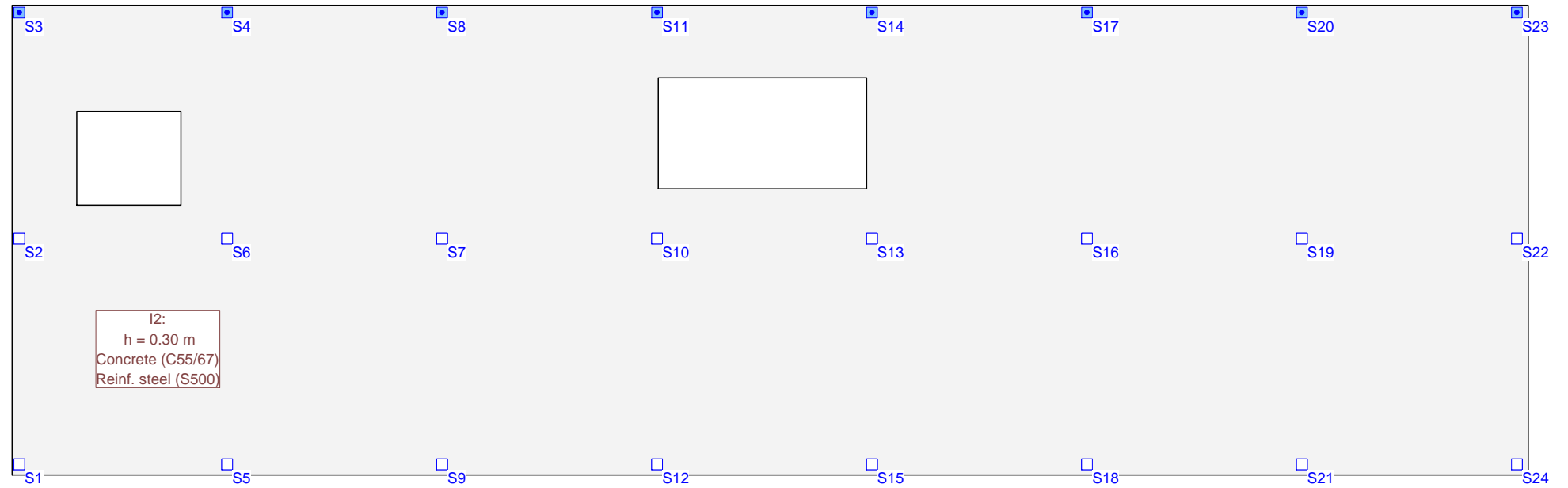


Structure

Scale 1:167.1



Characteristics of material classes: Eurocode EN/EN

Concrete

Material class	$-f_{ck,cyl}$ [N/mm ²]	E_{cm} [kN/mm ²]	f_{ctm} [N/mm ²]	τ_{Rd} [N/mm ²]	$f_{ck,cubg}$ [N/mm ²]
C55 / 67	-55.00	38.00	4.20	0.50	67.00

Reinforcement steel

Material class	$-f_{yk}$ [N/mm ²]	E_s [kN/mm ²]	f_{yk} [N/mm ²]	ϵ_{uk} [‰]	f_{tk} [N/mm ²]
S500	-500.00	200.00	500.00	20.0	500.00

Nr.:

Characteristics of material classes: Eurocode ENV/EN

Concrete (EC2)

Material class	$-f_{ck,cyl}$ [N/mm ²]	E_{cm} [kN/mm ²]	f_{ctm} [N/mm ²]	τ_{Rd} [N/mm ²]	$f_{ck,cubg}$ [N/mm ²]
C12/15	-12.00	26.00	1.60	0.18	15.00
C16/20	-16.00	27.00	1.90	0.22	20.00
C20/25	-20.00	29.00	2.20	0.26	25.00
C25/30	-25.00	30.50	2.60	0.30	30.00
C30/37	-30.00	32.00	2.90	0.34	37.00
C35/45	-35.00	33.50	3.20	0.37	45.00
C40/50	-40.00	35.00	3.50	0.41	50.00
C45/55	-45.00	36.00	3.80	0.44	55.00
C50/60	-50.00	37.00	4.10	0.48	60.00
C55/67	-55.00	38.00	4.20	0.50	67.00
C60/75	-60.00	39.00	4.40	0.52	75.00
C70/85	-70.00	41.00	4.60	0.53	85.00
C80/95	-80.00	42.00	4.80	0.57	95.00
C90/105	-90.00	44.50	5.00	0.58	105.00
C100/115	-100.00	45.00	5.20	0.62	115.00

