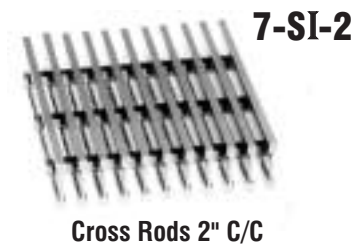
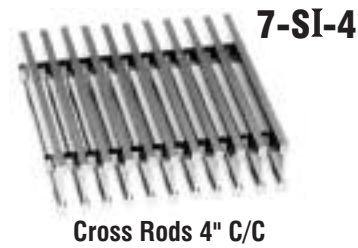


Aluminum Bar Grating

I-BAR SWAGE-LOCKED CLOSE-MESH 7/16" C/C Bearing Bars



U = safe uniform load, psf (page 69)
 C = safe concentrated load, psf (page 69)
 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.

LOAD & DEFLECTION TABLE

Bar Size	Symbol	Approx. Weight psf	Sec. Mod Per Ft. Of Width		SPAN (Direction of Bearing Bar)													
					24"	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"	96"	108"	
1" x 1/4"	7-SI-4	6.3		U	1714	1097	762	560	429	339	274	227						
	7-SI-2	6.5	0.857	D	0.144	0.225	0.324	0.441	0.576	0.729	0.900	1.089						
1-1/4" x 1/4"	7-SI-4	7.3		U	2679	1714	1190	875	670	529	429	354	298	254				
	7-SI-2	8.0	1.339	D	0.115	0.180	0.259	0.353	0.461	0.583	0.720	0.871	1.037	1.217	1.407	1.607		
1-1/2" x 1/4"	7-SI-4	9.3		U	3857	2469	1714	1259	964	762	617	510	429	365	315			
	7-SI-2	9.6	1.929	D	0.096	0.150	0.216	0.294	0.384	0.486	0.600	0.726	0.864	1.014	1.176	1.348	1.526	
1-3/4" x 1/4"	7-SI-4	10.9		U	5250	3360	2333	1714	1313	1037	840	694	583	497	429	328	259	
	7-SI-2	11.1	2.625	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	1.666	
2" x 1/4"	7-SI-4	12.3		U	6857	4389	3048	2239	1714	1354	1097	907	762	649	560	429	339	
	7-SI-2	12.6	3.429	D	0.072	0.113	0.162	0.221	0.288	0.365	0.450	0.545	0.648	0.761	0.882	1.152	1.458	
2-1/4" x 1/4"	7-SI-4	13.9		U	8679	5554	3857	2834	2170	1714	1389	1148	964	822	708	542	429	
	7-SI-2	14.1	4.339	D	0.064	0.100	0.144	0.196	0.256	0.324	0.400	0.484	0.576	0.676	0.784	1.024	1.296	
2-1/2" x 1/4"	7-SI-4	15.4		U	10714	6857	4762	3499	2679	2116	1714	1417	1190	1014	875	670	529	
	7-SI-2	15.6	5.357	D	0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.518	0.608	0.706	0.922	1.166	

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
1/4" Bar	7/8	1 1/16	1 3/4	2 1/16	2 5/8	3 1/16	3 1/2	3 9/16	4 1/8	4 13/16	5 1/4	5 11/16	6 1/8	6 9/16	7	7 7/16	7 7/8	8 5/16	8 3/4	9 9/16	9 5/8	10 1/16	10 1/2	10 9/16	11 1/8	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
1/4" Bar	13 1/8	13 9/16	14	14 7/16	14 7/8	15 5/16	15 3/4	16 3/16	16 5/8	17 1/16	17 1/2	17 9/16	18 3/8	18 13/16	19 1/4	19 11/16	20 1/8	20 9/16	21	21 7/16	21 7/8	22 5/16	22 3/4	23 3/16	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		
1/4" Bar	25 5/8	25 13/16	26 1/4	26 11/16	27 1/8	27 9/16	28	28 7/16	28 7/8	29 5/16	29 3/4	30 3/16	30 5/8	31 1/16	31 1/2	31 9/16	32 3/8	32 13/16	33 1/4	33 11/16	34 1/8	34 9/16	35	35 7/16	35 7/8	36 5/16		