

Equal angles

Hot rolled

dimensional tolerances and grades according to ASTM A276, ASTM A484, ASTM A479, ASME SA479, MTC EN 10204 3.1

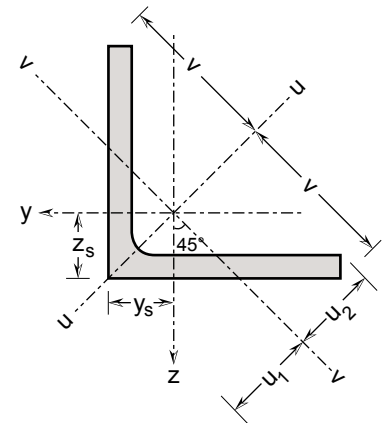
Laser fused

according to ASTM A1069, dimensional tolerances and grades, according to ASTM A276, ASTM A484, ASTM A479, ASME SA479, MTC EN 10204 3.1

Stainless steel

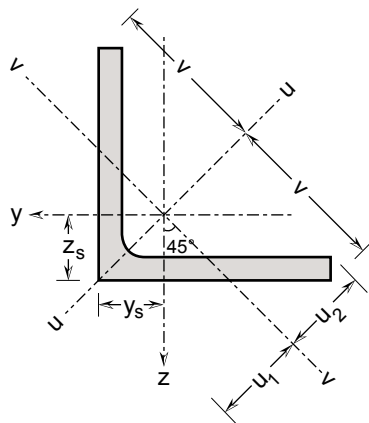
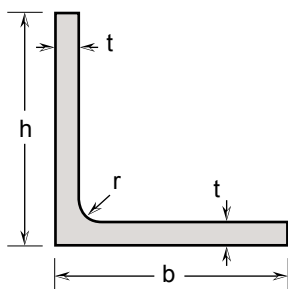
Standard stainless steel grades 304/L and 316/L
Annealed and pickled, lengths of 6000 -0/+100 mm

General properties									
Designation		Dimensions				Position of axes			
	G kg/m	h = b mm	t mm	r mm	A mm ² x10 ²	z _s =y _s mm	v mm	u ₁ mm	u ₂ mm
L 15 x 15 x 2	0.45	15	2	2.5	0.57	4.39	10.61	6.21	5.29
L 15 x 15 x 3	0.65	15	3	2.5	0.82	4.78	10.61	6.76	5.45
L 20 x 20 x 2	0.61	20	2	2.5	0.77	5.64	14.14	7.97	7.07
L 20 x 20 x 3	0.90	20	3	3.5	1.12	5.98	14.14	8.46	7.08
L 25 x 25 x 3	1.14	25	3	3.5	1.42	7.23	17.68	10.22	8.85
L 25 x 25 x 4	1.48	25	4	3.5	1.85	7.62	17.68	10.78	9.01
L 25 x 25 x 5	1.81	25	5	3.5	2.26	7.99	17.68	11.30	9.19
L 30 x 30 x 3	1.39	30	3	5	1.74	8.35	21.21	11.81	10.49
L 30 x 30 x 4	1.81	30	4	5	2.27	8.78	21.21	12.42	10.58
L 30 x 30 x 5	2.22	30	5	5	2.78	9.18	21.21	12.99	10.73
L 35 x 35 x 4	2.13	35	4	5	2.67	10.03	24.75	14.18	12.36
L 40 x 40 x 3	1.87	40	3	5	2.34	10.84	28.28	15.33	14.04
L 40 x 40 x 4	2.46	40	4	6	3.08	11.20	28.28	15.83	14.04
L 40 x 40 x 5	3.03	40	5	6	3.79	11.62	28.28	16.43	14.14
L 40 x 40 x 6	3.58	40	6	6	4.48	12.02	28.28	17.00	14.29
L 45 x 45 x 4	2.78	45	4	6	3.48	12.44	31.82	17.59	15.81
L 45 x 45 x 5	3.43	45	5	6	4.29	12.87	31.82	18.19	15.92
L 50 x 50 x 3	2.37	50	3	7	2.96	13.08	35.36	18.49	17.53
L 50 x 50 x 4	3.11	50	4	7	3.89	13.59	35.36	19.21	17.52
L 50 x 50 x 5	3.84	50	5	7	4.80	14.04	35.36	19.85	17.59
L 50 x 50 x 6	4.55	50	6	7	5.69	14.45	35.36	20.44	17.71



