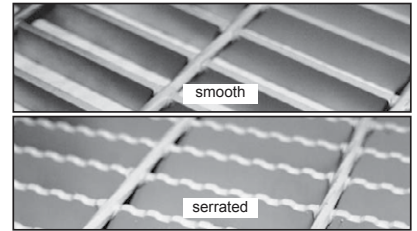


# WELDED STEEL BAR GRATING

Welded steel bar grating is manufactured by a resistance-weld process. Cross-bars are fused to bearing bars to form a permanent joint. Economical, yet durable for most applications. Available in standard panel widths of 2' or 3' and lengths of 20' or 24'. Material types include A569-carbon steel as well as stainless steel. Finishes include mill, H. D. galvanized, painted black. Custom colors upon request. Surfaces include, smooth, serrated or SlipNOT® anti-slip coating.



## LIGHT DUTY LOAD TABLE

SIZE (Symbol)	Load & Deflections	Span (Length of Bearing Bar)											
		2' - 0"	2' - 6"	3' - 0"	3' - 6"	4' - 0"	4' - 6"	5' - 0"	5' - 6"	6' - 0"	6' - 6"	7' - 0"	8' - 0"
3/4 x 3/16 (19-4-2)	U	578	370	258	188	144	115						
	D	0.095	0.151	0.215	0.295	0.374	0.486						
	C	578	462	386	331	289	257						
	D	0.076	0.119	0.173	0.234	0.308	0.389						
1 x 1/8 (19-4-3)	U	686	439	304	224	171	135	109	91	76			
	D	0.072	0.111	0.159	0.219	0.288	0.366	0.451	0.547	0.673			
	C	686	549	457	392	343	305	275	250	228			
	D	0.057	0.09	0.129	0.176	0.231	0.293	0.36	0.434	0.518			
1x 3/16 (19-4-4)	U	1029	659	459	338	257	203	164	135	114			
	D	0.072	0.111	0.159	0.219	0.288	0.366	0.451	0.547	0.673			
	C	1029	824	686	587	514	458	412	375	343			
	D	0.057	0.09	0.129	0.176	0.231	0.293	0.36	0.434	0.518			
1 1/4 x 1/8 (19-4-5)	U	1027	686	476	350	268	212	172	142	119	101	87	
	D	0.057	0.09	0.129	0.176	0.231	0.291	0.358	0.433	0.52	0.608	0.704	
	C	1027	858	716	613	536	477	430	390	358	330	306	
	D	0.046	0.072	0.104	0.141	0.183	0.233	0.288	0.349	0.416	0.487	0.565	
1 1/4 x 3/16 (19-4-6)	U	1608	1028	716	526	403	318	258	213	179	152	131	
	D	0.057	0.09	0.129	0.176	0.231	0.291	0.358	0.433	0.52	0.608	0.704	
	C	1608	1285	1073	918	803	716	644	585	536	495	459	
	D	0.046	0.072	0.104	0.141	0.183	0.233	0.288	0.349	0.416	0.487	0.565	
1 1/2 x 1/8 (19-4-7)	U	1544	987	686	505	387	306	248	205	172	149	128	96
	D	0.047	0.075	0.106	0.147	0.192	0.243	0.3	0.365	0.433	0.506	0.587	0.774
	C	1544	1235	1029	883	772	687	619	563	515	475	441	386
	D	0.038	0.059	0.087	0.117	0.154	0.195	0.241	0.289	0.347	0.406	0.47	0.614
1 1/2 x 3/16 (19-4-8)	U	2321	1485	1031	758	581	458	371	307	260	222	191	145
	D	0.047	0.072	0.106	0.147	0.192	0.243	0.3	0.365	0.433	0.506	0.587	0.774
	C	2321	1856	1547	1325	1159	1031	928	844	773	714	663	581
	D	0.038	0.059	0.087	0.117	0.154	0.195	0.241	0.289	0.347	0.406	0.47	0.614
1 3/4 x 3/16 (19-4-9)	U	3151	2016	1401	1029	788	622	505	416	351	299	259	197
	D	0.042	0.064	0.092	0.126	0.165	0.208	0.258	0.31	0.371	0.435	0.506	0.664
	C	3151	2521	2100	1800	1575	1400	1260	1145	1049	969	899	786
	D	0.033	0.052	0.074	0.101	0.132	0.167	0.206	0.249	0.297	0.347	0.403	0.527
2 x 3/16 (19-4-10)	U	4116	2633	1829	1344	1029	813	659	546	460	393	339	258
	D	0.036	0.056	0.081	0.111	0.144	0.183	0.226	0.273	0.325	0.384	0.447	0.58
	C	4116	3292	2745	2351	2058	1828	1646	1496	1370	1266	1175	1027
	D	0.029	0.045	0.064	0.088	0.115	0.145	0.18	0.217	0.259	0.303	0.353	0.46
2 1/4x 3/16 (19-4-11)	U	5209	3332	2314	1670	1302	1028	835	689	583	496	428	327
	D	0.032	0.05	0.072	0.098	0.127	0.162	0.199	0.241	0.287	0.338	0.393	0.512
	C	5209	4167	3472	2916	2604	2314	2082	1892	1733	1601	1487	1301
	D	0.026	0.039	0.057	0.079	0.102	0.129	0.16	0.194	0.23	0.27	0.314	0.41
2 1/2x 3/16 (19-4-12)	U	6432	4115	2858	2099	1609	1271	1029	850	720	613	529	405
	D	0.028	0.044	0.064	0.088	0.116	0.145	0.18	0.217	0.26	0.305	0.354	0.465
	C	6432	5147	4286	3673	3214	2858	2571	2338	2141	1977	1836	1607
	D	0.023	0.036	0.051	0.071	0.092	0.116	0.144	0.173	0.207	0.242	0.282	0.369

