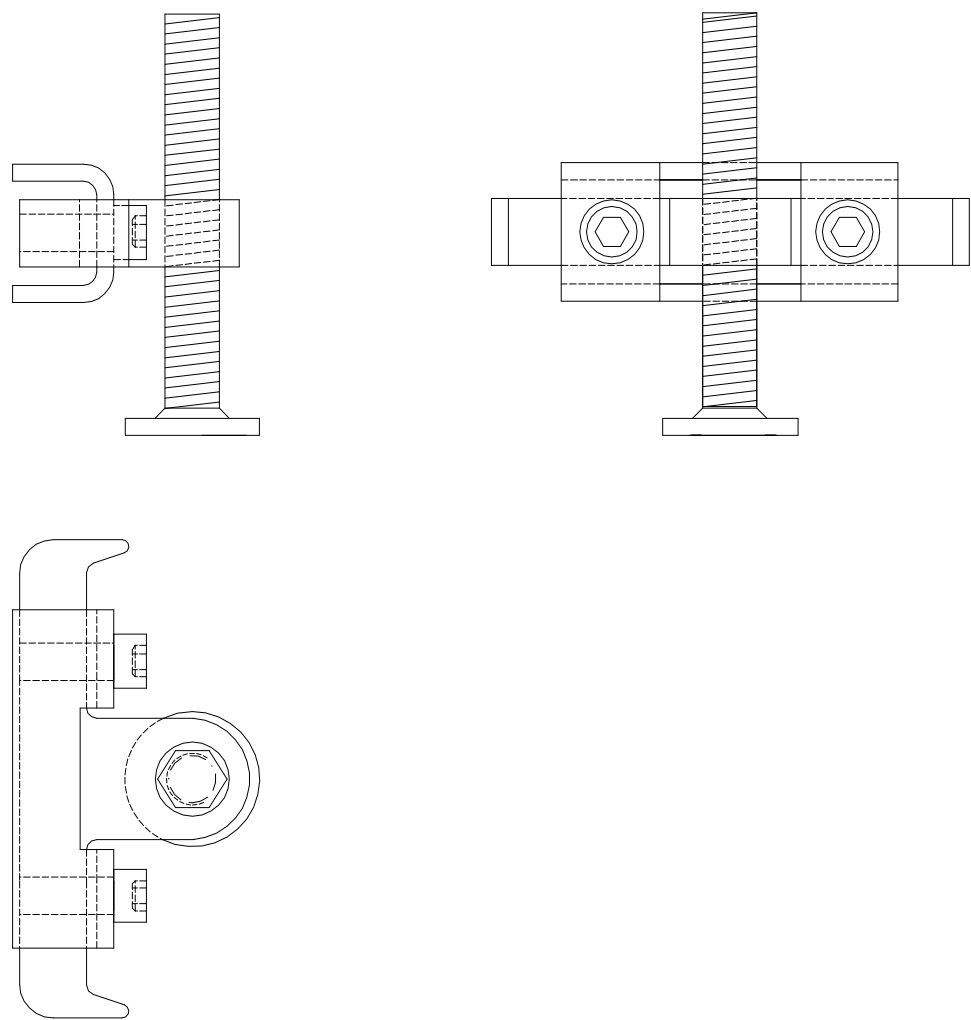
Post seal



Stop log seal

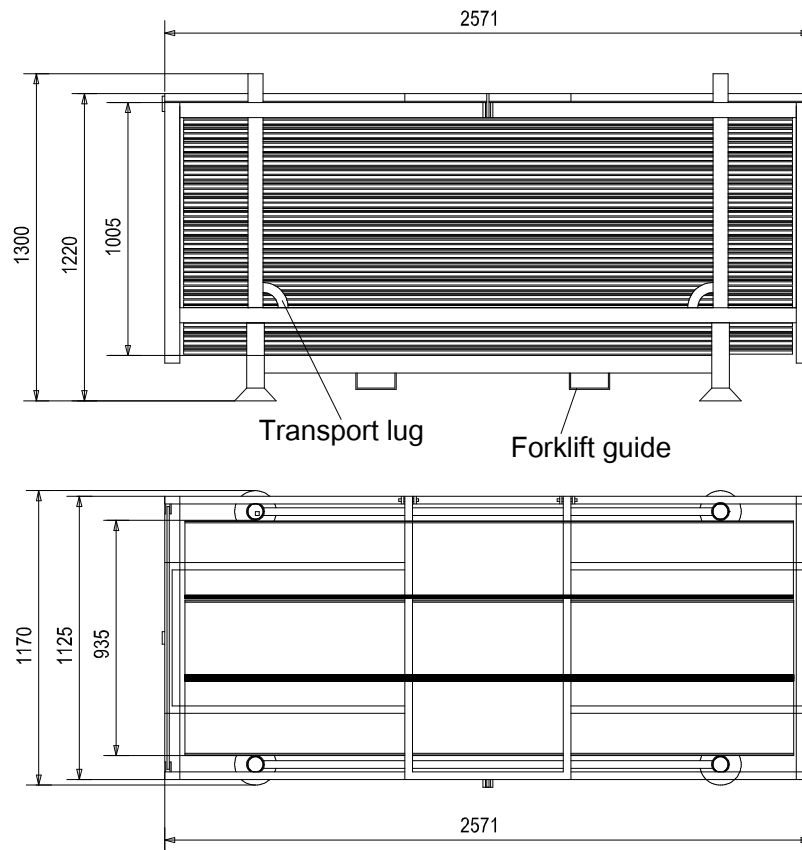


Locking system



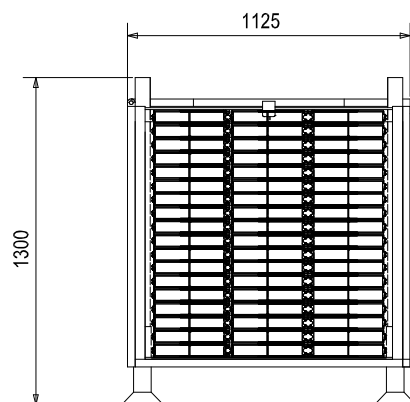
Material: Stainless steel 1.4301

Storage system

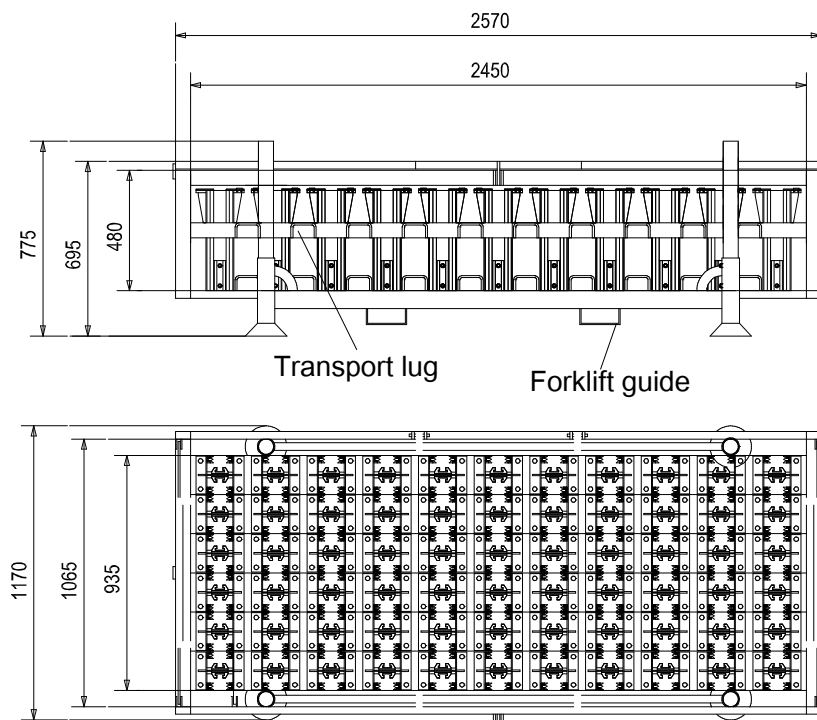


Intermediate layer: anti-slip mat

