MARCO

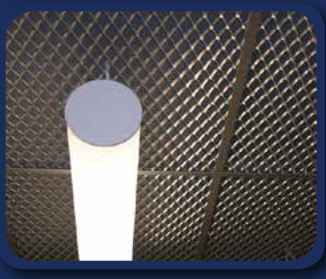
SPECIALTY STEEL

Premium Expanded Metal Products

QUALITY | SPEED | RELIABILITY

Flat - Raised - Grating - Catwalk





TOC

45,000 sq. ft. facility on 9+ acres

MARCO
SPECIALTY STEEL

Total solutions provider

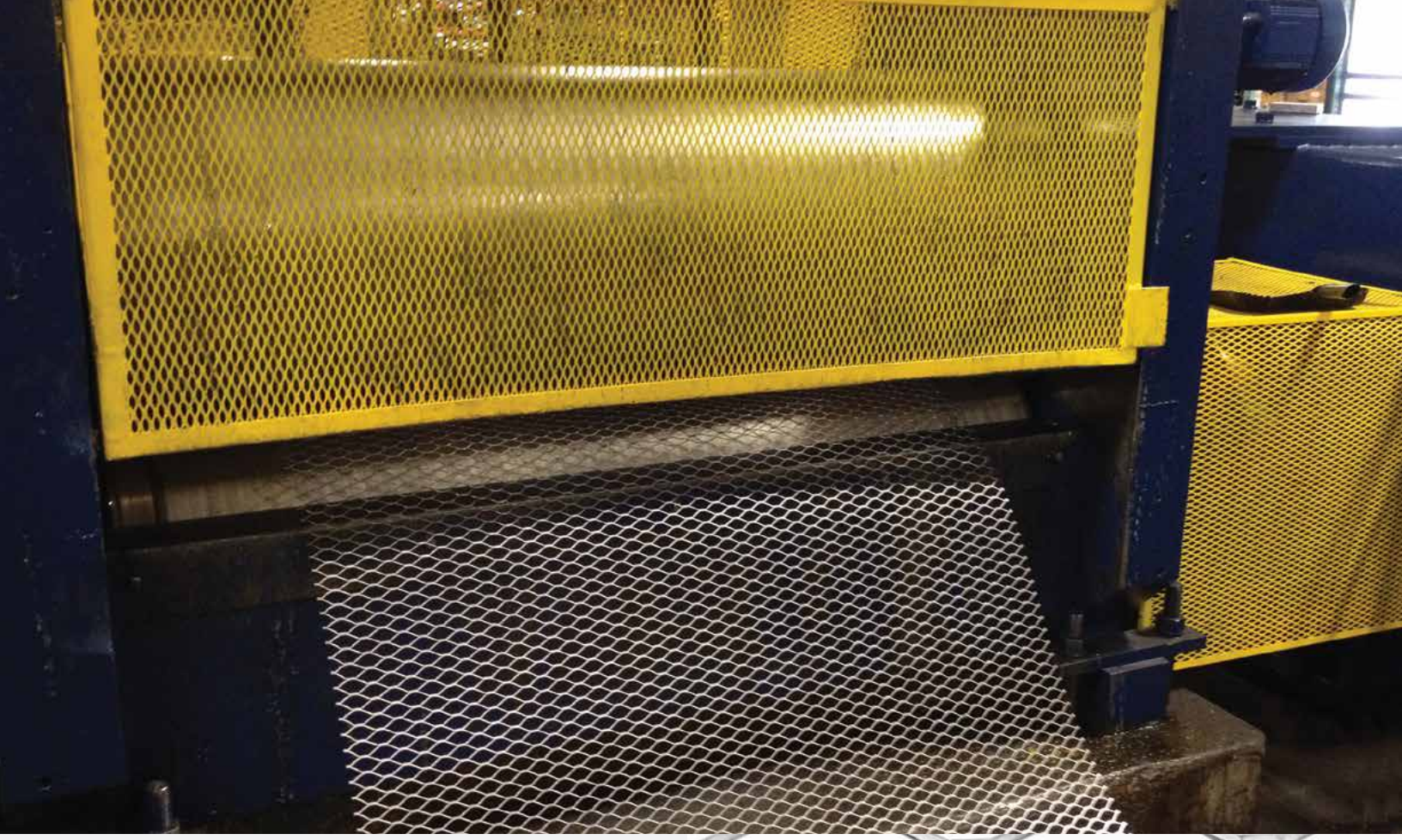
For over 20 years, Marco Specialty Steel has been a leading supplier of expanded metal. We have thousands of sheets in inventory ready for immediate shipment from our 45,000 sq. ft. centrally located warehouse. Our inventory includes a complete range of 304 Stainless, 316 Stainless, Aluminum, Galvanized and Carbon Steel. We can also custom order many other stainless steel grades.

Our inventory is constantly evolving and expanding every day to meet the changing needs of our customers around the country and around the world. All of our material meets the rigorous EMMA Standard 557-99 and ASTM F-1267. If required, most specifications are available as domestically produced and meet the "Buy American Recovery Act" provisions, or as DFAR compliant (DFAR Clause 252.225-7014.) Contact one of our experienced sales staff to discuss how we can work together to meet your specific needs.

When quality counts…
Make it Marco!