Structural properties

Designation	Axis y-y / axis z-z			Axis u-u		Axis v-v		I_{yz} mm ⁴ x10 ⁴
	$I_y=I_z$ mm ⁴ x10 ⁴	$W_{el,y}=W_{el,z}$ mm ³ x10 ³	$i_y=i_z$ mm x10	I_u mm ⁴ x10 ⁴	i_u mm x10	I_v mm ⁴ x10 ⁴	i_v mm x10	
L 15 x 15 x 2	0.11	0.11	0.45	0.18	0.56	0.05	0.29	-0.07
L 15 x 15 x 3	0.16	0.15	0.44	0.24	0.55	0.07	0.29	-0.09
L 20 x 20 x 2	0.28	0.20	0.61	0.45	0.76	0.12	0.39	-0.17
L 20 x 20 x 3	0.39	0.28	0.59	0.62	0.74	0.16	0.38	-0.23
L 25 x 25 x 3	0.80	0.45	0.75	1.27	0.95	0.33	0.48	-0.47
L 25 x 25 x 4	1.02	0.59	0.74	1.61	0.93	0.43	0.48	-0.59
L 25 x 25 x 5	1.21	0.71	0.73	1.90	0.92	0.52	0.48	-0.69
L 30 x 30 x 3	1.40	0.65	0.90	2.22	1.13	0.59	0.58	-0.82
L 30 x 30 x 4	1.80	0.85	0.89	2.85	1.12	0.75	0.58	-1.05
L 30 x 30 x 5	2.16	1.04	0.88	3.41	1.11	0.92	0.57	-1.25
L 35 x 35 x 4	2.95	1.18	1.05	4.68	1.32	1.23	0.68	-1.73
L 40 x 40 x 3	3.49	1.20	1.22	5.53	1.54	1.45	0.79	-2.04
L 40 x 40 x 4	4.47	1.55	1.21	7.09	1.52	1.86	0.78	-2.61
L 40 x 40 x 5	5.43	1.91	1.20	8.59	1.51	2.26	0.77	-3.17
L 40 x 40 x 6	6.31	2.26	1.19	9.97	1.49	2.65	0.77	-3.66
L 45 x 45 x 4	6.50	2.00	1.37	10.30	1.72	2.69	0.88	-3.80
L 45 x 45 x 5	7.90	2.46	1.36	12.53	1.71	3.28	0.87	-4.63
L 50 x 50 x 3	6.86	1.86	1.52	10.84	1.91	2.88	0.99	-3.98
L 50 x 50 x 4	8.97	2.46	1.52	14.22	1.91	3.73	0.98	-5.24
L 50 x 50 x 5	10.96	3.05	1.51	17.38	1.90	4.55	0.97	-6.42
L 50 x 50 x 6	12.84	3.61	1.50	20.34	1.89	5.34	0.97	-7.50



Equal angles

Hot rolled

dimensional tolerances and grades according to ASTM A276, ASTM A484, ASTM A479, ASME SA479, MTC EN 10204 3.1

Laser fused

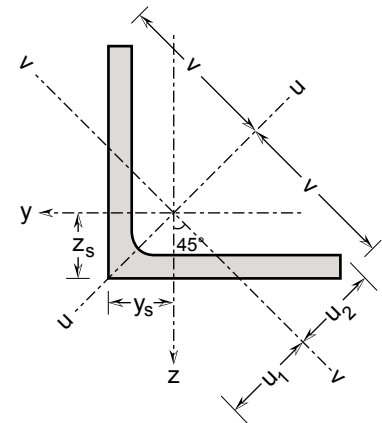
according to ASTM A1069, dimensional tolerances and grades, according to ASTM A276, ASTM A484, ASTM A479, ASME SA479, MTC EN 10204 3.1

