PRODUCT CATALOG

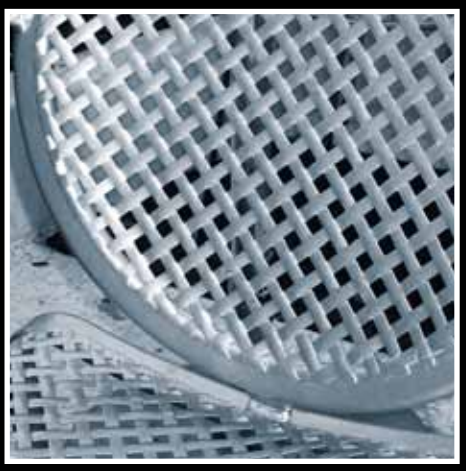
NEW METALS INC.











New Metals, Inc. is one of the largest producers of expanded metals in North America. Founded in 1954, the company produces a complete line of quality expanded metals, perforated metals, expanded metal grating, light-gauge floorplate, ornamental metal components and expanded metal refuse baskets.

Shipments of most products are made from factory inventory and stocks maintained by Steel Service Centers located throughout the United States, Mexico and Latin America. New Metals, Inc. stocks a large range of expanded metal and expanded metal grating standard sheet sizes, including carbon steel, stainless steel, aluminum and hot-dipped galvanized products.

The company also manufactures a wide variety of special products and provides many services, such as shearing, expanding to size, finishing and parts fabrication. In addition, New Metals, Inc. is quickly becoming one of the leading manufacturers of wrought iron and forged components. A great deal of wrought iron parts for the furniture, lighting and other industries are also produced by the company.

Please feel free to inquire regarding having your products' subcomponents fabricated with New Metals, Inc.