Applications

Architectural fencing
Security fencing
Windows, door & skylight guards
Air intake screens
Interior partitions & barriers
Cab/truck dividers
Concrete reinforcement
Security mesh
Drive & sidewalk gates
Light diffusers
Machine guards
Patio furniture
Landscape & utility carts
Utility trailers
Fire escapes
Walkways, mezzanines & stairways
Doors & cabinet doors
Ceiling lighting
RF shielding
Fuel cells
Electrolytic
Filters
Gaskets



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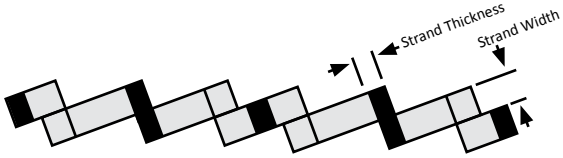
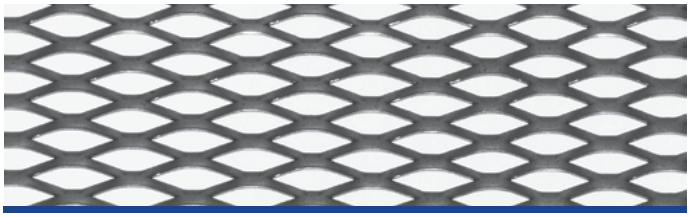
EXPANDED METAL

Standard Expanded Metal (SXM)

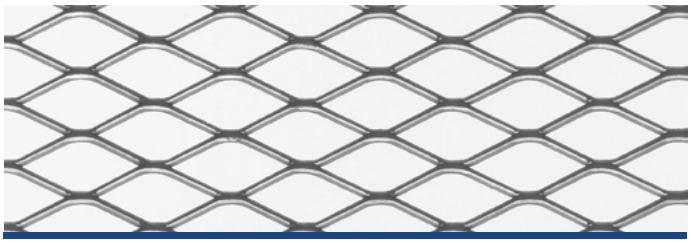
Standard Expanded Metal, or raised metal, is a finished product that comes from the press after having been die cut and expanded. The illustration shows that the strands and bonds form a sharp angle to the original plane of the solid sheet.



Pattern shown is actual size:

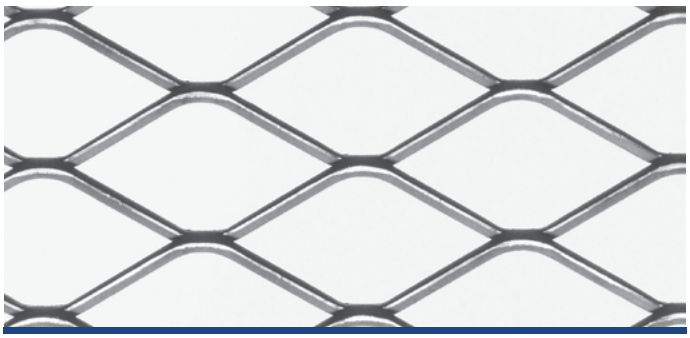


1/4" # 18 Standard



1/2" # 16 Standard

3/4" # 13 Standard

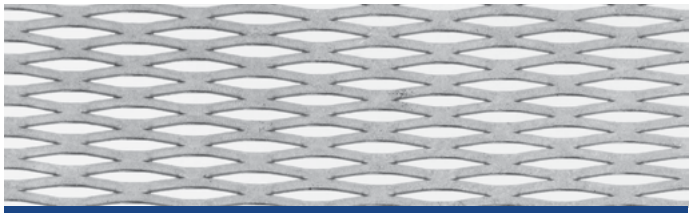


1-1/2" # 9 Standard

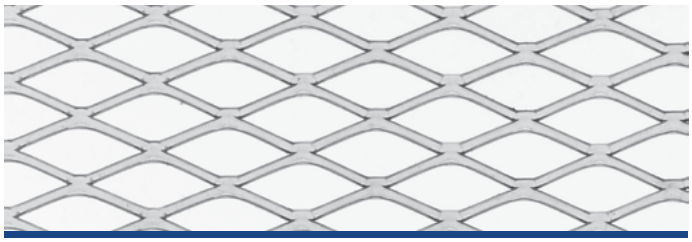
Flattened Expanded Metal (FXM)

Flattened Expanded Metal is standard expanded metal which has been cold rolled leaving a flat, smooth surface. As well as about five percent lighter.

Pattern shown is actual size:



1/4" # 18 Flattened



1/2" # 16 Flattened

3/4" # 13 Flattened

1-1/2" # 9 Flattened

Standard (Raised) Expanded Carbon Steel

Style	Lbs. Per 100 Sq. Ft.	Standard Sheet Size (Feet)		Design Size (Inches)		Opening Size (Inches)		Approx. Strand Size (Inches)		Overall Thickness	Approx. No. Diamonds Per Ft.		% Open Area
		Width SWD	Length LWD	SWD	LWD	SWO	LWO	Thickness	Width	(In.)	SWD	LWD	
1/4" # 20 R	86	4	8	.25	1.00	.17	.72	.36	.73	.125	48	12	45
1/4" # 18 R	114	4	8	.25	1.00	.17	.72	.48	.73	.125	48	12	43
1/2" # 20 R	43	4	8	.50	1.20	.44	.94	.036	.072	.124	24	10	80
1/2" # 18 R	70	4&6	8&10	.50	1.20	.44	.94	.048	.088	.155	24	10	77
1/2" # 16 R	86	4&6	8&10	.50	1.20	.38	.94	.060	.086	.157	24	10	71
1/2" # 13 R	147	4&6	8&10	.50	1.20	.31	.94	.092	.096	.182	24	10	58
3/4" # 16 R	54	4&6	8&10	.92	2.00	.81	1.75	.060	.099	.186	13	6	85
3/4" # 13 R	80	4&6	8&10	.92	2.00	.75	1.69	.092	.096	.195	13	6	78
3/4" # 10 (13 ga.) R	120	4&6	8&10	.92	2.00	.75	1.63	.092	.144	.282	13	6	77
3/4" # 9 (10 ga.) R	180	4,5&6	8,10&12	.92	2.00	.69	1.56	.134	.148	.300	13	6	66
1" # 16 R	44	4	8	1.09	2.40	1.00	2.06	.060	.096	.182	12	5	86
1-1/2" # 16 R	40	4	8	1.33	3.00	1.25	2.63	.060	.107	.211	9	4	89
1-1/2" # 13 R	60	4&6	8&10	1.33	3.00	1.19	2.50	.092	.104	.215	9	4	86
1-1/2" # 10 (13 ga.) R	79	4&6	8&10	1.33	3.00	1.19	2.50	.092	.137	.289	9	4	85
1-1/2" # 9 (10 ga.) R	120	4,5&6	8&10	1.33	3.00	1.13	2.38	.134	.142	.295	9	4	75
1-1/2" # 6 R	250	4&6	8	1.33	3.00	1.00	2.31	.198	.201	.425	9	4	63
2" # 10 (13 ga.) R	68	4	8	1.85	4.00	1.63	3.44	.092	.164	.312	6.5	3	86
2" # 9 (10 ga.) R	90	4	8	1.85	4.00	1.56	3.38	.134	.149	.325	6.5	3	86