Stainless steel

Standard stainless steel grades 304/L and 316/L
Annealed and pickled, lengths of 6000 -0/+100 mm

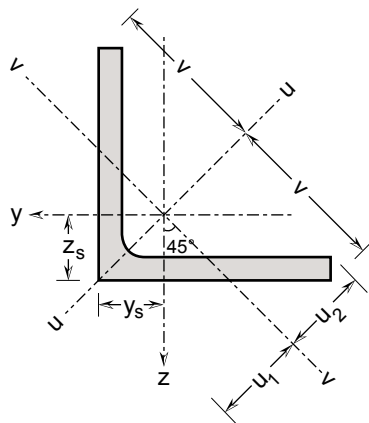
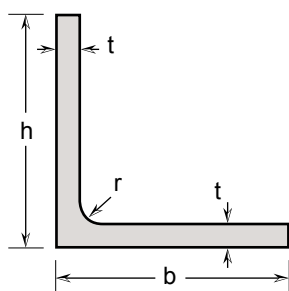
General properties									
Designation		Dimensions				Position of axes			
	G kg/m	h = b mm	t mm	r mm	A mm ² x10 ²	z _s =y _s mm	v mm	u ₁ mm	u ₂ mm
L 60 x 60 x 6	5.53	60	6	8	6.91	16.88	42.43	23.87	21.15
L 65 x 65 x 6	6.02	65	6	9	7.53	18.04	45.96	25.51	22.83
L 65 x 65 x 8	7.88	65	8	9	9.85	18.88	45.96	26.70	23.06
L 65 x 65 x 9	8.78	65	9	9	10.98	19.28	45.96	27.26	23.20
L 75 x 75 x 6	6.98	75	6	9	8.73	20.53	53.03	29.03	26.38
L 75 x 75 x 8	9.16	75	8	9	11.45	21.37	53.03	30.23	26.60
L 75 x 75 x 9	10.22	75	9	9	12.78	21.77	53.03	30.79	26.74
L 75 x 75 x 10	11.27	75	10	9	14.09	22.16	53.03	31.35	26.89
L 80 x 80 x 6	7.48	80	6	10	9.35	21.67	56.57	30.65	28.09
L 80 x 80 x 8	9.81	80	8	10	12.27	22.55	56.57	31.89	28.26
L 90 x 90 x 9	12.40	90	9	10	15.50	25.46	63.64	36.00	31.93
L 100 x 100 x 6	9.44	100	6	12	11.79	26.42	70.71	37.36	35.10
L 100 x 100 x 8	12.41	100	8	12	15.51	27.37	70.71	38.70	35.18
L 100 x 100 x 9	13.88	100	9	12	17.34	27.80	70.71	39.32	35.27
100x100x10	15.32	100	10	12	19.15	28.22	70.71	39.92	35.38
L 120 x 120 x 8*	14.85	120	8	2	18.56	32.95	84.85	46.59	43.50
L 120 x 120 x 10	18.52	120	10	12	23.15	33.22	84.85	46.97	42.46
L 120 x 120 x 12*	21.89	120	12	2	27.36	34.41	84.85	48.66	44.26
L 120 x 120 x 15*	27.00	120	15	2	33.75	35.49	84.85	50.19	44.85
L 125 x 125 x 8*	15.49	125	8	2	19.36	34.20	88.39	48.36	45.27
L 125 x 125 x 9	17.48	125	9	12	21.84	34.04	88.39	48.14	44.13

* Profiles are laser fused with full penetration, equivalent to hot rolled (r = laser seam).