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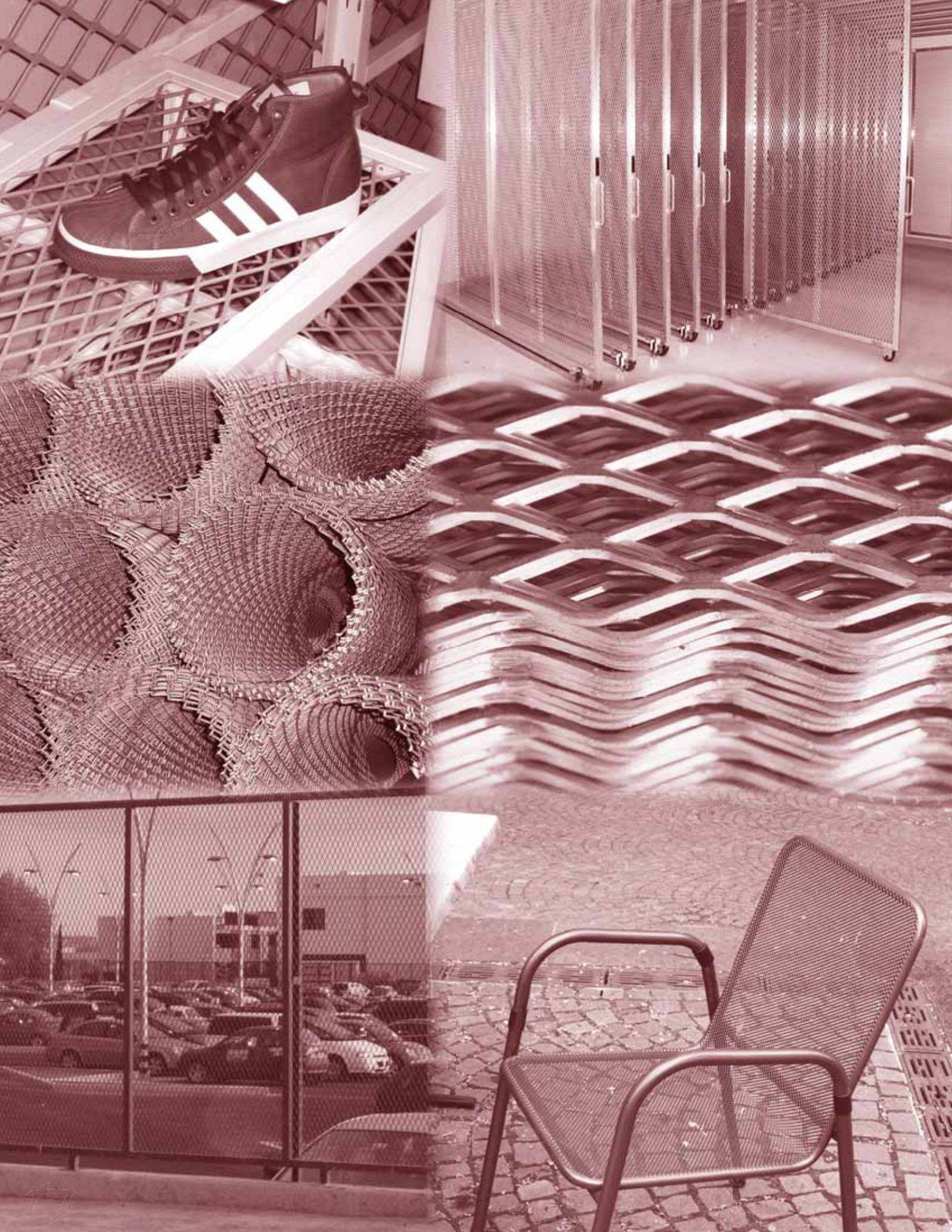
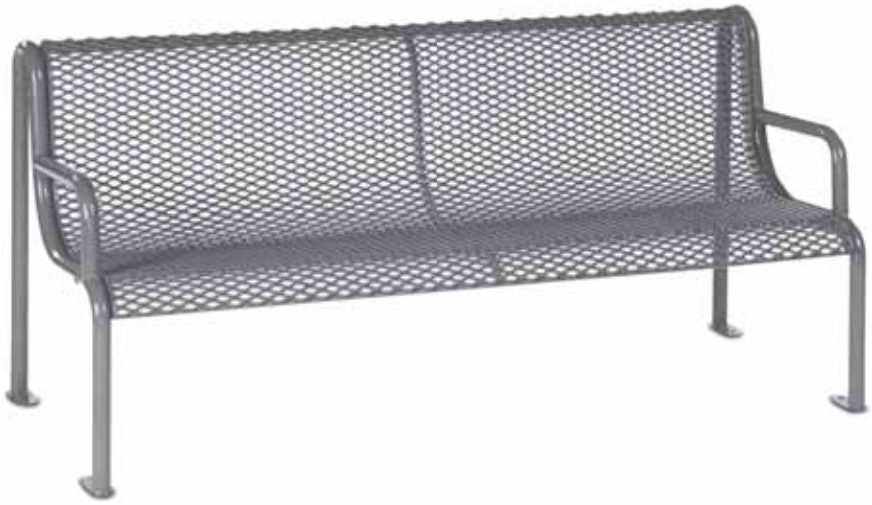
EXPANDED METAL



EXPANDED METAL APPLICATIONS

Expanded metal is an extraordinarily versatile material. It is most easily classified as either standard or flattened, but can also be grouped according to specific end-uses (for example, filter mesh, industrial mesh, grating and decorative meshes). Some major areas of use are:

- Machine and window guards
- Platforms and industrial flooring
- Outdoor furniture
- Heaters, fans
- Balcony railings
- Space dividers
- Display racks
- Filters
- Utility trailers
- Fencing
- Signs
- Shelving
- Strainers
- Grilles
- Bird and animal cages
- Walkways and stair treads
- Trays
- Containers
- Architectural elements
- Security walls and doors



EXPANDED METAL

Expanded metal is a metallic mesh that comes from a single sheet or coil, without any welding, that presents a series of openings of uniform size in the shape of diamonds. It is a product that comes from a drawing process from the steel coil or sheet, that allows to develop multiple mesh designs.

Expanded metal is a versatile product that is offered in several gauges, dimensions and finishes.

To correctly select the expanded metal product that meets your requirements, it is necessary to consider the following conditions:

- End use of the product
- Nominal dimension of the short way of the diamond
- Material thickness
- Whether raised or flattened
- Size of the sheet or coil required
- Type of material required (carbon steel, aluminum, etc.)

