



DIMENSIONAL AND SHAPE TOLERANCES

COLD ROLLED STEEL SHEETS AND COILS

SSAB

The tolerances for SSAB's cold rolled sheet steel products comply with EN 10131:2006.
Narrower or customer specific tolerances are available upon request.

The table below shows the SSAB branded cold rolled steel grades and their minimum yield strengths.

Steel grade		Minimum yield strength			
		$R_e < 260 \text{ MPa}$	$260 \text{ MPa} \leq R_e < 340 \text{ MPa}$	$340 \text{ MPa} \leq R_e \leq 420 \text{ MPa}$	$R_e > 420 \text{ MPa}$
SSAB Boron	22		•		
	27CR		•		
	38		•		
SSAB Domex	220LA	•			
	260LA		•		
	280LA		•		
	300LA		•		
	340LA			•	
	350LA			•	
	380LA			•	
	420LA			•	
	460LA				•
	500LA				•
	SSAB Form	200	•		
03		•			
04		•			
05		•			
06		•			
07		•			
SSAB Laser	DC03	•			
SSAB Weathering	COR-TEN A		•		
	355			•	
	700				•

THICKNESS TOLERANCES

Thickness is measured at a point no less than 40 mm from the edges.
If the width is less than 80 mm, the product is measured from the middle.

SPECIFIED MINIMUM YIELD STRENGTH $R_e < 260 \text{ MPa}$

Nominal thickness, mm	Normal tolerances for a nominal width of mm			Special tolerances (S) for a nominal width of mm		
	– 1200	1201 – 1500	1501 –	– 1200	1201 – 1500	1501 –
0.35 – 0.40	± 0.03	± 0.04	± 0.05	± 0.020	± 0.025	± 0.030
0.41 – 0.60	± 0.03	± 0.04	± 0.05	± 0.025	± 0.030	± 0.035
0.61 – 0.80	± 0.04	± 0.05	± 0.06	± 0.030	± 0.035	± 0.040
0.81 – 1.00	± 0.05	± 0.06	± 0.07	± 0.035	± 0.040	± 0.050
1.01 – 1.20	± 0.06	± 0.07	± 0.08	± 0.040	± 0.050	± 0.060
1.21 – 1.60	± 0.08	± 0.09	± 0.10	± 0.050	± 0.060	± 0.070
1.61 – 2.00	± 0.10	± 0.11	± 0.12	± 0.060	± 0.070	± 0.080
2.01 – 2.50	± 0.12	± 0.13	± 0.14	± 0.080	± 0.090	± 0.100
2.51 – 3.00	± 0.15	± 0.15	± 0.16	± 0.100	± 0.110	± 0.120

SPECIFIED MINIMUM YIELD STRENGTH $260 \text{ MPa} \leq R_e < 340 \text{ MPa}$

Nominal thickness, mm	Normal tolerances for a nominal width of mm			Special tolerances (S) for a nominal width of mm		
	– 1200	1201 – 1500	1501 –	– 1200	1201 – 1500	1501 –
0.35 – 0.40	± 0.04	± 0.05	± 0.06	± 0.025	± 0.030	± 0.035
0.41 – 0.60	± 0.04	± 0.05	± 0.06	± 0.030	± 0.035	± 0.040
0.61 – 0.80	± 0.05	± 0.06	± 0.07	± 0.035	± 0.040	± 0.050
0.81 – 1.00	± 0.06	± 0.07	± 0.08	± 0.040	± 0.050	± 0.060
1.01 – 1.20	± 0.07	± 0.08	± 0.10	± 0.050	± 0.060	± 0.070
1.21 – 1.60	± 0.09	± 0.11	± 0.12	± 0.060	± 0.070	± 0.080
1.61 – 2.00	± 0.12	± 0.13	± 0.14	± 0.070	± 0.080	± 0.100
2.01 – 2.50	± 0.14	± 0.15	± 0.16	± 0.100	± 0.110	± 0.120
2.51 – 3.00	± 0.17	± 0.18	± 0.18	± 0.120	± 0.130	± 0.140

SPECIFIED MINIMUM YIELD STRENGTH $340 \text{ MPa} \leq R_e \leq 420 \text{ MPa}$

Nominal thickness, mm	Normal tolerances for a nominal width of mm			Special tolerances (S) for a nominal width of mm		
	– 1200	1201 – 1500	1501 –	– 1200	1201 – 1500	1501 –
0.35 – 0.40	± 0.04	± 0.05	± 0.06	± 0.030	± 0.035	± 0.040
0.41 – 0.60	± 0.05	± 0.06	± 0.07	± 0.035	± 0.040	± 0.050
0.61 – 0.80	± 0.06	± 0.07	± 0.08	± 0.040	± 0.050	± 0.060
0.81 – 1.00	± 0.07	± 0.08	± 0.10	± 0.050	± 0.060	± 0.070
1.01 – 1.20	± 0.09	± 0.10	± 0.11	± 0.060	± 0.070	± 0.080
1.21 – 1.60	± 0.11	± 0.12	± 0.14	± 0.070	± 0.080	± 0.100
1.61 – 2.00	± 0.14	± 0.15	± 0.17	± 0.080	± 0.100	± 0.110
2.01 – 2.50	± 0.16	± 0.18	± 0.19	± 0.110	± 0.120	± 0.130
2.51 – 3.00	± 0.20	± 0.20	± 0.21	± 0.130	± 0.140	± 0.150