Structural properties

Designation	Axis y-y / axis z-z			Axis u-u		Axis v-v		
	$I_y=I_z$ mm ⁴ x10 ⁴	$W_{el,y}=W_{el,z}$ mm ³ x10 ³	$i_y=i_z$ mm x10	I_u mm ⁴ x10 ⁴	i_u mm x10	I_v mm ⁴ x10 ⁴	i_v mm x10	I_{yz} mm ⁴ x10 ⁴
L 60 x 60 x 6	22.79	5.29	1.82	36.14	2.29	9.44	1.17	-13.35
L 65 x 65 x 6	29.19	6.21	1.97	46.27	2.48	12.11	1.27	-17.08
L 65 x 65 x 8	37.49	8.13	1.95	59.38	2.46	15.60	1.26	-21.89
L 65 x 65 x 9	41.37	9.05	1.94	65.44	2.44	17.30	1.26	-24.07
L 75 x 75 x 6	45.83	8.41	2.29	72.71	2.89	18.94	1.47	-26.89
L 75 x 75 x 8	59.13	11.03	2.27	93.80	2.86	24.46	1.46	-34.67
L 75 x 75 x 9	65.40	12.29	2.26	103.66	2.85	27.13	1.46	-38.26
L 75 x 75 x 10	71.43	13.52	2.25	113.08	2.83	29.77	1.45	-41.66
L 80 x 80 x 6	55.82	9.57	2.44	88.51	3.08	23.13	1.57	-32.69
L 80 x 80 x 8	72.25	12.58	2.43	114.61	3.06	29.88	1.56	-42.36
L 90 x 90 x 9	116.24	18.01	2.74	184.51	3.45	47.96	1.76	-68.28
L 100 x 100 x 6	111.05	15.09	3.07	175.90	3.86	46.21	1.98	-64.84
L 100 x 100 x 8	144.84	19.94	3.06	229.81	3.85	59.87	1.96	-84.97
L 100 x 100 x 9	160.99	22.30	3.05	255.49	3.84	66.50	1.96	-94.50
100x100x10	176.68	24.62	3.04	280.34	3.83	73.01	1.95	-103.66
L 120 x 120 x 8*	260.89	29.97	3.75	416.46	4.74	105.32	2.38	-155.57
L 120 x 120 x 10	313.79	36.16	3.68	498.58	4.64	128.99	2.36	-184.79
L 120 x 120 x 12*	373.13	43.59	3.69	594.01	4.66	152.25	2.36	-220.88
L 120 x 120 x 15*	450.35	53.29	3.65	714.84	4.60	185.86	2.35	-264.49
L 125 x 125 x 8*	296.03	32.60	3.91	472.64	4.94	119.42	2.48	-176.61
L 125 x 125 x 9	324.23	35.64	3.85	515.26	4.86	133.20	2.47	-191.03



Equal angles

Hot rolled

dimensional tolerances and grades according to ASTM A276, ASTM A484, ASTM A479, ASME SA479, MTC EN 10204 3.1

Laser fused

according to ASTM A1069, dimensional tolerances and grades, according to ASTM A276, ASTM A484, ASTM A479, ASME SA479, MTC EN 10204 3.1

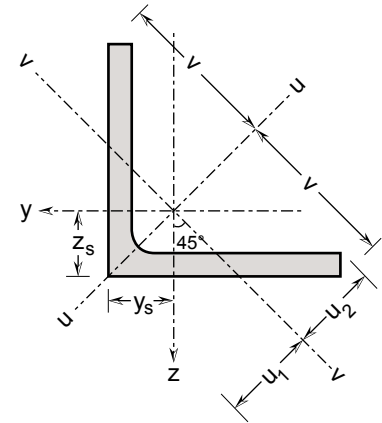
Stainless steel

Standard stainless steel grades 304/L and 316/L
Annealed and pickled, lengths of 6000 -0/+100 mm

