

## 8-SR-4, 8-SR-2 & 8-AP-4, 8-AP-2 Aluminum Grating

### Rectangular Bar Swage-Locked Close Mesh

1/2" Center to Center of Bearing Bars



**8-SR-4**  
Cross Rods 4" C/C



**8-SR-2**  
Cross Rods 2" C/C

### Press-Locked Close Mesh

1/2" Center to Center of Bearing Bars



**8-AP-4**  
Cross Bars 4" C/C



**8-AP-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"									
3/4" x 1/8"	SR	3.0	0.281	U	563	360	250	184	141								
	AP	3.1		D	0.192	0.300	0.432	0.588	0.768								
	SR	3.4		C	563	450	375	321	281								
	AP	3.4		D	0.154	0.240	0.346	0.470	0.614	4'-6"							
3/4" x 3/16"	SR	4.4	0.422	U	844	540	375	276	211	167							
	AP	4.6		D	0.192	0.300	0.432	0.588	0.768	0.972							
	SR	4.7		C	844	675	563	482	422	375							
	AP	5.1		D	0.154	0.240	0.346	0.470	0.614	0.778	5'-0"						
1" x 1/8"	SR	3.9	0.500	U	1000	640	444	327	250	198							
	AP	4.0		D	0.144	0.225	0.324	0.441	0.576	0.729	0.900						
	SR	4.3		C	1000	800	667	571	500	444	400						
	AP	4.3		D	0.115	0.180	0.259	0.353	0.461	0.583	0.720	5'-6"					
1" x 3/16"	SR	5.8	0.750	U	1500	960	667	490	375	296	240						
	AP	5.9		D	0.144	0.225	0.324	0.441	0.576	0.729	0.900	1.089					
	SR	6.1		C	1500	1200	1000	857	750	667	600	545					
	AP	6.4		D	0.115	0.180	0.259	0.353	0.461	0.583	0.720	0.871					
1-1/4" x 1/8"	SR	4.9	0.781	U	1563	1000	694	510	391	309	250	207					
	AP	5.0		D	0.115	0.180	0.259	0.353	0.461	0.583	0.720	0.871					
	SR	5.2		C	1563	1250	1042	893	781	694	625	568					
	AP	5.4		D	0.092	0.144	0.207	0.282	0.369	0.467	0.576	0.697	6'-0"				
1-1/4" x 3/16"	SR	7.1	1.172	U	2344	1500	1042	765	586	463	375	310	260				
	AP	7.5		D	0.115	0.180	0.259	0.353	0.461	0.583	0.720	0.871	1.037				
	SR	7.4		C	2344	1875	1563	1339	1172	1042	938	852	781				
	AP	8.1		D	0.092	0.144	0.207	0.282	0.369	0.467	0.576	0.697	0.829	6'-6"			
1-1/2" x 1/8"	SR	5.8	1.125	U	2250	1440	1000	735	563	444	360	298	250	213			
	AP	5.9		D	0.096	0.150	0.216	0.294	0.384	0.486	0.600	0.726	0.864	1.014			
	SR	6.1		C	2250	1800	1500	1286	1125	1000	900	818	750	692			
	AP	6.3		D	0.077	0.120	0.173	0.235	0.307	0.389	0.480	0.581	0.691	0.811	7'-0"		
1-1/2" x 3/16"	SR	8.5	1.688	U	3375	2160	1500	1102	844	667	540	446	375	320	276		
	AP	8.8		D	0.096	0.150	0.216	0.294	0.384	0.486	0.600	0.726	0.864	1.014	1.176		
	SR	8.8		C	3375	2700	2250	1929	1688	1500	1350	1227	1125	1038	964		
	AP	9.5		D	0.077	0.120	0.173	0.235	0.307	0.389	0.480	0.581	0.691	0.811	0.941	8'-0"	
1-3/4" x 3/16"	SR	9.8	2.297	U	4594	2940	2042	1500	1148	907	735	607	510	435	375	287	
	AP	10.2		D	0.082	0.129	0.185	0.252	0.329	0.417	0.514	0.622	0.741	0.869	1.008	1.137	
	SR	10.2		C	4594	3675	3063	2625	2297	2042	1838	1670	1531	1413	1313	1148	
	AP	10.9		D	0.066	0.103	0.148	0.202	0.263	0.333	0.411	0.498	0.592	0.695	0.806	0.929	1.053
2" x 3/16"	SR	11.2	3.000	U	6000	3840	2667	1959	1500	1185	960	793	667	568	490	375	296
	AP	11.5		D	0.072	0.113	0.162	0.221	0.288	0.365	0.450	0.545	0.648	0.761	0.882	1.015	1.158
	SR	11.5		C	6000	4800	4000	3429	3000	2667	2400	2182	2000	1846	1714	1500	1333
	AP	12.2		D	0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.518	0.608	0.706	0.811	0.922
2-1/4" x 3/16"	SR	12.6	3.797	U	7594	4860	3375	2480	1898	1500	1215	1004	844	719	620	475	375
	AP	12.9		D	0.064	0.100	0.144	0.196	0.256	0.324	0.400	0.484	0.576	0.676	0.784	0.904	1.034
	SR	12.9		C	7594	6075	5063	4339	3797	3375	3038	2761	2531	2337	2170	1898	1688
	AP	13.6		D	0.051	0.080	0.115	0.157	0.205	0.259	0.320	0.387	0.461	0.541	0.627	0.719	0.819
2-1/2" x 3/16"	SR	13.9	4.688	U	9375	6000	4167	3061	2344	1852	1500	1240	1042	888	765	586	463
	AP	14.3		D	0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.518	0.608	0.706	0.811	0.922
	SR	14.2		C	9375	7500	6250	5357	4688	4167	3750	3409	3125	2885	2679	2344	2083
	AP	14.9		D	0.046	0.072	0.104	0.141	0.184	0.233	0.288	0.348	0.415	0.487	0.564	0.643	0.733