PRESENTATIONS AND PROFILES

Expanded metal can be provided in:

- Standard size sheets
- Coils
- Cut to size sheets

Profiles:

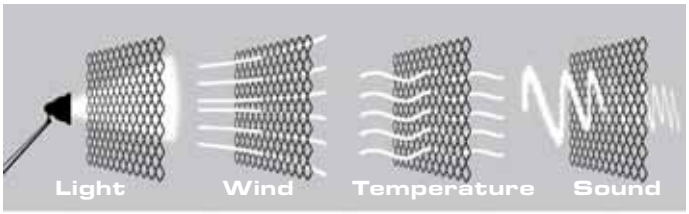
- Standard (raised) mesh
- Flattened mesh

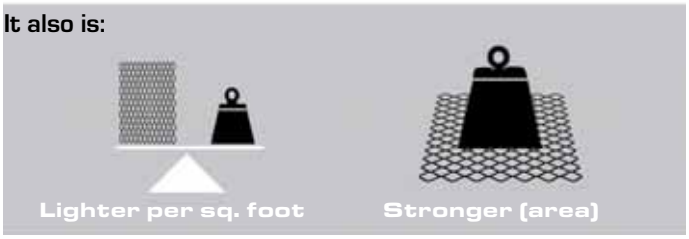
RAW MATERIALS

Materials that can be expanded are: carbon steel, galvanized steel, aluminum and tin plate. Other materials likely to be expanded are stainless steel, copper.

ADVANTAGES

The process of expanding steel sheets can enhance original sheet size by up to 10 times, also reducing up to 80% of the original weight. Also, expanded metal permits passage of:





MANUFACTURING TOLERANCES FOR 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
LWD 1/16" per foot of length
(measured with 90 degree angle)

Weights and Thickness:
+ or - 10% of published weight and/or thickness

Camber:
SWD 1/16" per foot of width
LWD 1/16" per linear 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 OF EXPANDED METAL PLEASE CONSULT THE PLANT.

HOW TO ORDER EXPANDED METAL

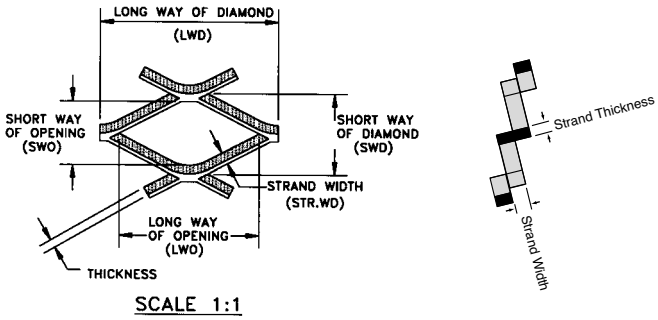
The following information should always be included when placing an expanded metal order:

1. Specify the number of pieces wanted.
2. Specify the nominal dimension of the diamond SWD.
   Example: 3/4”
3. Specify the style of the sheet
   Example: #18; or if aluminum .081
4. Specify whether standard or flattened.
5. Specify the type of metal wanted
   Example: carbon steel, stainless steel, aluminum, etc.
6. Specify the size sheet wanted
   Example: 4’ SWD x 8’ LWD

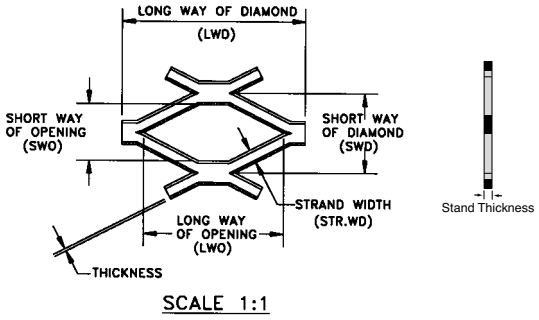
This example illustrates the information necessary for a Steel Service Center to fill your order.

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

Standard Mesh - Example: 3/4" # 9 SXM

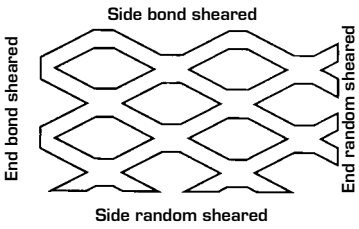


Flattened Mesh - Example: 3/4" # 9 FXM



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.

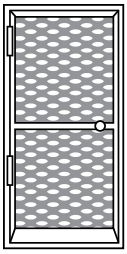
End Random Shearing. The process of shearing a piece of expanded metal to a specified length (LWD). This cut normally leaves open diamonds at both ends but accomplishes close tolerance (plus or minus 1/16") when both are sheared.

