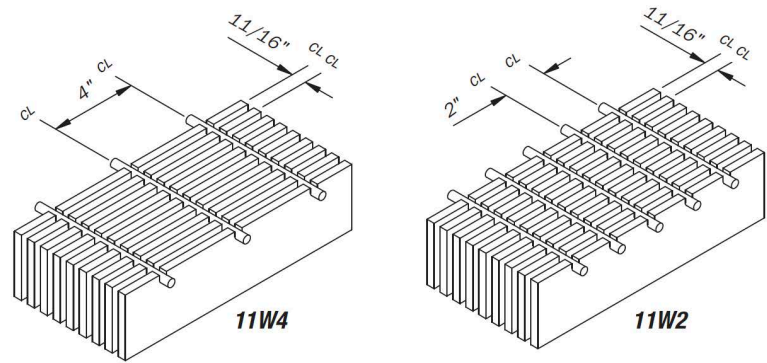




# LAUREL CUSTOM GRATING, LLC

AN **MLP** COMPANY

## Load Table for Heavy-Duty Bar Grating Type 11W4 – Simple Spans



NOTE: The design capacity of any product shown is the same regardless of cross bar spacing.

Bar Size	Weight #/SF	Section Modulus per foot width	Standard Cross Bar	Maximum Safe Clear Span					
				1 Ton	3 Ton	5 Ton	H-15	H-20	H-25
1 x 1/4"	16.0	0.727	3/8" dia	0'-9"	0'-8"	0'-9"	1'-0"	1'-2"	1'-2"
1 x 5/16"	19.7	0.909	3/8" dia	0'-11"	0'-9"	0'-11"	1'-1"	1'-3"	1'-4"
1 x 3/8"	23.4	1.091	3/8" dia	1'-1"	0'-10"	1'-0"	1'-3"	1'-5"	1'-6"*
1-1/4 x 1/4"	19.7	1.136	3/8" dia	1'-1"	0'-10"	1'-0"	1'-3"	1'-5"	1'-6"
1-1/4 x 5/16"	24.3	1.42	3/8" dia	1'-4"	1'-0"	1'-2"	1'-5"	1'-7"	1'-8"
1-1/4 x 3/8"	28.9	1.704	3/8" dia	1'-7"	1'-2"	1'-4"	1'-7"	1'-9"	1'-10"*
1-1/2 x 1/4"	23.4	1.636	3/8" dia	1'-7"	1'-2"	1'-3"	1'-7"	1'-9"	1'-10"
1-1/2 x 5/16"	28.9	2.045	3/8" dia	1'-11"	1'-4"	1'-6"	1'-9"	2'-0"	2'-0"
1-1/2 x 3/8"	34.5	2.454	3/8" dia	2'-3"	1'-7"	1'-8"	2'-0"	2'-2"*	2'-3"*
1-3/4 x 1/4"	27.1	2.227	3/8" dia	2'-1"	1'-5"	1'-7"	1'-11"	2'-1"	2'-2"
1-3/4 x 3/8"	40.1	3.340	3/8" dia	3'-0"*	2'-0"	2'-1"	2'-6"	2'-8"*	2'-8"*
2 x 1/4"	30.8	2.908	3/8" dia	2'-8"	1'-10"	1'-11"	2'-3"	2'-5"	2'-6"
2 x 5/16"	38.2	3.635	3/8" dia	3'-4"	2'-2"	2'-3"	2'-9"	2'-10"	2'-11"
2 x 3/8"	45.6	4.363	3/8" dia	3'-8"*	2'-7"	2'-8"	3'-1"*	3'-2"*	3'-2"*
2-1/4 x 1/4"	34.5	3.681	3/8" dia	3'-4"	2'-3"	2'-4"	2'-9"	2'-11"	3'-0"
2-1/4 x 3/8"	51.2	5.521	3/8" dia	4'-5"*	3'-2"	3'-3"	3'-8"*	3'-9"*	3'-9"*
2-1/2 x 1/4"	38.2	4.544	3/8" dia	4'-1"	2'-8"	2'-9"	3'-3"	3'-5"	3'-5"
2-1/2 x 5/16"	47.5	5.680	3/8" dia	4'-8"*	3'-3"	3'-4"	3'-11"	3'-11"*	4'-0"*
2-1/2 x 3/8"	56.7	6.816	3/8" dia	5'-2"*	3'-11"	3'-11"	4'-3"*	4'-4"	4'-4"*
3 x 1/4"	46.5	6.544	1/2" dia	5'-6"*	3'-9"	3'-9"	4'-5"	4'-6"	4'-7"
3 x 5/16"	57.6	8.180	1/2" dia	6'-2"*	4'-7"	4'-7"	5'-2"*	5'-1"*	5'-1"*
3 x 3/8"	67.9	9.816	1/2" dia	6'-9"*	5'-4"*	5'-3"*	5'-7"*	5'-7"*	5'-7"*
3-1/2 x 1/4"	53.9	8.907	1/2" dia	7'-0"*	5'-0"	5'-0"	5'-9"*	5'-9"*	5'-9"*
3-1/2 x 3/8"	79.9	13.360	1/2" dia	8'-4"*	6'-8"*	6'-7"*	7'-1"*	7'-0"*	7'-0"*
4 x 1/4"	61.3	11.633	1/2" dia	8'-4"*	6'-7"	6'-4"	7'-0"*	7'-0"*	7'-0"*
4 x 5/16"	75.3	14.542	1/2" dia	9'-2"*	7'-6"*	7'-4"*	7'-10"*	7'-10"*	7'-9"*
4 x 3/8"	91.0	17.450	1/2" dia	10'-2"*	8'-2"*	8'-0"*	8'-7"*	8'-6"*	9'-10"*

Weights are approximate, and can vary depending on panel width, type of cross bar, and mill and fabrication tolerances.