General properties

Designation		Dimensions				Position of axes			
	G kg/m	h = b mm	t mm	r mm	A mm ² x10 ²	z _s =y _s mm	v mm	u ₁ mm	u ₂ mm
L 125 x 125 x 10	19.32	125	10	12	24.15	34.46	88.39	48.74	44.24
L 125 x 125 x 12	22.97	125	12	12	28.71	35.28	88.39	49.89	44.50
L 125 x 125 x 15*	28.20	125	15	2	35.25	36.75	88.39	51.97	46.61
L 130 x 130 x 8*	16.13	130	8	2	20.16	35.45	91.92	50.13	47.03
L 130 x 130 x 9*	18.08	130	9	2	22.59	35.82	91.92	50.65	47.22
L 130 x 130 x 10*	20.00	130	10	2	25.00	36.19	91.92	51.17	47.41
L 130 x 130 x 12*	23.81	130	12	2	29.76	36.92	91.92	52.21	47.79
L 130 x 130 x 15*	29.40	130	15	2	36.75	38.00	91.92	53.74	48.37
L 150 x 150 x 8*	18.69	150	8	2	23.36	40.45	106.07	57.21	54.10
L 150 x 150 x 9	21.08	150	9	12	26.34	40.28	106.07	56.96	52.98
L 150 x 150 x 10	23.32	150	10	12	29.15	40.71	106.07	57.57	53.08
L 150 x 150 x 12	27.77	150	12	12	34.71	41.53	106.07	58.73	53.34
L 150 x 150 x 15*	34.20	150	15	2	42.75	43.02	106.07	60.83	55.42
L 175 x 175 x 12*	32.45	175	12	2	40.56	48.18	123.74	68.14	63.67
L 175 x 175 x 15*	40.20	175	15	2	50.25	49.28	123.74	69.69	64.24
L 200 x 200 x 12*	37.25	200	12	2	46.56	54.44	141.42	76.99	72.50
L 200 x 200 x 13*	40.25	200	13	2	50.31	54.81	141.42	77.51	72.69
L 200 x 200 x 15*	46.20	200	15	2	57.75	55.54	141.42	78.55	73.07

* Profiles are laser fused with full penetration, equivalent to hot rolled (r = laser seam).



Structural properties								
Designation	Axis y-y / axis z-z			Axis u-u		Axis v-v		I_{yz} mm ⁴ x10 ⁴
	$I_y=I_z$ mm ⁴ x10 ⁴	$W_{el,y}=W_{el,z}$ mm ³ x10 ³	$i_y=i_z$ mm x10	I_u mm ⁴ x10 ⁴	i_u mm x10	I_v mm ⁴ x10 ⁴	i_v mm x10	
L 125 x 125 x 10	356.62	39.39	3.84	566.80	4.84	146.45	2.46	-210.17
L 125 x 125 x 12	419.15	46.72	3.82	665.93	4.82	172.38	2.45	-246.77
L 125 x 125 x 15*	512.59	58.08	3.81	814.16	4.81	211.02	2.45	-301.57
L 130 x 130 x 8*	334.19	35.35	4.07	533.65	5.14	134.73	2.58	-199.46
L 130 x 130 x 9*	371.81	39.48	4.06	593.45	5.12	150.18	2.58	-221.63
L 130 x 130 x 10*	408.58	43.55	4.04	651.77	5.11	165.38	2.57	-243.20
L 130 x 130 x 12*	479.63	51.53	4.01	764.14	5.07	195.13	2.56	-284.50
L 130 x 130 x 15*	580.33	63.08	3.97	922.29	5.01	238.37	2.55	-341.96
L 150 x 150 x 8*	519.59	47.43	4.72	830.09	5.96	209.08	2.99	-310.51
L 150 x 150 x 9	571.82	52.12	4.66	909.62	5.88	234.03	2.98	-337.80
L 150 x 150 x 10	629.96	57.64	4.65	1002.29	5.86	257.63	2.97	-372.33
L 150 x 150 x 12	742.82	68.48	4.63	1181.77	5.83	303.87	2.96	-438.95
L 150 x 150 x 15*	911.08	85.16	4.62	1450.44	5.82	371.71	2.95	-539.36
L 175 x 175 x 12*	1210.70	95.47	5.46	1932.59	6.90	488.81	3.47	-721.89
L 175 x 175 x 15*	1476.54	117.45	5.42	2353.87	6.84	599.22	3.45	-877.33
L 200 x 200 x 12*	1829.89	125.71	6.27	2922.59	7.92	737.20	3.98	-1092.70
L 200 x 200 x 13*	1968.06	135.55	6.25	3142.32	7.90	793.80	3.97	-1174.26
L 200 x 200 x 15*	2238.29	154.94	6.23	3571.34	7.86	905.24	3.96	-1333.05