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 cut 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 1/2 diamond.

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

NOTE: Bond shearing provides closed diamonds that 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 greater safety risk due to the sharp edges left on the open diamond.



Steel Door Guard

A rigid steel mesh with small openings designed to be an effective insect screen with enhanced security. This product is available in 3 distinctive mesh patterns.

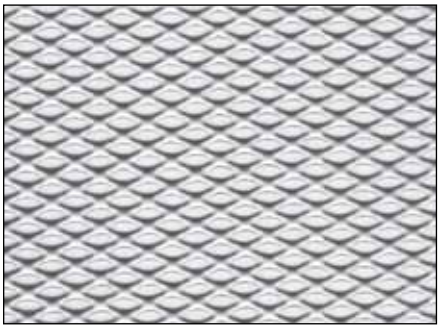
It is the ideal protective mesh for doors and windows that is stronger than traditional wire or plastic screen meshes.

Steel Door Guard offers greater security because it is much more resistant to breaking or cutting.

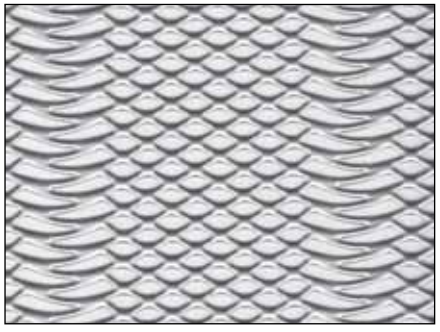
- The uniform openings allow free passage of air, sound and light.
- Functional and distinctive design.
- It is made from one piece of steel with no welds or braids.
- It is offered in 4 different sizes.

STEEL DOOR GUARD					
Product	Gauge	Strand Width (Inches)	Type of Steel		Dimensions (SWD x LWD)
			Carbon Steel	Pre-Galvanized	
1/8" #24 FXM	24	0.028	Yes	Yes	96" & 84" x 48" & 36"
1/8" #26 FXM	26	0.028	Yes	Yes	96" & 84" x 48" & 36"
1/8" #24 FXM Zig-Zag	24	0.028	Yes	Yes	96" & 84" x 48" & 36"
1/8" #24 FXM Baroque	24	0.028	Yes	Yes	96" & 84" x 48" & 36"

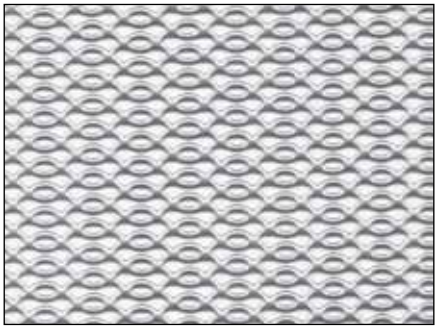
Note: Steel Door Guard products are also available in powder coated finishes. Please inquire as to available colors and minimum order requirements.



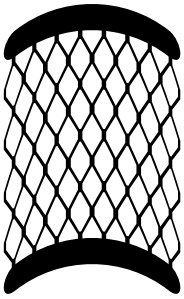
1/8" # 24 FXM



1/8" #24 FXM Zig-Zag



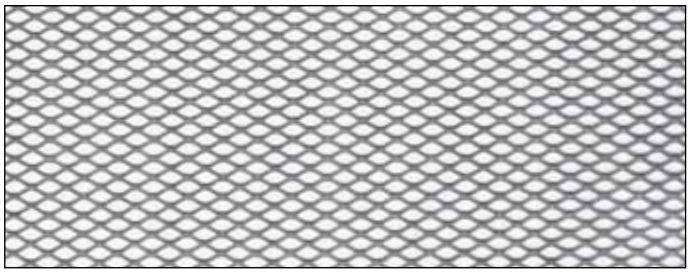
1/8" #24 FXM Baroque



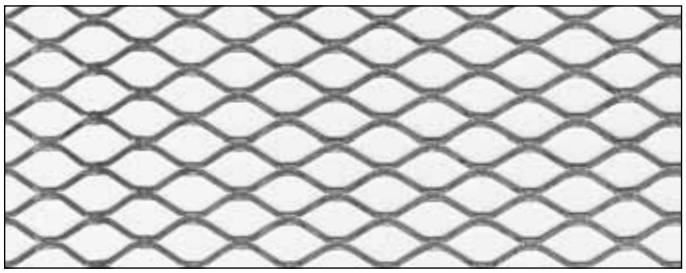
Filter Mesh

New Metals is a specialist in manufacturing expanded metal mesh for automotive filtering applications, pumps, construction equipment and tractors.