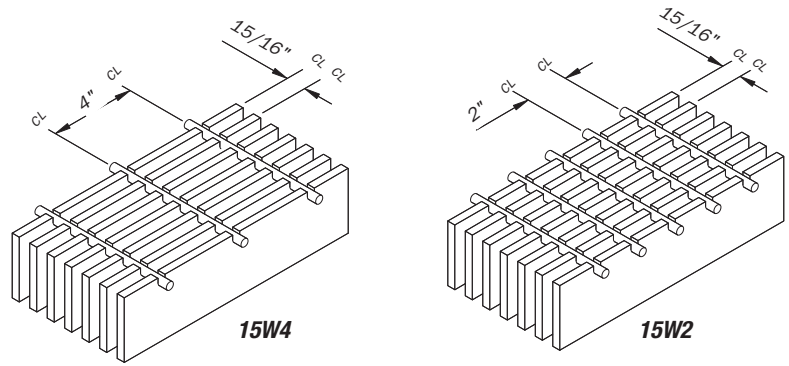
Weights shown are based on 4" cross bar centers.

Section Modulus based on 17.45 Bars/Foot Width.

\*Span limited by deflection (L/400 maximum).

For serrated grating design, increase bearing bar depth to next deeper size shown in chart.

# Load Table for Heavy-Duty Bar Grating Type 15W4 – Simple Spans



NOTE: The design capacity of any product shown is the same regardless of cross bar spacing.

Bar Size	Weight #/SF	Section Modulus per foot width	Standard Cross Bar	Maximum Safe Clear Span					
				1 Ton	3 Ton	5 Ton	H-15	H-20	H-25
1 x 1/4"	12.2	0.533	3/8" dia	0'-8"	0'-7"	0'-8"	0'-10"	1'-0"	1'-0"
1 x 5/16"	14.9	0.667	3/8" dia	0'-9"	0'-8"	0'-9"	1'-0"	1'-1"	1'-2"
1 x 3/8"	17.7	0.80	3/8" dia	0'-11"	0'-9"	0'-10"	1'-1"	1'-3"	1'-3"
1-1/4 x 1/4"	14.9	0.833	3/8" dia	0'-11"	0'-9"	0'-10"	1'-1"	1'-3"	1'-4"
1-1/4 x 5/16"	18.4	1.042	3/8" dia	1'-1"	0'-10"	1'-0"	1'-3"	1'-5"	1'-5"
1-1/4 x 3/8"	21.8	1.250	3/8" dia	1'-4"	1'-0"	1'-1"	1'-4"	1'-6"	1'-7"
1-1/2 x 1/4"	17.7	1.20	3/8" dia	1'-3"	0'-11"	1'-1"	1'-4"	1'-6"	1'-7"
1-1/2 x 5/16"	21.8	1.50	3/8" dia	1'-7"	1'-1"	1'-3"	1'-6"	1'-8"	1'-9"
1-1/2 x 3/8"	26	1.80	3/8" dia	1'-10"	1'-3"	1'-5"	1'-8"	1'-10"	1'-11"
1-1/2 x 1/2"	34.3	2.40	3/8" dia	2'-5"	1'-7"	1'-8"	2'-0"	2'-2"*	2'-3"*
1-3/4 x 1/4"	20.5	1.633	3/8" dia	1'-8"	1'-2"	1'-3"	1'-7"	1'-9"	1'-10"
1-3/4 x 3/8"	30.1	2.450	3/8" dia	2'-6"	1'-8"	1'-9"	2'-1"	2'-3"	2'-4"
2 x 1/4"	23.2	2.133	3/8" dia	2'-2"	1'-6"	1'-7"	1'-10"	2'-0"	2'-1"
2 x 5/16"	28.7	2.667	3/8" dia	2'-8"	1'-9"	1'-10"	2'-2"	2'-4"	2'-5"
2 x 3/8"	34.3	3.20	3/8" dia	3'-2"	2'-1"	2'-1"	2'-6"	2'-8"	2'-9"
2 x 1/2"	45.3	4.267	3/8" dia	3'-10"*	2'-8"	2'-8"	3'-1"*	3'-2"*	3'-2"*
2-1/4 x 1/4"	26.0	2.70	3/8" dia	2'-8"	1'-9"	1'-10"	2'-3"	2'-4"	2'-5"
2-1/4 x 3/8"	38.4	4.050	3/8" dia	3'-11"*	2'-7"	2'-7"	3'-0"	3'-2"	3'-3"
2-1/2 x 1/4"	28.7	3.333	3/8" dia	3'-4"	2'-2"	2'-2"	2'-7"	2'-9"	2'-10"
2-1/2 x 5/16"	35.6	4.167	3/8" dia	4'-1"	2'-7"	2'-10"	3'-1"	3'-3"	3'-3"
2-1/2 x 3/8"	42.6	5.00	3/8" dia	4'-7"*	3'-1"	3'-1"	3'-7"	3'-9"	3'-9"
2-1/2 x 1/2"	56.4	6.667	3/8" dia	5'-4"*	4'-0"	3'-11"	4'-4"*	4'-4"*	4'-4"*
3 x 1/4"	35.2	4.80	3/8" dia	4'-8"	3'-0"	3'-0"	3'-6"	3'-7"	3'-8"
3 x 5/16"	43.4	6.00	1/2" dia	5'-6"*	3'-8"	3'-7"	4'-2"	4'-4"	4'-4"
3 x 3/8"	51.7	7.20	1/2" dia	6'-1"*	4'-2"	4'-3"*	4'-11"*	4'-10"*	4'-10"*
3 x 1/2"	68.3	9.60	1/2" dia	7'-0"*	5'-5"*	5'-3"*	5'-7"*	5'-7"*	5'-7"*
3-1/2 x 1/4"	40.7	6.533	1/2" dia	6'-2"	3'-11"	3'-11"	4'-6"	4'-7"	4'-8"
3-1/2 x 3/8"	60	9.800	1/2" dia	7'-6"*	5'-9"	5'-7"	6'-1"	6'-1"*	6'-0"*
3-1/2 x 1/2"	79.4	13.067	1/2" dia	8'-7"*	6'-7"*	6'-7"*	7'-0"*	7'-0"*	6'-10"*
4 x 1/4"	46.2	8.533	1/2" dia	7'-6"*	5'-1"	4'-11"	5'-9"	5'-9"	5'-10"
4 x 5/16"	57.3	10.667	1/2" dia	8'-4"*	6'-3"	6'-1"	6'-9"*	6'-9"*	6'-8"
4 x 3/8"	68.3	12.80	1/2" dia	9'-0"*	7'-0"*	7'-0"*	7'-5"*	7'-4"*	7'-3"*
4 x 1/2"	90.4	17.07	1/2" dia	10'-4"*	8'-2"*	7'-11"*	8'-6"*	8'-4"*	8'-4"*
4-1/2 x 1/4"	51.7	10.80	1/2" dia	8'-10"*	6'-4"	6'-2"	7'-1"	7'-1"	7'-1"
4-1/2 x 3/8"	76.6	16.20	1/2" dia	10'-8"*	8'-4"*	8'-2"*	8'-9"*	8'-8"*	8'-7"*
4-1/2 x 1/2"	101.5	21.60	1/2" dia	12'-0"*	9'-2"*	9'-4"	10'-0"*	9'-0"*	9'-11"*
5 x 1/4"	57.3	13.333	1/2" dia	10'-4"*	7'-9"	7'-6"	8'-5"*	8'-5"*	8'-2"*
5 x 5/16"	71.1	16.667	1/2" dia	11'-4"*	8'-10"*	8'-9"*	9'-4"*	9'-3"	9'-2"*
5 x 3/8"	84.9	20.0	1/2" dia	12'-8"*	9'-10"*	9'-7"	10'-2"*	10'-1"*	10'-0"*
5 x 1/2"	112.5	26.667	1/2" dia	13'-10"*	10'-4"*	10'-10"*	11'-7"*	11'-6"*	11'-4"*
6 x 1/4"	68.3	19.20	1/2" dia	13'-4"*	10'-2"*	10'-2"*	11'-0"*	10'-10"	10'-8"
6 x 5/16"	84.9	24.0	1/2" dia	14'-6"*	11'-2"*	11'-4"*	12'-2"*	12'-0"	11'-11"
6 x 3/8"	101.4	28.80	1/2" dia	15'-10"*	12'-0"*	12'-4"	13'-2"*	13'-0"	12'-10"
6 x 1/2"	134.6	38.40	1/2" dia	16'-8"*	14'-4"	14'-0"	14'-10"	14'-6"	14'-6"

