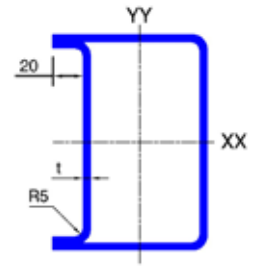


For general purpose use

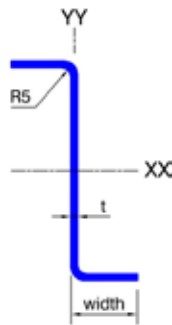
# Structural Sections

In addition to our huge range of lintels we are able to manufacture a wide variety of light structural sections in LDX 2101®. Manufactured from the same steel stock as our lintel range, we are able to deliver structural sections in the same lead time as our standard lintels! We manufacture our structural sections from LDX 2101® sheet in gauges 2.0, 3.0, 4.0 & 6.0mm, which comprise our standard stock gauges. Sections of other gauges can also be produced if sufficient quantity is ordered. Sections can be ordered in any length up to 4.5m, lengths over 4.5m require transverse welding. Section properties of a selection of typical sections are shown on this page for the benefit of designers.



Applications for these sections can be found anywhere LDX 2101® stainless steel provides an advantage:

- Marine structures
- Flood & Sluice gates
- Purlins/Girts in hostile environments
- Thresholds & Ramps
- Tanks & Silos
- Walkways & Stairways
- Cooling towers
- Duct structural elements
- Desalination plants
- Water and Waste water treatment
- Pulp & Paper handling
- Food & Beverage Handling



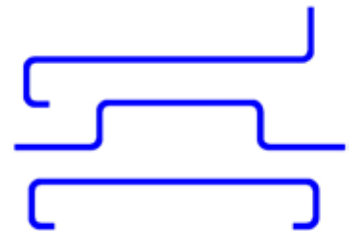
## Structural Box Sections

(HxWxt) Size	(kg/m) Mass	(cm <sup>4</sup> ) Ixx	(cm <sup>3</sup> ) Zxxe	(cm <sup>4</sup> ) Iyy	(mm) Cy	(cm <sup>3</sup> ) Zyye
65x50x2.0	3.90	32.33	9.95	12.61	22.99	8.41
75x65x2.0	4.68	53.35	14.23	28.14	31.15	12.51
80x40x2.0	4.06	46.79	11.70	7.53	16.16	7.53
100x50x2.0	4.99	90.24	18.05	16.06	21.25	10.71
100x65x2.0	5.45	104.65	20.93	33.41	29.92	14.85
120x60x2.0	5.92	154.39	25.73	30.05	26.32	12.03
120x60x4.0	11.53	286.00	47.67	55.45	26.50	27.73
140x50x2.0	6.22	205.17	29.31	19.70	20.01	9.75
140x50x4.0	12.15	382.10	54.59	35.89	20.14	23.93
140x75x2.0	7.00	252.78	36.11	613.42	34.17	20.42
140x75x4.0	13.69	474.60	67.80	114.60	34.32	41.67
140x100x2.0	7.77	300.40	49.77	130.82	47.99	32.22
140x100x4.0	15.25	567.10	81.01	247.80	48.16	61.95
150x75x2.0	7.31	298.21	39.76	64.32	33.88	21.74
150x75x4.0	14.32	561.70	74.89	120.20	34.03	43.71
150x100x2.0	8.08	352.97	54.72	137.15	47.69	34.19
150x100x4.0	15.87	668.30	89.11	259.80	47.84	64.95
200x100x4.0	18.97	1336.00	133.60	319.70	46.56	67.24
200x150x4.0	22.06	1720.00	155.92	897.90	75.45	122.17
215x90x2.0	9.79	785.44	85.66	135.45	40.72	40.18
215x90x4.0	19.28	1505.00	140.00	255.60	40.81	61.03
215x100x2.0	10.10	830.81	91.17	177.93	46.15	47.00
215x100x4.0	19.90	1594.00	148.28	337.50	46.26	71.79
215x115x2.0	10.56	898.86	93.84	253.84	54.26	57.56
215x115x4.0	20.83	1727.00	146.43	484.40	54.37	88.47
215x125x2.0	10.87	944.23	93.85	312.87	59.64	64.82
215x125x4.0	21.45	1816.00	153.95	599.00	59.75	99.94
215x140x2.0	11.34	1012.29	93.81	414.57	67.67	76.03
215x140x4.0	22.38	1950.00	165.14	796.70	67.78	117.69

