

# Cold Formed Square Hollow Sections

BS EN 10219

Designation		Weight	Cross Sectional Area	Second Moment of Area	Radius of Gyration	Elastic Modulus	Plastic Modulus	Torsional inertia contentant	Torsional modulus contentant	Superficial Area per metre length	Superficial Area per metre length	Nominal Length per tonne	Ratio for Local Buckling
Size	Thickness												
$B \times B$	$T$	$M$	$A$	$I$	$i$	$W_{el}$	$W_{pl}$	$L_t$	$C_t$	$A_s$	$A_s$	$L$	Flange
mm	mm	Kg/m	cm <sup>2</sup>	cm <sup>4</sup>	cm	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>4</sup>	cm <sup>3</sup>	m <sup>2</sup> /m	m <sup>2</sup> /m	m	B/T
19 × 19	1.6	0.822	1.05	0.51	0.70	0.54	0.67	0.88	0.82	0.07	0.07	1216.00	6.88
20 × 20	1.6	0.873	1.11	0.61	0.74	0.61	0.75	1.03	0.92	0.07	0.08	1146.00	7.50
	2.0	1.050	1.34	0.69	0.72	0.69	0.88	1.21	1.06	0.07	0.07	953.00	5.00
25 × 25	1.6	1.124	1.43	1.28	0.94	1.02	1.24	2.12	1.54	0.09	0.10	890.00	10.63
	2.0	1.364	1.74	1.48	0.92	1.19	1.47	2.53	1.80	0.09	0.09	733.00	7.50
	2.3	1.532	1.95	1.61	0.91	1.29	1.62	2.80	1.97	0.09	0.09	653.00	5.87
	2.5	1.640	2.09	1.69	0.90	1.35	1.71	2.97	2.07	0.09	0.09	610.00	5.00
	3.0	1.890	2.41	1.84	0.87	1.47	1.91	3.33	2.27	0.09	0.09	529.00	3.33
30 × 30	1.6	1.375	1.75	2.31	1.15	1.54	1.84	3.77	2.32	0.11	0.12	727.00	13.75
	2.0	1.678	2.14	2.72	1.13	1.81	2.21	4.54	2.75	0.11	0.11	596.00	10.00
	2.3	1.894	2.41	2.99	1.11	2.00	2.45	5.07	3.03	0.11	0.11	528.00	8.04
	2.5	2.032	2.59	3.16	1.10	2.10	2.61	5.40	3.20	0.11	0.11	492.00	7.00
	3.0	2.361	3.01	3.50	1.08	2.34	2.96	6.15	3.58	0.11	0.11	423.00	5.00
32 × 32	1.6	1.476	1.88	2.84	1.23	1.78	2.12	4.62	2.68	0.12	0.12	678.00	15.00
	1.8	1.641	2.09	3.11	1.22	1.95	2.33	5.11	2.94	0.12	0.12	609.00	12.78
	2.0	1.803	2.30	3.36	1.21	2.10	2.54	5.58	3.18	0.12	0.12	555.00	11.00
	2.3	2.038	2.60	3.71	1.20	2.32	2.84	6.24	3.52	0.12	0.12	491.00	8.91
	2.5	2.189	2.79	3.92	1.19	2.45	3.02	6.66	3.72	0.12	0.12	457.00	7.80
	3.0	2.550	3.25	4.38	1.16	2.74	3.44	7.62	4.18	0.12	0.12	392.00	5.67
	3.2	2.687	3.42	4.54	1.15	2.84	3.59	7.96	4.34	0.12	0.12	372.00	5.00
35 × 35	1.6	1.626	2.07	3.79	1.35	2.16	2.57	6.11	3.26	0.13	0.14	615.00	16.88
	2.0	1.992	2.54	4.51	1.33	2.58	3.09	7.41	3.89	0.13	0.13	502.00	12.50
	2.3	2.255	2.87	4.99	1.32	2.85	3.46	8.31	4.32	0.13	0.13	444.00	10.22
	2.5	2.425	3.09	5.29	1.31	3.02	3.69	8.89	4.58	0.13	0.13	412.00	9.00
	3.0	2.832	3.61	5.95	1.28	3.40	4.23	10.20	5.18	0.13	0.13	353.00	6.67