Weights are approximate, and can vary depending on panel width, type of cross bar, and mill and fabrication tolerances.

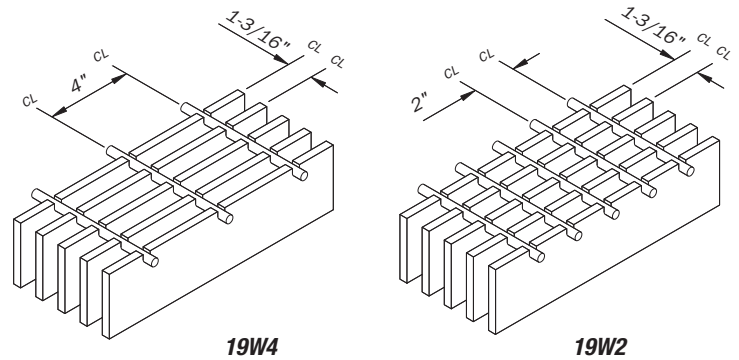
Weights shown are based on 4" cross bar centers.

Section Modulus based on 12.8 bars/foot.

\*Span limited by deflection (L/400 maximum).

For serrated grating design, increase bearing bar depth to next deeper size shown in chart.

# Load Table for Heavy-Duty Bar Grating Type 19W4 – Simple Spans



NOTE: The design capacity of any product shown is the same regardless of cross bar spacing.