Reinforcement steel (EC2)

Material class	$-f_{yk}$ [N/mm ²]	E_s [kN/mm ²]	f_{yk} [N/mm ²]	ϵ_{uk} [‰]	f_{tk} [N/mm ²]
S220	-220.00	200.00	220.00	20.0	220.00
S400	-400.00	200.00	400.00	20.0	400.00
S420	-420.00	200.00	420.00	20.0	420.00
S500	-500.00	200.00	500.00	20.0	500.00

PT steel (EC2)

Material class	$-0.9f_{pk}$ [N/mm ²]	E_p [kN/mm ²]	$0.9f_{pk}$ [N/mm ²]	ϵ_{uk} [‰]	f_{pk} [N/mm ²]
S1500/1670	-1500.00	195.00	1500.00	20.0	1670.00
S1570/1700	-1570.00	195.00	1570.00	20.0	1780.00
S1670/1860	-1670.00	195.00	1670.00	20.0	1860.00

Fibre reinforced polymer

Material class	E [kN/mm ²]
Typ_S	165.00
Typ_M	210.00
Typ_H	300.00

Limit state specification: !Ultimate limit state

Description

Standard design situation: Ultimate limit state type 2 (1B)
Analysis parameter: AP2

Action combinations

No	Action Name	Fac	Action combinations	
			1	2
1	Dead load	1	1.35	1
2	Superimposed dead loads	1	1.35	1
3	Live load general	1	1.5	1.5

Fac : all combination factors are multiplied by this factor

Load case superpositions for the actions

for limit state specification !Ultimate limit state

Action	Alt	additive	exclusive	Load case	Factor	Comb.
Dead load		permanent		SW Self weight	1.000	
Superimposed dead load		permanent		LC	1.000	
Live load general		if critical		LC1	1.000	

Alt : Alternative superposition

Limit state specification: !Serviceability(frequent)

Description

Standard design situation: Serviceability frequent combination
Analysis parameter: AP1

Action combinations

No	Action Name	Fac	Action combinations	
			1	2
1	Dead load	1	1	
2	Superimposed dead loads	1	1	
3	Live load general	1	0.7	

Fac : all combination factors are multiplied by this factor

Load case superpositions for the actions

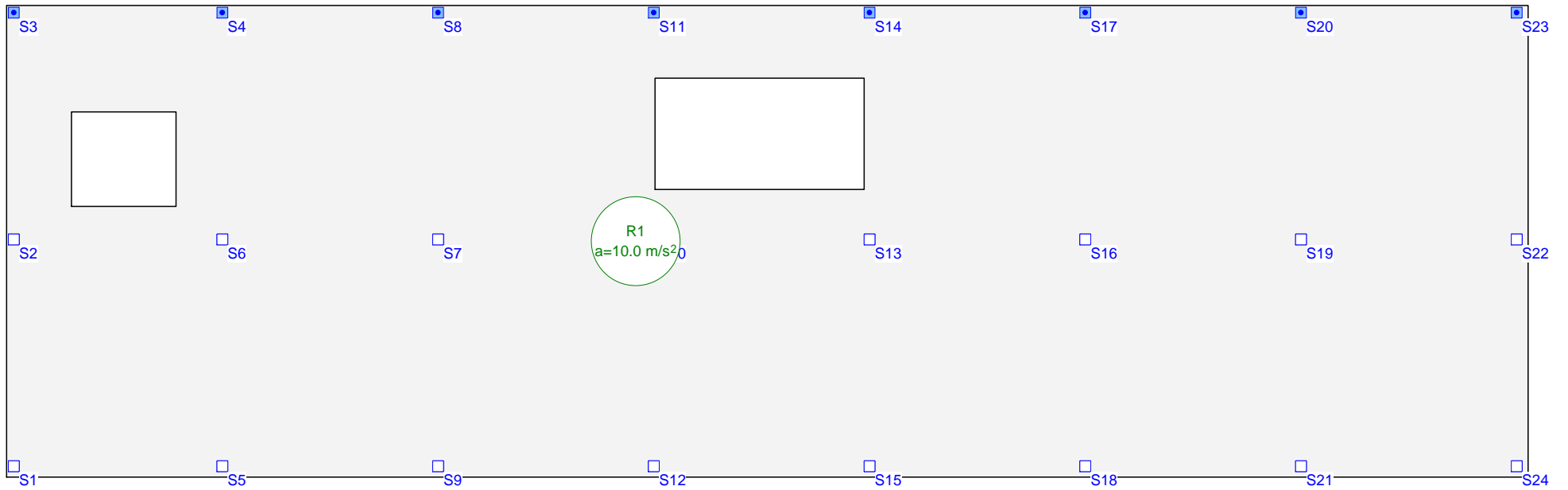
for limit state specification !Serviceability(frequent)