38 × 38	1.6	1.777	2.26	4.92	1.47	2.59	3.06	7.90	3.90	0.15	0.15	563.00	18.75
	2.0	2.180	2.78	5.88	1.46	3.10	3.70	9.60	4.67	0.15	0.15	459.00	14.00
	2.3	2.471	3.15	6.54	1.44	3.44	4.15	10.80	5.20	0.14	0.14	405.00	11.52
	2.5	2.660	3.39	6.94	1.43	3.65	4.44	11.60	5.53	0.14	0.14	376.00	10.20
	3.0	3.115	3.97	7.85	1.41	4.13	5.10	13.30	6.28	0.14	0.14	321.00	7.67
	4.0	3.947	5.03	9.26	1.36	4.87	6.22	16.40	7.48	0.14	0.14	253.00	4.50
40 × 40	1.6	1.877	2.39	5.79	1.56	2.90	3.41	9.27	4.36	0.15	0.16	533.00	20.00
	1.9	2.200	2.80	6.66	1.54	3.33	3.96	10.80	5.02	0.15	0.15	455.00	16.05
	2.0	2.306	2.94	6.94	1.54	3.47	4.13	11.30	5.23	0.15	0.15	434.00	15.00
	2.3	2.616	3.33	7.73	1.52	3.86	4.64	12.70	5.83	0.15	0.15	382.00	12.39
	2.5	2.817	3.59	8.22	1.51	4.11	4.97	13.60	6.21	0.15	0.15	355.00	11.00
	3.0	3.303	4.21	9.32	1.49	4.66	5.72	15.80	7.07	0.15	0.15	303.00	8.33
	4.0	4.198	5.35	11.10	1.44	5.54	7.01	19.40	8.48	0.15	0.15	238.00	5.00
50 × 50	1.6	2.380	3.03	11.70	1.96	4.68	5.46	18.50	7.03	0.19	0.20	420.00	26.25
	1.9	2.797	3.56	13.60	1.95	5.42	6.37	21.60	8.15	0.19	0.19	358.00	21.32
	2.0	2.934	3.74	14.10	1.95	5.66	6.66	22.60	8.51	0.19	0.19	341.00	20.00
	2.3	3.338	4.25	15.90	1.93	6.34	7.52	25.60	9.55	0.19	0.19	300.00	16.74
	2.5	3.602	4.59	16.90	1.92	6.78	8.07	27.50	10.20	0.19	0.19	278.00	15.00
	3.0	4.245	5.41	19.50	1.90	7.79	9.39	32.10	11.80	0.19	0.19	236.00	11.67
	4.0	5.454	6.95	23.70	1.85	9.49	11.73	40.40	14.40	0.19	0.19	183.00	7.50
	4.5	6.020	7.67	25.50	1.82	10.20	12.76	44.10	15.60	0.18	0.19	166.00	6.11
	5.0	6.560	8.36	27.00	1.80	10.80	13.70	47.50	16.60	0.18	0.18	152.00	5.00
6.0	7.562	9.63	29.50	1.75	11.80	15.32	53.20	18.20	0.18	0.18	132.00	3.33	
60 × 60	1.6	2.882	3.67	20.70	2.37	6.89	7.99	32.40	10.40	0.23	0.24	347.00	32.50
	2.3	4.060	5.17	28.30	2.34	9.44	11.09	45.20	14.20	0.23	0.23	246.00	21.09
	2.5	4.387	5.59	30.30	2.33	10.10	11.93	48.70	15.20	0.23	0.23	228.00	19.00
	3.0	5.187	6.61	35.10	2.31	11.70	13.95	57.10	17.70	0.23	0.23	193.00	15.00
	4.0	6.710	8.55	43.60	2.26	14.50	17.64	72.60	22.00	0.23	0.23	149.00	10.00
	4.5	7.433	9.47	47.20	2.23	15.70	19.32	79.80	23.90	0.22	0.23	135.00	8.33
64 × 64	2.3	4.349	5.54	34.70	2.50	10.80	12.71	55.20	16.30	0.25	0.25	230.00	22.83
	3.0	5.564	7.09	43.20	2.47	13.50	16.03	69.90	20.30	0.25	0.25	180.00	16.33
	4.0	7.213	9.19	53.80	2.42	16.80	20.34	89.20	25.40	0.24	0.24	139.00	11.00