Bar Size	Weight #/SF	Section Modulus per foot width	Standard Cross Bar	Maximum Safe Clear Span					
				1 Ton	3 Ton	5 Ton	H-15	H-20	H-25
1 x 1/4"	9.9	0.421	3/8" dia	0'-7"	0'-6"	0'-7"	0'-9"	0'-11"	0'-11"
1 x 5/16"	12.1	0.526	3/8" dia	0'-8"	0'-7"	0'-8"	0'-10"	1'-0"	1'-0"
1 x 3/8"	14.3	0.632	3/8" dia	0'-9"	0'-8"	0'-9"	0'-11"	1'-1"	1'-2"
1-1/4 x 1/4"	12.1	0.658	3/8" dia	0'-10"	0'-8"	0'-9"	1'-0"	1'-1"	1'-2"
1-1/4 x 5/16"	14.8	0.822	3/8" dia	1'-0"	0'-9"	0'-11"	1'-1"	1'-3"	1'-4"
1-1/4 x 3/8"	17.6	0.987	3/8" dia	1'-2"	0'-10"	1'-0"	1'-2"	1'-4"	1'-5"
1-1/2 x 1/4"	14.3	0.947	3/8" dia	1'-1"	0'-10"	0'-11"	1'-2"	1'-4"	1'-5"
1-1/2 x 5/16"	17.6	1.184	3/8" dia	1'-4"	1'-0"	1'-1"	1'-4"	1'-6"	1'-7"
1-1/2 x 3/8"	20.9	1.421	3/8" dia	1'-7"	1'-1"	1'-2"	1'-6"	1'-8"	1'-9"
1-1/2 x 1/2"	27.9	1.895	3/8" dia	2'-1"	1'-5"	1'-6"	1'-9"	1'-11"	2'-0"
1-3/4 x 1/4"	16.4	1.289	3/8" dia	1'-6"	1'-0"	1'-2"	1'-5"	1'-7"	1'-8"
1-3/4 x 3/8"	24.1	1.934	3/8" dia	2'-2"	1'-5"	1'-6"	1'-9"	2'-0"	2'-0"
2 x 1/4"	18.7	1.684	3/8" dia	1'-10"	1'-3"	1'-4"	1'-8"	1'-11"	1'-11"
2 x 5/16"	23	2.105	3/8" dia	2'-4"	1'-6"	1'-7"	1'-11"	2'-1"	2'-2"
2 x 3/8"	27.5	2.526	3/8" dia	2'-9"	1'-9"	1'-10"	2'-2"	2'-4"	2'-4"
2 x 1/2"	36.8	3.368	3/8" dia	3'-6"*	2'-3"	2'-3"	2'-8"	2'-10"	2'-10"
2-1/4 x 1/4"	20.9	2.132	3/8" dia	2'-4"	1'-6"	1'-7"	2'-3"	2'-1"	2'-2"
2-1/4 x 3/8"	30.7	3.197	3/8" dia	3'-5"	2'-2"	2'-2"	2'-7"	2'-9"	2'-9"
2-1/2 x 1/4"	23.1	2.632	3/8" dia	2'-10"	1'-10"	1'-7"	1'-11"	2'-4"	2'-5"
2-1/2 x 5/16"	28.6	3.289	3/8" dia	3'-6"	2'-3"	2'-3"	2'-7"	2'-9"	2'-10"
2-1/2 x 3/8"	34	3.947	3/8" dia	4'-3"	2'-7"	2'-7"	3'-0"	3'-2"	3'-2"
2-1/2 x 1/2"	45.7	5.263	3/8" dia	4'-11"*	3'-5"	3'-4"	3'-10"	3'-11"*	3'-11"*
3 x 1/4"	27.5	3.789	3/8" dia	4'-1"	2'-6"	2'-6"	2'-11"	3'-1"	3'-1"
3 x 5/16"	34	4.737	3/8" dia	5'-0"	3'-1"	3'-0"	3'-6"	3'-8"	3'-8"
3 x 3/8"	41.5	5.684	1/2" dia	5'-8"*	3'-8"	3'-7"	4'-1"	4'-2"	4'-3"
3 x 1/2"	54.7	7.579	1/2" dia	6'-6"*	4'-9"	4'-7"	5'-1"*	5'-1"*	5'-0"
3-1/2 x 1/4"	31.9	5.158	3/8" dia	5'-6"	3'-4"	3'-3"	3'-9"	3'-11"	3'-11"
3-1/2 x 3/8"	48.1	7.737	1/2" dia	7'-0"*	4'-10"	4'-8"	5'-4"	5'-5"	5'-5"
3-1/2 x 1/2"	63.5	10.316	1/2" dia	8'-0"*	6'-0"*	6'-0"*	6'-4"*	6'-3"*	6'-3"*
4 x 1/4"	36.2	6.737	3/8" dia	7'-0"*	4'-3"	4'-2"	4'-9"	4'-10"	4'-10"
4 x 5/16"	45.9	8.421	1/2" dia	7'-9"*	5'-3"	5'-1"	5'-10"	5'-10"	5'-10"
4 x 3/8"	54.7	10.105	1/2" dia	8'-6"*	6'-3"	6'-0"	6'-8"*	6'-7"*	6'-7"*
4 x 1/2"	72.2	13.473	1/2" dia	9'-8"*	7'-6"*	7'-4"*	7'-8"*	7'-7"*	7'-6"*
4-1/2 x 1/4"	41.5	8.526	1/2" dia	8'-4"*	5'-4"	5'-1"	5'-10"	5'-11"	5'-11"
4-1/2 x 3/8"	61.3	12.789	1/2" dia	10'-0"*	7'-8"*	7'-6"	7'-11"*	7'-10"*	7'-9"*
4-1/2 x 1/2"	81.0	17.052	1/2" dia	11'-4"*	8'-11"*	8'-7"*	9'-1"*	9'-0"*	9'-1"*
5 x 1/4"	45.9	10.526	1/2" dia	9'-8"*	6'-6"	6'-3"	7'-1"	7'-1"	7'-1"
5 x 5/16"	56.9	13.158	1/2" dia	10'-8"*	8'-1"	7'-8"	8'-6"*	8'-4"*	8'-4"*
5 x 3/8"	67.8	15.789	1/2" dia	11'-6"*	9'-0"*	8'-9"*	9'-3"*	9'-2"*	9'-0"*
5 x 1/2"	89.8	21.052	1/2" dia	13'-0"*	10'-4"*	10'-0"*	10'-7"*	10'-8"*	10'-4"*
6 x 1/4"	54.7	15.158	1/2" dia	12'-6"*	9'-4"	8'-9"*	10'-0"	9'-9"*	9'-8"
6 x 5/16"	67.8	18.947	1/2" dia	13'-10"*	10'-10"*	10'-5"*	11'-0"*	10'-7"*	10'-10"*
6 x 3/8"	81	22.736	1/2" dia	14'-10"*	11'-8"*	11'-4"*	12'-0"*	11-10"	11'-8"*
6 x 1/2"	109.1	30.315	1/2" dia	16'-2"*	13'-6"*	12'-11"	13'-9"	13'-5"	13'-4"

Weights are approximate, and can vary depending on panel width, type of cross bar, and mill and fabrication tolerances.

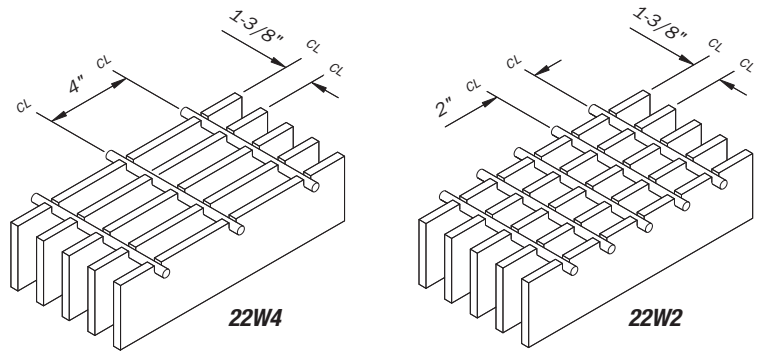
Weights shown are based on 4" cross bar centers.

Section Modulus based on 10.105 bars/foot.

\*Span limited by deflection (L/400 maximum).

For serrated grating design, increase bearing bar depth to next deeper size shown in chart.