**Code:**  
 U = safe uniform load, lb/sq. ft.  
 D = deflection in inches  
 C = safe concentrated load, lb/ft.  
 of grating width, at mid-span

**Note (ALL LOAD TABLES):**  
 1/4" is recommended as the maximum deflection consistent with pedestrian comfort but can be exceeded for other loading conditions at the discretion of the engineer.

Based on 11 bearing bars per foot of width  
 Maximum allowable stress 18,000 psi

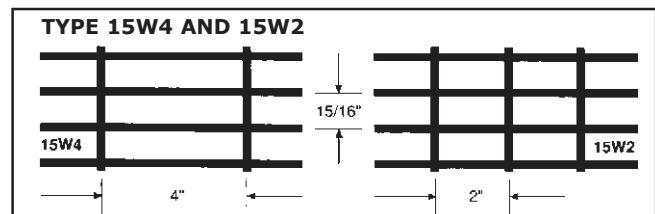
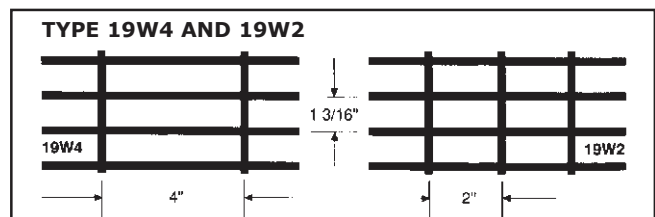
**Conversion Table**

Type	Multiplier
9W4	2.00
11W4	1.64
15W4	1.18

**WEIGHT IN POUNDS PER SQUARE FOOT**

Bearing Bars	Cross Bars	Type 19W4	Type 19W2	Type 15W4	Type 15W2
3/4 x 1/8	1/4	3.99	4.63	4.95	5.59
3/4 x 3/16	1/4	5.67	6.31	7.11	7.75
1 x 1/8	1/4	5.15	5.79	6.44	7.08
1 x 3/16	1/4	7.35	7.99	9.27	9.91
1 1/4 x 1/8	1/4	6.2	6.84	7.79	8.43
1 1/4 x 3/16	1/4	9.03	9.67	11.43	12.07
1 1/2 x 1/8	1/4	7.35	7.99	9.27	9.91
1 1/2 x 3/16	5/16	10.94	11.8	13.82	14.68
1 3/4 x 3/16	5/16	12.62	13.48	15.98	16.84
2 x 3/16	5/16	14.3	15.16	18.14	19.00
2 1/4 x 3/16	5/16	15.87	16.74	20.16	21.03
2 1/2 x 3/16	5/16	17.55	18.42	22.32	23.19