	4.5	7.998	10.19	58.50	2.40	18.30	22.32	98.10	27.70	0.24	0.24	125.00	9.22
	5.0	8.758	11.16	62.80	2.37	19.60	24.17	107.00	29.80	0.24	0.24	114.00	7.80
	6.0	10.199	12.99	70.10	2.32	21.90	27.52	122.00	33.40	0.24	0.24	98.00	5.67
65 × 65	1.6	3.133	3.99	26.50	2.58	8.16	9.44	41.40	12.20	0.25	0.26	319.00	35.63
	2.0	3.876	4.94	32.30	2.56	9.94	11.58	50.90	14.90	0.25	0.25	258.00	27.50
	2.3	4.421	5.63	36.40	2.54	11.20	13.13	57.90	16.90	0.25	0.25	226.00	23.26
	2.5	4.780	6.09	39.10	2.53	12.00	14.14	62.40	18.10	0.25	0.25	209.00	21.00
	3.0	5.658	7.21	45.40	2.51	14.00	16.57	73.30	21.00	0.25	0.25	177.00	16.67
	4.0	7.338	9.35	56.60	2.46	17.40	21.05	93.70	26.30	0.25	0.25	136.00	11.25
	4.5	8.139	10.37	61.60	2.44	18.90	23.10	103.00	28.70	0.24	0.25	123.00	9.44
	5.0	8.915	11.36	66.10	2.41	20.30	25.03	112.00	30.90	0.24	0.24	112.00	8.00
	6.0	10.388	13.23	73.90	2.36	22.70	28.53	128.00	34.70	0.24	0.24	96.30	5.83

# Cold Formed Square Hollow Sections

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Designation		Weight M	Cross Sectional Area A	Second Moment of Area I	Radius of Gyration i	Elastic Modulus W <sub>el</sub>	Plastic Modulus W <sub>pl</sub>	Torsional inertia contant L <sub>t</sub>	Torsional modulus contant C <sub>t</sub>	Superficial Area per metre length A <sub>s</sub>	Superficial Area per metre length A <sub>s</sub>	Nominal Length per tonne L	Ratio for Local Buckling Flange B/T
Size	Thickness												
B × B	T												
mm	mm	Kg/m	cm <sup>2</sup>	cm <sup>4</sup>	cm	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>4</sup>	cm <sup>3</sup>	m <sup>2</sup> /m	m <sup>2</sup> /m	m	B/T
70 × 70	2.5	5.172	6.59	49.40	2.74	14.10	16.54	78.50	21.20	0.27	0.27	193.00	23.00
	3.0	6.129	7.81	57.50	2.71	16.40	19.42	92.40	24.70	0.27	0.27	163.00	18.33
	4.0	7.966	10.15	72.10	2.67	20.60	24.76	119.00	31.10	0.27	0.27	126.00	12.50
	5.0	9.700	12.36	84.60	2.62	24.20	29.56	142.00	36.70	0.26	0.26	103.00	9.00
	6.0	11.330	14.43	95.20	2.57	27.20	33.83	163.00	41.40	0.26	0.26	88.30	6.67
	6.3	11.531	14.69	93.80	2.53	26.80	33.80	168.00	42.10	0.25	0.25	86.70	6.11
75 × 75	1.6	3.636	4.63	41.30	2.99	11.00	12.69	64.10	16.50	0.29	0.30	275.00	41.88
	2.3	5.143	6.55	57.10	2.95	15.20	17.74	90.00	22.90	0.29	0.29	194.00	27.61
	2.5	5.565	7.09	61.40	2.94	16.40	19.12	97.10	24.60	0.29	0.29	180.00	25.00
	3.0	6.600	8.41	71.60	2.92	19.10	22.49	115.00	28.70	0.29	0.29	152.00	20.00
