Carbon Steel-Standard								
Specification	Design Size		Opening Strands		Size of Strands		Overall Thickness	Open Area
	(Inches)		(Inches)		(Inches)		(Inches)	(%)
	SWD	LWD	SWO	LWO	Width	Thicknes s		
1/4" #20	0.25	1	0.125	0.718	0.072	0.036	0.135	45
1/4" #18	0.25	1	0.11	0.718	0.072	0.048	0.147	43
1/2" #20	0.5	1.2	0.438	0.938	0.072	0.036	0.14	80
1/2" #18	0.5	1.2	0.438	0.938	0.088	0.048	0.172	72
1/2" #16	0.5	1.2	0.375	0.938	0.087	0.06	0.175	65
1/2" #13	0.5	1.2	0.312	0.938	0.096	0.092	0.204	57
3/4" #16	0.923	2	0.813	1.75	0.101	0.06	0.21	78
3/4" #13	0.923	2	0.75	1.688	0.096	0.092	0.205	76
3/4" #10	0.923	2	0.75	1.625	0.144	0.092	0.29	72
(13ga)								
3/4" #9	0.923	2	0.688	1.562	0.15	0.134	0.312	68
(10ga)								
1" #16	1	2.4	0.938	2.062	0.087	0.06	0.192	82
1-1/2"#18	1.33	3	1.313	2.625	0.068	0.048	0.14	90
1-1/2"#16	1.33	3	1.25	2.625	0.108	0.06	0.23	85
1-1/2"#13	1.33	3	1.188	2.5	0.105	0.092	0.202	85
1-1/2"#10	1.33	33 3	1.188	2.5	0.138	0.092	0.284	80
(13ga)								
1-1/2"#9	1.33	3	1.125	2.375	0.144	0.134	0.312	76
(10ga)								
1-1/2"#6	1.33	3	1	2.313	0.203	0.198	0.433	69
(6ga)								
2"#10	1.85	05 4	1.625	3.438	0.404	0.092	0.327	82
(13ga)		4			0.164			

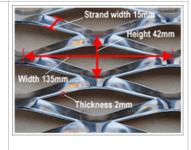
Stainless Steel-Standard									
Specification	Design Size		Opening Strands		Size of Strands		Overall Thickness	Open Area	
	(Inches)		(Inches)		(Inches)		Inches)	(%)	
SWD	LWD	swo	LWO	Width	Thicknes s				
1/4" #18	0.25	1	0.12	0.62	0.087	0.05	0.15	30	
1/2" #18	0.5	1.2	0.437	0.937	0.087	0.05	0.164	70	
1/2" #16	0.5	1.2	0.437	0.937	0.087	0.062	0.164	70	
1/2" #13	0.5	1.2	0.325	0.875	0.119	0.093	0.225	70	
3/4" #18	0.923	2	0.812	1.75	0.106	0.05	0.2	85	
3/4" #16	0.923	2	0.812	1.75	0.106	0.062	0.202	83	
3/4" #13	0.923	2	0.75	1.687	0.107	0.093	0.202	80	
3/4" #9	0.923	2	0.687	1.562	0.152	0.16	0.14	67	
(10ga)									
1-1/2"	1.333	.333 3	1.25	2.75	0.115	0.062	0.222	85	
#16									
1-1/2"	1.33	33 3	1.25	2.625	0.115	0.093	0.000	90	
#13							0.222	83	
1-1/2"#9	1.333 3	2	1 105	2.5	0.144	0.134	0.312	76	
(10ga)		33	1.125						

Aluminum-Standard									
Specification	Design Size		Opening Strands		Size of Strands		Overall Thickness	Open Area	
	(Inches)		(Inches)		(Inches)		(Inches)	(%)	
1/2" .051	0.5	1.2	0.375	0.937	0.093	0.051	0.158	65	
1/2" .081	0.5	1.2	0.375	0.937	0.093	0.081	0.186	60	
3/4" .051	0.923	2	0.813	1.175	0.109	0.051	0.2	78	
3/4".081	0.923	0.923 2	0.75	1.68	0.129	0.081	0.22	76	
(Lt.)									
3/4".081	0.923	0.923 2	0.75	1.68	0.165	0.081	0.3	69	
(Lt.)									
3/4".125	0.923	2	0.688	1.68	0.169	0.125	0.305	68	
1-1/2".081	1.333	3	1.188	2.5	0.128	0.081	0.24	85	
1-1/2".125	1.333	3	1.188	2.5	0.162	0.125	0.3	79	

Note: Special size and specifications can be made according to customers requires.

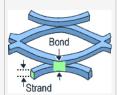
# Technology:

 $\label{eq:material} \begin{tabular}{ll} Material: stainless steel, carbon steel, brass, aluminum, titanium, \\ nickel, Al-Mg alloy \end{tabular}$ 



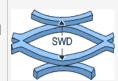
#### Strand and Bond

Expanded metal is composed of strands and bonds. Strands form the sides of the expanded metal openings. Bonds are where the strands intersect. In other words, the bond is where each diamond shaped opening is connected with the next opening.



#### SWD

SWD (Short Way of the Diamond) is the distance from the middle of the bond on one side to the middle of the bond on the opposite side.



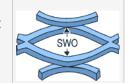
## **LWD**

LWD (Long Way of the Diamond) is the distance across the largest dimension of the diamond measured halfway between the diamonds.



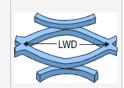
#### SWO

SWO (Short Way of the Opening) is the width of the opening of the shortest side of the diamond. SWO does not include the strand width, where SWD (Short Way of the Diamond) does.



#### LWO

LWO (Long Way of the Opening) is the length of the opening of the longest side of the diamond. LWO does not include the strand width, where LWD (Long Way of the Diamond) does.

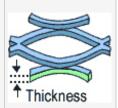


### Open Area

Expanded metal contains open spaces (the diamond-shaped openings) and material. Open area is the total area of the diamond openings divided by the total area of the sheet or roll of expanded metal and is expressed as a percent. In other words, open area describes how much of the expanded metal is open space. If expanded metal has a 60 percent open area, then 60 percent of the expanded metal is open space and 40 percent is material.

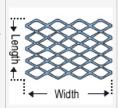
## Gauge or Thickness

Thickness is the measurement from the top surface to bottom surface of the expanded metal piece. Gauge is the most common measurement, but thickness can also be measured in fractional inches or millimeters.



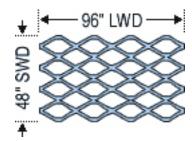
# Width and Length

Length is the measure of the longest side of the expanded metal sheet or cut-to-size piece. Width is the measure of the shortest side of the sheet or cut-to-size piece.



# Determining SWD, LWD Direction

The illustration to the right shows the correct way to designate SWD and LWD dimensions in relation to the length or width.



Stock sheets are like the one shown above

LWD Direction Parallel to Length