Standard (Raised) Expanded Stainless Steel

Style	Lbs. Per 100 Sq. Ft.	Standard Sheet Size (Feet)		Design Size (Inches)		Opening Size (Inches)		Approx. Strand Size (Inches)		Overall Thickness	Approx. No. Diamonds Per Ft.		% Open Area
		Width SWD	Length LWD	SWD	LWD	SWO	LWO	Thickness	Width	(In.)	SWD	LWD	
1/2" # 18 R	73	4	8	.50	1.20	.43	.94	.050	.087	.164	24	10	77
1/2" # 16 R	91	4	8	.50	1.20	.43	.94	.062	.087	.164	24	10	70
1/2" # 13 R	187	4	8	.50	1.20	.31	.88	.093	.120	.225	24	10	58
3/4" # 16 R	60	4	8	.92	2.00	.81	1.75	.062	.106	.200	13	6	85
3/4" # 13 R	91	4	8	.92	2.00	.75	1.69	.093	.108	.200	13	6	78
3/4" # 9 R	205	4	8	.92	2.00	.69	1.56	.140	.161	.300	13	6	67
1-1/2" # 16 R	45	4	8	1.33	3.00	1.25	2.75	.062	.115	.220	9	4	89
1-1/2" # 13 R	68	4	8	1.33	3.00	1.25	2.62	.093	.116	.220	9	4	86
1-1/2" # 9 R	137	4	8	1.33	3.00	1.13	2.50	.140	.155	.280	9	4	75

Standard (Raised) Expanded Aluminum

Style	Lbs. Per 100 Sq. Ft.	Standard Sheet Size (Feet)		Design Size (Inches)		Opening Size (Inches)		Approx. Strand Size (Inches)		Overall Thickness	Approx. No. Diamonds Per Ft.		% Open Area
		Width SWD	Length LWD	SWD	LWD	SWO	LWO	Thickness	Width	(In.)	SWD	LWD	
1/2" .051 R	27	4	8	.50	1.20	.38	.94	.051	.093	.158	24	10	70
1/2" .081 R	44	4	8	.50	1.20	.38	.94	.081	.096	.186	24	10	60
3/4" .051 R	17	4	8	.92	2.00	.81	1.75	.051	.109	.200	13	6	90
3/4" .081 (L) R	32	4	8	.92	2.00	.78	1.59	.081	.129	.200	13	6	76
3/4" .081 (H) R	41	4	8	.92	2.00	.75	1.69	.081	.166	.300	13	6	74
3/4" .125 R	65	4	8	.92	2.00	.69	1.69	.125	.170	.305	13	6	66
1-1/2" .081 R	22	4	8	1.33	3.00	1.19	2.50	.081	.128	.240	9	4	87
1-1/2" .125 R	43	4	8	1.33	3.00	1.19	2.50	.125	.163	.300	9	4	78

Flattened Expanded Carbon Steel

Style	Lbs. Per 100 Sq. Ft.	Standard Sheet Size (Feet)		Design Size (Inches)		Opening Size (Inches)		Approx. Strand Size (Inches)		Overall Thickness	Approx. No. Diamonds Per Ft.		% Open Area
		Width SWD	Length LWD	SWD	LWD	SWO	LWO	Thickness	Width	(In.)	SWD	LWD	
1/4" # 20 F	83	4	8	.25	1.03	.09	.69	.030	.086	.030	48	12	47
1/4" # 18 F	111	4	8	.25	1.03	.09	.69	.040	.086	.040	48	12	40
1/2" # 20 F	40	4	8&10	.50	.126	.38	1.00	.029	.070	.029	24	10	72
1/2" # 18 F	66	4	8&10	.50	1.26	.28	1.00	.039	.109	.039	24	10	69
1/2" # 16 F	82	4	8&10	.50	1.26	.25	1.00	.050	.103	.050	24	10	60
1/2" # 13 F	140	4	8&10	.50	1.26	.25	1.00	.070	.122	.070	24	10	57
3/4" # 16 F	51	4	8&10	.92	2.10	.75	1.75	.048	.115	.048	13	6	75
3/4" # 14 F	63	4	8&10	.92	2.12	.69	1.81	.061	.119	.061	13	6	70
3/4" # 13 F	75	4	8&10	.92	2.10	.69	1.78	.070	.119	.070	13	6	73
3/4" # 10 F	114	4	8	.92	2.10	.64	1.76	.070	.160	.070	13	6	68
3/4" # 9 (10 ga.) F	171	4&5	8&10	.92	2.12	.56	1.69	.120	.164	.120	13	6	63
1" # 16 F	41	4	8	1.09	2.56	.88	2.25	.048	.115	.048	12	5	77
1-1/2" # 16 F	38	4	8	1.33	3.20	1.06	2.75	.048	.123	.048	9	4	82
1-1/2" # 14 F	46	4	8	1.33	3.20	1.06	2.75	.060	.138	.060	9	4	82
1-1/2" # 13 F	57	4	8&10	1.33	3.20	1.06	2.75	.070	.138	.070	9	4	80
1-1/2" # 9 (10 ga.) F	111	4	8&10	1.33	3.20	1.00	2.56	.110	.175	.110	9	4	77