## Load Table for Heavy-Duty Bar Grating Type 22W4 – Simple Spans



NOTE: The design capacity of any product shown is the same regardless of cross bar spacing.

Bar Size	Weight #/SF	Section Modulus per foot width	Standard Cross Bar	Maximum Safe Clear Span					
				1 Ton	3 Ton	5 Ton	H-15	H-20	H-25
1 x 1/4"	8.8	0.364	3/8" dia	0'-6"	0'-6"	0'-7"	0'-9"	0'-10"	0'-10"
1 x 5/16"	10.7	0.455	3/8" dia	0'-8"	0'-6"	0'-8"	0'-10"	0'-11"	1'-0"
1 x 3/8"	12.6	0.545	3/8" dia	0'-9"	0'-7"	0'-9"	0'-11"	1'-0"	1'-1"
1-1/4 x 1/4"	10.7	0.568	3/8" dia	0'-9"	0'-7"	0'-9"	0'-11"	1'-0"	1'-1"
1-1/4 x 5/16"	13.1	0.710	3/8" dia	0"-11"	0'-8"	0'-10"	1'-0"	1'-2"	1'-3"
1-1/4 x 3/8"	15.5	0.852	3/8" dia	1'-1"	0'-9"	0'-11"	1'-2"	1'-3"	1'-4"
1-1/2 x 1/4"	12.6	0.818	3/8" dia	1'-0"	0'-9"	0'-11"	1'-1"	1'-3"	1'-4"
1-1/2 x 5/16"	15.5	1.023	3/8" dia	1'-3"	0'-11"	1'-0"	1'-3"	1'-5"	1'-6"
1-1/2 x 3/8"	18.3	1.227	3/8" dia	1'-6"	1'-0"	1'-1"	1'-4"	1'-6"	1'-7"
1-1/2 x 1/2"	24.1	1.636	3/8" dia	1'-11"	1'-3"	1'-4"	1'-7"	1'-9"	1'-10"
1-3/4 x 1/4"	14.5	1.114	3/8" dia	1'-4"	0'-11"	1'-1"	1'-3"	1'-6"	1'-6"
1-3/4 x 3/8"	21.2	1.670	3/8" dia	1'-11"	1'-3"	1'-4"	1'-8"	1'-10"	1'-11"
2 x 1/4"	16.4	1.455	3/8" dia	1'-9"	1'-2"	1'-3"	1'-6"	1'-8"	1'-9"
2 x 5/16"	20.2	1.818	3/8" dia	2'-1"	1'-5"	1'-5"	1'-9"	1'-11"	2'-0"
2 x 3/8"	24.1	2.182	3/8" dia	2'-6"	1'-7"	1'-8"	2'-0"	2'-1"	2'-2"
2 x 1/2"	31.7	2.909	3/8" dia	3'-4"	2'-1"	2'-1"	2'-5"	2'-7"	2'-7"
2-1/4 x 1/4"	18.3	1.841	3/8" dia	2'-2"	1'-5"	1'-6"	1'-9"	1'-11"	2'-0"
2-1/4 x 3/8"	26.9	2.761	3/8" dia	3'-2"	2'-0"	2'-0"	2'-4"	2'-6"	2'-6"
2-1/2 x 1/4"	20.2	2.273	3/8" dia	2'-7"	1'-8"	1'-8"	2'-0"	2'-2"	2'-3"
2-1/2 x 5/16"	25	2.841	3/8" dia	3'-3"	2'-0"	2'-0"	2'-5"	2'-6"	2'-7"
2-1/2 x 3/8"	29.8	3.409	3/8" dia	3'-10"	2'-4"	2'-4"	2'-9"	2'-10"	2'-11"
2-1/2 x 1/2"	39.4	4.545	3/8" dia	4'-9"*	3'-1"	3'-0"	3'-6"	3'-7"	3'-7"
3 x 1/4"	24.1	3.273	3/8" dia	3'-9"	2'-3"	2'-3"	2'-8"	2'-9"	2'-10"
3 x 5/16"	29.8	4.091	3/8" dia	4'-7"	2'-9"	2'-9"	3'-2"	3'-3"	3'-4"
3 x 3/8"	36.4	4.909	1/2" dia	5'-4"*	3'-4"	3'-2"	3'-8"	3'-9"	3'-10"
3 x 1/2"	47.9	6.545	1/2" dia	6'-2"*	4'-4"	4'-2"	4'-9"	4'-9"*	4'-9"
3-1/2 x 1/4"	27.9	4.454	3/8" dia	5'-0"	3'-0"	2'-11"	3'-5"	3'-6"	3'-6"
3-1/2 x 3/8"	42.2	6.682	1/2" dia	6'-10"*	4'-5"	4'-2"	4'-10"	4'-10"	4'-10"
3-1/2 x 1/2"	55.6	8.909	1/2" dia	7'-8"*	5'-9"	5'-6"	6'-0"*	5'-11"*	5'-10"*
4 x 1/4"	31.7	5.818	3/8" dia	6'-6"	3'-10"	3'-9"	4'-3"	4'-4"	4'-4"
4 x 5/16"	40.2	7.273	1/2" dia	7'-5"*	4'-9"	4'-6"	5'-2"	5'-3"	5'-2"
4 x 3/8"	47.9	8.727	1/2" dia	8'-2"*	5'-8"	5'-4"	6'-1"	6'-1"	6'-1"
4 x 1/2"	63.2	11.636	1/2" dia	9'-4"*	7'-1"*	6'-10"*	7'-3"*	7'-1"*	7'-0"*
4-1/2 x 1/4"	36.4	7.363	1/2" dia	7'-11"*	4'-10"	4'-7"	5'-3"	5'-3"	5'-3"
4-1/2 x 3/8"	53.6	11.045	1/2" dia	9'-8"*	7'-1"	6'-8"	7'-6"*	7'-4"*	7'-4"
4-1/2 x 1/2"	70.9	14.727	1/2" dia	10'-11"*	8'-6"*	8'-1"*	8'7"	8'-5"*	8'-4"*
5 x 1/4"	40.2	9.091	1/2" dia	9'-3"*	5'-11"	5'-7"	6'-4"	6'-4"	6'-3"
5 x 5/16"	49.8	11.363	1/2" dia	10'-3"*	7'-4"	6'-10"	7'-9"	8'-8"*	7'-8"
5 x 3/8"	59.4	13.636	1/2" dia	11'-2"*	8'-7"	8'-2"	8'-9"*	8'-7"*	8'-6"*
5 x 1/2"	78.5	18.181	1/2" dia	12'-6"*	9'-10"*	9'-5"*	10'-0"*	9'-10"*	9'-9"*
6 x 1/4"	47.9	13.091	1/2" dia	12'-0"*	8'-5"	7'-10"	8'-10"	8'-9"	8'-8"
6 x 5/16"	59.4	16.363	1/2" dia	13'-4"*	10'-5"	9'-8"	10'-5"*	10'-2"*	10'-2"*
6 x 3/8"	70.9	19.636	1/2" dia	14'-4"*	11'-2"*	10'-8"*	11'-4"*	11'-2"*	11'-0"*
6 x 1/2"	93.8	26.181	1/2" dia	15'-10"	12'-10"*	12'-2"*	12'-10"	12'-8"*	12'-6"*