	4.0	8.594	10.95	90.20	2.87	24.10	28.76	147.00	36.30	0.29	0.29	116.00	13.75
	4.5	9.552	12.17	98.60	2.85	26.30	31.68	163.00	39.70	0.28	0.29	105.00	11.67
	5.0	10.485	13.36	106.00	2.82	28.40	34.46	177.00	42.90	0.28	0.28	95.40	10.00
	6.0	12.272	15.63	120.00	2.77	32.00	39.58	205.00	48.70	0.28	0.28	81.50	7.50
80 × 80	2.3	5.505	7.01	69.90	3.16	17.50	20.30	110.00	26.20	0.31	0.31	182.00	29.78
	3.0	7.071	9.01	87.80	3.12	22.00	25.78	140.00	33.00	0.31	0.31	141.00	21.67
	4.0	9.222	11.75	111.00	3.07	27.80	33.07	180.00	41.80	0.31	0.31	108.00	15.00
	4.5	10.259	13.07	122.00	3.05	30.40	36.48	200.00	45.90	0.30	0.31	97.50	12.78
	5.0	11.270	14.36	131.00	3.03	32.90	39.74	218.00	49.70	0.30	0.30	88.70	11.00
	6.0	13.214	16.83	149.00	2.98	37.30	45.79	252.00	56.60	0.30	0.30	75.70	8.33
89 × 89	3.0	7.919	10.09	123.00	3.49	27.60	32.28	195.00	41.50	0.35	0.35	126.00	24.67
	4.0	10.353	13.19	156.00	3.44	35.10	41.58	252.00	52.90	0.34	0.34	96.60	17.25
	4.5	11.530	14.69	172.00	3.42	38.60	45.97	279.00	58.10	0.34	0.34	86.70	14.78
	5.0	12.683	16.16	186.00	3.39	41.80	50.18	305.00	63.10	0.34	0.34	78.80	12.80
	6.0	14.909	18.99	213.00	3.34	47.80	58.09	355.00	72.30	0.34	0.34	67.10	9.83
90 × 90	2.3	6.227	7.93	101.00	3.56	22.40	25.93	158.00	33.60	0.35	0.35	161.00	34.13
	3.0	8.013	10.21	127.00	3.53	28.30	33.04	201.00	42.50	0.35	0.35	125.00	25.00
	4.0	10.478	13.35	162.00	3.48	36.00	42.58	261.00	54.20	0.35	0.35	95.40	17.50
	4.5	11.672	14.87	178.00	3.46	39.50	47.09	289.00	59.60	0.34	0.35	85.70	15.00
	5.0	12.840	16.36	193.00	3.43	42.90	51.41	316.00	64.70	0.34	0.34	77.90	13.00
	6.0	15.098	19.23	220.00	3.39	49.00	59.54	368.00	74.20	0.34	0.34	66.20	10.00
	6.3	15.488	19.73	221.00	3.35	49.10	60.30	382.00	76.20	0.33	0.33	64.60	9.29
	8.0	18.873	24.04	255.00	3.25	56.60	71.27	456.00	88.80	0.33	0.33	53.00	6.25
100 × 100	2.3	6.949	8.85	140.00	3.97	27.90	32.26	217.00	41.90	0.39	0.39	144.00	38.48
	3.0	8.955	11.41	177.00	3.94	35.40	41.21	279.00	53.20	0.39	0.39	112.00	28.33
	4.0	11.734	14.95	226.00	3.89	45.30	53.30	362.00	68.10	0.39	0.39	85.20	20.00
	4.5	13.085	16.67	249.00	3.87	49.90	59.04	402.00	75.10	0.38	0.39	76.40	17.22
	5.0	14.410	18.36	271.00	3.84	54.20	64.59	441.00	81.70	0.38	0.38	69.40	15.00
	6.0	16.982	21.63	311.00	3.79	62.30	75.10	514.00	94.10	0.38	0.38	58.90	11.67
	6.3	17.466	22.25	314.00	3.76	62.80	76.38	536.00	97.00	0.37	0.37	57.30	10.87
	8.0	21.385	27.24	366.00	3.67	73.20	91.05	645.00	114.00	0.37	0.37	46.80	7.50