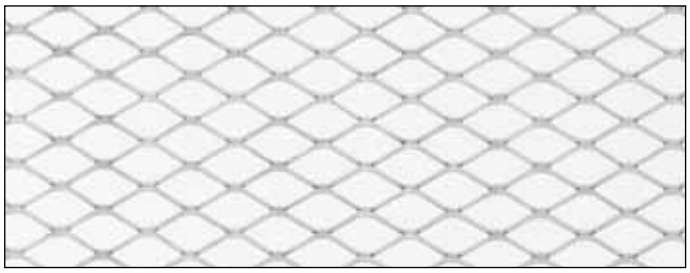
Filter Mesh also has applications in air conditioning filter components, as well as commercial and home air extractors. This material is fire and corrosion resistant, is easy to install and is highly flexibile.



FR-180 FXM

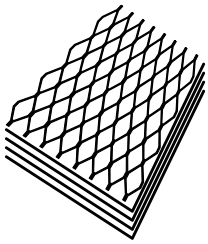


FR-500 FXM

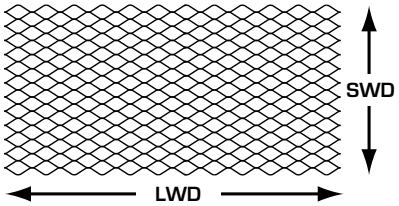


C15-22 FXM

Product	Diamond Size				Thickness		Strand Width		Weight		Dimensions	
	SWD		LWD								SWD	LWD
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs/Ft²	Kgs./ mts.²	Length ft.	Width ft.
FR-180 FXM	0.10	2.5	0.18	4.5	0.010	0.25	0.014	0.3	0.10	0.50	203	1.312
FR-500 FXM	0.25	6.4	0.50	12.7	0.010	0.25	0.028	0.7	0.10	0.50	203 & 213	1.312 & 2
C13-26 FXM	0.34	8.71	0.62	15.8	0.017	0.45	0.039	1.0	0.18	0.90	36	3
C14-24 FXM	0.34	8.71	0.62	15.8	0.021	0.53	0.039	1.0	0.22	1.08	36	3
C15-22 FXM	0.34	8.71	0.62	15.8	0.029	0.76	0.039	1.0	0.27	1.31	36	3
C16-20 FXM	0.34	8.71	0.62	15.8	0.036	0.91	0.059	1.5	0.51	2.49	36	3

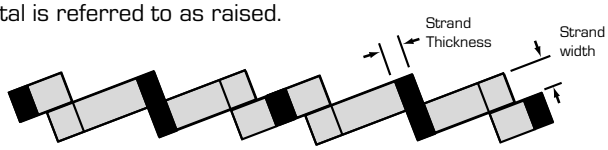


Expanded Metal

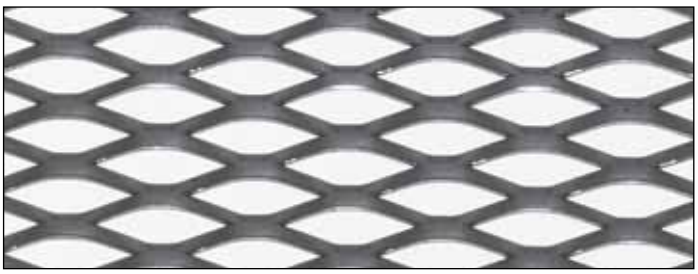


Standard Expanded Metal (SXM)

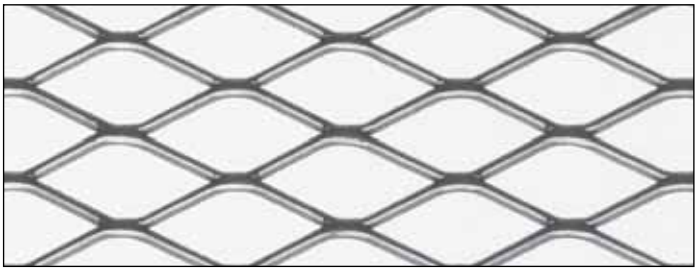
Standard expanded metal is a finished product as it comes from the press after having been die cut and expanded. Illustration shows that the strands and bonds form a sharp angle to the original plane of the solid sheet. Many times standard expanded metal is referred to as raised.