**Note:** 9W & 11W grating use 5/16 cross rods. Consult salesperson for 9W grating specifications & availability.



# WELDED STEEL BAR GRATING

## PANEL WIDTHS

<b>19W4</b>	# of bars	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16					
	1/8" bar	1-5/16	2-1/2	3-11/16	4-7/8	6-1/16	7-1/4	8-7/16	9-5/8	10-13/16	12	13-3/16	14-3/8	15-9/16	16-3/4	17-15/16					
	3/16" bar	1-3/8	2-9/16	3-3/4	4-15/16	6-1/8	7-5/16	8-1/2	9-11/16	10-7/8	12-1/16	13-1/4	14-7/16	15-5/8	16-13/16	18					
	# of bars	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31					
<b>15W4</b>	1/8" bar	19-1/8	20-5/16	21-1/2	22-11/16	23-7/8	25-1/16	26-1/4	27-7/16	28-5/8	29-13/16	31	32-3/16	33-3/8	34-9/16	35-3/4					
	3/16" bar	19-3/16	20-3/8	21-9/16	22-3/4	23-15/16	25-1/8	26-5/16	27-1/2	28-11/16	29-7/8	31-1/16	32-1/4	33-7/16	34-5/8	35-13/16					
	# of bars	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16					
	1/8" bar	1-1/16	2	2-15/16	3-7/8	4-13/16	5-3/4	6-11/16	7-5/8	8-9/16	9-1/2	10-7/16	11-3/8	12-5/16	13-1/4	14-3/16		15-1/8	16-1/16	17	17-15/16
<b>11W4</b>	3/16" bar	1-1/8	2-1/16	3	3-15/16	4-7/8	5-13/16	6-3/4	7-11/16	8-5/8	9-9/16	10-1/2	11-7/16	12-3/8	13-5/16	14-1/4	15-3/16	16-1/8	17-1/16	18	
	# of bars	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	
	1/8" bar	18-7/8	19-13/16	20-3/4	21-11/16	22-5/8	23-9/16	24-1/2	25-7/16	26-3/8	27-5/16	28-1/4	29-3/16	30-1/8	31-1/16	32	32-15/16	33-7/8	34-13/16	35-3/4	
	3/16" bar	18-15/16	19-7/8	20-13/16	21-3/4	22-11/16	23-5/8	24-9/16	25-1/2	26-7/16	27-3/8	28-5/16	29-1/4	30-3/16	31-1/8	32-1/16	33	33-15/16	34-7/8	35-13/16	
<b>11W4</b>	# of bars	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		
	3/16" bar	7/8	1-9/16	2-1/4	2-15/16	3-5/8	4-5/16	5	5-11/16	6-3/8	7-1/16	7-3/4	8-7/16	9-1/8	9-13/16	10-1/2	11-3/16	11-7/8	12-9/16		
	# of bars	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36			
<b>11W4</b>	3/16" bar	13-1/4	13-15/16	14-5/8	15-5/16	16	16-11/16	17-3/8	18-1/16	18-3/4	19-7/16	20-1/8	20-13/16	21-1/2	22-3/16	22-7/8	23-9/16	24-1/4			

### PERCENTAGE OF FREE AREA

### ORDERING INFORMATION

Bar Hgt.	x-Rod Space	15W					19W				
		1/8	3/16	1/4	5/16	3/8	1/8	3/16	1/4	5/16	3/8
3/4	W4	80.4	74.1				83.0	78.0			
3/4	W2	74.5	68.6				76.9	72.3			
1	W4	80.4	74.1	67.3	60.2		83.0	78.0	72.4	66.5	61.7
1	W2	74.5	68.6	61.7	54.3		76.9	72.3	66.4	60.6	55.7
1 1/4	W4	80.4	74.1	67.3	60.2		83.0	78.0	72.4	66.5	61.7
1 1/4	W2	74.5	68.6	61.7	54.3		76.9	72.3	66.4	60.6	55.7
1 1/2	W4	80.4	73.5	67.3	60.2		83.0	77.4	72.4	66.5	61.7
1 1/2	W2	74.5	67.4	61.7	54.3		76.9	71.0	66.4	60.6	55.7
1 3/4	W4		72.5	66.3	60.2		76.3	71.4	66.5	61.7	
1 3/4	W2		65.4	59.9	54.3		68.9	64.4	60.6	55.7	
2	W4		72.5	66.3	60.2		76.3	71.4	66.5	60.5	
2	W2		65.4	59.9	54.3		68.9	64.4	60.6	53.3	
2 1/4	W4		72.5	66.3	60.2		76.3	71.4	66.5	60.5	
2 1/4	W2		65.4	59.9	54.3		68.9	64.4	60.6	58.3	
2 1/2	W4		72.5	66.3	60.2		76.3	71.4	66.5	60.5	
2 1/2	W2		65.4	59.9	54.3		68.9	64.4	60.6	53.3	
2 3/4	W4		72.5	66.3	60.2		76.3	71.4	66.5	60.5	
2 3/4	W2		65.4	59.9	54.3		68.9	64.4	60.6	53.3	
3	W4			65	59			70	65.2	60.5	
3	W2			57.3	52			61.6	57.4	53.3	
3 1/4	W4			65	59			70	65.2	60.5	
3 1/4	W2			57.3	52			61.6	57.4	53.3	
3 1/2	W4			65	59			70	65.2	60.5	
3 1/2	W2			57.3	52			61.6	57.4	53.3	
3 3/4	W4							70	65.2	60.5	
3 3/4	W2							61.6	57.4	53.3	
4	W4			7				70.0	65.2	60.5	
4	W2							61.6	57.4	53.3	

