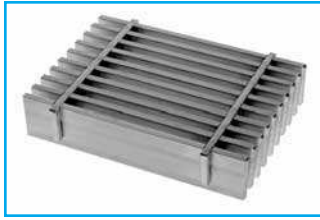


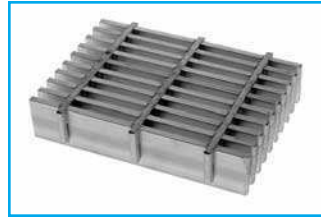
# Aluminum Grating

## PRESS-LOCKED CLOSE MESH

7/16" Center to Center of Bearing Bars



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



**7-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"	4'-6"	5'-0"
3/4" x 1/8"	7-4-32	3.4	0.321	U 643	411	286	210	161		
	7-2-32	3.8		D 0.192	0.300	0.432	0.588	0.768		
3/4" x 3/16"	7-4-33	5.2	0.482	U 964	617	429	315	241	190	
	7-2-33	5.7		D 0.192	0.300	0.432	0.588	0.768	0.972	
1" x 1/8"	7-4-42	4.5	0.571	U 1143	731	508	373	286	226	183
	7-2-42	4.8		D 0.144	0.225	0.324	0.441	0.576	0.729	0.900
1" x 3/16"	7-4-43	6.7	0.857	U 1143	914	762	653	571	508	457
	7-2-43	7.2		D 0.115	0.180	0.259	0.353	0.461	0.583	0.720
1-1/4" x 1/8"	7-4-52	5.6	0.893	U 1714	1097	762	560	429	339	274
	7-2-52	6.1		D 0.144	0.225	0.324	0.441	0.576	0.729	0.900
1-1/4" x 3/16"	7-4-53	8.4	1.339	U 1714	1371	1143	980	857	762	686
	7-2-53	9.1		D 0.115	0.180	0.259	0.353	0.461	0.583	0.720
1-1/2" x 1/8"	7-4-62	6.7	1.286	U 1786	1143	794	583	446	353	286
	7-2-62	7.1		D 0.115	0.180	0.259	0.353	0.461	0.583	0.720
1-1/2" x 3/16"	7-4-63	10.0	1.929	U 1786	1429	1190	1020	893	794	714
	7-2-63	10.7		D 0.092	0.144	0.207	0.282	0.369	0.467	0.576
1-3/4" x 3/16"	7-4-73	11.5	2.625	U 2679	1714	1190	875	670	529	429
	7-2-73	12.2		D 0.115	0.180	0.259	0.353	0.461	0.583	0.720
2" x 3/16"	7-4-83	13.1	3.429	U 2679	2143	1786	1531	1339	1190	1071
	7-2-83	13.8		D 0.092	0.144	0.207	0.282	0.369	0.467	0.576
2-1/4" x 3/16"	7-4-93	14.6	4.339	U 2571	1646	1143	840	643	508	411
	7-2-93	15.3		D 0.096	0.150	0.216	0.294	0.384	0.486	0.600
2-1/2" x 3/16"	7-4-103	16.2	5.357	U 2571	2057	1714	1469	1286	1143	1029
	7-2-103	16.9		D 0.077	0.120	0.173	0.235	0.307	0.389	0.480
				U 3857	2469	1714	1259	964	762	617
				D 0.096	0.150	0.216	0.294	0.384	0.486	0.600
				U 5250	3360	2333	1714	1313	1037	840
				D 0.082	0.129	0.185	0.252	0.329	0.417	0.514
				U 6857	4389	3048	2239	1714	1354	1097
				D 0.072	0.113	0.162	0.221	0.288	0.365	0.450
				U 8679	5554	3857	2834	2170	1714	1389
				D 0.064	0.100	0.144	0.196	0.256	0.324	0.400
				U 10714	6857	4762	3499	2679	2116	1714
				D 0.058	0.090	0.130	0.176	0.230	0.292	0.360
				U 10714	8571	7143	6122	5357	4762	4286
				D 0.046	0.072	0.104	0.141	0.184	0.233	0.288

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  
**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.

### AP-7 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	21	22	23	24	25	26	27	28	29
1/8" Bar	13/16	1 1/4	1 11/16	2 1/8	2 9/16	3	3 7/16	3 3/8	4 1/8	4 3/4	5 1/8	5 5/8	6 1/8	6 1/2	6 15/16	7 3/8	7 9/16	8 1/4	8 11/16	9 1/8	9 9/16	10	10 7/16	10 7/8	11 1/8	11 3/4	12 1/8	12 5/8
3/16" Bar	7/8	1 5/16	1 3/4	2 1/8	2 5/8	3 1/8	3 1/2	3 9/16	4 1/8	4 3/4	5 1/4	5 11/16	6 1/8	6 9/16	7	7 1/16	7 1/8	8 1/16	8 3/4	9 1/16	9 5/8	10 1/16	10 1/2	10 15/16	11 3/8	11 13/16	12 1/4	12 11/16
No. of Bars	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
1/8" Bar	13 1/16	13 1/2	13 5/16	14 3/8	14 13/16	15 1/4	15 11/16	16 1/8	16 3/4	17	17 1/16	17 3/8	18 1/8	18 3/4	19 1/16	19 5/8	20 1/16	20 1/2	20 5/16	21 3/8	21 13/16	22 1/4	22 11/16	23 1/8	23 5/16	24 1/16	24 5/8	24 7/8
3/16" Bar	13 3/8	13 9/16	14	14 7/16	14 7/8	15 1/8	15 5/8	16 1/16	16 3/8	17 1/16	17 1/2	17 5/16	18 3/8	18 13/16	19 1/4	19 11/16	20 1/8	20 9/16	21	21 1/16	21 1/8	22 1/16	22 5/16	23 1/16	23 5/8	24 1/16	24 1/2	24 15/16
No. of Bars	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83		
1/8" Bar	25 5/16	25 3/4	26 3/16	26 5/8	27 1/16	27 1/2	27 5/16	28 3/8	28 13/16	29 1/4	29 11/16	30 1/8	30 9/16	31	31 1/16	31 3/8	32 1/16	32 1/2	32 5/16	33 1/16	33 5/8	34 1/16	34 1/2	34 5/16	35 3/8	35 13/16	36 1/4	
3/16" Bar	25 5/8	25 13/16	26 1/4	26 11/16	27 1/8	27 1/16	28	28 1/16	28 3/8	29 1/16	29 3/4	30 1/16	30 5/8	31 1/16	31 1/2	31 5/16	32 1/8	32 1/16	33 1/4	33 1/16	34 1/8	34 1/16	35	35 1/16	35 5/8	36 1/8		