

11-SR-4, 11-SR-2 & 11-AP-4, 11-AP-2 Aluminum Grating

Rectangular Bar Swage-Locked Close Mesh

11/16" Center to Center of Bearing Bars



11-SR-4
Cross Rods 4" C/C



11-SR-2
Cross Rods 2" C/C

Press-Locked Close Mesh

11/16" Center to Center of Bearing Bars



11-AP-4
Cross Bars 4" C/C



11-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"	11-4-32	SR 2.3	0.205	U	409	262	182	134	102		
	11-2-32	AP 2.3		D	0.192	0.300	0.432	0.588	0.768		
		SR 2.6		C	409	327	273	234	205		
		AP 2.7		D	0.154	0.240	0.346	0.470	0.614		
3/4" x 3/16"	11-4-33	SR 3.3	0.307	U	614	393	273	200	153		
	11-2-33	AP 3.5		D	0.192	0.300	0.432	0.588	0.768		
		SR 3.6		C	614	491	409	351	307		
		AP 4.0		D	0.154	0.240	0.346	0.470	0.614		
1" x 1/8"	11-4-42	SR 3.0	0.364	U	727	465	323	237	182	144	
	11-2-42	AP 3.0		D	0.144	0.225	0.324	0.441	0.576	0.729	
		SR 3.3		C	727	582	485	416	364	323	
		AP 3.3		D	0.115	0.180	0.259	0.353	0.461	0.583	
1" x 3/16"	11-4-43	SR 4.3	0.545	U	1091	698	485	356	273	215	175
	11-2-43	AP 4.5		D	0.144	0.225	0.324	0.441	0.576	0.729	0.900
		SR 4.6		C	1091	873	727	623	545	485	436
		AP 5.0		D	0.115	0.180	0.259	0.353	0.461	0.583	0.720
1-1/4" x 1/8"	11-4-52	SR 3.6	0.568	U	1136	727	505	371	284	224	182
	11-2-52	AP 3.8		D	0.115	0.180	0.259	0.353	0.461	0.583	0.720
		SR 4.0		C	1136	909	758	649	568	505	455
		AP 4.2		D	0.092	0.144	0.207	0.282	0.369	0.467	0.576
1-1/4" x 3/16"	11-4-53	SR 5.3	0.852	U	1705	1091	758	557	426	337	273
	11-2-53	AP 5.6		D	0.115	0.180	0.259	0.353	0.461	0.583	0.720
		SR 5.6		C	1705	1364	1136	974	852	758	682
		AP 6.3		D	0.092	0.144	0.207	0.282	0.369	0.467	0.576
1-1/2" x 1/8"	11-4-62	SR 4.3	0.818	U	1636	1047	727	534	409	323	262
	11-2-62	AP 4.4		D	0.096	0.150	0.216	0.294	0.384	0.486	0.600
		SR 4.6		C	1636	1309	1091	935	818	727	655
		AP 4.9		D	0.077	0.120	0.173	0.235	0.307	0.389	0.480
1-1/2" x 3/16"	11-4-63	SR 6.3	1.227	U	2455	1571	1091	801	614	485	393
	11-2-63	AP 6.6		D	0.096	0.150	0.216	0.216	0.384	0.486	0.600
		SR 6.6		C	2455	1964	1636	1403	1227	1091	982
		AP 7.3		D	0.077	0.120	0.173	0.235	0.307	0.389	0.480
1-3/4" x 3/16"	11-4-73	SR 7.3	1.670	U	3341	2138	1485	1091	835	660	535
	11-2-73	AP 7.6		D	0.082	0.129	0.185	0.252	0.329	0.417	0.514
		SR 7.6		C	3341	2673	2227	1909	1670	1485	1336
		AP 8.3		D	0.066	0.103	0.148	0.202	0.263	0.333	0.411
2" x 3/16"	11-4-83	SR 8.3	2.182	U	4364	2793	1939	1425	1091	862	698
	11-2-83	AP 8.6		D	0.072	0.113	0.162	0.221	0.288	0.365	0.450
		SR 8.6		C	4364	3491	2909	2499	2182	1939	1745
		AP 9.3		D	0.058	0.090	0.130	0.176	0.230	0.292	0.360
2-1/4" x 3/16"	11-4-93	SR 9.3	2.761	U	5523	3535	2455	1803	1381	1091	884
	11-2-93	AP 9.6		D	0.064	0.100	0.144	0.196	0.256	0.324	0.400
		SR 9.6		C	5523	4418	3682	3156	2761	2455	2209
		AP 10.3		D	0.051	0.080	0.115	0.157	0.205	0.259	0.320
2-1/2" x 3/16"	11-4-103	SR 10.3	3.409	U	6818	4364	3030	2226	1705	1347	1091
	11-2-103	AP 10.6		D	0.058	0.090	0.130	0.176	0.230	0.292	0.360
		SR 10.6		C	6818	5455	4545	3896	3409	3030	2727
		AP 11.3		D	0.046	0.072	0.104	0.141	0.184	0.233	0.288

Material: ASTM B-221,6063 or 6061

Deflection: Spans and loads to the right of the bold line exceed 1/4" deflection for uniform load of 100 psf which provides safe pedestrian comfort. These can be exceeded for other types of loads with engineer's approval.

Serrated Bars: For serrated grating, the depth of grating required for a specified load is 1/4" deeper than that shown in the table.

General: Loads and deflections are theoretical and based on static loading.

Finish: Mill finish unless otherwise specified.

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

SR/AP-11 PANEL WIDTH (inches) Note: Includes 1/4" (1/8" each side) for 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	1 1/16	1 3/4	2 7/16	3 1/8	3 13/16	4 1/2	5 3/16	5 7/8	6 9/16	7 1/4	7 15/16	8 5/8	9 5/16	10	10 11/16	11 3/8	12 1/16	12 3/4	13 7/16
3/16" Bar	1 1/8	1 13/16	2 1/2	3 3/16	3 7/8	4 9/16	5 1/4	5 15/16	6 5/8	7 5/16	8	8 11/16	9 3/8	10 1/16	10 3/4	11 7/16	12 1/8	12 13/16	13 1/2
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	14 1/8	14 13/16	15 1/2	16 3/16	16 7/8	17 9/16	18 1/4	18 15/16	19 5/8	20 5/16	21	21 11/16	22 3/8	23 1/16	23 3/4	24 7/16	25 1/8	25 13/16	26 1/2
3/16" Bar	14 3/16	14 7/8	15 9/16	16 1/4	16 15/16	17 9/16	18 5/16	19	19 11/16	20 3/8	21 1/16	21 3/4	22 7/16	23 1/8	23 3/16	24 1/2	25 3/16	25 7/8	26 9/16
No. of Bars	40	41	42	43	44	45	46	47	48	49	50	51	52	53					
1/8" Bar	27 3/16	27 7/8	28 9/16	29 1/4	29 15/16	30 5/8	31 5/16	32	32 11/16	33 3/8	34 1/16	34 3/4	35 7/16	36 1/8					
3/16" Bar	27 1/4	27 15/16	28 5/8	29 5/16	30	30 11/16	31 3/8	32 1/16	32 3/4	33 7/16	34 1/8	34 13/16	35 1/2	36 3/16					