Flattened Expanded Stainless Steel

Style	Lbs. Per 100 Sq. Ft.	Standard Sheet Size (Feet)		Design Size (Inches)		Opening Size (Inches)		Approx. Strand Size (Inches)		Overall Thickness	Approx. No. Diamonds Per Ft.		% Open Area
		Width SWD	Length LWD	SWD	LWD	SWO	LWO	Thickness	Width	(In.)	SWD	LWD	
1/2" # 18 F	69	4	8	.50	1.25	.31	1.00	.040	.093	.040	24	10	68
1/2" # 16 F	86	4	8	.50	1.25	.31	1.00	.050	.093	.050	24	10	60
1/2" # 13 F	178	4	8	.50	1.25	.25	1.00	.080	.132	.080	24	10	56
3/4" # 16 F	57	4	8	.92	2.10	.75	.181	.050	.118	.050	13	6	75
3/4" # 13 F	87	4	8	.92	2.10	.63	1.75	.070	.120	.070	13	6	74
3/4" # 9 (10 ga.) F	195	4	8	.92	2.10	.56	1.69	.119	.160	.119	13	6	64
1-1/2" # 16 F	43	4	8	1.33	3.20	1.06	2.75	.050	.124	.050	9	4	83
1-1/2" # 13 F	65	4	8	1.33	3.20	1.00	2.63	.079	.124	.079	9	4	79
1-1/2" # 9 (10 ga.) F	131	4	8	1.33	3.20	0.94	2.63	.119	.165	.119	9	4	76

Flattened Expanded Aluminum

Style	Lbs. Per 100 Sq. Ft.	Standard Sheet Size (Feet)		Design Size (Inches)		Opening Size (Inches)		Approx. Strand Size (Inches)		Overall Thickness	Approx. No. Diamonds Per Ft.		% Open Area
		Width SWD	Length LWD	SWD	LWD	SWO	LWO	Thickness	Width	(In.)	SWD	LWD	
1/2" .051 F	25	4	8	.50	1.27	.31	1.00	.040	.104	.040	24	10	57
1/2" .081 F	41	4	8	.50	1.27	.31	1.00	.060	.105	.060	24	10	57
3/4" .051 F	16	4	8	.92	2.12	.75	1.81	.040	.122	.040	13	6	73
3/4" .081 (L) F	30	4	8	.92	2.12	.64	1.77	.070	.143	.070	13	6	66
3/4" .081 (H) F	38	4	8	.92	2.12	.69	1.75	.070	.181	.070	13	6	63
3/4" .125 F	61	4	8	.92	2.12	.63	1.75	.095	.187	.095	13	6	55
1-1/2" .081 F	20	4	8	1.33	3.15	1.06	2.75	.055	.143	.055	9	4	75
1-1/2" .125 F	40	4	8	1.33	3.15	1.00	2.75	.080	.181	.080	9	4	65

Note: All weights are approximate and meet or exceed current industry Standards. Galvanized expanded metal weighs more than non-galvanized material.

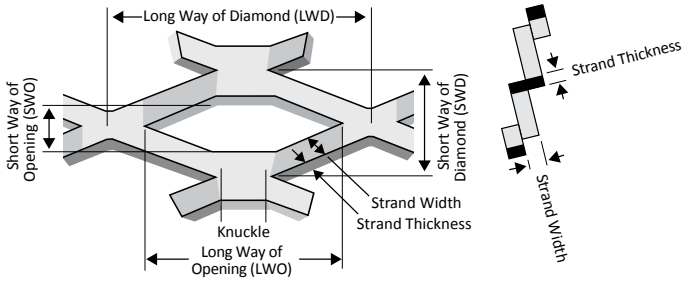
Please consult factory for exact weights, flattening limitations or in the event material meeting ASTM Specification F1267 should be required.

How to Order

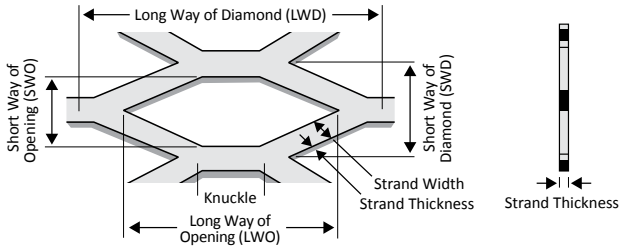
Information Necessary to Order

1. Number of pieces
2. Nominal dimension of the diamond SWD (*Ex.:* 3/4")
3. Sheet style (*Ex.:* # 18; or if aluminum .081)
4. Standard or Flattened
5. Metal type (*Ex.:* carbon steel, stainless steel, aluminum, etc.)
6. Sheet Size (*Ex.:* 4' SWD x 8' LWD)

Standard Mesh – *Ex:* 3/4" #9 SXM



Flattened Mesh – *Ex.:* 3/4" # 9 FXM



Example illustrates the information necessary for a Steel Service Center to fill your order.

Example - 100 sheets 3/4" #9 standard expanded metal carbon steel 4" SWD x 8" LWD.

Manufacturing Tolerances

(stock size sheets)

Sheet Dimensions:

SWD-0"+3/16" per foot of width
LWD-0"+1 diamond

Out-of-Squareness:

SWD 1/16" per foot of width
LED 1/16" per foot of length (measured with 90 degree angle)

Thickness:

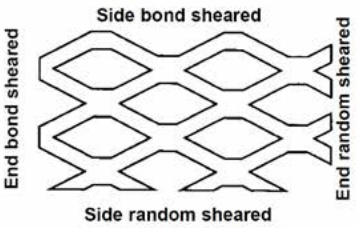
+ or – 10% of published thickness

Camber:

SWD 1/16" per foot of width
LWD 1/16" per liner foot (as measured by the greatest distance between the edge of the sheet and a straight-edge placed across the two ends of the sheet.)

The above tolerances apply to all stock items listed in our literature.
FOR SPECIAL SIZES, PLEASE CONSULT THE PLANT

Shearing



Side Shearing: The process of cutting a piece of expanded metal parallel to the long dimension of the diamond.

Random Side Shearing: Side shearing is a cut made parallel to the LWD dimension of the sheet which usually leaves open diamonds. Standard tolerances on the SWD dimension is plus or minus 1/16" when both sides are sheared.

Bond Side Shearing: This cut is made along the length of the sheet on the center line of the bond over specified width. In most cases it is not practical to attempt to bond side shear either regular or flattened expanded metal due to camber.

