

EXPANDED METAL SHEETS

STANDARD - ALUMINUM

FLATTENED - ALUMINUM

Style	Weight lbs/Sq.Ft.	Opening Size (in inches)		Strand Size (in inches)		Approx. Open Area %
		SWO	LWO	Width	Thick	
A1/2" - 0.051R	27	0.375	0.937	0.096	0.051	65
A1/2" - 0.081R	44	0.375	0.937	0.096	0.081	60
A3/4" - 0.051R	17	0.812	1.75	0.109	0.051	78
A3/4" - 0.081LR	32	0.75	1.68	0.129	0.081	76
A3/4" - 0.081HR	41	0.75	1.68	0.165	0.081	69
A3/4" - 0.125R	65	0.687	1.68	0.169	0.125	68
A1 1/2" - 0.081R	22	1.187	2.5	0.128	0.081	85
A1 1/2" - 0.125R	43	1.187	2.5	0.162	0.125	79

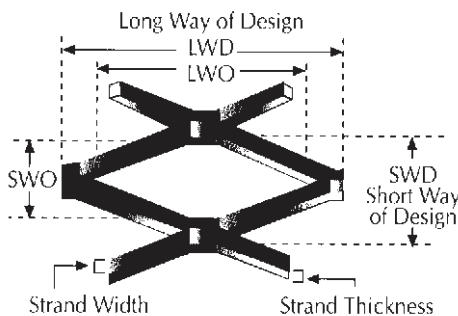
Style	Weight lbs/Sq.Ft.	Opening Size (in inches)		Strand Size (in inches)		Approx. Open Area %
		SWO	LWO	Width	Thick	
A1/2" - 0.051F	26	0.312	1	0.104	0.04	61
A1/2" - 0.081F	42	0.312	1	0.105	0.06	58
A3/4" - 0.051F	16	0.75	1.812	0.122	0.04	72
A3/4" - 0.081LF	30	0.687	1.75	0.143	0.07	70
A3/4" - 0.081HF	39	0.687	1.75	0.181	0.07	63
A3/4" - 0.125F	62	0.625	1.75	0.187	0.095	62
A1 1/2" - 0.081F	21	1.062	2.75	0.143	0.055	77
A1 1/2" - 0.125F	41	1	2.75	0.181	0.08	70

STANDARD - CARBON STEEL

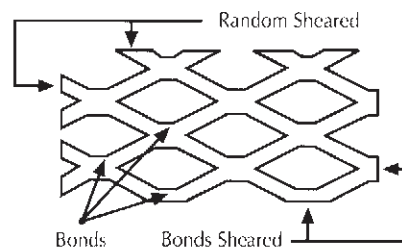
FLATTENED - CARBON STEEL

Style	Weight lbs/Sq.Ft.	Opening Size (in inches)		Strand Size (in inches)		Approx. Open Area %
		SWO	LWO	Width	Thick	
1/2" - #20R	0.43	0.438	0.938	0.072	0.036	80
1/2" - #18R	0.7	0.44	0.938	0.088	0.048	72
1/2" - #16R	0.86	0.375	0.938	0.086	0.06	65
1/2" - #13R	1.47	0.312	0.938	0.096	0.092	57
1/2" - #13(.188)R	2.82	0.25	0.8	0.188	0.092	25
3/4" - #16R	0.54	0.813	1.75	0.099	0.06	78
3/4" - #13R	0.8	0.75	1.688	0.096	0.092	76
3/4" - #10 (13)R	1.2	0.75	1.625	0.144	0.092	72
3/4" - #9R	1.8	0.688	1.563	0.148	0.134	68
1" - #16R	0.44	1	2.063	0.096	0.06	82
1" - #14R	0.78	0.875	1.563	0.125	0.074	75
1" - #12R	1.02	0.907	1.563	0.109	0.105	78
1" - #10 (170)R	1.7	0.75	1.563	0.155	0.135	62
1" - #10HR	2	0.725	1.563	0.18	0.135	60
1" - #7R	4.12	0.576	1.563	0.275	0.183	45
1 1/2" - #18R	0.2	1.313	2.625	0.067	0.048	90
1 1/2" - #16R	0.4	1.25	2.625	0.107	0.06	85
1 1/2" - #13R	0.6	1.188	2.5	0.104	0.092	85
1 1/2" - #10 (13)R	0.79	1.188	2.5	0.137	0.092	80
1 1/2" - #10R	1.7	1	2.375	0.2	0.135	74
1 1/2" - #10HR	2	0.83	2.375	0.24	0.135	72
1 1/2" - #9R	1.2	1.125	2.375	0.142	0.134	76
1 1/2" - #6R	2.5	1	2.313	0.201	0.198	69

Style	Weight	Opening Size (in inches)		Strand Size (in inches)		Approx. Open Area %
	lbs/100	SWO	LWO	Width	Thick	
	Plain					
1/2" - #20F	0.4	0.375	1	0.079	0.029	65
1/2" - #18F	0.66	0.312	1	0.097	0.039	60
1/2" - #16F	0.82	0.312	1	0.096	0.05	63
1/2" - #13F	1.4	0.265	1	0.107	0.07	52
3/4" - #16F	0.51	0.75	1.75	0.111	0.048	74
3/4" - #13F	0.75	0.688	1.781	0.106	0.07	74
3/4" - #10 (13)F	1.14	0.637	1.755	0.16	0.07	68
3/4" - #9F	1.71	0.563	1.688	0.165	0.12	63
1" - #16F	0.41	0.813	2.25	0.098	0.05	78
1" - #14F	0.63	0.79	2	0.125	0.07	80
1" - #12F	0.98	0.785	2	0.156	0.085	74
1" - #10F	1.65	0.75	1.9	0.16	0.11	58
1 1/2" - #16F	0.38	1.062	2.75	0.119	0.048	83
1 1/2" - #13F	0.57	1.062	2.75	0.116	0.07	80
1 1/2" - #10 F	1.65	0.9	2.56	0.188	0.11	63
1 1/2" - #9F	1.14	1	2.563	0.158	0.11	75



STYLE DIMENSION - Nominal dimension Short Way of Design (SWD).
 DESIGN SIZE - Actual dimension SWD and LWD. Measured from a point to a corresponding point on the following design.
 (SWO) - Short Way of Opening.
 (LWO) - Long Way of Opening
 STRANDS - The sides of design.
 STRAND THICKNESS - Gauge thickness of metal expanded.
 STRAND WIDTH - Amount of metal fed under dies to produce one strand.