	9.0	23.533	29.98	391.00	3.61	78.10	98.56	700.00	123.00	0.36	0.36	42.50	6.11
120 × 120	2.3	8.393	10.69	245.00	4.79	40.90	46.99	379.00	61.30	0.47	0.47	119.00	47.17
	3.0	10.839	13.81	312.00	4.76	52.10	60.24	488.00	78.20	0.47	0.47	92.30	35.00
	4.0	14.246	18.15	402.00	4.71	67.00	78.33	637.00	101.00	0.47	0.47	70.20	25.00
	4.5	15.911	20.27	445.00	4.68	74.10	87.01	708.00	111.00	0.46	0.47	62.90	21.67
	5.0	17.550	22.36	485.00	4.66	80.90	95.45	778.00	122.00	0.46	0.46	57.00	19.00
	6.0	20.750	26.43	562.00	4.61	93.70	111.61	913.00	141.00	0.46	0.46	48.20	15.00
	6.3	21.422	27.29	572.00	4.58	95.30	114.22	955.00	146.00	0.45	0.45	46.70	14.05
	8.0	26.409	33.64	677.00	4.49	113.00	137.81	1163.00	175.00	0.45	0.45	37.90	10.00
	9.0	29.185	37.18	730.00	4.43	122.00	150.31	1274.00	189.00	0.44	0.44	34.30	8.33
125 × 125	3.0	11.310	14.41	355.00	4.96	56.70	65.56	553.00	85.10	0.49	0.49	88.40	36.67
	4.0	14.874	18.95	457.00	4.91	73.20	85.33	722.00	110.00	0.49	0.49	67.20	26.25
	4.5	16.617	21.17	506.00	4.89	80.90	94.84	804.00	122.00	0.48	0.49	60.20	22.78
	5.0	18.335	23.36	553.00	4.86	88.40	104.10	884.00	133.00	0.48	0.48	54.50	20.00
	6.0	21.692	27.63	641.00	4.82	103.00	121.87	1038.00	154.00	0.48	0.48	46.10	15.83
	6.3	22.411	28.55	653.00	4.78	104.00	124.86	1086.00	160.00	0.47	0.47	44.60	14.84
	8.0	27.665	35.24	775.00	4.69	124.00	151.00	1325.00	192.00	0.47	0.47	36.10	10.63
	9.0	30.598	38.98	838.00	4.64	134.00	164.94	1454.00	208.00	0.46	0.46	32.70	8.89
140 × 140	4.0	16.758	21.35	652.00	5.52	93.10	108.15	1023.00	140.00	0.55	0.55	59.70	30.00
	5.0	20.690	26.36	791.00	5.48	113.00	132.30	1256.00	170.00	0.54	0.54	48.30	23.00
	6.0	24.518	31.23	920.00	5.43	131.00	155.33	1479.00	198.00	0.54	0.54	40.80	18.33
	6.3	25.379	32.33	941.00	5.39	134.00	159.62	1550.00	205.00	0.53	0.53	39.40	17.22
	8.0	31.433	40.04	1127.00	5.30	161.00	194.18	1901.00	248.00	0.53	0.53	31.80	12.50
	10.0	38.125	48.57	1312.00	5.20	187.00	230.38	2274.00	291.00	0.52	0.52	26.20	9.00
	12.0	43.379	55.26	1398.00	5.03	200.00	252.87	2567.00	322.00	0.50	0.50	23.10	6.67
	12.5	44.779	57.04	1425.00	5.00	204.00	259.25	2634.00	329.00	0.50	0.50	22.30	6.20
150 × 150	3.0	13.665	17.41	623.00	5.98	83.00	95.53	965.00	125.00	0.59	0.59	73.20	45.00
	4.0	18.014	22.95	808.00	5.93	108.00	124.87	1265.00	162.00	0.59	0.59	55.50	32.50
	4.5	20.150	25.67	896.00	5.91	120.00	139.08	1411.00	180.00	0.58	0.59	49.60	28.33