Weights are approximate, and can vary depending on panel width, type of cross bar, and mill and fabrication tolerances.

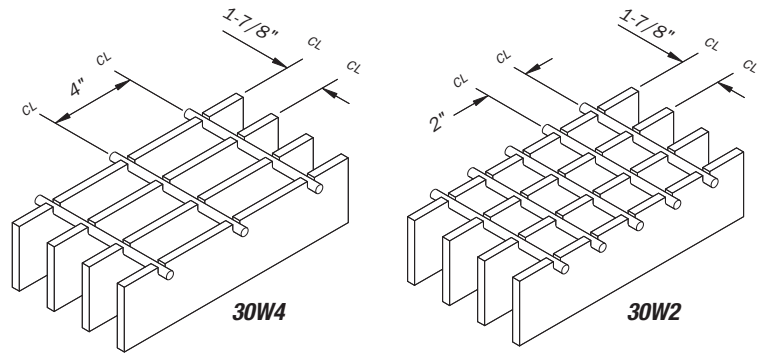
Weights shown are based on 4" cross bar centers.

Section Modulus based on 8.727 bars/foot.

\*Span limited by deflection (L/400 maximum).

For serrated grating design, increase bearing bar depth to next deeper size shown in chart.

# Load Table for Heavy-Duty Bar Grating Type 30W4 – Simple Spans



NOTE: The design capacity of any product shown is the same regardless of cross bar spacing.

