



HK Metal Products

FORGE WELDED STEEL GRATING

SERIES 2

40mm BAR CENTRES

COMPUTATIONS BY

(1) Safe Loads are Deflections for Load Bars
 U: Safe Superimposed Uniformly Distributed Load - kPa
 C: Safe Superimposed Line Load - kN/m
 D: Deflection due to Superimposed Load - mm



Main Bars mm	Mass kgs/sqm	Self Wt kpa	Span mm								Span for 5mmDefl @ 4kPa																		
			(1)	600	900	1200	1500	1800	2100	2400																			
20 x 3	15.54	0.152	U	18.91	8.32	CHECK DEFLECTION FOR LOADS & SPANS THIS SIDE OF SHADOW LINE.					998																		
			D	3.08	6.87																								
			C	5.67	3.74																								
			D	2.47	5.49																								
20 x 5	23.39	0.229	U	31.55	13.89							CHECK DEFLECTION FOR LOADS & SPANS THIS SIDE OF SHADOW LINE.					1134												
			D	3.09	6.88																								
			C	9.46	6.25																								
			D	2.47	5.50																								
25 x 3	18.49	0.181	U	29.61	13.06													CHECK DEFLECTION FOR LOADS & SPANS THIS SIDE OF SHADOW LINE.					1180						
			D	2.47	5.52																								
			C	8.88	5.88																								
			D	1.98	4.42																								
25 x 5	28.30	0.278	U	49.30	21.79	12.14	CHECK DEFLECTION FOR LOADS & SPANS THIS SIDE OF SHADOW LINE.																	1341					
			D	2.47	5.43	9.73																							
			C	14.81	9.81	7.28																							
			D	1.98	4.33	7.63																							
32 x 3	22.61	0.222	U	48.59	21.47	11.98						CHECK DEFLECTION FOR LOADS & SPANS THIS SIDE OF SHADOW LINE.					1420												
			D	1.93	4.33	7.63																							
			C	14.58	9.66	7.19																							
			D	1.55	3.46	6.10																							
32 x 5	35.17	0.345	U	81.01	35.81	19.99												12.67	CHECK DEFLECTION FOR LOADS & SPANS THIS SIDE OF SHADOW LINE.						1614				
			D	1.93	4.33	7.64												11.82											
			C	24.30	16.11	12.00												9.50											
			D	1.55	3.46	6.11												9.46											
40 x 3	27.32	0.268	U	76.00	33.63	18.80	11.93	CHECK DEFLECTION FOR LOADS & SPANS THIS SIDE OF SHADOW LINE.										1679											
			D	1.55	3.47	6.13	9.50																						
			C	22.80	15.13	11.28	8.95																						
			D	1.24	2.78	4.90	7.60																						
40 x 5	43.02	0.422	U	126.69	56.07	31.36	19.92						13.70	CHECK DEFLECTION FOR LOADS & SPANS THIS SIDE OF SHADOW LINE.										1908					
			D	1.55	3.47	6.13	9.51						13.57																
			C	38.01	25.23	18.81	14.94						12.33																
			D	1.24	2.78	4.91	7.61						10.86																
45 x 5	47.92	0.470	U	160.40	71.03	39.75	25.27						17.40						CHECK DEFLECTION FOR LOADS & SPANS THIS SIDE OF SHADOW LINE.						2084				
			D	1.38	3.09	5.46	8.48						12.11																
			C	48.12	31.96	23.85	18.95						15.66																
			D	1.10	2.47	4.37	6.78						9.69																
50 x 5	52.83	0.518	U	198.09	87.75	49.13	31.26	21.55	15.69	CHECK DEFLECTION FOR LOADS & SPANS THIS SIDE OF SHADOW LINE.																2255			
			D	1.24	2.78	4.92	7.64	10.93	14.75																				
			C	59.43	39.49	29.48	23.44	19.39	16.48																				
			D	0.99	2.33	3.94	6.12	8.74	11.80																				
55 x 5	57.74	0.566	U	239.75	106.24	5	9.51	37.88	26.14						19.05	14.45	CHECK DEFLECTION FOR LOADS & SPANS THIS SIDE OF SHADOW LINE.							2423					
			D	1.13	2.53	4.48	6.96	9.96	13.45						17.40														
			C	71.93	4	7.81	35.71	28.41	23.52						20.00	17.34													
			D	0.90	2.02	3.58	5.57	7.97	10.76						13.92														
65 x 5	67.55	0.663	U	334.99	148.52	83.25	53.04	36.63	26.74						20.32	CHECK DEFLECTION FOR LOADS & SPANS THIS SIDE OF SHADOW LINE.						2746							
			D	0.95	2.14	3.80	5.91	8.46	11.44						14.82														
			C	100.50	66.83	49.95	39.78	32.97	28.07						24.38														
			D	0.76	1.71	3.04	4.72	6.76	9.15						11.86														