

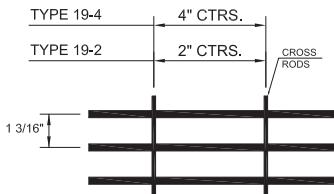
ALUMINUM STANDARD MESH BAR GRATING

STANDARD FISHOLOW – TYPE 19

Bearing Bars: 1 3/16" centers, 6063T6

Cross Bars: 6063T5

Stock panels: 3' nominal width x 24' long



aluminum type 19



IMPERIAL LEGEND

U = Safe Uniform Load (lbs./ft.²)

C = Safe Concentrated Load (lbs./foot of grating width)

D = Deflection (inches)

Loads and deflections given in this table are theoretical and are based on a maximum allowable fibre stress of 12,000 P.S.I.

For Fisholow I-bar loading, use the equivalent depth 3/16" bar size values in this load table.

BEARING BAR SIZE (inches)	APPROX. WEIGHT (lbs./ft. ²)	LOAD/DEFLECTION	SPAN IN FEET AND INCHES															SECTION MODULUS PER FOOT OF WIDTH						
			2' 0"	2' 6"	3' 0"	3' 6"	4' 0"	4' 6"	5' 0"	5' 6"	6' 0"	6' 6"	7' 0"	7' 6"	8' 0"	8' 6"	9' 0"							
1 x 1/8	1.92	U	421	269	187	137	105	83	Spans and loads in the pink shaded area exceed a deflection of 1/4" for uniform loads of 100 lbs/sq. ft. Experience has shown that 1/4" deflection is the maximum deflection to give pedestrian comfort, but can be exceeded for other types of loads at the discretion of the engineer.										0.216					
		D	0.114	0.225	0.324	0.441	0.576	0.729	0.216															
		C	421	337	281	241	211	187	0.216															
		D	0.115	0.18	0.259	0.353	0.461	0.583	0.216															
1 x 3/16	2.72	U	632	404	281	206	158	125	For serrated surface, increase depth by one size.										0.325					
		D	0.144	0.225	0.324	0.441	0.576	0.729											0.325					
		C	632	505	421	361	316	281											0.325					
		D	0.115	0.18	0.259	0.353	0.461	0.583											0.325					
1 1/4 x 1/8	2.31	U	658	421	292	215	164	130	105	87	73	For serrated surface, increase depth by one size.										0.339		
		D	0.115	0.18	0.259	0.353	0.461	0.583	0.720	0.871	1.037	0.339												
		C	658	526	439	376	329	292	263	239	219	0.339												
		D	0.092	0.144	0.207	0.282	0.369	0.467	0.576	0.697	0.829	0.339												
1 1/4 x 3/16	3.31	U	987	632	439	322	247	195	158	130	110	93	81	For serrated surface, increase depth by one size.										0.507
		D	0.115	0.18	0.259	0.353	0.461	0.583	0.720	0.871	1.037	1.217	1.411	0.507										
		C	987	789	658	564	493	439	395	359	329	304	282	0.507										
		D	0.092	0.144	0.207	0.282	0.369	0.467	0.576	0.697	0.829	0.973	1.129	0.507										
1 1/2 x 1/8	2.72	U	947	606	421	309	237	187	152	125	105	90	77	67	59	52	47	For serrated surface, increase depth by one size.		0.488				
		D	0.096	0.150	0.216	0.294	0.384	0.486	0.600	0.726	0.864	1.014	1.176	1.35	1.536	1.734	1.944			0.488				
		C	947	758	632	541	474	421	379	344	316	291	271	253	237	223	211			0.488				
		D	0.077	0.120	0.173	0.235	0.307	0.389	0.480	0.581	0.691	0.811	0.941	1.08	1.229	1.387	1.555			0.488				
1 1/2 x 3/16	3.89	U	1421	909	632	464	355	281	227	188	158	135	116	101	89	79	70	For serrated surface, increase depth by one size.		0.730				
		D	0.096	0.15	0.216	0.294	0.384	0.486	0.6	0.726	0.864	1.014	1.176	1.35	1.536	1.734	1.944			0.730				
		C	1421	1137	947	812	711	632	568	517	474	437	406	379	355	334	316			0.730				
		D	0.077	0.12	0.173	0.235	0.307	0.389	0.48	0.581	0.691	0.811	0.941	1.08	1.229	1.387	1.555			0.730				
1 3/4 x 3/16	4.48	U	1934	1238	860	632	484	382	309	256	215	183	158	138	121	107	96	For serrated surface, increase depth by one size.		0.994				
		D	0.082	0.129	0.185	0.252	0.329	0.417	0.514	0.622	0.741	0.869	1.008	1.157	1.317	1.486	1.666			0.994				
		C	1934	1547	1289	1105	967	860	774	703	645	595	553	516	484	455	430			0.994				
		D	0.066	0.103	0.148	0.202	0.263	0.333	0.411	0.498	0.592	0.695	0.806	0.926	1.053	1.189	1.333			0.994				
2 x 3/16	5.08	U	2526	1617	1123	825	632	499	404	334	281	239	206	180	158	140	125	For serrated surface, increase depth by one size.		1.299				
		D	0.072	0.113	0.162	0.221	0.288	0.365	0.45	0.545	0.648	0.761	0.882	1.013	1.152	1.301	1.458			1.299				
		C	2526	2021	1684	1444	1263	1123	1011	919	842	777	962	674	632	594	561			1.299				
		D	0.058	0.09	0.13	0.176	0.263	0.292	0.36	0.436	0.518	0.608	0.706	0.81	0.922	1.04	1.166			1.299				
2 1/4 x 3/16	5.68	U	3197	2046	1421	1044	799	632	512	423	355	303	261	227	200	177	158	For serrated surface, increase depth by one size.		1.644				
		D	0.064	0.100	0.144	0.196	0.256	0.324	0.400	0.484	0.576	0.676	0.784	0.900	1.024	1.156	1.296			1.644				
		C	3197	2558	2132	1827	1599	1421	1279	1163	1066	984	1218	1137	799	752	711			1.644				
		D	0.051	0.080	0.115	0.157	0.205	0.259	0.320	0.387	0.461	0.541	0.627	0.720	0.819	0.925	1.037			1.644				
2 1/2 x 3/16	6.28	U	3947	2526	1754	1289	987	780	632	522	439	374	322	281	247	219	195	For serrated surface, increase depth by one size.		2.029				
		D	0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.518	0.608	0.706	0.81	0.922	1.04	1.166			2.029				
		C	3947	3158	2632	2256	1974	1754	1579	1435	1316	1215	1128	1053	987	929	877			2.029				
		D	0.046	0.072	0.104	0.141	0.184	0.233	0.288	0.348	0.415	0.487	0.564	0.648	0.737	0.832	0.933			2.029				

I-BAR WEIGHTS (IMPERIAL)

BEARING BAR SIZE (inches)	WEIGHTS (lbs./ft ²)				
	TYPE 11-4	TYPE 15-4	TYPE 19-4	TYPE 30-4	TYPE 38-4
1 x 1/4	n/a	2.35	1.85	1.22	1.02
1 1/4 x 1/4	n/a	2.86	2.29	1.51	1.26
1 1/2 x 1/4	n/a	3.30	2.63	1.76	1.47
1 3/4 x 1/4	n/a	3.73	2.97	2.02	1.75
2 x 1/4	n/a	4.15	3.30	2.24	1.88
2 1/4 x 1/4	n/a	4.67	3.89	2.61	2.18
2 1/2 x 1/4	n/a	4.77	3.99	2.67	2.23

Fisholow grating meets N.A.A.M.M. standards.