### GRATING

1. Specify type of grating (steel, aluminum, stainless steel)
2. Bearing bar size and center to center of spacing.
3. Span (Bearing Bar Direction)
4. Drawing: Area to be covered, including all cutouts and critical dimensions.
5. Type of anchorage (welded, saddle clip, friction clip, others).
6. Finish: Galvanized or black paint
7. Surfaces: Smooth, serrated or Slip-Not® anti-slip coating.

### STAIR TREADS

1. Type of grating and bearing bar size
2. Nosing: Checker-plate or abrasive
3. Finish: Mill, galvanized, or black paint
4. Surface: Smooth, serrated, or Slip-Not® anti-slip coating.

If you have any further questions, please let us know and we will be happy to help you!

**BANDING BAR** — A flat bar welded to the end of a panel of grating. The bar is mostly the same thickness and depth as the bearing bar.

**BEARING BAR** — The main load carrying bar which runs the same direction as the span.

**CIRCULAR CUT-BAND** — The circular cutting and banding of a panel to conform to a specific layout. Example: grating going around a tank or pipe.

**CROSS BARS** — The connecting bars made from steel strip or rolled bars which extend across the bearing bars, usually perpendicular to them. They are welded, forged or mechanically locked.

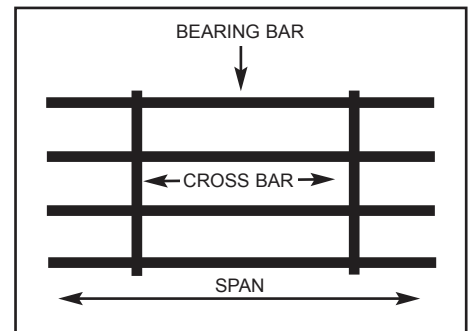
**NOSING** — An L-shaped section, usually made of checker plate or cast iron and cast aluminum abrasive material.

**SERRATED GRATING** — Grating which has that top surfaces of the bearing bar notched, which provides non-skid footing.

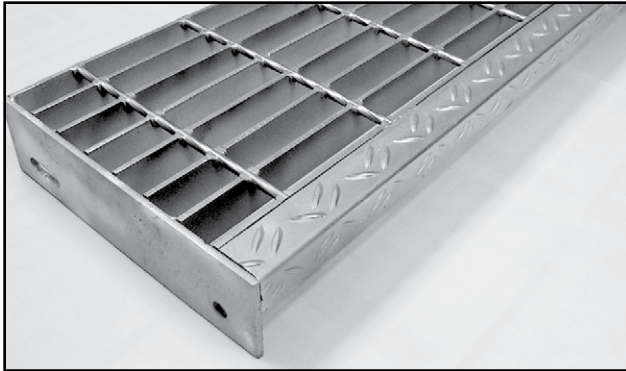
**SPAN** — The distance between points of grating support. Mostly direction of bearing bar.