SPECIFIED MINIMUM YIELD STRENGTH 420MPa <math> < R_e </math>

Nominal thickness, mm	Normal tolerances for a nominal width of mm			Special tolerances (S) for a nominal width of mm		
	- 1200	1201 – 1500	1501 –	- 1200	1201 – 1500	1501 –
0.35 – 0.40	± 0.05	± 0.06	± 0.07	± 0.035	± 0.040	± 0.050
0.41 – 0.60	± 0.05	± 0.07	± 0.08	± 0.040	± 0.050	± 0.060
0.61 – 0.80	± 0.06	± 0.08	± 0.10	± 0.050	± 0.060	± 0.070
0.81 – 1.00	± 0.08	± 0.10	± 0.11	± 0.060	± 0.070	± 0.080
1.01 – 1.20	± 0.10	± 0.11	± 0.13	± 0.070	± 0.080	± 0.100
1.21 – 1.60	± 0.13	± 0.14	± 0.16	± 0.080	± 0.100	± 0.110
1.61 – 2.00	± 0.16	± 0.17	± 0.19	± 0.100	± 0.110	± 0.130
2.01 – 2.50	± 0.19	± 0.20	± 0.22	± 0.130	± 0.140	± 0.160
2.51 – 3.00	± 0.22	± 0.23	± 0.24	± 0.160	± 0.170	± 0.180

WIDTH TOLERANCES

WIDE STRIP AND SHEET

Nominal width, mm	Normal tolerances mm		Special tolerances (S) mm	
	Under	Over	Under	Over
- 1 200	0	+ 4	0	+ 2
1201 – 1500	0	+ 5	0	+ 2
1501 –	0	+ 6	0	+ 3

SLIT WIDE STRIP (WIDTH <math> < 600 \text{ MM}</math>)

Tolerance class	Nominal thickness mm	Nominal width mm							
		- 124		125 – 249		250 – 399		400 – 599	
		Under	Over	Under	Over	Under	Over	Under	Over
Normal	- 0.59	0	+ 0.4	0	+ 0.5	0	+ 0.7	0	+ 1.0
	0.60 – 0.99	0	+ 0.5	0	+ 0.6	0	+ 0.9	0	+ 1.2
	1.00 – 1.99	0	+ 0.6	0	+ 0.8	0	+ 1.1	0	+ 1.4
	2.00 – 3.00	0	+ 0.7	0	+ 1.0	0	+ 1.3	0	+ 1.6
Special (S)	- 0.59	0	+ 0.2	0	+ 0.2	0	+ 0.3	0	+ 0.5
	0.60 – 0.99	0	+ 0.2	0	+ 0.3	0	+ 0.4	0	+ 0.6
	1.00 – 1.99	0	+ 0.3	0	+ 0.4	0	+ 0.5	0	+ 0.7
	2.00 – 3.00	0	+ 0.4	0	+ 0.5	0	+ 0.6	0	+ 0.8

LENGTH TOLERANCES

SHEETS

Nominal length mm	Tolerance class			
	Normal mm		Special (S) mm	
	Under	Over	Under	Over
- 1999	0	6	0	3
2000 –	0	0.3 % of the length	0	0.15 % of the length

Tighter tolerances may also be agreed at the time of order.

FLATNESS TOLERANCES

The flatness tolerances apply only to sheets. The flatness deviation is the maximum permitted distance between the sheet and the horizontal surface on which it is placed. The sheets delivered without skin pass rolling are delivered with normal tolerances only.

SPECIFIED MINIMUM YIELD STRENGTH $R_e < 260 \text{ MPa}$

Tolerance class	Nominal width mm	Nominal thickness mm		
		– 0.69	0.70 – 1.19	1.20 – 3.00
Normal	600 – 1199	10	8	7
	1200 – 1499	12	10	8
	1500 –	17	15	13
Special (FS)	600 – 1199	5	4	3
	1200 – 1499	6	5	4
	1500 –	8	7	6

SPECIFIED MINIMUM YIELD STRENGTH $260 \leq R_e < 340 \text{ MPa}$

Tolerance class	Nominal width mm	Nominal thickness mm		
		– 0.69	0.70 – 1.19	1.20 – 3.00
Normal	600 – 1199	13	10	8
	1200 – 1499	15	13	11
	1500 –	20	19	17
Special (FS)	600 – 1199	8	6	5
	1200 – 1499	9	8	6
	1500 –	12	10	9

SPECIFIED MINIMUM YIELD STRENGTH $R_e \geq 340 \text{ MPa}$

The flatness tolerances are to be agreed separately at the time of order.

OUT-OF-SQUARENESS TOLERANCES

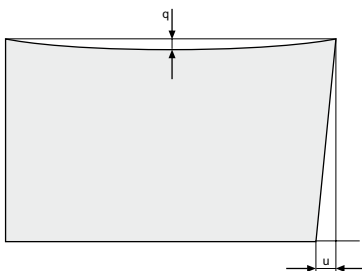
The out-of-squareness (u) can be maximum 1 % of the sheet width (Figure 1).

EDGE CAMBER TOLERANCES

The edge camber (q) shall be maximum 5 mm over a length of 2 m. For lengths less than 2 m, the edge camber can be a maximum of 0.25 % of the actual length (Figure 1).

For slit wide strips of width less than 600 mm, a special edge camber tolerance of max. 2 mm over a length of 2 m may be specified. This special edge camber tolerance is not applicable to high-strength slit strips.

FIGURE 1. OUT-OF-SQUARENESS AND EDGE CAMBER.



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