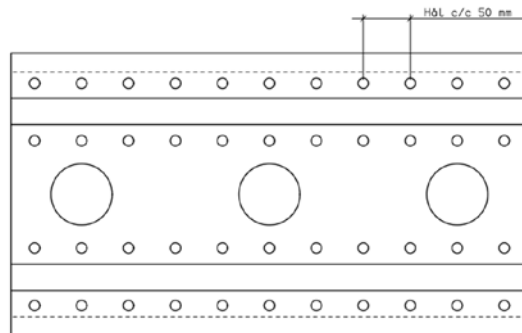
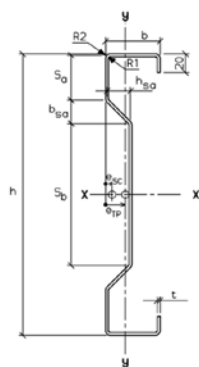


Cross-section data Sigma beams

Single beam S350GD

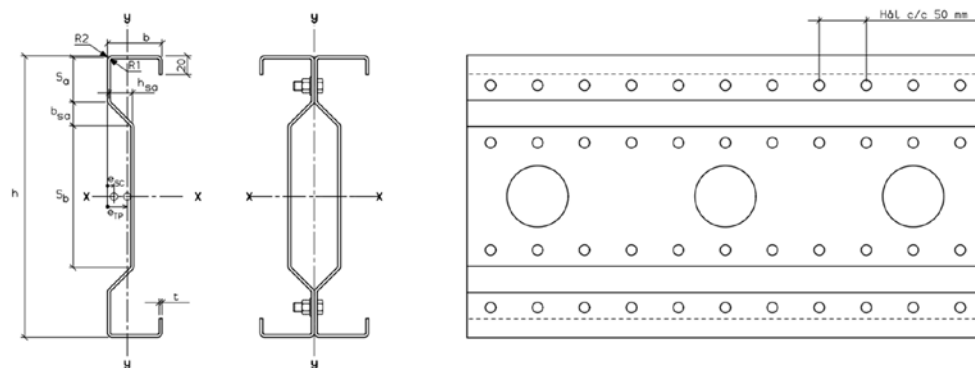
Profile	Cross-section dimensions (outer dimensions)					Dimensions to centre line for sheet metal					TP	SC	Gross cross-section, x axis					Hole	Gross cross-section, y axis				Surface area and mass	
	no.	h	w	t	R_1	R_2	s_b	s_a	w_{sa}	h_{sa}			r	e_{TP}	e_{SC}	A	I_x		W_x	Z_x	r_x	A_{net}	I_y	W_y
S200/2	200	58	2.0	2.0	4.0	50	49.0	25	25	3.0	20.0	-3.1	685	3.83	3.83	4.63	74.8	568	0.244	0.659	1.08	18.9	0.722	5.55
S200/2.5	200	58	2.5	2.0	4.5	50	48.8	25	25	3.25	19.8	-2.7	864	4.79	4.79	5.81	74.5	715	0.301	0.816	1.34	18.7	0.718	6.91
S200/3	200	58	3.0	2.0	5.0	50	48.5	25	25	3.5	19.6	-2.3	1040	5.73	5.73	6.98	74.2	861	0.355	0.964	1.60	18.5	0.714	8.24
S200/4	200	58	4.0	2.0	6.0	50	48.0	25	25	4.0	19.3	-1.5	1388	7.52	7.52	9.22	73.6	1144	0.451	1.23	2.09	18.0	0.704	10.8
S200/5	200	58	5.0	2.0	7.0	50	47.5	25	25	4.5	18.9	-0.8	1724	9.19	9.19	11.1	73.0	1417	0.534	1.46	2.54	17.6	0.695	13.3
S300/2	300	58	2.0	2.0	4.0	150	49.0	25	25	3.0	21.1	10.9	874	10.3	6.89	8.53	109	670	0.248	0.69	1.12	16.8	0.914	6.99
S300/2.5	300	58	2.5	2.0	4.5	150	48.8	25	25	3.25	20.9	11.2	1102	12.9	8.63	10.7	108	844	0.305	0.853	1.40	16.6	0.909	8.69
S300/3	300	58	3.0	2.0	5.0	150	48.5	25	25	3.5	20.8	11.6	1327	15.5	10.3	12.9	108	1015	0.360	1.01	1.67	16.5	0.904	10.4
S300/4	300	58	4.0	2.0	6.0	150	48.0	25	25	4.0	20.5	12.2	1780	20.5	13.7	17.1	107	1356	0.461	1.30	2.22	16.1	0.896	13.7
S300/5	300	58	5.0	2.0	7.0	150	47.5	25	25	4.5	20.3	12.9	2219	25.3	16.8	21.2	107	1684	0.550	1.56	2.69	15.7	0.887	16.9
S400/2	400	58	2.0	2.0	4.0	150	99.0	25	25	3.0	17.3	7.1	1059	20.6	10.3	13.1	139	855	0.313	0.789	1.54	17.2	1.110	8.51
S400/2.5	400	58	2.5	2.0	4.5	150	98.8	25	25	3.25	17.2	7.4	1341	26.0	13.0	16.6	139	1083	0.391	0.99	1.94	17.1	1.109	10.6
S400/3	400	58	3.0	2.0	5.0	150	98.5	25	25	3.5	17.1	7.8	1617	31.3	15.6	19.9	139	1304	0.462	1.17	2.32	16.9	1.104	12.7
S400/4	400	58	4.0	2.0	6.0	150	98.0	25	25	4.0	16.8	8.4	2173	41.6	20.8	26.6	138	1750	0.597	1.53	3.07	16.6	1.096	16.8
S400/5	400	58	5.0	2.0	7.0	150	97.5	25	25	4.5	16.6	9.0	2714	51.3	25.7	33.0	137	2180	0.717	1.84	3.78	16.3	1.087	20.8
Multiple													10^6	10^4	10^4				10^6	10^4	10^4			
Unit	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm ²	mm ⁴	mm ³	mm ³	mm	mm ²	mm ⁴	mm ³	mm ³	mm	m ² /m	kg/m