Bar Size	Weight #/SF	Section Modulus per foot width	Standard Cross Bar	Maximum Safe Clear Span					
				1 Ton	3 Ton	5 Ton	H-15	H-20	H-25
1 x 1/4"	6.9	0.267	3/8" dia	0'-6"	0'-5"	0'-6"	0'-8"	0'-9"	0'-9"
1 x 5/16"	8.3	0.333	3/8" dia	0'-7"	0'-6"	0'-7"	0'-9"	0'-10"	0'-10"
1 x 3/8"	9.8	0.40	3/8" dia	0'-8"	0'-6"	0'-8"	0'-9"	0'-11"	0'-11"
1-1/4 x 1/4"	8.3	0.417	3/8" dia	0'-8"	0'-6"	0'-8"	0'-10"	0'-11"	0'-11"
1-1/4 x 5/16"	10.2	0.521	3/8" dia	0'-9"	0'-7"	0'-9"	0'-11"	1'-0"	1'-1"
1-1/4 x 3/8"	12	0.625	3/8" dia	0'-11"	0'-8"	0'-10"	1'-0"	1'-1"	1'-2"
1-1/2 x 1/4"	9.8	0.60	3/8" dia	0'-11"	0'-8"	0'-9"	1'-0"	1'-1"	1'-2"
1-1/2 x 5/16"	12	0.750	3/8" dia	1'-1"	0'-9"	0'-11"	1'-1"	1'-3"	1'-3"
1-1/2 x 3/8"	14.1	0.90	3/8" dia	1'-3"	0'-10"	1'-0"	1'-2"	1'-4"	1'-5"
1-1/2 x 1/2"	18.4	1.20	3/8" dia	1'-8"	1'-1"	1'-2"	1'-5"	1'-7"	1'-7"
1-3/4 x 1/4"	11.2	0.817	3/8" dia	1'-2"	0'-10"	0'-11"	1'-2"	1'-3"	1'-4"
1-3/4 x 3/8"	16.3	1.225	3/8" dia	1'-8"	1'-1"	1'-2"	1'-5"	1'-7"	1'-8"
2 x 1/4"	12.7	1.067	3/8" dia	1'-6"	1'-0"	1'-1"	1'-4"	1'-6"	1'-6"
2 x 5/16"	15.6	1.333	3/8" dia	1'-10"	1'-2"	1'-3"	1'-6"	1'-8"	1'-9"
2 x 3/8"	18.5	1.60	3/8" dia	2'-2"	1'-4"	1'-5"	1'-8"	1'-10"	1'-11"
2 x 1/2"	24.2	2.133	3/8" dia	2'-10"	1'-9"	1'-9"	2'-0"	2'-2"	2'-2"
2-1/4 x 1/4"	14.1	1.350	3/8" dia	1'-10"	1'-2"	1'-3"	1'-6"	1'-8"	1'-9"
2-1/4 x 3/8"	20.6	2.025	3/8" dia	2'-10"	1'-8"	1'-8"	1'-11"	2'-1"	2'-2"
2-1/2 x 1/4"	15.6	1.667	3/8" dia	2'-3"	1'-5"	1'-5"	1'-8"	1'-10"	1'-11"
2-1/2 x 5/16"	19.2	2.083	3/8" dia	2'-9"	1'-8"	1'-8"	2'-0"	2'-1"	2'-2"
2-1/2 x 3/8"	22.8	2.50	3/8" dia	3'-3"	2'-0"	1'-11"	2'-3"	2'-5"	2'-5"
2-1/2 x 1/2"	30.0	3.333	3/8" dia	4'-4"	2'-6"	2'-5"	2'-10"	2'-11"	2'-11"
3 x 1/4"	18.5	2.40	3/8" dia	3'-2"	1'-9"	1'-11"	2'-2"	2'-4"	2'-4"
3 x 5/16"	22.8	3.0	3/8" dia	3'-11"	2'-4"	2'-3"	2'-7"	2'-8"	2'-9"
3 x 3/8"	28.0	3.60	1/2" dia	4'-8"	2'-9"	2'-7"	3'-0"	3'-1"	3'-1"
3 x 1/2"	36.7	4.80	1/2" dia	5'-8"*	3'-6"	3'-4"	3'-9"	3'-10"	3'-10"
3-1/2 x 1/4"	21.4	3.267	3/8" dia	4'-3"	2'-6"	2'-5"	2'-9"	2'-10"	2'-11"
3-1/2 x 3/8"	32.3	4.90	1/2" dia	6'-2"*	3'-5"	3'-5"	3'-10"	3'-11"	3'-11"
3-1/2 x 1/2"	42.5	6.533	1/2" dia	7'-2"*	4'-9"	4'-5"	4'-11"	4'-11"	4'-11"
4 x 1/4"	24.2	4.267	3/8" dia	5'-6"	3'-2"	3'-0"	3'-5"	3'-6"	3'-6"
4 x 5/16"	30.9	5.333	1/2" dia	6'-10"	3'-11"	3'-8"	4'-2"	4'-2"	4'-2"
4 x 3/8"	36.7	6.40	1/2" dia	7'-6"*	4'-8"	4'-4"	4'-10"	4'-10"	4'-10"
4 x 1/2"	48.2	8.533	1/2" dia	8'-7"*	6'-1"	5'-7"	6'-3"	6'-2"	6'-2"
4-1/2 x 1/4"	28.0	5.40	1/2" dia	6'-11"	3'-11"	3'-8"	4'-2"	4'-3"	4'-3"
4-1/2 x 3/8"	41.0	8.10	1/2" dia	8'-10"*	5'-10"	5'-4"	6'-0"	5'-11"	5'-10"
4-1/2 x 1/2"	54.0	10.80	1/2" dia	10'-2"*	7'-8"	7'-0"	7'-7"*	7'-5"*	7'-4"*
5 x 1/4"	30.9	6.667	1/2" dia	8'-6"	4'-10"	4'-6"	5'-0"	5'-0"	5'-0"
5 x 5/16"	38.1	8.333	1/2" dia	9'-6"*	5'-11"	5'-6"	6'-2"	6'-1"	6'-0"
5 x 3/8"	45.4	10.0	1/2" dia	10'-4"*	7'-1"	6'-6"	7'-3"	7'-2"	7'-0"
5 x 1/2"	59.8	13.33	1/2" dia	11'-9"*	8'-11"*	8'-5"	8'-10"*	8'-8"*	8'-7"*
6 x 1/4"	36.7	9.60	1/2" dia	11'-2"*	6'-10"	6'-3"	7'-0"	6'-11"	6'-10"
6 x 5/16"	45.4	12.0	1/2" dia	12'-4"*	8'-6"	7'-9"	8'-7"	8'-5"	8'-3"
6 x 3/8"	54.0	14.40	1/2" dia	13'-3"*	10'-1"	9'-2"	9'-11"*	9'-10"	9'-9"
6 x 1/2"	71.4	19.20	1/2" dia	15'-0"*	11'-8"*	11'-0"*	11'-6"*	11'-3"*	11'-1"*

Weights are approximate, and can vary depending on panel width, type of cross bar, and mill and fabrication tolerances.

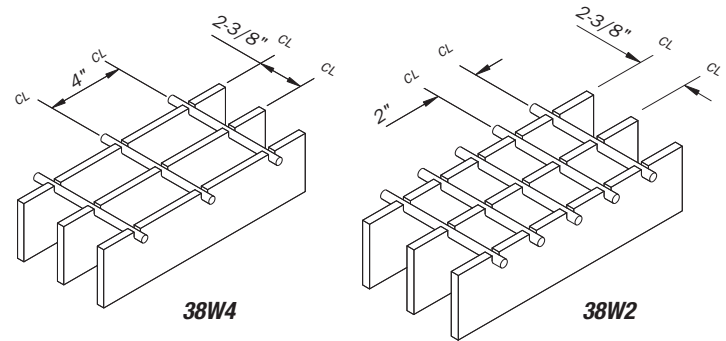
Weights shown are based on 4" cross bar centers.

Section Modulus based on 6.4 bars/foot.

\*Span limited by deflection (L/400 maximum).

For serrated grating design, increase bearing bar depth to next deeper size shown in chart.

## Load Table for Heavy-Duty Bar Grating Type 38W4 – Simple Spans



NOTE: The design capacity of any product shown is the same regardless of cross bar spacing.