**STRAIGHT CUT** — The cutting of grating along a straight edge. Mostly figured when cutting around columns or posts.

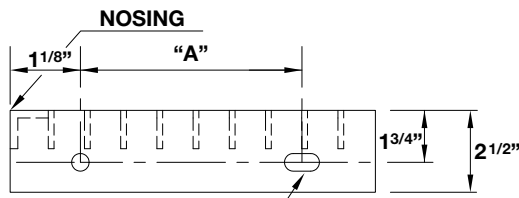
**TOE PLATE** — A flat bar attached flat against the outer edge of grating and projecting above the top surface of grating to form lip or curve.



# STAIR TREADS

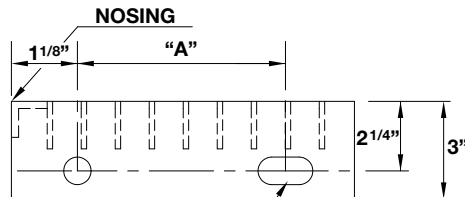


**CROSS SECTION:  
GRATING DEPTH UP TO 1-1/4"**



7/16" DIAMETER  
HOLE & SLOT

**CROSS SECTION:  
GRATING DEPTH FROM 1-1/2" TO 1-3/4"  
AND ALL ALUMINUM TREADS**



7/16" DIAMETER  
HOLE & SLOT

Steel Treads Bearing Bar Size In Inches	Maximum Tread Length*			
	19-4 (1-3/16") On-Center		15-4 (15/16") On-Center	
	Plain	Serrated	Plain	Serrated
1" x 1/8"	2' 7"	2' 3"	3' 0"	2' 6"
1" x 3/16"	3' 5"	2' 10"	4' 0"	3' 4"
1-1/4" x 3/16"	4' 8"	4' 2"	5' 1"	4' 6"
1-1/2" x 3/16"	5' 6"	5' 3"	5' 6"	5' 6"

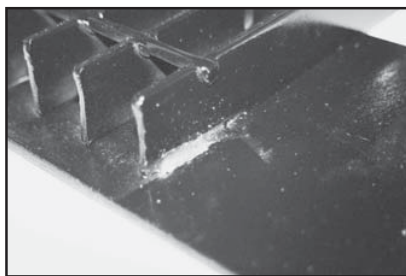
Aluminum Treads Bearing Bar Size In Inches	Maximum Tread Length*			
	19-4 (1-3/16") On-Center		15-4 (15/16") On-Center	
	Plain	Serrated	Plain	Serrated
1" x 3/16"	2' 4"	N.R.	2' 6"	N.R.
1-1/4" x 3/16"	2' 10"	2' 7"	3' 1"	2' 9"
1-1/2" x 3/16"	3' 6"	3' 2"	3' 10"	3' 6"
1-3/4" x 3/16"	4' 3"	3' 10"	4' 8"	4' 3"

Aluminum I-Bars Bearing Bar Size In Inches	Maximum Tread Length*	
	19-4 (1-3/16") On-Center	15-4 (15/16") On-Center
	1" I-Bar	2' 4"
1-1/4" I-Bar	2' 10"	3' 1"
1-1/2" I-Bar	3' 6"	3' 10"
1-3/4" I-Bar	4' 3"	4' 8"

\*Maximum tread length based on 300lb. Concentrated load on front 5" of tread at center of tread length and deflection limitation of 1/240 of length.

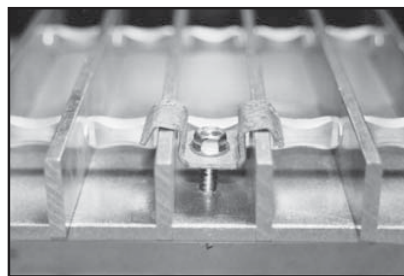
Standard Tread Widths		Dimension
Bearing Bar Centers		A
19-4(1-3/16")	15-4(15/16")	
6-3/16"	6-1/8"	2-1/2"
7-3/8"	7-1/16"	4-1/2"
8-9/16"	8"	4-1/2"
9-3/4"	8-15/16"	7"
10-15/16"	9-7/8"	7"
12-1/8"	10-13/16"	7"

## GRATING ATTACHMENT METHODS



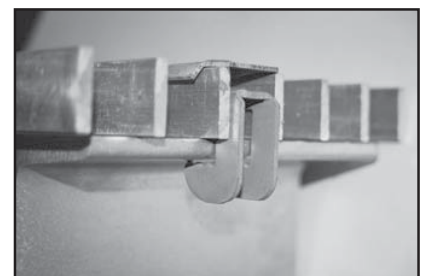
**Welded**

Recommended for permanent installation.