	5.0	22.260	28.36	982.00	5.89	131.00	152.98	1554.00	197.00	0.58	0.58	44.90	25.00
	6.0	26.402	33.63	1146.00	5.84	153.00	179.88	1833.00	230.00	0.58	0.58	37.90	20.00
	6.3	27.357	34.85	1174.00	5.80	156.00	185.15	1922.00	239.00	0.57	0.57	36.60	18.81
	8.0	33.945	43.24	1412.00	5.71	188.00	225.96	2364.00	289.00	0.57	0.57	29.50	13.75
	9.0	37.663	47.98	1537.00	5.66	205.00	248.20	2608.00	316.00	0.56	0.56	26.60	11.67
	12.5	48.704	62.04	1817.00	5.41	242.00	305.58	3321.00	389.00	0.54	0.54	20.50	7.00

# Cold Formed Square Hollow Sections

BS EN 10219

Designation		Weight	Cross Sectional Area	Second Moment of Area	Radius of Gyration	Elastic Modulus	Plastic Modulus	Torsional inertia contentant	Torsional modulus contentant	Superficial Area per metre length	Superficial Area per metre length	Nominal Length per tonne	Ratio for Local Buckling
Size	Thickness												
$B \times B$	$T$	$M$	$A$	$I$	$i$	$W_{el}$	$W_{pl}$	$L_t$	$C_t$	$A_s$	$A_s$	$L$	Flange
mm	mm	Kg/m	cm <sup>2</sup>	cm <sup>4</sup>	cm	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>4</sup>	cm <sup>3</sup>	m <sup>2</sup> /m	m <sup>2</sup> /m	m	B/T
160 x 160	4.0	19.270	24.55	987.00	6.34	123.00	142.78	1541.00	185.00	0.63	0.63	51.90	35.00
	5.0	23.830	30.36	1202.00	6.29	150.00	175.16	1896.00	226.00	0.62	0.62	42.00	27.00
	6.0	28.286	36.03	1405.00	6.25	176.00	206.24	2239.00	264.00	0.62	0.62	35.40	21.67
	6.3	29.335	37.37	1442.00	6.21	180.00	212.57	2349.00	275.00	0.61	0.61	34.10	20.40
	8.0	36.457	46.44	1741.00	6.12	218.00	260.14	2897.00	334.00	0.61	0.61	27.40	15.00
	10.0	44.405	56.57	2048.00	6.02	256.00	310.95	3490.00	395.00	0.60	0.60	22.50	11.00
	12.0	50.915	64.86	2224.00	5.86	278.00	346.05	3997.00	443.00	0.58	0.58	19.60	8.33
	12.5	52.629	67.04	2275.00	5.83	284.00	355.66	4114.00	455.00	0.58	0.58	19.00	7.80
16.0	63.720	81.17	2546.00	5.60	318.00	412.67	4799.00	520.00	0.56	0.56	15.70	5.00	
178 x 178	4.0	21.531	27.43	1373.00	7.08	154.00	178.05	2136.00	232.00	0.70	0.70	46.40	39.50
	4.5	24.106	30.71	1527.00	7.05	172.00	198.64	2386.00	258.00	0.70	0.70	41.50	34.56
	5.0	26.656	33.96	1677.00	7.03	188.00	218.86	2632.00	283.00	0.69	0.70	37.50	30.60
	6.0	31.677	40.35	1966.00	6.98	221.00	258.22	3113.00	332.00	0.69	0.69	31.60	24.67
	9.0	45.576	58.06	2690.00	6.81	302.00	361.49	4480.00	463.00	0.67	0.67	21.90	14.78
180 x 180	4.0	21.782	27.75	1422.00	7.16	158.00	182.21	2210.00	237.00	0.71	0.71	45.90	40.00
