

8-W-4, 8-W-2 & 8-P-4, 8-P-2 Steel Bar Grating

Welded Close-Mesh

11/16" Center to Center of Bearing Bars



8-W-4
Cross Rods 4" C/C



8-W-2
Cross Rods 2" C/C

Press-Locked Close Mesh

11/16" Center to Center of Bearing Bars



8-P-4
Cross Bars 4" C/C



8-P-2
Cross Bars 2" C/C

Load & Deflection Table

Bar Size	Symbol	Approx. Weight psf	Sec mod Per Ft of Width	SPAN (Length of Bearing Bar)																
				2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	8'-0"	9'-0"				
3/4" x 1/8"	8-4-32	W 8.3	0.281	U	844	540	375	276	211	167	135									
	8-2-32	P 8.7		D	0.099	0.155	0.223	0.304	0.397	0.503	0.621									
		W 8.8		C	844	675	563	482	422	375	338									
3/4" x 3/16"	8-4-33	W 12.2	0.422	U	1266	810	563	413	316	250	203									
	8-2-33	P 13.0		D	0.099	0.155	0.223	0.304	0.397	0.503	0.621	0.751								
		W 12.8		C	1266	1013	844	723	633	563	506	460								
1" x 1/8"	8-4-42	W 10.9	0.500	U	1500	960	667	490	375	296	240									
	8-2-42	P 11.3		D	0.074	0.116	0.168	0.228	0.298	0.377	0.466	0.563	0.670							
		W 11.4		C	1500	1200	1000	857	750	667	600	545	500							
1" x 3/16"	8-4-43	W 16.0	0.750	U	2250	1440	1000	735	563	444	360									
	8-2-43	P 16.9		D	0.074	0.116	0.168	0.228	0.298	0.377	0.466	0.563	0.670	0.787						
		W 16.7		C	2250	1800	1500	1286	1125	1000	900	818	750	692						
1-1/4" x 1/8"	8-4-52	W 13.4	0.781	U	2344	1500	1042	765	586	463	375									
	8-2-52	P 14.2		D	0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536	0.629	0.730					
		W 14.0		C	2344	1875	1563	1339	1172	1042	938	852	781	721	670					
1-1/4" x 3/16"	8-4-53	W 19.9	1.172	U	3516	2250	1563	1148	879	694	563									
	8-2-53	P 21.2		D	0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536	0.629	0.730	0.849	0.965			
		W 20.5		C	3516	2813	2344	2009	1758	1563	1406	1278	1172	1082	1004	879	781			
1-1/2" x 1/8"	8-4-62	W 16.0	1.125	U	3375	2160	1500	1102	844	667	540									
	8-2-62	P 16.7		D	0.050	0.078	0.112	0.152	0.199	0.251	0.310	0.376	0.447	0.524	0.608	0.794	1.006			
		W 16.6		C	3375	2700	2250	1929	1688	1500	1350	1227	1125	1038	964	844	750			
1-1/2" x 3/16"	8-4-63	W 23.8	1.688	U	5063	3240	2250	1653	1266	1000	810									
	8-2-63	P 25.1		D	0.050	0.078	0.112	0.152	0.199	0.251	0.310	0.376	0.447	0.524	0.608	0.794	1.006			
		W 24.4		C	5063	4050	3375	2893	2531	2250	2025	1841	1688	1558	1446	1266	1125			
1-3/4" x 3/16"	8-4-73	W 27.6	2.297	U	6891	4410	3063	2250	1723	1361	1103									
	8-2-73	P 28.9		D	0.043	0.067	0.096	0.130	0.170	0.215	0.266	0.322	0.383	0.450	0.521	0.681	0.862			
		W 28.2		C	6891	5513	4594	3938	3445	3063	2756	2506	2297	2120	1969	1723	1531			
2" x 3/16"	8-4-83	W 31.5	3.000	U	9000	5760	4000	2939	2250	1778	1440									
	8-2-83	P 32.8		D	0.037	0.058	0.084	0.114	0.149	0.189	0.233	0.282	0.335	0.393	0.456	0.596	0.754			
		W 32.1		C	9000	7200	6000	5143	4500	4000	3600	3273	3000	2769	2571	2250	2000			
2-1/4" x 3/16"	8-4-93	W 35.3	3.797	U	11391	7290	5063	3719	2848	2250	1823									
	8-2-93	P 36.6		D	0.033	0.052	0.074	0.101	0.132	0.168	0.207	0.250	0.298	0.350	0.406	0.530	0.670			
		W 35.9		C	11391	9113	7594	6509	5695	5063	4556	4142	3797	3505	3254	2848	2531			
2-1/2" x 3/16"	8-4-103	W 39.2	4.688	U	14063	9000	6250	4592	3516	2778	2250									
	8-2-103	P 40.5		D	0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268	0.315	0.365	0.477	0.603			
		W 39.8		C	14063	11250	9375	8036	7031	6250	5625	5114	4688	4327	4018	3516	3125			
		P 42.4	D	0.024	0.037	0.054	0.073	0.095	0.121	0.149	0.180	0.215	0.252	0.292	0.381	0.483				

U= safe uniform load, psf - C= safe concentrated load, pfw - D= deflection, inches - E= modulus of elasticity, 29,000,000 psi - F= fiber stress, 18,000 psi

W/P-8 PANEL WIDTH (inches) Note: P-Press-Locked cross bars typically extend 1/8" each side. W-Welded cross rods may extend 1/8" each side. Panel widths do not include these extensions.

No. of Bars	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1/8" Bar	5/8	11/8	15/8	21/8	25/8	31/8	35/8	41/8	45/8	51/8	55/8	61/8	65/8	71/8	75/8	81/8	85/8	91/8	95/8	91/8	105/8	111/8	115/8	121/8
3/16" Bar	11/16	13/16	111/16	23/16	211/16	33/16	311/16	43/16	411/16	53/16	511/16	63/16	611/16	73/16	711/16	83/16	811/16	93/16	911/16	103/16	1011/16	113/16	1111/16	123/16
No. of Bars	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49
1/8" Bar	125/8	131/8	135/8	141/8	145/8	151/8	155/8	161/8	165/8	171/8	175/8	181/8	185/8	191/8	195/8	201/8	205/8	211/8	215/8	221/8	225/8	231/8	235/8	241/8
3/16" Bar	1211/16	133/16	1311/16	143/16	1411/16	153/16	1511/16	163/16	1611/16	173/16	1711/16	183/16	1811/16	193/16	1911/16	203/16	2011/16	213/16	2111/16	223/16	2211/16	233/16	2311/16	243/16
No. of Bars	50	51	52	53	54	55	56	57	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	
1/8" Bar	245/8	251/8	255/8	261/8	265/8	271/8	275/8	281/8	291/8	295/8	301/8	305/8	311/8	315/8	321/8	325/8	331/8	335/8	341/8	345/8	351/8	355/8	361/8	
3/16" Bar	2411/16	253/16	2511/16	263/16	2611/16	273/16	2711/16	283/16	293/16	2911/16	303/16	3011/16	313/16	3111/16	323/16	3211/16	333/16	3411/16	343/16	3511/16	353/16	3611/16	363/16	