**Saddle Clip**

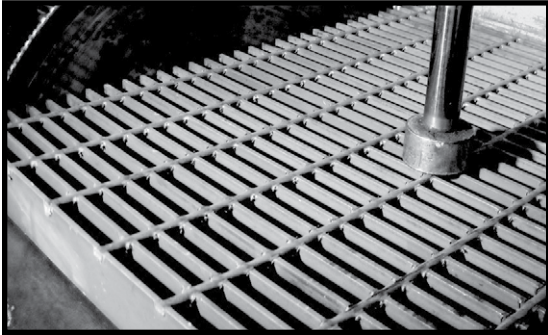
May be attached with self drilling TEK® screws or bolt and nut. Available galvanized steel, stainless steel or aluminum.



**G-Clip®**

Friction Fastener that enables no welding or drilling into support steel. Available galvanized or stainless steel.

# HEAVY-DUTY WELDED STEEL GRATING



Heavy-duty welded grating is strong enough for extreme load areas, such as parking lots, highways, terminals, airports and heavy-duty industrial zones.

**Panel Widths:**

Standard panel widths are 24" (36" available on certain sizes). Lengths up to 20' & 24' certain size. Call for availability.

**Material types:**

Carbon Steel & Stainless Steel

**Finishes**

*Carbon Steel:* Mill, Primed Black Paint & Galvanized

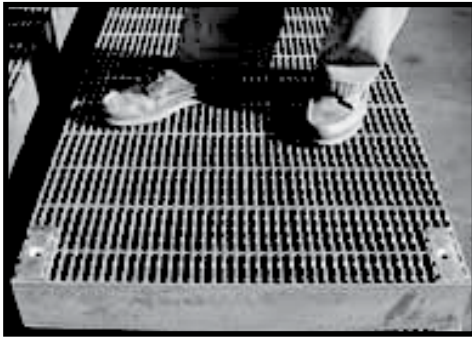
*Stainless Steel:* Mill finish as fabricated; Sandblasted upon request

**Surface Options:**

Smooth or Serrated

**We Also Offer:**

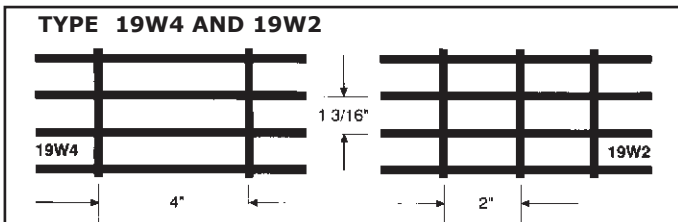
**Non-standard depths above 4"; ADA-approved heavy-duty grating for wheelchairs (& heels); Riveted grates; Grizzly grates**