	4.5	24.389	31.07	1581.00	7.13	176.00	203.30	2469.00	264.00	0.70	0.71	41.00	35.00
	5.0	26.970	34.36	1737.00	7.11	193.00	224.02	2724.00	290.00	0.70	0.70	37.10	31.00
	6.0	32.054	40.83	2037.00	7.06	226.00	264.35	3223.00	340.00	0.70	0.70	31.20	25.00
	6.3	33.292	42.41	2096.00	7.03	233.00	273.09	3383.00	354.00	0.69	0.69	30.00	23.57
	8.0	41.481	52.84	2546.00	6.94	283.00	335.70	4189.00	432.00	0.69	0.69	24.10	17.50
	9.0	46.141	58.78	2789.00	6.89	310.00	370.39	4640.00	475.00	0.68	0.68	21.70	15.00
200 x 200	4.0	24.294	30.95	1968.00	7.97	197.00	226.44	3049.00	295.00	0.79	0.79	41.20	45.00
	4.5	27.215	34.67	2192.00	7.95	219.00	252.86	3408.00	329.00	0.78	0.79	36.70	39.44
	5.0	30.110	38.36	2410.00	7.93	241.00	278.87	3763.00	362.00	0.78	0.78	33.20	35.00
	6.0	35.822	45.63	2833.00	7.88	283.00	329.67	4459.00	426.00	0.78	0.78	27.90	28.33
	6.3	37.248	47.45	2922.00	7.85	292.00	341.16	4682.00	444.00	0.77	0.77	26.80	26.75
	8.0	46.505	59.24	3566.00	7.76	357.00	420.86	5815.00	544.00	0.77	0.77	21.50	20.00
	9.0	51.793	65.98	3918.00	7.71	392.00	465.35	6454.00	599.00	0.76	0.76	19.30	17.22
	10.0	56.965	72.57	4251.00	7.65	425.00	508.08	7072.00	651.00	0.76	0.76	17.60	15.00
	12.0	65.987	84.06	4730.00	7.50	473.00	575.61	8230.00	743.00	0.74	0.74	15.20	11.67
	12.5	68.329	87.04	4859.00	7.47	486.00	593.50	8502.00	765.00	0.74	0.74	14.60	11.00
	16.0	83.816	106.77	5625.00	7.26	562.00	705.57	10210.00	901.00	0.72	0.72	11.90	7.50
220 x 220	5.0	33.250	42.36	3238.00	8.74	294.00	339.73	5038.00	442.00	0.86	0.86	30.10	39.00
	6.0	39.590	50.43	3813.00	8.70	347.00	402.18	5976.00	521.00	0.86	0.86	25.30	31.67
	6.3	41.204	52.49	3940.00	8.66	358.00	416.80	6277.00	543.00	0.85	0.85	24.30	29.92
	8.0	51.529	65.64	4828.00	8.58	439.00	515.62	7815.00	668.00	0.85	0.85	19.40	22.50
	10.0	63.245	80.57	5782.00	8.47	526.00	624.65	9533.00	804.00	0.84	0.84	15.80	17.00
	12.0	73.523	93.66	6487.00	8.32	590.00	711.99	11149.00	922.00	0.82	0.82	13.60	13.33
	12.5	76.179	97.04	6674.00	8.29	607.00	734.92	11530.00	951.00	0.82	0.82	13.10	12.60
16.0	93.864	119.57	7812.00	8.08	710.00	880.83	13971.00	1129.00	0.80	0.80	10.70	8.75	
250 x 250	5.0	37.960	48.36	4805.00	9.97	384.00	442.26	7443.00	577.00	0.98	0.98	26.30	45.00
	6.0	45.242	57.63	5672.00	9.92	454.00	524.45	8843.00	681.00	0.98	0.98	22.10	36.67
	6.3	47.139	60.05	5873.00	9.89	470.00	544.43	9290.00	711.00	0.97	0.97	21.20	34.68