Components are fixed in the pallets with tension belts

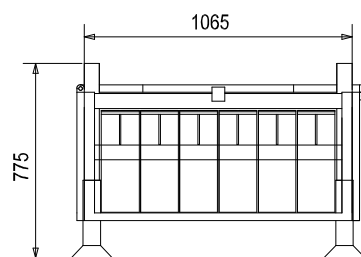


Lattice wall in side view not drawn

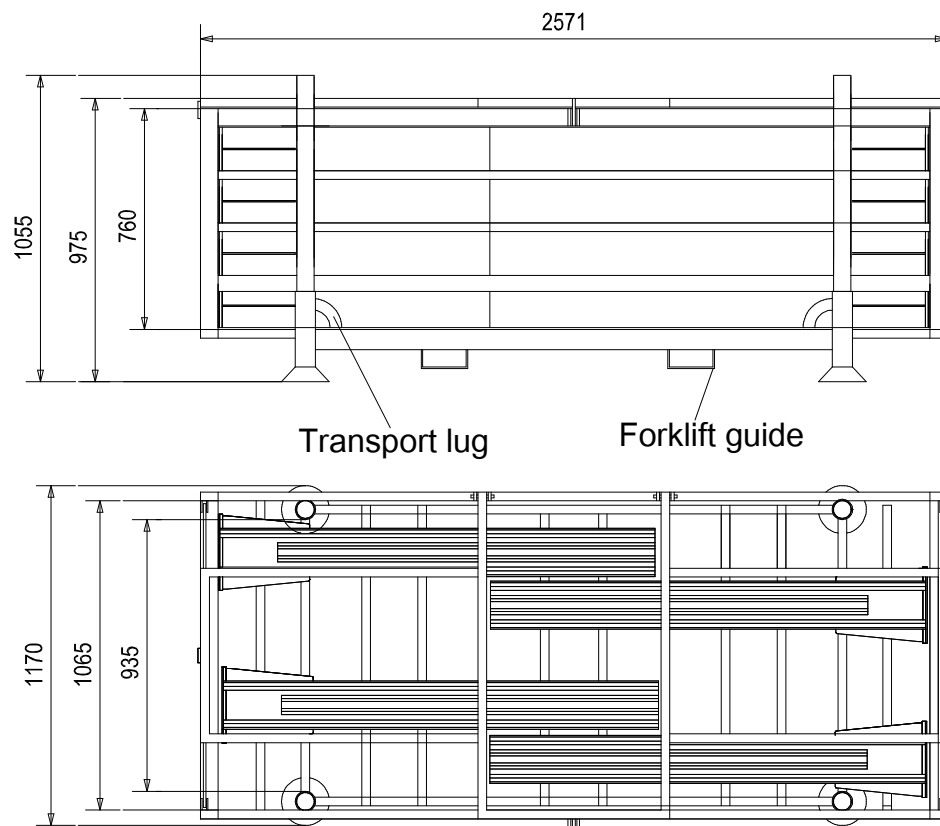


Lattice wall in side view not drawn

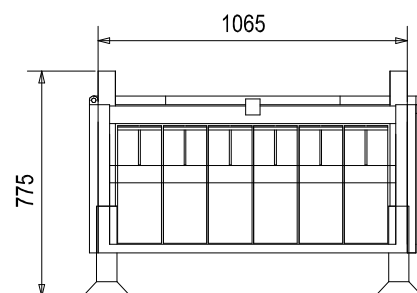
Contact of the components is prevented by plastic profiles
Components are fixed in the pallets with tension belts



Lattice wall in side view not drawn



Intermediate layer: anti-slip mat and woods
Components are fixed in the pallets with tension belts



Lattice wall in side view not drawn

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