## LOAD TABLE

### TYPE 19W4 - BEARING BARS 1 3/16" CENTER TO CENTER

Bar Sizes	Weight		Sec Mod	Load	SPAN																
	Lbs. Per 19W4	Sq. Ft 19W2			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"	9'-6"	10'-0"
1 1/2 X 1/4	14.3	15.5	0.984	U	3282	2101	1459	1072	820	648	526	434	364	311	268	233					
				C	3282	2625	2188	1875	1641	1459	1313	1193	1094	1010	938	875					
1 1/2 X 3/8	21.7	23.7	1.477	U	4922	3150	2188	1607	1230	972	788	651	547	402		308					
				C	4922	3938	3281	2813	2461	2188	1969	1790	1641		1406		1230				
2 X 1/4	18.7	19.8	1.750	U	5834	3734	2593	1905	1459	1152	933	771	648	552	477	414	364	323			
				C	5834	4667	3890	3334	2917	2593	2334	2122	1944	1795	1667	1555	1459	1373			
2 X 3/8	28.3	30.3	2.625	U	8750	5600	3889	2857	2188	1726	1400	1157	972		714	547					
				C	8750	7000	5833	5000	4357	3889	3500	3182	2917		2500		2188				
2 1/2 X 1/4	23.1	24.3	2.734	U	9116	5834	4052	2976	2279	1801	1459	1205	1013	863	744	648	570	504	450	404	
				C	9116	7293	6077	5209	4668	4052	3646	3315	3039	2805	2604	2431	2279	2145	2025	1919	
2 1/2 X 3/8	35.0	37.0	4.102	U	13672	8750	6076	4464	3418	2701	2188	1808	1519		1116	854					
				C	13672	10938	9115	7813	6836	6076	5469	4972	4557		3906		3418				
3 X 1/4	27.5	28.6	3.937	U	13128	8401	5834	4286	3282	2593	2101	1735	1459	1243	1072	933	820	727	648	582	526
				C	13128	10502	8751	7501	6564	5834	5251	4774	4376	4040	3751	3501	3282	3089	2917	2764	2625
3 X 3/8	42.1	44.1	5.906	U	19688	12600	8750	6429	4922	3889	3150	2603	2188		1607	1230					
				C	19688	15750	13125	11250	9844	8750	7875	7159	6563		5625		4922				
3 1/2 x 1/4	31.9	33	5.359	U	17865	11433	7940	5833	4466	3528	2858	2362	1985	1691	1458	1270	1116	989	882	792	715
				C	17865	14292	11910	10208	8932	7940	7146	6496	5955	5497	5105	4765	4467	4203	3970	3762	3573
3 1/2 X 3/8	48.1	50.1	8.04	U	26797	17150	11910	8750	6699	5293	4288	3543	2977		2188	1675					
				C	26797	21438	17865	15313	13398	11910	10719	9744	8932		7656		6699				
4 x 1/4	36.3	37.4	7.000	U	23338	14936	10372	7620	5834	4610	3734	3086	2593	2210	1905	1660	1459	1292	1152	1034	933
				C	23338	18670	16558	13335	11669	10372	9335	8486	7779	7180	6668	6223	5834	5491	5186	4913	4667
4 X 3/8	54.7	56.7	10.500	U	35000	22400	15556	11429	8750	6914	5600	4628	3889		2857	2188					
				C	35000	28000	23333	20000	17500	15556	14000	12727	11667		10000		8750				



**Additional Engineering Data & Information Available Upon Request.**

# HEAVY-DUTY WELDED STEEL GRATING

## LOAD TABLES

### TYPE 22W4- BEARING BARS 1 3/8" CENTER TO CENTER

Bar Sizes	Weight		Sec Mod	Load	SPAN																
	Lbs. Per 22W4	Sq. Ft 22W2			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"	9'-6"	10'-0"
1 1/2 x 1/4	12.6	13.7	0.843	U	2813	1800	1250	918	703	556	450	372	313	266	230	200					
				C	2813	2250	1875	1607	1406	1250	1125	1023	938	865	804	750					
1 1/2 X 3/8	19.2	21.2	1.266	U	4219	2700	1875	1378	1055	833	675	558	469		344		264				
				C	4219	3375	2813	2411	2109	1875	1688	1534	1406		1205		1055				
2 x 1/4	16.4	17.5	1.500	U	5000	3200	2222	1632	1250	988	800	661	556	473	408	356	313	277			
				C	5000	4000	3333	2857	2500	2222	2000	1818	1667	1583	1429	1333	1250	1176			
2 X 3/8	24.9	26.9	2.250	U	7500	4800	3333	2449	1875	1481	1200	992	833		612		469				
				C	7500	6000	5000	4286	3750	3333	3000	2727	2500		2143		1875				
2 1/2 X 1/4	20.3	21.4	2.344	U	7813	5000	3472	2551	1953	1543	1250	1033	868	740	638	556	488	433	385	346	
				C	7813	6250	5208	4464	3906	3472	3125	2841	2604	2404	2232	2083	1953	1838	1736	1645	
2 1/2 X 3/8	30.7	32.7	3.516	U	11719	7500	5208	3827	2930	2315	1875	1550	1302		957		732				
				C	11719	9375	7813	6696	5859	5208	4688	4261	3906		3348		2930				
3 X 1/4	24.1	25.2	3.375	U	11250	7200	5000	3673	2813	2222	1800	1487	1250	1065	918	800	703	623	556	499	450
				C	11250	9000	7500	6429	5625	5000	4500	4091	3750	3462	3214	3000	2813	2647	2500	2368	2250
3 X 3/8	36.9	38.9	5.063	U	16875	10800	7500	5510	4219	3333	2700	2231	1875		1378		1055				
				C	16875	13500	11250	9643	8438	7500	6750	6136	5625		4821		4219				
3 1/2 X 1/4	27.9	29	4.594	U	15313	9800	6806	5000	3828	3025	2450	2025	1701	1450	1250	1089	957	848	756	679	613
				C	15313	12250	10208	8750	7656	6806	6125	5568	5104	4712	4375	4083	3828	3603	3403	3224	3063
3 1/2 X 3/8	42.1	44.1	6.891	U	22969	14700	10208	7500	5742	4537	3675	3037	2552		1875		1435				
				C	22969	18375	15313	13125	11484	10208	9188	8352	7656		6563		5742				
4 X 1/4	31.7	32.8	6.000	U	20000	12800	8888	6531	5000	3950	3200	2645	2222	1893	1633	1422	1250	1107	988	856	800
				C	20000	16000	13333	11429	10000	8889	8000	7273	6667	6154	5714	5333	5000	4706	4444	4211	4000
4 X 3/8	47.9	49.9	9.000	U	30000	19200	13333	9796	7500	5926	4800	3967	3333		2449		1875				
				C	30000	24000	20000	17143	15000	13333	12000	10909	10000		8571		7500				