Cross-section data Sigma beams

Double beam S350GD

Profile	Cross-section dimensions (outer dimensions)					Dimensions to centre line for sheet metal					TP	SC	Gross cross-section, x axis					Hole	Gross cross-section, y axis				Surface area and mass		
	no.	h	w	t	R_1	R_2	s_b	s_a	w_{sa}	h_{sa}			r	e_{TP}	e_{SC}	A	I_x		W_x	Z_x	r_x	A_{net}	I_y	W_y	Z_y
S200/2	200	58	2.0	2.0	4.0	50	49.0	25	25	3.0	0	0	1370	7.66	7.66	9.26	74.8	1136	1.09	1.88	2.87	28.2	1.443	11.1	
S200/2.5	200	58	2.5	2.0	4.5	50	48.8	25	25	3.25	0	0	1727	9.58	9.58	11.6	74.5	1430	1.37	2.36	3.63	28.2	1.436	13.8	
S200/3	200	58	3.0	2.0	5.0	50	48.5	25	25	3.5	0	0	2080	11.5	11.5	14.0	74.2	1722	1.64	2.83	4.39	28.1	1.429	16.5	
S200/4	200	58	4.0	2.0	6.0	50	48.0	25	25	4.0	0	0	2775	15.0	15.0	18.4	73.6	2288	2.15	3.72	5.90	27.8	1.408	21.6	
S200/5	200	58	5.0	2.0	7.0	50	47.5	25	25	4.5	0	0	3447	18.4	18.4	22.3	73.0	2834	2.65	4.57	7.38	27.7	1.390	26.6	
S300/2	300	58	2.0	2.0	4.0	150	49.0	25	25	3.0	0	0	1748	20.6	13.8	17.1	109	1340	1.34	2.32	3.85	27.7	1.827	14.0	
S300/2.5	300	58	2.5	2.0	4.5	150	48.8	25	25	3.25	0	0	2203	25.8	17.3	21.4	108	1688	1.69	2.92	4.88	27.7	1.818	17.4	
S300/3	300	58	3.0	2.0	5.0	150	48.5	25	25	3.5	0	0	2654	31.0	20.6	25.8	108	2030	2.04	3.51	5.91	27.7	1.809	20.7	
S300/4	300	58	4.0	2.0	6.0	150	48.0	25	25	4.0	0	0	3561	41.0	27.4	34.2	107	2712	2.73	4.71	8.02	27.7	1.791	27.3	
S300/5	300	58	5.0	2.0	7.0	150	47.5	25	25	4.5	0	0	4437	50.6	33.6	42.4	107	3368	3.40	5.86	10.1	27.7	1.774	33.8	
S400/2	400	58	2.0	2.0	4.0	150	99.0	25	25	3.0	0	0	2117	41.2	20.6	26.2	139	1710	1.33	2.30	3.87	25.1	2.219	17.0	
S400/2.5	400	58	2.5	2.0	4.5	150	98.8	25	25	3.25	0	0	2682	52.1	26.0	33.2	139	2166	1.69	2.92	4.94	25.1	2.218	21.3	
S400/3	400	58	3.0	2.0	5.0	150	98.5	25	25	3.5	0	0	3234	62.6	31.2	39.8	139	2608	2.04	3.52	6.00	25.1	2.209	25.4	
S400/4	400	58	4.0	2.0	6.0	150	98.0	25	25	4.0	0	0	4347	83.2	41.6	53.2	138	3500	2.73	4.71	8.18	25.1	2.191	33.6	
S400/5	400	58	5.0	2.0	7.0	150	97.5	25	25	4.5	0	0	5427	103	51.4	66.0	137	4360	3.41	5.88	10.3	25.1	2.174	41.6	
Multiple													10^6	10^4	10^4				10^6	10^4	10^4				
Unit	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm ²	mm ⁴	mm ³	mm ³	mm	mm ²	mm ⁴	mm ³	mm ³	mm	m ² /m	kg/m	



Distance between screws on double beams

1000 mm where the beams are restrained laterally, 500 mm on the side in compression if the beams can buckle to one side, 1,000 mm on the side in tension

500 mm on both sides if the beams are in compression or if it is uncertain how the beams will deflect