	8.0	59.065	75.24	7229.00	9.80	578.00	675.77	11598.00	878.00	0.97	0.97	16.90	26.25
	9.0	65.923	83.98	7984.00	9.75	639.00	750.00	12913.00	972.00	0.96	0.96	15.20	22.78
	10.0	72.665	92.57	8707.00	9.70	697.00	822.00	14197.00	1062.00	0.96	0.96	13.80	20.00
	12.0	84.827	108.06	9859.00	9.55	789.00	943.56	16691.00	1226.00	0.94	0.94	11.80	15.83
	12.5	87.954	112.04	10161.00	9.52	813.00	975.17	17283.00	1266.00	0.94	0.94	11.40	15.00
16.0	108.936	138.77	12047.00	9.32	964.00	1179.70	21146.00	1520.00	0.92	0.92	9.18	10.63	
260 x 260	6.0	47.126	60.03	6405.00	10.33	493.00	568.80	9970.00	739.00	1.02	1.02	21.20	38.33
	6.3	49.117	62.57	6635.00	10.30	510.00	590.75	10475.00	772.00	1.01	1.01	20.40	36.27
	8.0	61.577	78.44	8178.00	10.21	629.00	733.95	13087.00	955.00	1.01	1.01	16.20	27.50
	10.0	75.805	96.57	9865.00	10.11	759.00	893.78	16035.00	1156.00	1.00	1.00	13.20	21.00
	12.0	88.595	112.86	11200.00	9.96	862.00	1027.95	18878.00	1337.00	0.98	0.98	11.30	16.67
	12.5	91.879	117.04	11548.00	9.93	888.00	1062.76	19553.00	1381.00	0.98	0.98	10.90	15.80
16.0	113.960	145.17	13739.00	9.73	1057.00	1288.93	23986.00	1663.00	0.96	0.96	8.77	11.25	
300 x 300	6.0	54.662	69.63	9964.00	11.96	664.00	764.23	15434.00	997.00	1.18	1.18	18.30	45.00
	6.3	57.030	72.65	10342.00	11.93	689.00	794.94	16218.00	1042.00	1.17	1.17	17.50	42.62
	9.0	80.053	101.98	14183.00	11.79	946.00	1102.14	22661.00	1434.00	1.16	1.16	12.50	28.33
	12.0	103.667	132.06	17767.00	11.60	1184.00	1401.51	29514.00	1829.00	1.14	1.14	9.65	20.00
	12.5	107.579	137.04	18348.00	11.57	1223.00	1450.60	30601.00	1892.00	1.14	1.14	9.30	19.00
	16.0	134.056	170.77	22076.00	11.37	1472.00	1773.84	37837.00	2299.00	1.12	1.12	7.46	13.75
350 x 350	6.0	64.082	81.63	16008.00	14.00	915.00	1049.01	24683.00	1372.00	1.38	1.38	15.60	53.33
	6.3	66.921	85.25	16645.00	13.97	951.00	1092.71	25939.00	1436.00	1.37	1.37	14.90	50.56
	8.0	84.185	107.24	20681.00	13.89	1182.00	1365.58	32557.00	1787.00	1.37	1.37	11.90	38.75
	9.0	94.183	119.98	22967.00	13.84	1312.00	1521.79	36372.00	1987.00	1.36	1.36	10.60	33.89
	10.0	104.065	132.57	25189.00	13.78	1439.00	1674.83	40127.00	2182.00	1.36	1.36	9.61	30.00
	12.0	122.507	156.06	29054.00	13.64	1660.00	1949.46	47598.00	2552.00	1.34	1.34	8.16	24.17
	12.5	127.204	162.04	30045.00	13.62	1717.00	2019.77	49393.00	2642.00	1.34	1.34	7.86	23.00
	16.0	159.176	202.77	36511.00	13.42	2086.00	2487.97	61481.00	3238.00	1.32	1.32	6.28	16.88