



HK Metal Products

FORGE WELDED STEEL GRATING

SERIES 1

30mm 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	19.47	0.191	U	25.23	11.11	CHECK DEFLECTION FOR LOADS & SPANS THIS SIDE OF SHADOW LINE.					1073														
			D	3.09	6.88																				
			C	7.57	5.00																				
			D	2.47	5.50																				
20 x 5	29.93	0.294	U	42.08	18.54	10.30	CHECK DEFLECTION FOR LOADS & SPANS THIS SIDE OF SHADOW LINE.				1219														
			D	3.09	6.89	12.09																			
			C	12.62	8.34	6.18																			
			D	2.47	5.51	9.67																			
25 x 3	23.39	0.229	U	39.49	17.42	9.70					CHECK DEFLECTION FOR LOADS & SPANS THIS SIDE OF SHADOW LINE.				1268										
			D	2.47	5.52	9.72																			
			C	11.85	7.84	5.82																			
			D	1.98	4.42	7.77																			
25 x 5	36.48	0.358	U	65.85	29.07	16.09									CHECK DEFLECTION FOR LOADS & SPANS THIS SIDE OF SHADOW LINE.				1441						
			D	2.47	5.43	0.73																			
			C	19.75	13.08	9.72																			
			D	1.98	4.42	7.79																			
32 x 3	28.89	0.283	U	64.80	28.64	15.99													10.13	CHECK DEFLECTION FOR LOADS & SPANS THIS SIDE OF SHADOW LINE.				1526	
			D	1.93	4.33	7.64													11.81						
			C	19.44	12.89	9.59													7.60						
			D	1.55	3.46	6.11													9.45						
32 x 5	45.63	0.448	U	108.02	47.76	26.67	16.91	CHECK DEFLECTION FOR LOADS & SPANS THIS SIDE OF SHADOW LINE.											1734						
			D	1.93	.33	7.64	11.83																		
			C	32.41	21.49	16.00	12.68																		
			D	1.55	3.46	6.11	9.46																		
40 x 3	35.17	0.345	U	101.34	44.85	25.08	15.93					CHECK DEFLECTION FOR LOADS & SPANS THIS SIDE OF SHADOW LINE.							1804						
			D	1.55	3.47	6.13	9.51																		
			C	30.40	20.18	15.05	11.94																		
			D	1.24	2.78	4.91	7.61																		
40 x 5	56.10	0.550	U	168.93	74.77	41.82	26.57									18.28	CHECK DEFLECTION FOR LOADS & SPANS THIS SIDE OF SHADOW LINE.							2050	
			D	1.55	3.47	6.14	9.52									13.58									
			C	50.68	33.65	25.09	19.93									16.45									
			D	1.24	2.78	4.91	7.61									10.86									
45 x 5	62.64	0.615	U	213.89	94.72	53.01	33.71									23.22					16.90	CHECK DEFLECTION FOR LOADS & SPANS THIS SIDE OF SHADOW LINE.		2239	
			D	1.38	3.09	5.46	8.48									12.11					16.33				
			C	64.17	42.62	31.81	25.28									20.90					17.74				
			D	1.10	2.47	4.37	6.78									9.69					13.06				
50 x 5	69.18	0.679	U	264.14	117.02	65.53	41.69	28.75	20.94	15.87	CHECK DEFLECTION FOR LOADS & SPANS THIS SIDE OF SHADOW LINE.					2424									
			D	1.24	2.78	4.92	7.65	10.93	14.75	19.08															
			C	79.24	52.66	39.32	31.27	25.87	21.99	19.05															
			D	0.99	2.33	3.94	6.12	8.75	11.80	15.26															
55 x 5	75.73	0.743	U	319.68	141.67	79.39	50.53	34.86	25.41	19.28			CHECK DEFLECTION FOR LOADS & SPANS THIS SIDE OF SHADOW LINE.		2603										
			D	1.13	2.53	4.48	6.96	9.96	13.45	14.42															
			C	95.90	63.75	47.62	37.89	31.37	26.69	23.14															
			D	0.90	2.02	3.58	5.57	7.97	10.76	13.93															
65 x 5	88.81	0.871	U	446.67	198.03	111.01	70.73	48.86	35.66	27.10					CHECK DEFLECTION FOR LOADS & SPANS THIS SIDE OF SHADOW LINE.		2951								
			D	0.95	2.14	3.80	5.91	8.46	11.44	14.83															
			C	134.00	89.12	66.61	53.05	43.97	37.45	32.52															
			D	0.76	1.71	3.04	4.72	6.77	9.15	11.86															