BOND - Where two strands intersect. Eliminates prongs or jagged edges.
 TOLERANCE - Minus 0 plus 1/2 the design size, either SWD or LWD.
 RANDOM - This type of shearing leaves prongs or jagged edges
 Tolerance: + or - 1/16"
 Grating: = or 1/4"

EXPANDED METAL GRATING

GRATING DATA - CARBON STEEL

STYLE	Lbs. Per sq. ft.	Standard Sheet Size (Feet)		Design Size (Inches)		Opening Size (Inches)		Strand Size (Inches)		Overall Thickness (Inches)	No. of Designs Per Ft.		% Open Area
		width SWD	length SWD	SWD	LWD	SWO	LWO	Width	Thickness		SWD	LWD	
3.0 lb.	3.00	4 & 6	8,10 & 12	1.33	5.33	0.94	3.44	0.264	0.183	0.540	9	2.25	60
3.14 lb.	3.14	4-4&6	8-10	2.00	6.00	1.63	4.88	0.312	0.250	0.656	6	2	69
4.0 lb.	4.00	4-5&6	8 & 10	1.33	5.33	0.94	3.44	0.300	0.215	0.618	9	2.25	55
4.27 lb.	4.27	4 & 6	8 & 10	1.41	4.00	1.00	2.88	0.300	0.250	0.625	8.5	3	58
5.0 lb.	5.00	4-5&6	8 & 10	1.33	5.33	0.813	3.38	0.331	0.250	0.655	9	2.25	50
6.25 lb.	6.25	4 & 6	8 & 12	1.41	5.33	0.813	3.38	0.350	0.312	0.715	8.5	2.25	50
7.0 lb.	7.00	4	8	1.41	5.33	0.813	3.38	0.391	0.312	0.740	8.5	2.25	45

GRATING DATA - ALUMINUM (TYPE 5052-H-32)

STYLE	Lbs. Per sq. ft.	Standard Sheet Size (Feet)		Design Size (Inches)		Opening Size (Inches)		Strand Size (Inches)		Overall Thickness (Inches)	No. of Designs Per Ft.		% Open Area
		width SWD	length SWD	SWD	LWD	SWO	LWO	Width	Thickness		SWD	LWD	
2.0 lb.	2.0	5	12	1.33	5.33	0.940	3.44	0.387	0.250	0.730	9	2.25	48

Above material meets all requirements of Military Specifications MIL-M-17194C (Metals, Expanded, Steel) and MIL-G 18015 (Ships) (Gratings, Metal, other than Bar Type) and the deflection requirements of Federal Specification RR-G-661-B.

CONCENTRATED & UNIFORM LOAD DEFLECTION / FIXED SPAN

		CARBON STEEL -----STYLE * (LBS. PER SQ. FT)-----														ALUMINUM	
		3		3.14		4		4.27		5		6.25		7		2	
		LOAD	D	LOAD	D	LOAD	D	LOAD	D	LOAD	D	LOAD	D	LOAD	D	LOAD	D
24" SPAN	U	275	0.250	375	0.25	350	0.24	500	0.245	600	0.240	800	0.220	800	0.210		
	C	275	0.250	375	0.25	440	0.25	400	0.250	540	0.245	800	0.220	800	0.220	250	0.250
36" SPAN	U	100	0.220	150	0.24	150	0.245	165	0.245	175	0.240	300	0.250	400	0.250		
	C	165	0.250	155	0.25	220	0.25	225	0.240	310	0.250	300	0.240	350	0.240	100	0.250
48" SPAN	U			50	0.25	50	0.25	60	0.250	100	0.250	115	0.240	165	0.240		
	C	75	0.250	75	0.25	100	0.25	100	0.250	140	0.250	150	0.240	175	0.250	50	0.250

U- Uniform Load in Lbs. Per Sq. Ft. * C-Concentrated Load in Lbs. Per Sq. Ft. * D- Deflection in inches

SELECTION CHART - CARBON STEEL

CONCENTRATED LOAD (Lbs. Per Ft. of Length of Catwalk or Platform)	CLEAR SPAN (Distance between supports, measured from the inside edge of one support to the inside edge of the next support)						
	23"	30"	35"	42"	47"	54"	60"
50 Lbs. Light or occasional pedestrian traffic	3.00	3.00	3.00	3.00	3.00	4.00	5.00
100 Lbs. Normal or frequent pedestrian traffic	3.14	3.14	3.14	3.14	3.14	4.27	6.25
150 Lbs. Heavy or constant pedestrian traffic	3.00	4.00	4.00	5.00	6.25	7.00	
200 Lbs. pedestrian traffic with light equipment	3.14	4.27	4.27	6.25			
250 Lbs.	4.00	5.00	5.00	7.00			
300 Lbs.	4.27	6.25					
350 Lbs.	4.00	6.25	7.00				

The concentrated load selection for this chart do not exceed the 1.4 inch maximum deflection as stated in Federal Specification RR-G-618 and the generally accepted maximum deflection for heavy pedestrian traffic.

