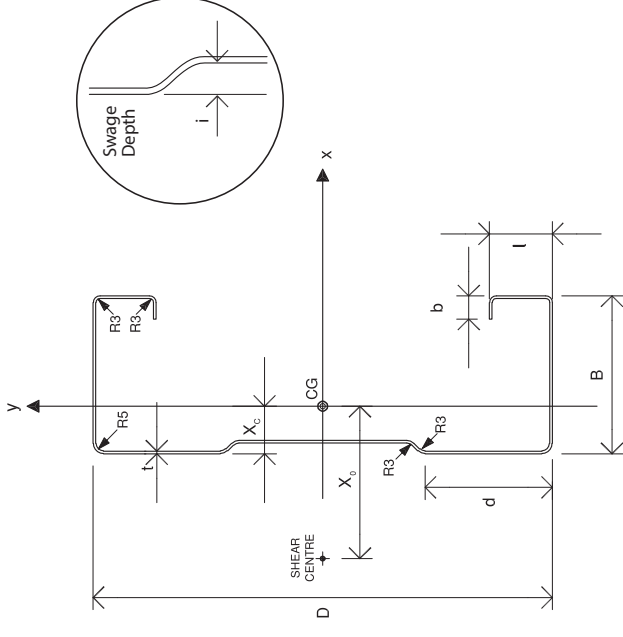


## DHS PURLIN SYSTEM SECTION PROPERTIES

DHS Section	Depth <sub>D</sub> (mm)	Depth <sub>B</sub> (mm)	Thickness <sub>t</sub> (mm)	Mass (kg/m)	Weight (kN/m)	d (mm)	Swage Depth <sub>i</sub> (mm)	b (mm)	l (mm)	X <sub>c</sub> (mm)	X <sub>o</sub> (mm)
DHS 150/12	150	65	1.15	2.99	0.030	54	4	10	23	24.0	56.6
DHS 150/15	150	65	1.45	3.74	0.037	54	4	10	23	23.9	56.1
DHS 200/12	200	75	1.15	3.71	0.037	62	4	10	28	26.3	62.0
DHS 200/15	200	75	1.45	4.65	0.046	62	4	10	28	26.2	61.4
DHS 200/18	200	75	1.75	5.59	0.055	62	4	10	28	26.1	60.8
DHS 250/13	250	85	1.25	4.87	0.048	67	6	12	33	29.4	67.1
DHS 250/15	250	85	1.45	5.63	0.056	67	6	12	33	29.3	66.7
DHS 250/18	250	85	1.75	6.76	0.067	67	6	12	33	29.3	66.2
DHS 300/15	300	100	1.45	6.66	0.066	67	7	12	38	34.0	76.1
DHS 300/18	300	100	1.75	8.01	0.079	67	7	12	38	33.9	75.6
DHS 350/18	350	100	1.75	8.83	0.087	77	7	12	43	32.7	73.4
DHS 400/20	400	100	1.95	10.74	0.106	79	7	12	48	31.8	70.9

**Note:** Mass assumes a total coated weight for the standard zinc coating of 275g/m<sup>2</sup>.



DHS Section	Full (Gross) Section Properties										Effective Section Properties							
	A <sub>g</sub> (mm <sup>2</sup> )	I <sub>x</sub> (10 <sup>6</sup> mm <sup>4</sup> )	I <sub>y</sub> (10 <sup>6</sup> mm <sup>4</sup> )	Z <sub>x</sub> (10 <sup>3</sup> mm <sup>3</sup> )	Z <sub>y</sub> <sup>(+ve)</sup> (10 <sup>3</sup> mm <sup>3</sup> )	Z <sub>y</sub> <sup>(-ve)</sup> (10 <sup>3</sup> mm <sup>3</sup> )	r <sub>x</sub> (mm)	r <sub>y</sub> (mm)	β <sub>y</sub> (mm)	J (mm <sup>4</sup> )	I <sub>w</sub> (10 <sup>9</sup> mm <sup>6</sup> )	A <sub>e</sub> (f <sub>y</sub> ) (mm <sup>2</sup> )	I <sub>ex</sub> (10 <sup>6</sup> mm <sup>4</sup> )	I <sub>ey</sub> <sup>(+ve)</sup> (10 <sup>6</sup> mm <sup>4</sup> )	I <sub>ey</sub> <sup>(-ve)</sup> (10 <sup>6</sup> mm <sup>4</sup> )	Z <sub>ex</sub> (10 <sup>3</sup> mm <sup>3</sup> )	Z <sub>ey</sub> <sup>(+ve)</sup> (10 <sup>3</sup> mm <sup>3</sup> )	Z <sub>ey</sub> <sup>(-ve)</sup> (10 <sup>3</sup> mm <sup>3</sup> )
DHS 150/12	381	1.33	0.24	17.8	5.9	10.2	59.2	25.3	166	168	1.44	223	1.18	0.24	0.16	14.6	5.9	4.9
DHS 150/15	477	1.66	0.30	22.2	7.3	12.6	59.1	25.1	165	334	1.76	314	1.57	0.30	0.22	20.2	7.3	6.6
DHS 200/12	473	2.90	0.40	29.0	8.2	15.2	78.4	29.1	207	208	4.04	238	2.37	0.40	0.25	20.7	8.2	6.2
DHS 200/15	593	3.63	0.49	36.3	10.1	18.9	78.2	28.9	206	415	4.96	336	3.22	0.49	0.33	29.8	10.1	8.6
DHS 200/18	712	4.34	0.59	43.4	12.0	22.4	78.1	28.7	206	726	5.82	445	4.12	0.59	0.42	39.9	12.0	10.8
DHS 250/13	620	5.86	0.66	46.8	11.8	22.4	97.2	32.6	246	323	10.47	290	4.62	0.66	0.39	31.6	11.8	8.6
DHS 250/15	717	6.76	0.76	54.1	13.6	25.8	97.1	32.5	245	502	11.97	361	5.62	0.76	0.47	39.6	13.6	10.5
DHS 250/18	861	8.10	0.90	64.8	16.1	30.7	97.0	32.3	245	879	14.13	478	7.20	0.90	0.60	53.2	16.1	13.8
DHS 300/15	849	11.55	1.22	77.0	18.4	35.8	116.7	37.9	292	595	27.41	381	8.93	1.22	0.73	50.2	18.4	13.5
DHS 300/18	1020	13.86	1.45	92.4	22.0	42.7	116.5	37.7	292	1042	32.47	505	11.46	1.45	0.92	67.1	22.0	17.6
DHS 350/18	1125	20.22	1.60	115.6	23.7	48.8	134.1	37.7	333	1149	48.48	523	16.36	1.60	0.96	80.8	23.7	18.0
DHS 400/20	1368	31.31	1.91	156.5	28.0	60.0	151.3	37.4	380	1734	75.70	635	25.75	1.91	1.14	112.2	28.0	21.4

**Note:** Notation used is consistent with Table 1.4 in AS/NZS 4600, (+ve) = DHS Purlin Lip in compression (-ve) = DHS Purlin Web in compression.