## Z-Sections

Size	height	total Width	Flange Width	Gauge	Mass/m	cm <sup>4</sup> Ixx	cm <sup>3</sup> Zxx	cm <sup>4</sup> Iyy	cm <sup>3</sup> Zyy
50x26x3	50	49	26	3	2.09	10.2	4.09	2.80	1.144
50x27x4	50	50	27	4	2.73	13.2	5.29	3.98	1.592
60x26x3	60	49	26	3	2.33	15.8	5.26	2.81	1.145
60x27x4	60	50	27	4	3.04	20.6	6.86	3.98	1.594
75x31x3	75	59	31	3	2.91	30.7	8.19	4.89	1.658
75x32x4	75	60	32	4	3.81	40.2	10.72	6.87	2.291
100x31x3	100	59	31	3	3.49	61.3	12.26	4.90	1.660
100x32x4	100	60	32	4	4.59	80.7	16.14	6.89	2.296
125x41x3	125	79	41	3	4.53	127.0	20.32	11.74	2.971
125x42x4	125	80	42	4	5.98	167.6	26.82	16.27	4.068
125x43x6	125	80	43	6	8.70	242.2	38.76	24.51	6.128
150x41x3	150	79	41	3	5.12	197.2	26.29	11.74	2.972
150x42x4	150	80	42	4	6.76	260.8	34.78	16.29	4.071
150x43x6	150	80	43	6	9.86	379.1	50.55	24.56	6.139

**Bespoke Sections** are readily accommodated, please contact us with your enquiry...

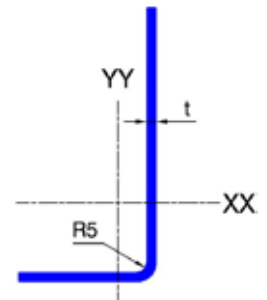
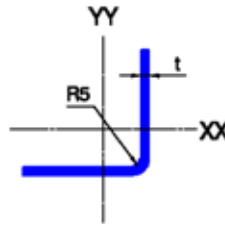


Section properties calculated in accordance with BS5950-5:1998. Ze is the effective section modulus, taking local buckling under bending into consideration. In the case of C-Sections, e+ refers to the case of bending about the Y-Y axis so that the web is in compression and the tips of the flanges are under tension. On request, box sections may be fabricated with the internal 'C' section facing the other way. Radii are typically 5mm internal. 'Cy' refers to the offset of the YY axis through the centroid from the nearest extreme edge of the section, 'Cx' similar.

# Structural Sections

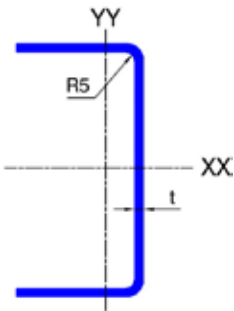
## Equal Angles

Size	height	Width	Gauge	Mass/m	cm <sup>4</sup> I <sub>xx</sub>	cm <sup>3</sup> Z <sub>xx</sub>
25x25x4	25	25	3	1.03	0.779	0.442
25x25x4	25	25	4	1.32	0.984	0.569
30x30x3	30	30	3	1.26	1.385	0.647
30x30x4	30	30	4	1.63	1.763	0.838
40x40x3	40	40	3	1.73	3.403	1.178
40x40x4	40	40	4	2.25	4.378	1.535
50x50x3	50	50	3	2.19	6.792	1.867
50x50x4	50	50	4	2.87	8.798	2.442
50x50x6	50	50	6	4.12	12.47	3.533
60x60x3	60	60	3	2.66	11.91	2.714
60x60x4	60	60	4	3.49	15.50	3.561
60x60x6	60	60	6	5.05	22.16	5.18
75x75x3	75	75	3	3.36	23.60	4.281
75x75x4	75	75	4	4.42	30.86	5.635
75x75x6	75	75	6	6.45	44.54	8.24
100x100x4	100	100	4	5.97	74.60	10.148
100x100x6	100	100	6	8.77	108.7	14.933
125x125x6	125	125	6	11.1	216.0	23.60



