

Heavy Duty Grating

38 Space Load Table

Use this table when evaluating spans & loads for the following types of Heavy Duty steel grating:
38-W-4 and 38-W-2



H-25 Load



H-20 Load



H-15 Load



Auto Traffic



5 Ton Forklift



3 Ton Forklift



1 Ton Forklift

Bearing Bar size	Section Modulus psf	Moment of Inertia psf	Approx. Weight psf	Maximum Safe Span						
				H-25 Load	H-20 Load	H-15 Load	Auto Traffic	5 Ton Forklift	3 Ton Forklift	1 Ton Forklift
1 x 1/4 1 x 5/16 1 x 3/8	0.211 0.263 0.316	0.105 0.132 0.158	5.4 6.5 7.6	0'-8" 0'-10" 0'-10"	0'-8" 0'-9" 0'-10"	0'-7" 0'-8" 0'-8"	0'-9" 0'-10" 0'-11"	0'-6" 0'-6" 0'-7"	0'-5" 0'-5" 0'-6"	0'-5" 0'-6" 0'-7"
1-1/4 x 1/4 1-1/4 x 5/16 1-1/4 x 3/8	0.329 0.411 0.493	0.206 0.257 0.308	6.5 7.8 9.2	0'-11" 1'-0" 1'-1"	0'-10" 0'-11" 1'-0"	0'-9" 0'-10" 0'-11"	1'-0" 0'-11" 1'-4"	0'-8" 0'-8" 0'-9"	0'-6" 0'-7" 0'-7"	0'-7" 0'-9" 0'-10"
1-1/2 x 1/4 1-1/2 x 5/16 1-1/2 x 3/8	0.474 0.592 0.711	0.355 0.444 0.533	7.6 9.2 10.8	1'-1" 1'-3" 1'-4"	1'-0" 1'-1" 1'-3"	0'-10" 1'-0" 1'-1"	1'-3" 1'-6" 1'-9"	0'-9" 0'-10" 0'-11"	0'-7" 0'-8" 0'-9"	0'-10" 1'-0" 1'-2"
1-3/4 x 1/4 1-3/4 x 5/16 1-3/4 x 3/8	0.645 0.806 0.967	0.564 0.705 0.846	8.6 10.5 12.4	1'-4" 1'-5" 1'-7"	1'-2" 1'-3" 1'-5"	1'-0" 1'-2" 1'-3"	1'-7" 1'-11" 2'-3"	0'-10" 0'-11" 1'-1"	0'-9" 0'-10" 1'-0"	1'-0" 1'-3" 1'-6"
2 x 1/4 2 x 5/16 2 x 3/8	0.842 1.053 1.263	0.842 1.053 1.263	9.7 11.9 14.0	1'-5" 1'-8" 1'-9"	1'-4" 1'-6" 1'-8"	1'-2" 1'-4" 1'-6"	2'-0" 2'-5" 2'-10"	1'-0" 1'-1" 1'-3"	0'-11" 1'-0" 1'-2"	1'-4" 1'-7" 1'-11"
2-1/4 x 1/4 2-1/4 x 5/16 2-1/4 x 3/8	1.066 1.332 1.599	1.199 1.499 1.799	10.8 13.2 15.6	1'-8" 1'-10" 2'-0"	1'-6" 1'-8" 1'-10"	1'-4" 1'-10" 1'-8"	2'-5" 3'-0" 3'-6"	1'-1" 1'-3" 1'-5"	1'-1" 1'-3" 1'-5"	1'-8" 2'-0" 2'-5"
2-1/2 x 1/4 2-1/2 x 5/16 2-1/2 x 3/8	1.316 1.645 1.974	1.645 2.056 2.467	11.9 14.5 17.2	1'-10" 2'-1" 2'-3"	1'-8" 1'-11" 2'-1"	1'-6" 1'-11" 2'-0"	2'-11" 3'-7" 4'-2"	1'-3" 1'-6" 1'-8"	1'-3" 1'-6" 1'-9"	2'-0" 2'-6" 2'-11"
3 x 1/4 3 x 5/16 3 x 3/8	1.895 2.368 2.842	2.842 3.553 4.263	14.0 17.2 20.4	2'-2" 2'-6" 2'-10"	2'-1" 2'-4" 2'-8"	1'-11" 2'-3" 2'-7"	4'-1" 4'-9" 5'-0"	1'-8" 1'-11" 2'-3"	1'-8" 2'-0" 2'-5"	2'-10" 3'-6" 4'-2"
3-1/2 x 1/4 3-1/2 x 5/16 3-1/2 x 3/8	2.579 3.224 3.868	4.513 5.641 6.770	16.2 19.9 23.7	2'-8" 3'-1" 3'-6"	2'-6" 2'-11" 3'-4"	2'-5" 2'-10" 3'-4"	5'-1" 5'-6" 5'-10"	2'-1" 2'-6" 2'-11"	2'-2" 2'-8" 3'-2"	3'-9" 4'-8" 5'-3"
4 x 1/4 4 x 5/16 4 x 3/8	3.368 4.211 5.053	6.737 8.421 10.105	18.3 22.6 26.9	3'-2" 3'-8" 4'-3"	3'-0" 3'-7" 4'-2"	2'-11" 3'-7" 4'-2"	5'-10" 6'-3" 6'-8"	2'-7" 3'-2" 3'-8"	2'-9" 3'-5" 4'-0"	4'-11" 5'-7" 6'-0"
4-1/2 x 1/4 4-1/2 x 5/16 4-1/2 x 3/8	4.263 5.329 6.395	9.592 11.990 14.388	20.4 25.3 30.1	3'-9" 4'-5" 5'-1"	3'-7" 4'-4" 5'-0"	3'-7" 4'-4" 5'-1"	6'-7" 7'-1" 7'-6"	3'-2" 3'-11" 4'-7"	3'-5" 4'-3" 5'-0"	5'-10" 6'-4" 6'-9"
5 x 1/4 5 x 3/8 5 x 1/2	5.263 7.895 10.526	13.158 19.737 26.316	22.6 33.3 44.1	4'-4" 5'-10" 6'-5"	4'-3" 5'-10" 6'-5"	4'-3" 5'-10" 6'-6"	7'-4" 8'-4" 9'-2"	3'-10" 5'-6" 6'-4"	4'-2" 6'-0" 6'-8"	6'-6" 7'-6" 8'-3"
6 x 1/4 6 x 3/8 6 x 1/2	7.579 11.368 15.158	22.737 34.105 45.474	26.9 39.8 52.7	5'-10" 6'-11" 7'-8"	5'-10" 7'-0" 7'-8"	5'-11" 7'-1" 7'-10"	8'-9" 10'-0" 11'-1"	5'-4" 6'-11" 7'-7"	5'-11" 7'-3" 8'-0"	7'-10" 9'-0" 9'-11"
7 x 1/4 7 x 3/8 7 x 1/2	10.316 15.474 20.632	36.105 54.158 72.211	31.2 46.2 61.2	7'-1" 8'-1" 8'-11"	7'-2" 8'-2" 9'-0"	7'-3" 8'-4" 9'-2"	10'-3" 11'-8" 12'-11"	7'-1" 8'-1" 8'-11"	7'-5" 8'-5" 9'-4"	9'-2" 10'-6" 11'-6"