End Random Shearing: The process of shearing a piece of expanded metal to a specified length (LWD). This cut normally leaves open diamonds at both ends but accomplishes close tolerance (plus or minus 1/16") when both are sheared.

End Shearing: The process of cutting a piece of expanded metal parallel to the short way of the diamond.

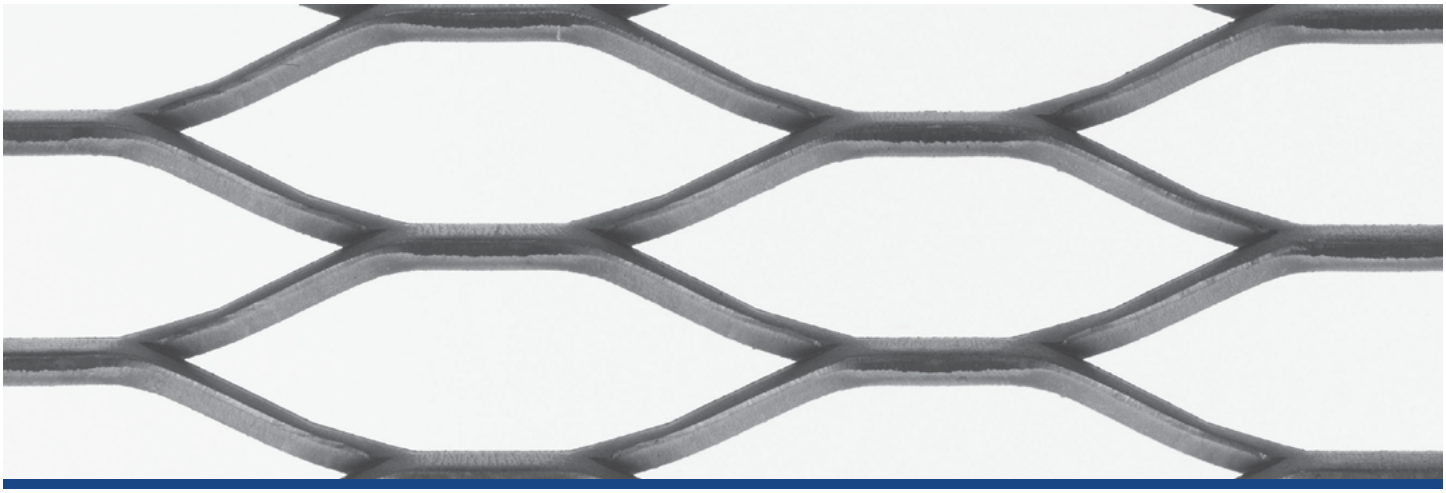
End Bond Shearing: The process of shearing a piece of expanded metal to a specified length (LWD). A plus or minus 1/16" tolerance applies when both ends are sheared. One end is out on the bond parallel to the SWD the other end usually has open diamonds. *Note:* When end bond shearing is requested for both ends the sheet is sheared at the center line of the bond over the specified length with the tolerance of plus or minus ½ diamond.

Squareness: When all four sides of a sheet of expanded metal are sheared, the maximum tolerance will plus or minus 1/16" per foot of width.

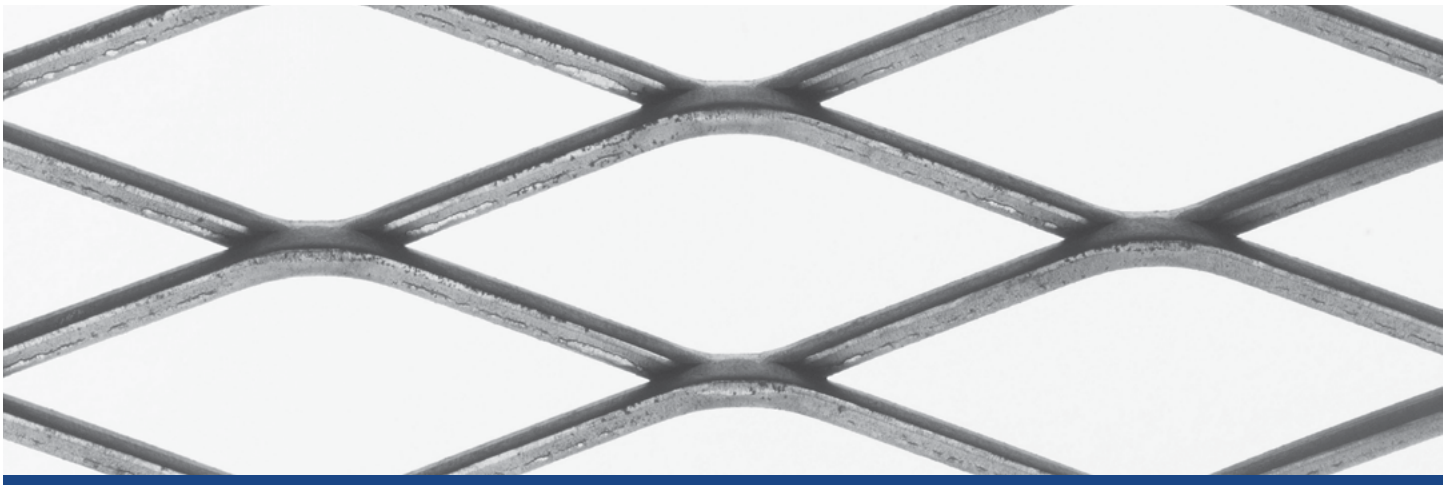
Note: Bond shearing provides closed diamonds the facilitate handling and safety but frequently result in higher cost and always require greater dimensional tolerance. Random shearing is normally less costly except where the scrap ("drop-off") is excessive. Also, random shearing is more difficult to handle and presents a safety risk due to the sharp edges left on the open diamond.