## Unequal Angles

Size	height	Width	Gauge	Mass/m	cm <sup>4</sup> I <sub>xx</sub>	cm <sup>3</sup> Z <sub>xx</sub>	cm <sup>4</sup> I <sub>yy</sub>	cm <sup>3</sup> Z <sub>yy</sub>
40x25x4	40	25	3	1.38	2.909	1.095	0.893	0.469
40x25x4	40	25	4	1.78	3.733	1.425	1.131	0.605
50x40x3	50	40	3	1.96	6.323	1.807	3.638	1.213
50x40x4	50	40	4	2.56	8.184	2.363	4.684	1.581
60x30x3	60	30	3	1.96	9.446	2.432	1.674	0.702
60x30x4	60	30	4	2.56	12.26	3.187	2.138	0.911
75x50x3	75	50	3	2.77	20.70	4.030	7.628	1.963
75x50x4	75	50	4	3.64	27.04	5.302	9.892	2.570
75x50x6	75	50	6	5.29	38.93	7.746	14.05	3.722
100x50x3	100	50	3	3.36	45.19	6.899	8.182	2.020
100x50x4	100	50	4	4.42	59.27	9.102	10.62	2.646
100x50x6	100	50	6	6.45	86.05	13.37	15.10	3.837
100x75x3	100	75	3	3.94	51.83	7.372	25.66	4.440
100x75x4	100	75	4	5.19	68.05	9.732	33.57	5.846
100x75x6	100	75	6	7.61	99.03	14.31	48.50	8.556
125x75x4	125	75	4	5.97	124.9	14.79	35.59	5.991
125x75x6	125	75	6	8.77	182.6	21.83	51.45	8.771
150x75x6	150	75	6	9.94	300.1	30.72	53.74	8.930



## C-Sections

Size	height	Width	Gauge	Mass/m	cm <sup>4</sup> I <sub>xx</sub>	cm <sup>3</sup> Z <sub>xx</sub>	cm <sup>4</sup> I <sub>yy</sub>	cm <sup>3</sup> Z <sub>yy</sub>
75x25x3	75	25	3	2.63	26.28	7.008	1.757	0.931
75x25x4	75	25	4	3.38	33.49	8.932	2.223	1.201
100x25x4	100	25	4	4.15	68.5	13.69	2.39	1.240
100x25x6	100	25	6	5.86	95.4	19.08	3.28	1.765
100x50x4	100	50	4	5.70	112.3	22.45	17.60	4.885
100x50x6	100	50	6	8.18	158.5	31.69	24.94	7.065
125x30x4	125	30	4	5.24	134.2	21.47	4.32	1.829
125x30x6	125	30	6	7.49	189.7	30.35	5.98	2.62
125x65x4	125	65	4	7.41	231.6	37.06	39.22	8.354
125x65x6	125	65	6	10.74	331.1	52.97	56.27	12.17
150x50x4	150	50	4	7.25	293.2	39.10	19.78	5.14
150x50x6	150	50	6	10.51	420.5	56.07	28.11	7.44
150x75x4	150	75	4	8.80	394.5	52.60	61.72	11.27
150x75x6	150	75	6	12.83	568.3	75.78	89.08	16.49
150x90x6	150	90	6	14.23	657.0	87.60	148.0	23.41
180x75x6	180	75	6	14.23	872.6	96.96	94.13	16.89
200x75x6	200	75	6	15.16	1120	112.0	97.00	17.11
200x90x6	200	90	6	16.55	1281	128.1	162.0	24.38
230x75x6	230	75	6	16.55	1565	136.1	100.7	17.39
230x90x6	230	90	6	17.95	1779	154.7	168.8	24.82

We can also combine 'standard' sections, for example a light duty I-Beam can be obtained by welding two 'C' sections together!