Action	Alt	additive	exclusive	Load case	Factor	Comb.
Dead load		permanent		SW Self weight	1.000	
Superimposed dead loa		permanent		LC	1.000	
Live load general		if critical		LC1	1.000	

Alt : Alternative superposition

Load case SW: Self weight

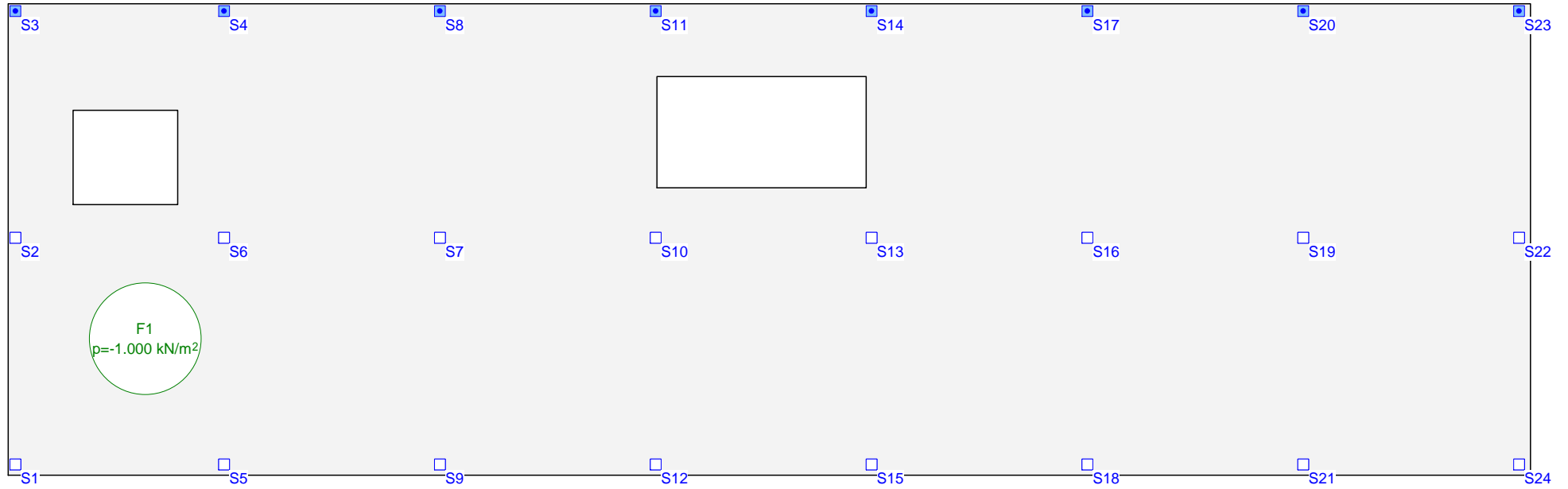
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Nr.:

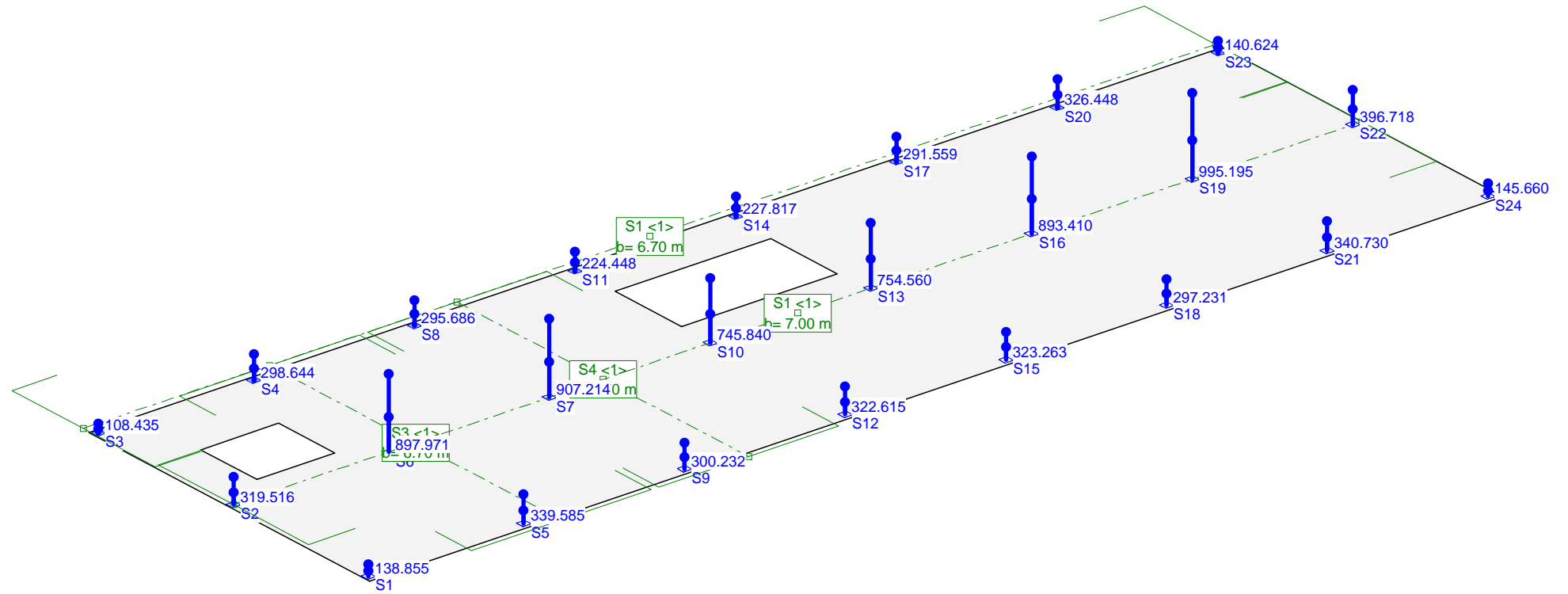
Load case LC

Scale 1:167.1



Nr.:

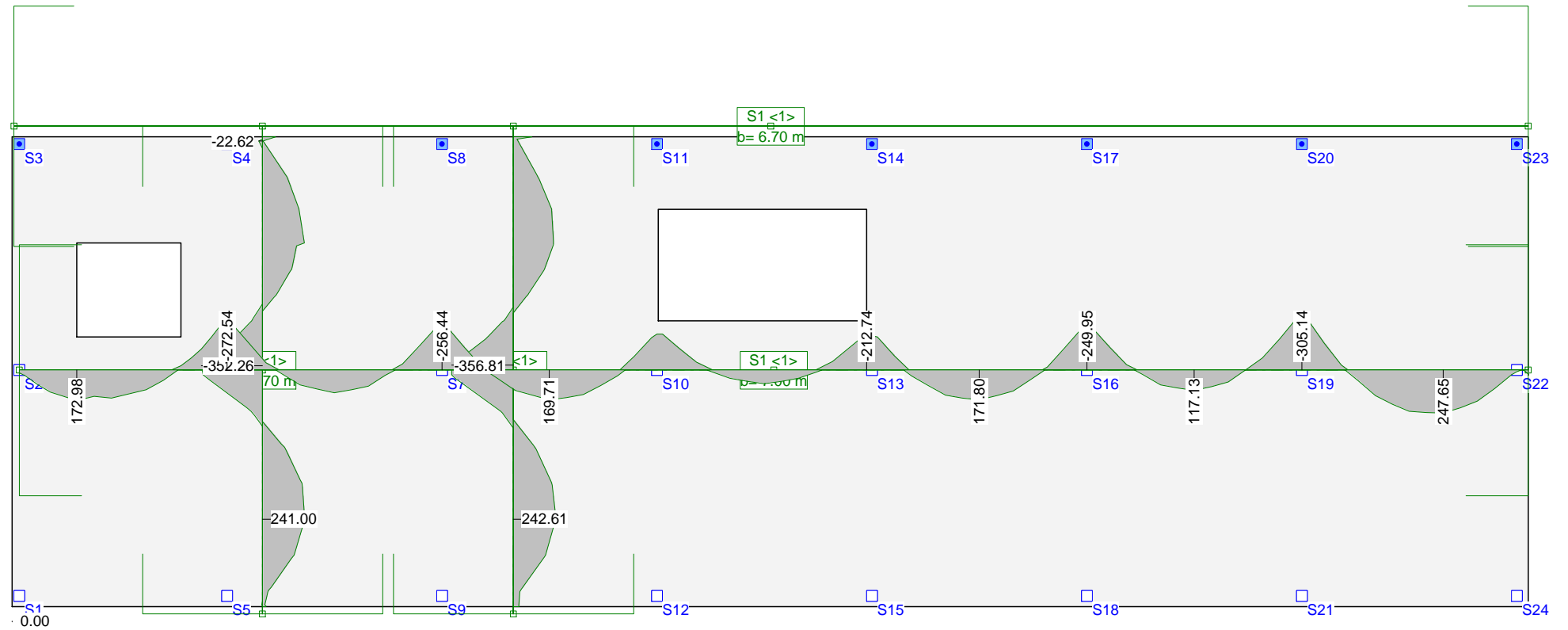
Envelopes of reaction forces Walls: Limit state specification: !Ultimate limit state Identifications: Columns: [kN]