EXPANDED METAL GRATING

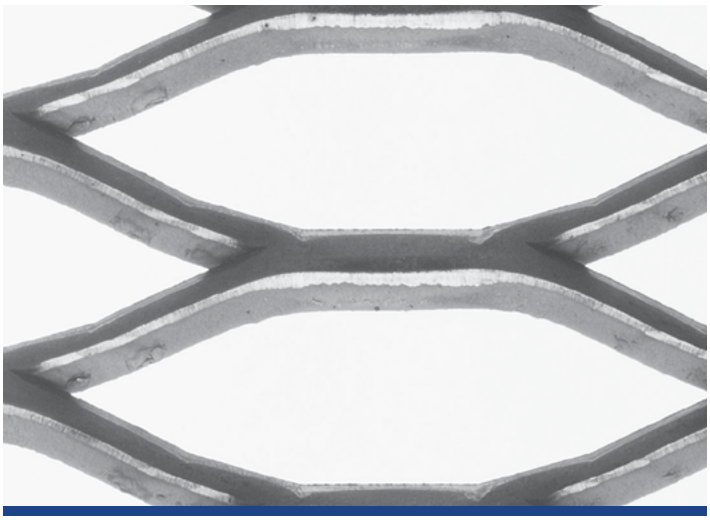
Expanded Metal Grating is a heavy duty expanded metal produced from carbon steel sheet and plate. Expanded metal grating contains no joints or welds, as each sheet is a single piece of sturdy steel. (Pattern shown is actual size)



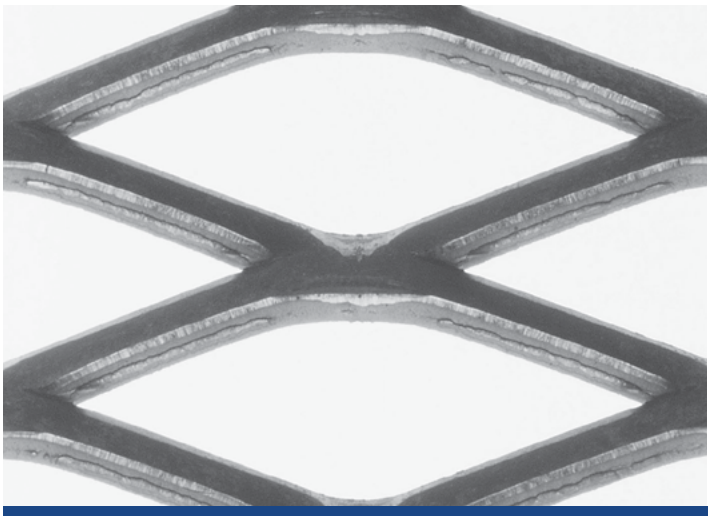
3 lb. Grating



3.14 lb. Grating



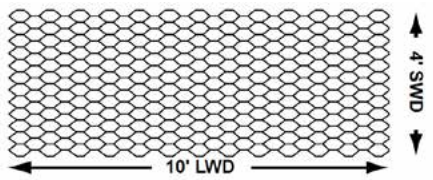
4 lb. Grating



4.27 lb. Grating

Style	Lbs. Per 100 Sq. Ft.	Standard Sheet Size (Feet)		Design Size (Inches)		Opening Size (Inches)		Approx. Strand Size (Inches)		Overall Thickness	Approx. No. Diamonds Per Ft.		% Open Area
		Width SWD	Length LWD	SWD	LWD	SWO	LWO	Thickness	Width	(In.)	SWD	LWD	
Carbon Steel Standard Grating													
3 lb.	300	4&6	8&10	1.33	5.33	0.940	3.44	.183	.261	.540	9	2.25	73
3.14 lb.	314	4&6	8&10	2.00	6.00	1.625	4.88	.250	.308	.656	6	2	74
4 lb.	400	4&6	8&10	1.33	5.33	0.940	3.44	.215	.297	.618	9	2.25	65
4.27 lb.	427	4&6	8&10	1.41	4.00	1.000	2.88	.250	.297	.625	8.5	3	58
5 lb.	500	4&6	8&10	1.33	5.33	0.813	3.38	.250	.327	.655	9	2.25	52
6.25 lb.	625	4&6	8	1.41	5.33	0.813	3.38	.312	.347	.715	8.5	2.25	55
7 lb.	700	4	8	1.41	5.33	0.813	3.38	.312	.388	.740	8.5	2.25	60
Aluminum Grating													
2 lb.	200	Inquire		1.33	5.33	0.940	3.44	.250	.371	.730	9	2.25	48
Stainless Steel Grating													
3.3 lb.	330	Inquire		2.00	6.00	1.625	4.88	.250	.312	.656	6	2	69
4.5 lb.	450	Inquire		1.41	4.00	1.508	2.88	.250	.300	.625	8.3	3	58
Carbon Steel Catwalk-Long Length SWD													
2 lb.	200	10	2	1.33	5.33	1.00	3.44	.120	267	.480	9	2.25	60
3 lb.	300	10&12	2,3,4&5	1.33	5.33	0.940	3.44	.183	.261	.500	12.8	3.5	73
3.14 lb.	314	10	2&3	2.00	6.00	1.625	4.88	.250	.308	.562	7.4	2.5	74
4 lb.	400	10	2&3	1.33	5.33	0.940	3.44	.215	.297	.625	12.8	3.5	65
4.27 lb.	427	10	2&3	1.41	4.00	1.000	2.88	.250	.297	.625	12	4.2	58
5 lb.	500	10	2&3	1.33	5.33	0.813	3.38	.250	.327	.625	14.8	3.6	52

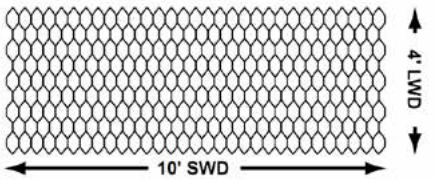
3.0 lb. Grating



SWD = Short Way of Diamond

LWD = Long Way of Diamond

3.0 lb. Grating Catwalk



Selection Guide

First consider the general characteristics required, such as safety, open area and ease of maintenance. After the basic product is selected, determine the proper style of grating to satisfy the load and span conditions. The following information will help you select the proper style of grating for the job:

- Determine the clear span
- Determine the load condition and the amount of load
- Select the appropriate grating style from the guide to the right

Concentrated Load at Center of Span (Lbs. per Foot of Width)										
	Clear Span									
Carbon Steel	18"	24"	30"	36"	42"	48"	54"	60"	66"	72"
50	3.0 3.14	3.0 3.14	3.0 3.14	3.0 3.14	3.0 3.14	4.0 4.27	5.0 6.25	6.25 7.0	6.25 7.0	7.0
100	3.0 3.14	3.0 3.14	3.0 3.14	3.0 3.14	4.0 4.27	5.0 6.25	7.0			
150	3.0 3.14	3.0 3.14	3.0 3.14	5.0 6.25	5.0 6.25	7.0	7.0			
200	3.0 3.14	3.0 3.14	4.0 4.27	5.0 6.25	6.25 7.0	7.0				
250	3.0 3.14	3.0 3.14	4.0 4.27	6.25 7.00	7.0					
300	3.0 3.14	4.0 4.27	5.0 6.25	7.0						
350	3.0 3.14	4.0 4.27	6.25 7.0	7.0						
400	3.0 3.14	4.0 4.27	6.25 7.0							

Chart information conforms with Military Specifications MIL-M-17194C (Metals Expanded Steel) and MYL-G 18015 (ships) (grating) and the deflection requirements of Federal Specifications RR-G-661-B.

How to Order

Information Necessary to Order

1. Always specify the number of pieces, style and sheet size, as in the following example:

   30 pcs., 5.0# expanded metal grating, 4’ x 8’

   Note: The sheet size SWD (short way of diamond) is always specified first and the sheet size LWD (long way of diamond) is specified second, i.e. SWD x LWD. If your expanded metal grating is for a catwalk application, the LWD will typically run the short way of the sheet. This is because a shorter LWD provides greater support over the span of the walkway. Example: 30 pcs., 3.0# carbon steel expanded metal grating catwalk, 10’ SWD x 3’ LWD.

2. If special sheet sizes are required, state exact sheet size and type of shearing wanted, or dimensional tolerance allowed. Expanded metal grating is normally furnished bond sheared on the first bond over the specified dimension (both SWD and LWD); however, in same cases it can be furnished random sheared to a closer tolerance if required.

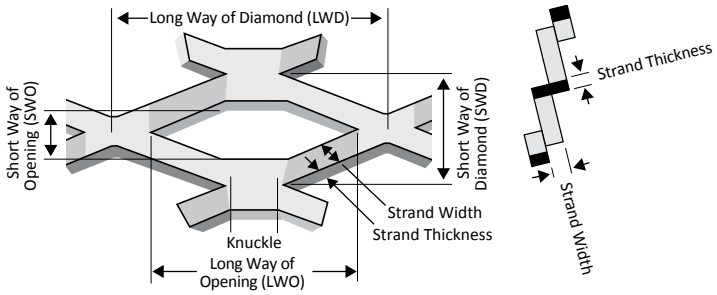
   Standard tolerances on special sheet sizes are as follows:

   Bond Sheared Sheets -0”, +1/2 diamond

   Random Sheared Sheets + - 1/8”

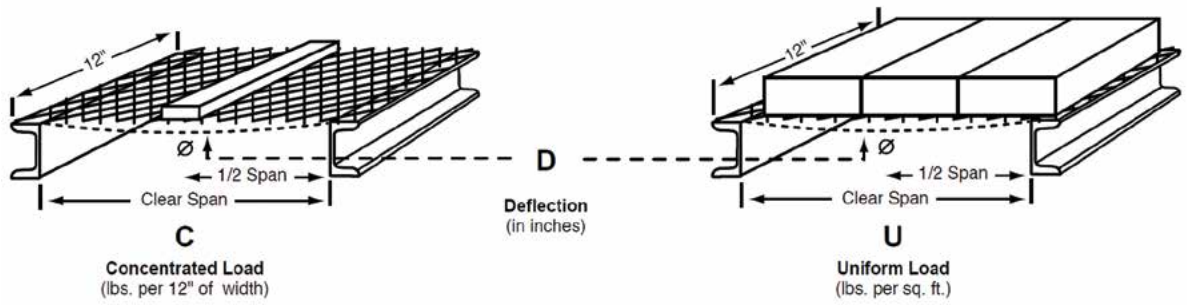
3. Specify the type of metal wanted. Example: Carbon steel, stainless steel, aluminum etc.

4. If your expanded metal grating requirements involve walkway and platform areas that cannot be specified in simple sheet sizes, contact our Sales Engineer for assistance.



How to Read Load Table

The expanded metal grating flooring Load Table is based on the following:



Clear Span: The distance between supports, measured from the inside edge of one support to the inside edge of the next support.

Concentrated Load: A load distributed over a relatively small area, such as a pedestrian load or portable equipment load. Typical concentrated loads are shown in pounds per foot of grating width, measured perpendicular to the span (i.e. in the SWD direction).