U= safe uniform load, psf - C= safe concentrated load, pfw - D= deflection, inches - E= modulus of elasticity, 10,000,000 psi - F= fiber stress, 12,000 psi

SR/AP-8 PANEL WIDTH (inches) Note: Includes 1/4" (1/8" each side) for extended cross rods on swage-locked (SR) and extended cross bars on press-locked (AP).

No. of Bars	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1/8" Bar	7/8	1 3/8	1 7/8	2 3/8	2 7/8	3 7/8	3 7/8	4 3/8	4 7/8	5 3/8	5 7/8	6 3/8	6 7/8	7 3/8	7 7/8	8 3/8	8 7/8	9 3/8	9 7/8
3/16" Bar	15/16	1 7/16	1 15/16	2 7/16	2 15/16	3 7/16	3 15/16	4 7/16	4 15/16	5 7/16	5 15/16	6 7/16	6 7/16	7 7/16	7 15/16	8 7/16	8 15/16	9 15/16	10 7/16
No. of Bars	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
1/8" Bar	10 3/8	10 7/8	11 3/8	11 7/8	12 3/8	12 7/8	13 3/8	13 7/8	14 3/8	14 7/8	15 3/8	15 7/8	16 3/8	16 7/8	17 3/8	17 7/8	18 3/8	18 7/8	19 3/8
3/16" Bar	10 15/16	11 7/16	11 15/16	12 7/16	12 15/16	13 7/16	13 15/16	14 7/16	14 7/16	14 15/16	15 7/16	15 15/16	16 7/16	16 15/16	17 7/16	17 15/16	18 7/16	18 15/16	19 7/16
No. of Bars	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58
1/8" Bar	19 7/8	20 3/8	20 7/8	21 3/8	21 7/8	22 3/8	22 7/8	23 3/8	23 7/8	24 3/8	24 7/8	25 3/8	25 7/8	26 3/8	26 7/8	27 3/8	27 7/8	28 3/8	28 7/8
3/16" Bar	19 15/16	20 7/16	20 15/16	21 7/16	21 15/16	22 7/16	22 15/16	23 7/16	23 15/16	24 7/16	24 15/16	25 7/16	25 15/16	26 7/16	26 15/16	27 7/16	27 15/16	28 7/16	28 15/16
No. of Bars	59	60	61	62	63	64	65	66	67	68	69	70	71	72					
1/8" Bar	29 3/8	29 7/8	30 3/8	30 7/8	31 3/8	31 7/8	32 3/8	32 7/8	33 3/8	33 7/8	34 3/8	34 7/8	35 3/8	35 7/8					
3/16" Bar	29 7/16	29 15/16	30 7/16	30 15/16	31 7/16	31 15/16	32 7/16	32 15/16	33 7/16	33 15/16	34 7/16	34 15/16	35 7/16	35 15/16					