Nr.:

Beam section(s): Envelopes of dimensioning moments [kNm], Specification !Serviceability(frequent)

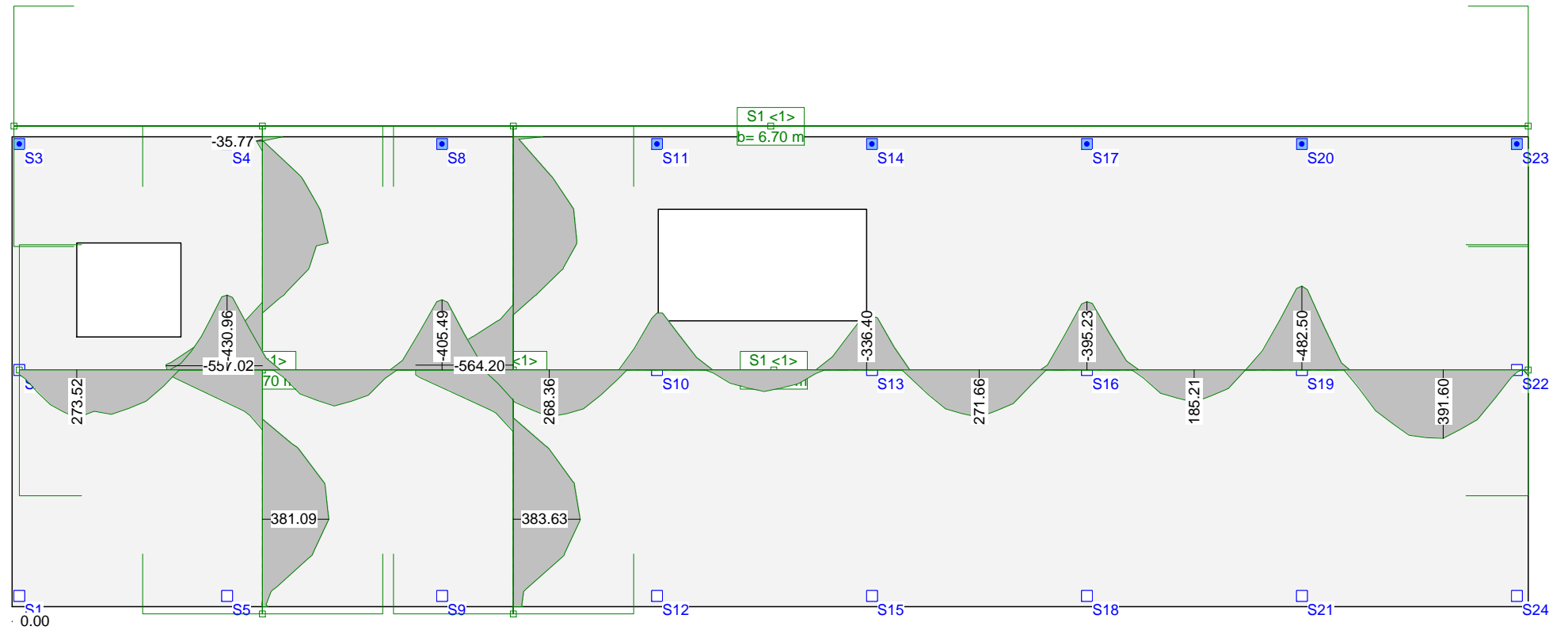
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Nr.:

Beam section(s): Envelopes of dimensioning moments [kNm], Specification !Ultimate limit state

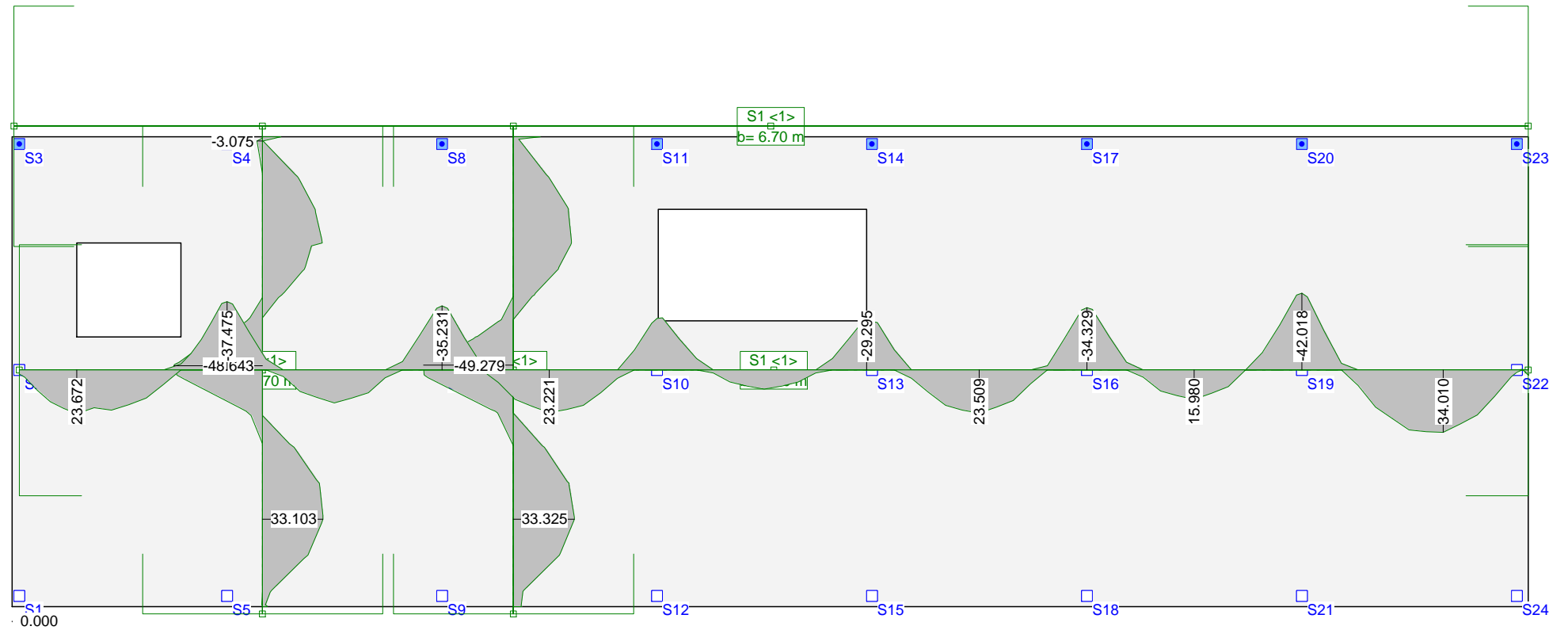
Scale 1:167.1



Nr.:

Beam section(s): As [cm²], Specification !Ultimate limit state/AP2

Scale 1:167.1



Nr.: