



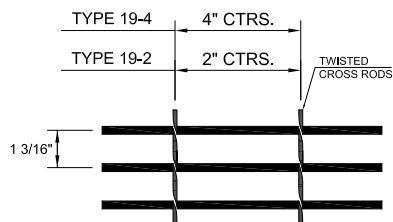
STANDARD MESH BAR GRATING

STANDARD TRU-WELD – TYPE 19

Bearing Bars: 1 3/16" centers

Stock panels: 3' nominal width x 24' long

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 18,000 P.S.I.

BEARING BAR SIZE (inches)	APPROX. WEIGHT (lbs./ft. ²)		LOAD/DEFLECTION	SPAN IN FEET AND INCHES																SECTION MODULUS PER FOOT OF WIDTH									
	TYPE 19-4	TYPE 19-2		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"											
3/4 x 3/16	5.58		U	533	341	237	174	133	105	Spans and loads in the green 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.										0.183									
			D	0.099	0.155	0.223	0.304	0.397	0.503																				
			C	533	426	355	305	266	237																				
			D	0.079	0.124	0.179	0.243	0.318	0.402																				
1 x 1/8	5.03		U	632	404	281	206	158	125	101	84	70	For serrated surface, increase depth by one size.										0.216						
			D	0.074	0.116	0.168	0.228	0.298	0.370	0.466	0.563	0.670																	
			C	632	505	421	361	316	281	253	230	211																	
			D	0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536																	
1 x 3/16	7.23	7.87	U	947	606	421	309	237	187	152	125	105	For serrated surface, increase depth by one size.										0.325						
			D	0.074	0.116	0.168	0.228	0.298	0.377	0.466	0.563	0.670																	
			C	947	758	632	541	474	421	379	344	316																	
			D	0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536																	
1 1/4 x 1/8	6.12	6.76	U	987	632	439	322	247	195	158	130	110	93	81	For serrated surface, increase depth by one size.										0.339				
			D	0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536	0.629	0.730															
			C	987	789	658	564	493	439	395	359	329	304	282															
			D	0.048	0.074	0.107	0.146	0.191	0.241	0.298	0.360	0.429	0.504	0.584															
1 1/4 x 3/16	8.87	9.51	U	1480	947	658	483	370	292	237	196	164	140	121	For serrated surface, increase depth by one size.										0.507				
			D	0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536	0.629	0.730															
			C	1480	1184	987	846	740	658	592	538	493	455	423															
			D	0.048	0.074	0.107	0.146	0.191	0.241	0.298	0.360	0.429	0.504	0.584															
1 1/2 x 1/8	7.23	7.87	U	1421	909	632	464	355	281	227	188	158	135	116	101	89	79	70	For serrated surface, increase depth by one size.										0.488
			D	0.050	0.078	0.112	0.152	0.199	0.251	0.310	0.376	0.447	0.524	0.608	0.698	0.794	0.897	1.006											
			C	1421	1137	947	812	711	632	568	517	474	437	406	379	355	334	316											
			D	0.040	0.062	0.089	0.122	0.159	0.201	0.248	0.300	0.358	0.420	0.487	0.559	0.636	0.718	0.804											
1 1/2 x 3/16	10.51	11.15	U	2132	1364	947	696	533	421	341	282	237	202	174	152	133	118	105	For serrated surface, increase depth by one size.										0.730
			D	0.050	0.078	0.112	0.152	0.199	0.251	0.310	0.376	0.447	0.524	0.608	0.698	0.794	0.897	1.006											
			C	2132	1705	1421	1218	1066	947	853	775	711	656	609	568	533	502	474											
			D	.0040	0.062	0.089	0.122	0.159	0.201	0.248	0.300	0.358	0.420	0.487	0.559	0.636	0.718	0.804											
1 3/4 x 3/16	12.17	12.81	U	2901	1857	1289	947	725	573	464	384	322	275	237	206	181	161	143	For serrated surface, increase depth by one size.										0.994
			D	0.043	0.067	0.096	0.130	0.170	0.215	0.266	0.322	0.383	0.450	0.521	0.599	0.681	0.769	0.862											
			C	2901	2321	1934	1658	1451	12859	1161	1055	967	893	829	774	725	683	645											
			D	0.034	0.053	0.077	0.104	0.136	0.172	0.215	0.266	0.322	0.383	0.450	0.521	0.599	0.681	0.769											
2 x 3/16	13.81	14.45	U	3789	2425	1684	1237	947	749	606	501	421	359	309	269	237	210	187	For serrated surface, increase depth by one size.										1.299
			D	0.037	0.058	0.084	0.114	0.149	0.189	0.233	0.282	0.335	0.393	0.456	0.524	0.596	0.673	0.754											
			C	3789	3032	2326	2165	1895	1684	1516	1378	1263	1166	1083	1011	947	892	842											
			D	0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268	0.315	0.365	0.419	0.477	0.538	0.603											
2 1/4 x 3/16	15.45	16.09	U	4796	3069	2132	1566	1199	947	767	634	533	454	392	341	300	266	237	For serrated surface, increase depth by one size.										1.644
			D	0.033	0.052	0.074	0.101	0.132	0.168	0.207	0.250	0.298	0.350	0.406	0.466	0.530	0.598	0.670											
			C	4796	3837	3197	2741	2398	2132	1918	1744	1599	1476	1370	1279	1199	1128	1066											
			D	0.026	0.041	0.060	0.081	0.106	0.134	0.166	0.200	0.238	0.280	0.324	0.372	0.424	0.478	0.536											
2 1/2 x 3/16	17.11	17.75	U	5921	3789	2632	1933	1480	1170	947	783	658	561	483	421	370	328	292	For serrated surface, increase depth by one size.										2.029
			D	0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268	0.315	0.365	0.419	0.477	0.538	0.603											
			C	5921	4737	3947	3383	2961	2632	2386	2153	1974	1822	1692	1579	1480	1393	1316											
			D	0.024	0.037	0.054	0.073	0.095	0.121	0.149	0.180	0.215	0.252	0.292	0.335	0.381	0.431	0.483											

Tru-Weld grating meets N.A.A.M.M. standards.

*All weights will increase by 5% when galvanized.

Standard Mesh
BAR GRATING