Bar Size	Weight #/SF	Section Modulus per foot width	Standard Cross Bar	Maximum Safe Clear Span					
				1 Ton	3 Ton	5 Ton	H-15	H-20	H-25
1 x 1/4"	5.7	0.211	3/8" dia	0'-5"	0'-5"	0'-6"	0'-7"	0'-8"	0'-8"
1 x 5/16"	6.8	0.263	3/8" dia	0'-6"	0'-5"	0'-6"	0'-8"	0'-9"	0'-9"
1 x 3/8"	7.9	0.316	3/8" dia	0'-7"	0'-6"	0'-7"	0'-8"	0'-10"	0'-10"
1-1/4 x 1/4"	6.8	0.329	3/8" dia	0'-7"	0'-6"	0'-7"	0'-9"	0'-10"	0'-10"
1-1/4 x 5/16"	8.2	0.411	3/8" dia	0'-9"	0'-6"	0'-8"	0'-10"	0'-11"	0'-11"
1-1/4 x 3/8"	9.6	0.493	3/8" dia	0'-10"	0'-7"	0'-9"	0'-11"	1'-0"	1'-1"
1-1/2 x 1/4"	7.9	0.474	3/8" dia	0'-10"	0'-7"	0'-9"	0'-11"	1'-0"	1'-0"
1-1/2 x 5/16"	9.6	0.592	3/8" dia	1'-0"	0'-8"	0'-10"	1'-0"	1'-1"	1'-2"
1-1/2 x 3/8"	11.3	0.711	3/8" dia	1'-2"	0'-9"	0'-11"	1'-1"	1'-3"	1'-3"
1-1/2 x 1/2"	14.7	0.947	3/8" dia	1'-6"	1'-0"	1'-0"	1'-3"	1'-5"	1'-6"
1-3/4 x 1/4"	9	0.645	3/8" dia	1'-1"	0'-9"	0'-10"	1'-0"	1'-2"	1'-2"
1-3/4 x 3/8"	13	0.967	3/8" dia	1'-6"	1'-0"	1'-1"	1'-3"	1'-5"	1'-6"
2 x 1/4"	10.2	0.842	3/8" dia	1'-4"	0'-11"	1'-0"	1'-2"	1'-4"	1'-5"
2 x 5/16"	12.5	1.053	3/8" dia	1'-7"	1'-0"	1'-1"	1'-4"	1'-6"	1'-7"
2 x 3/8"	14.7	1.263	3/8" dia	1'-11"	1'-2"	1'-3"	1'-6"	1'-8"	1'-8"
2 x 1/2"	19.2	1.684	3/8" dia	2'-6"	1'-6"	1'-6"	1'-9"	1'-11"	2'-0"
2-1/4 x 1/4"	11.3	1.066	3/8" dia	1'-8"	1'-1"	1'-1"	1'-4"	1'-6"	1'-7"
2-1/4 x 3/8"	16.4	1.599	3/8" dia	2'-5"	1'-5"	1'-5"	1'-9"	1'-10"	1'-11"
2-1/2 x 1/4"	12.5	1.316	3/8" dia	2'-0"	1'-3"	1'-3"	1'-5"	1'-8"	1'-9"
2-1/2 x 5/16"	15.3	1.645	3/8" dia	2'-6"	1'-6"	1'-6"	1'-9"	1'-11"	1'-11"
2-1/2 x 3/8"	18.1	1.974	3/8" dia	2'-11"	1'-9"	1'-8"	2'-0"	2'-1"	2'-2"
2-1/2 x 1/2"	23.8	2.632	3/8" dia	3'-6"	2'-3"	2'-2"	2'-5"	2'-6"	2'-7"
3 x 1/4"	14.7	1.895	3/8" dia	2'-10"	1'-8"	1'-8"	1'-11"	2'-1"	2'-1"
3 x 5/16"	18.1	2.368	3/8" dia	3'-6"	2'-0"	1'-11"	2'-3"	2'-4"	2'-5"
3 x 3/8"	22.4	2.842	1/2" dia	4'-2"	2'-5"	2'-3"	2'-7"	2'-10"	2'-8"
3 x 1/2"	29.2	3.790	1/2" dia	5'-4"*	3'-1"	2'-11"	3'-3"	3'-4"	3'-4"
3-1/2 x 1/4"	17	2.579	3/8" dia	3'-9"	2'-2"	2'-1"	2'-5"	2'-6"	2'-6"
3-1/2 x 3/8"	25.8	3.869	1/2" dia	5'-7"	3'-2"	2'-11"	3'-4"	3'-4"	3'-4"
3-1/2 x 1/2"	33.7	5.158	1/2" dia	6'-9"*	4'-1"	3'-9"	4'-3"	4'-2"	4'-2"
4 x 1/4"	19.2	3.369	3/8" dia	4'-11"	2'-9"	2'-7"	2'-11"	3'-0"	3'-0"
4 x 5/16"	24.7	4.211	1/2" dia	6'-1"	3'-5"	3'-2"	3'-7"	3'-7"	3'-7"
4 x 3/8"	29.2	5.053	1/2" dia	7'-2"*	4'-0"	3'-8"	4'-2"	4'-2"	4'-1"
4 x 1/2"	38.2	6.737	1/2" dia	8'-2"*	5'-4"	4'-10"	5'-4"	5'-3"	5'-2"
4-1/2 x 1/4"	22.4	4.263	1/2" dia	6'-2"	3'-5"	3'-2"	3'-7"	3'-7"	3'-7"
4-1/2 x 3/8"	32.6	6.395	1/2" dia	8'-5"*	5'-0"	4'-7"	5'-1"	5'-0"	5'-0"
4-1/2 x 1/2"	42.8	8.527	1/2" dia	9'-7"*	6'-8"	6'-0"	6'-7"	6'-5"	6'-4"
5 x 1/4"	24.7	5.264	1/2" dia	7'-7"	4'-2"	3'-10"	4'-3"	4'-3"	4'-3"
5 x 5/16"	30.3	6.579	1/2" dia	9'-0"*	5'-2"	4'-8"	5'-3"	5'-2"	5'-1"
5 x 3/8"	36	7.895	1/2" dia	9'-10"*	6'-2"	5'-7"	6'-2"	6'-0"	5'-11"
5 x 1/2"	47.3	10.527	1/2" dia	11'-2"*	8'-2"	7'-3"	8'-0"	7'-9"	7'-7"
6 x 1/4"	29.2	7.580	1/2" dia	10'-6"*	5'-11"	5'-4"	5'-11"	5'-10"	5'-9"
6 x 5/16"	36	9.474	1/2" dia	11'-8"*	7'-4"	6'-7"	7'-3"	7'-1"	6'-11"
6 x 3/8"	42.8	11.369	1/2" dia	12'-8"*	8'-9"	7'-10"	8'-7"	8'-4"	8'-1"
6 x 1/2"	56.4	15.159	1/2" dia	14'-4"*	10'-10"*	10'-2"*	10'-7"*	10'-3"*	10'-1"*

Weights are approximate, and can vary depending on panel width, type of cross bar, and mill and fabrication tolerances.

Weights shown are based on 4" cross bar centers.

Section Modulus based on 5.053 bars/foot.

\*Span limited by deflection (L/400 maximum).