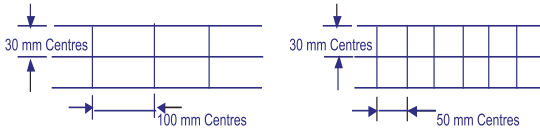


ELECTRO FORGED STEEL GRATING



ELECTRO FORGED GRATINGS

GRATING with load bearing bars @ 30 mm centres Cross bars @ 100 mm Safe Uniformly distributed loads (U.D.L.) in kilonewtons per square metre on simply supported panels with deflections (D) in mm. Load table is made considering a maximum permissible stress of 165 N/mm² which allows for a safety factor of 1:6.



Safe Working Loads & Deflection Tables for 30mm Pitch

Note : For pedestrian traffic there are three loading categories which are (a) light duty, (b) normal duty and (c) heavy duty. These categories are described as (a) access limited to one person only, (b) regular two way traffic and (c) high density traffic, BS 4592, part one 1987.

Add 2.99kg/m² approx. finished weight for cross bars @ 50 mm centres.

Max clear span for pedestrian Load (mm)	'D' (mm)	Bearing Bar (mm)	UNITS	MAXIMUM UNIFORMLY DISTRIBUTED LOAD IN kN/m ² AND MAXIMUM DEFLECTION IN mm @ INDIVIDUAL CLEAR SPANS SHOWN IN mm													Theoretical Finish Weight kg/m ²
				300	450	600	750	900	1000	1200	1350	1500	1650	1800	1950	2000	
a 1526 b 1287 c 1124	7.63 6.43 5.62	25x3	kn/m ²	171.67	76.30	42.92	25.25	14.61	10.65	6.16	4.33	3.16	2.37	1.83	1.44	1.33	25.46
			D (mm)	0.65	1.47	2.61	3.75	4.50	5.00	6.00	6.75	7.50	8.25	9.00	9.75	10.00	
a 1831 b 1544 c 1349	9.15 7.72 6.74	30x3	kn/m ²	247.20	109.87	61.80	39.55	25.25	18.41	10.65	7.48	5.45	4.10	3.16	2.48	2.30	29.95
			D (mm)	0.54	1.22	2.18	3.40	4.50	5.00	6.00	6.75	7.50	8.25	9.00	9.75	10.00	
a 2101 b 1801 c 1574	10.00 9.01 7.87	35x3	kn/m ²	367.47	149.54	84.12	53.83	37.39	29.23	16.92	11.88	8.66	6.51	5.01	3.94	3.65	34.44
			D (mm)	0.47	1.05	1.86	2.91	4.20	5.00	6.00	6.75	7.50	8.25	9.00	9.75	10.00	
a 2322 b 2044 c 1799	10.00 10.00 8.99	40x3	kn/m ²	439.47	195.32	109.87	70.31	48.83	39.55	25.25	17.73	12.93	9.71	7.48	5.88	5.45	38.94
			D (mm)	0.41	0.92	1.63	2.55	3.67	4.53	6.00	6.75	7.50	8.25	9.00	9.75	10.00	
a 2490 b 2191 c 1950	10.00 10.00 9.41	40x4	kn/m ²	583.00	259.00	145.00	92.70	64.50	52.20	33.34	23.40	17.10	12.82	9.88	7.77	7.21	50.92
			D (mm)	0.41	0.92	1.63	2.55	3.67	4.53	6.00	6.75	7.50	8.25	9.00	9.75	10.00	
a 1809 b 1526 c 1333	9.04 7.63 6.66	25x5	kn/m ²	286.11	127.16	71.53	42.08	24.35	17.75	10.27	7.22	5.26	3.95	3.04	2.39	2.22	40.44
			D (mm)	0.65	1.47	2.61	3.75	4.50	5.00	6.00	6.75	7.50	8.25	9.00	9.75	10.00	
a 2127 b 1831 c 1599	10.00 9.15 8.00	30x5	kn/m ²	412.00	183.11	103.00	65.92	42.08	30.68	17.75	12.47	9.09	6.83	5.26	4.14	3.83	47.92
			D (mm)	0.54	1.22	2.18	3.40	4.50	5.00	6.00	6.75	7.50	8.25	9.00	9.75	10.00	
a 2227 b 1900 c 1700	10.00 8.84 8.50	32x5	kn/m ²	455.00	198.00	114.50	75.00	47.20	37.00	21.35	14.99	10.95	8.21	6.35	4.97	4.61	50.92
			D (mm)	0.50	1.10	2.01	3.21	4.20	5.00	6.00	6.75	7.50	8.25	9.00	9.75	10.00	
a 2387 b 2101 c 1866	10.00 10.00 9.33	35x5	kn/m ²	560.78	249.23	140.19	89.72	62.31	48.72	28.19	19.80	14.43	10.84	8.35	6.57	6.09	55.42
			D (mm)	0.47	1.05	1.86	2.91	4.20	5.00	6.00	6.75	7.50	8.25	9.00	9.75	10.00	
a 2639 b 2322 c 2098	10.00 10.00 10.00	40x5	kn/m ²	732.44	325.53	183.11	117.19	81.38	65.92	42.08	29.56	21.55	16.19	12.47	9.81	9.09	62.90
			D (mm)	0.41	0.92	1.63	2.55	3.67	4.53	6.00	6.75	7.50	8.25	9.00	9.75	10.00	
a 3119 b 2745 c 2481	10.00 10.00 10.00	50x5	kn/m ²	1144.44	508.64	286.11	183.11	127.16	103.00	71.53	56.52	42.08	31.62	24.35	19.15	17.75	77.88
			D (mm)	0.33	0.73	1.31	2.04	2.94	3.63	5.22	6.61	7.50	8.25	9.00	9.75	10.00	
a 3567 b 3140 c 2837	10.00 10.00 10.00	60x5	kn/m ²	1496.00	664.00	374.00	239.00	166.00	122.30	93.50	73.88	59.84	54.10	41.67	32.77	25.00	92.86
			D (mm)	0.25	0.56	1.00	1.56	2.24	3.05	4.00	5.05	6.23	8.25	9.00	9.75	10.00	
a 4005 b 3525 c 3185	10.00 10.00 10.00	70 x 5	kn/m ²	2036.00	904.00	509.00	325.00	226.00	166.50	127.00	100.00	81.45	67.31	66.00	52.00	39.70	107.84
			D (mm)	0.21	0.48	0.85	1.34	1.92	2.62	3.42	4.33	5.34	6.46	9.00	9.75	10.00	

Note :

- ☞ For 3mm load bars subtract 2 mm from widths
- ☞ width dimensions can vary due to manufacturing process
- ☞ In addition to 30 and 41 mm pitch we also manufacture the gratings with 33 mm c/c, 35 mm c/c, 40mm c/c and 60 mm c/c