### TYPE 38W4 - BEARING BARS 2 3/8" CENTER TO CENTER

Bar Sizes	Weight		Sec Mod	Load	SPAN																
	Lbs. Per 38W4	Sq. Ft 38W2			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"	9'-6"	10'-0"
1 1/2 X 1/4	8	9.1	0.516	U	1719	1100	764	561	430	340	275	227	191	163	140	122					
				C	1719	1375	1146	982	859	764	688	625	573	529	491	458					
1 1/2 x 3/8	12.2	14.2	0.773	U	2578	1650	1146	842	645	509	413	341	286		210		161				
				C	2578	2063	1719	1473	1289	1146	1031	938	859		737		645				
2 X 1/4	10.2	11.3	0.917	U	3056	1956	1358	998	764	604	489	404	340	289	249	217	191	169			
				C	3056	2444	2037	1746	1528	1358	1222	1111	1019	940	873	815	764	719			
2 x 3/8	15.6	17.6	1.375	U	4583	2933	2037	1497	1146	905	733	606	509		374		286				
				C	4583	3667	3056	2619	2292	2037	1833	1667	1528		1310		1146				
2 1/2 X 1/4	12.5	13.6	1.432	U	4774	3056	2122	1559	1194	943	764	631	530	452	390	340	298	264	236	212	
				C	4774	3819	3183	2728	2387	2122	1910	1736	1591	1469	1364	1273	1194	1123	1061	1005	
2 1/2 x 3/8	19.0	21.0	2.148	U	7161	4583	3183	2338	1790	1415	1146	947	796		585		448				
				C	7161	5729	4774	4092	3581	3183	2865	2604	2387		2046		1790				
3 X 1/4	14.7	15.8	2.063	U	6875	4400	3058	2245	1719	1358	1100	909	764	651	561	489	430	381	340	305	275
				C	6875	5500	4583	3929	3438	3056	2750	2500	2292	2115	1964	1833	1719	1618	1528	1447	1375
3 3/8	22.7	24.7	3.094	U	10313	6600	4583	3367	2578	2037	1650	1384	1146		842		645				
				C	10313	8250	6875	5893	5156	4583	4125	3750	3438		2946		2578				
3 1/2 X 1/4	17	18.1	2.807	U	9358	5989	4159	3056	2339	1848	1497	1237	1040	886	764	665	585	518	462	415	374
				C	9358	7486	6238	5347	4679	4159	3743	3403	3119	2879	2674	2495	2339	2202	2079	1970	1872
3 1/2 x 3/8	25.8	27.8	4.211	U	14036	8983	6238	4583	3509	2773	2246	1856	1560		1146		877				
				C	14036	11229	9358	8021	7018	6238	5615	5104	4679		4010		3509				
4 X 1/4	19.3	20.4	3.667	U	12222	7822	5432	3991	3056	2414	1956	1616	1358	1157	998	869	764	677	604	542	489
				C	12222	9778	8148	6984	6111	5432	4889	4444	4074	3761	3492	3259	3056	2876	2716	2573	2444
4 x 3/8	29.2	31.2	5.500	U	18333	11733	8148	5986	4583	3621	2993	2424	2037		1497		1146				
				C	18333	14667	12222	10476	9167	8148	7333	6667	6111		5238		4583				