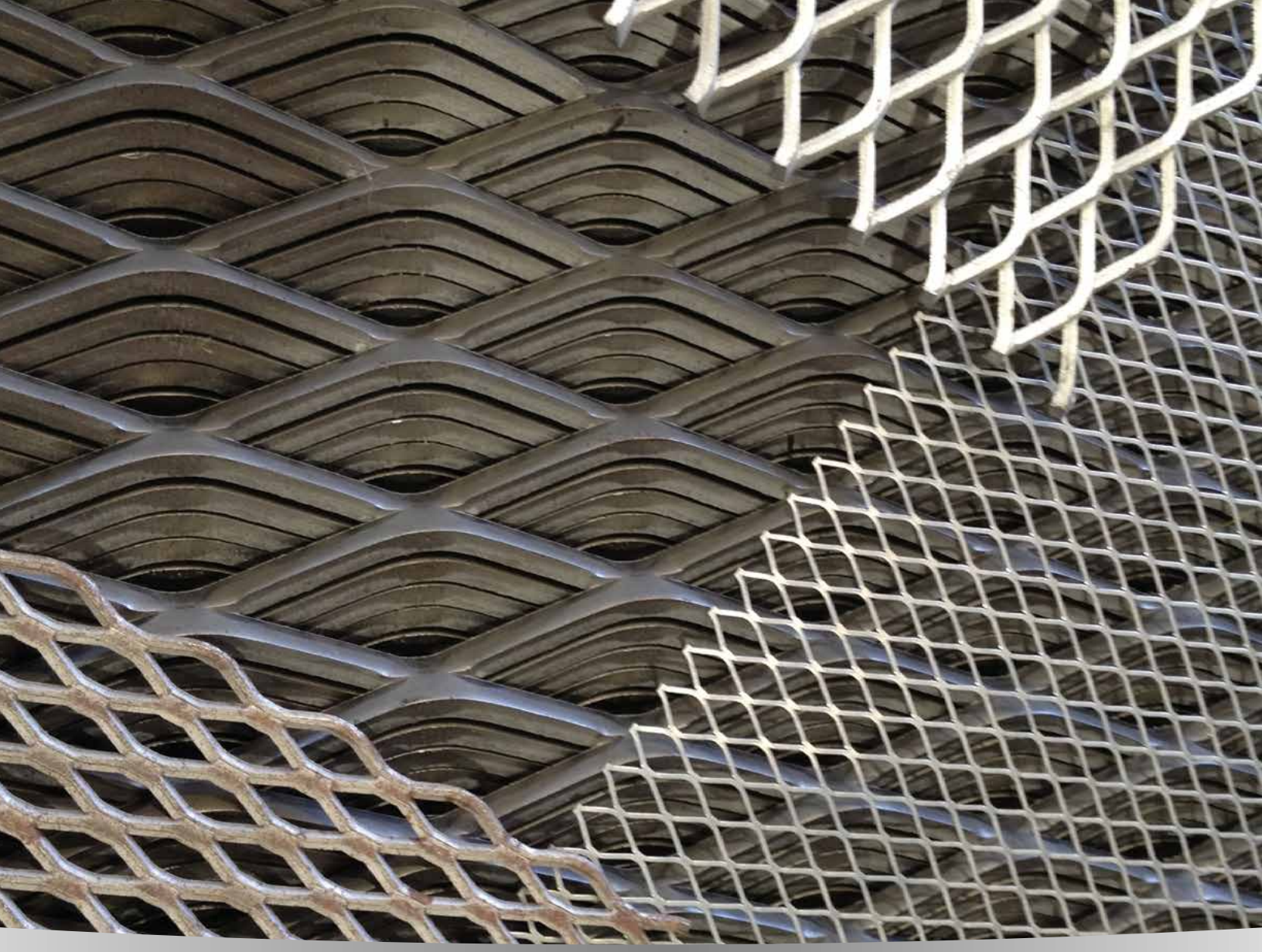
Deflection: The deviation in inches from the original plane when a piece of grating is placed under load.

Uniform Load: A load uniformly distributed over all of the clear span. Typical uniform load are shown in pounds per square foot of grating.

Expanded Metal Grating Loading Table

Load in Pounds...Deflection in Inches										
XM-Grating	Load Condition	Clear Span	50 lbs.	100 lbs.	150 lbs.	200 lbs.	250 lbs.	300 lbs.	350 lbs.	400 lbs.
3.0 lb. Carbon Steel	C	25	.067	.134	.201	.268				
		30	.113	.226	.339					
		35	.177	.353						
		40	.261							
	U	25	.082	.163	.245	.326				
		30	.166	.331						
		35	.303							
3.14 lb. Carbon Steel	C	25	.055	.109	.164	.219	.273			
		30	.088	.176	.264					
		35	.133	.267						
		40	.193	.386						
	U	25	.064	.128	.191	.255				
		30	.124	.248	.372					
		35	.221	.442						
		40	.367							
4.0 lb. Carbon Steel	C	25	.031	.063	.094	.125	.156	.188	.219	.250
		30	.052	.104	.156	.208	.260			
		35	.081	.161	.242	.322				
		40	.118	.237	.355					
		45	.167	.333						
	U	25	.036	.073	.109	.146	.182	.219	.255	
		30	.073	.146	.219	.292				
		35	.132	.265	.397					
		40	.223	.445						
		45	.353							
4.27 lb. Carbon Steel	C	25	.030	.060	.090	.121	.161	.181	.211	.241
		30	.051	.102	.153	.205	.256	.307		
		35	.080	.161	.241	.321				
		40	.119	.238	.357					
		45	.169	.337						
	U	25	.036	.071	.107	.142	.178	.213	.249	.285
		30	.073	.145	.218	.290	.363			
		35	.133	.266	.399					
		40	.226	.451						
		45	.360							
5.0 lb. Carbon Steel	C	30	.048	.096	.144	.192	.240	.288		
		35	.076	.152	.228	.303				
		40	.113	.226	.339					
		45	.161	.321						
		50	.220	.440						
	U	30	.069	.138	.207	.275	.344			
		35	.127	.254	.382					
		40	.217	.433						
		45	.346							
6.25 lb. Carbon Steel	C	30	.032	.064	.096	.128	.161	.193	.225	.257
		35	.050	.100	.150	.200	.250	.300		
		40	.073	.147	.220	.294				
		50	.141	.282						
		60	.242	.483						
	U	30	.048	.095	.143	.190	.238	.285	.333	
		35	.086	.173	.259	.346				
		40	.146	.292						
		50	.351							
7.0 lb. Carbon Steel	C	30	.031	.062	.093	.124	.154	.185	.216	.247
		35	.047	.093	.140	.186	.223	.280	.374	
		50	.126	.252	.378	.503				
		60	.212	.425						
		70	.332							
	U	30	.045	.089	.134	.178	.223	.267	.312	
		35	.079	.158	.237	.316				
		50	.308	.615						

Deflection values indicated by shading are larger than the maximum recommended (1/4") for normal pedestrian comfort but may be safely exceeded at the discretion of the engineer.



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