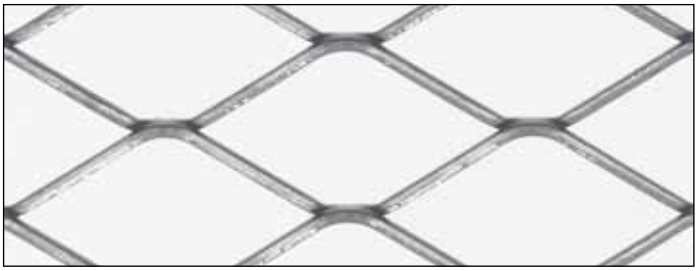
Pattern shown is actual size:



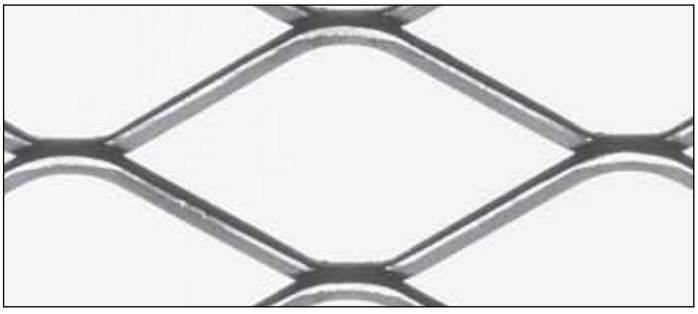
1/4" # 18 Standard



1/2" # 16 Standard



3/4" # 13 Standard

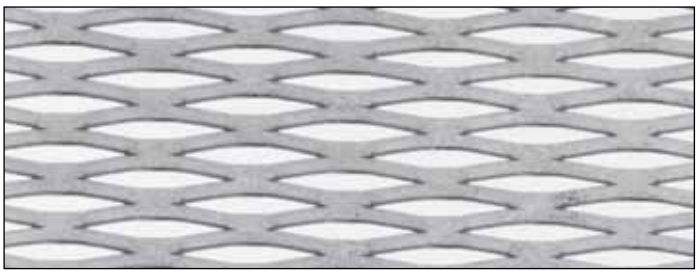


1-1/2" # 9 Standard

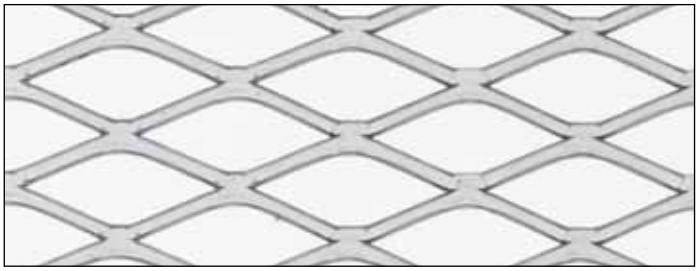
Flattened Expanded Metal (FXM)

Flattened expanded metal is standard expanded metal which has been cold rolled leaving a flat, smooth surface. Flattened expanded metal is about five percent lighter than standard expanded metal.

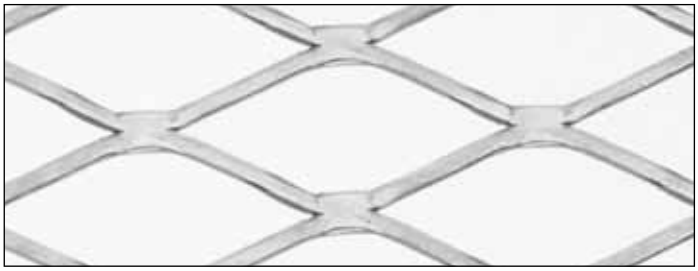
Pattern shown is actual size:



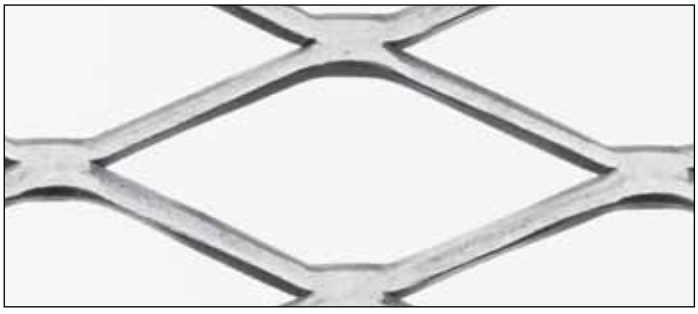
1/4" # 18 Flattened



1/2" # 16 Flattened



3/4" # 13 Flattened



1-1/2" # 9 Flattened

STANDARD EXPANDED METAL
CARBON STEEL

Product	Opening Size				Strand Thickness		Strand Width		Weight		Standard Sheet Size	
	SWD		LWD								SWD	LWD
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs/ Ft²	Kgs./ mts.²	Width ft.	Length ft.
1/4" #20 SXM	0.25	6.4	1.00	25.4	0.036	0.91	0.073	1.8	0.86	4.20	4	8
1/4" #18 SXM	0.25	6.4	1.00	25.4	0.047	1.21	0.073	1.8	1.15	5.60	4	8
1/2" #20 SXM	0.50	12.7	1.20	30.5	0.036	0.91	0.072	1.8	0.43	2.10	4	8
1/2" #18 SXM	0.50	12.7	1.20	30.5	0.047	1.21	0.088	2.2	0.70	3.40	4	8
1/2" #16 SXM	0.50	12.7	1.20	30.5	0.060	1.52	0.086	2.1	0.86	4.20	4	8
1/2" #13 SXM	0.50	12.7	1.20	30.5	0.092	2.34	0.096	2.4	1.47	7.20	4	8
3/4" #16 SXM	0.92	23.4	2.00	50.8	0.060	1.52	0.099	2.5	0.55	2.60	4	8
3/4" #13 SXM	0.92	23.4	2.00	50.8	0.092	2.34	0.096	2.4	0.80	3.90	4	8
3/4" #10(13) SXM	0.92	23.4	2.00	50.8	0.092	2.34	0.144	3.6	1.21	5.90	4	8
3/4" #9(10) SXM	0.92	23.4	2.00	50.8	0.133	3.40	0.148	3.7	1.80	8.80	4,5&6	8,10&12
1" #16 SXM	1.09	27.7	2.40	61.0	0.060	1.52	0.096	2.4	0.43	2.10	4	8
1 1/2" #16 SXM	1.33	33.8	3.00	76.2	0.060	1.52	0.107	2.7	0.41	2.00	4	8
1 1/2" #13 SXM	1.33	33.8	3.00	76.2	0.092	2.34	0.104	2.6	0.59	2.90	4	8
1 1/2" #10(13) SXM	1.33	33.8	3.00	76.2	0.092	2.34	0.137	3.4	0.80	3.90	4	8
1 1/2" #9(10) SXM	1.33	33.8	3.00	76.2	0.133	3.40	0.142	3.6	1.21	5.90	4,5&6	8&10
1 1/2" #6 SXM	1.33	33.8	3.00	76.2	0.198	5.03	0.201	5.1	2.50	12.20	4,5&6	8&10
2" #10(13) SXM	1.85	47.0	4.00	101.6	0.092	2.34	0.164	4.1	0.68	3.30	4	8
2" #9(10) SXM	1.85	47.0	4.00	101.6	0.133	3.40	0.149	3.7	0.90	4.40	4	8

STAINLESS STEEL

Product	Opening Size				Strand Thickness		Strand Width		Weight		Standard Sheet Size	
	SWD		LWD								SWD	LWD
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs/ Ft²	Kgs./ mts.²	Width ft.	Length ft.
1/2" #18 SXM	0.50	12.7	1.20	30.5	0.050	1.27	0.087	2.2	0.74	3.60	4	8
1/2" #16 SXM	0.50	12.7	1.20	30.5	0.062	1.57	0.087	2.2	0.90	4.40	4	8
1/2" #13 SXM	0.50	12.7	1.20	30.5	0.093	2.36	0.120	3.0	1.86	9.10	4	8
3/4" #16 SXM	0.92	23.4	2.00	50.8	0.062	1.57	0.106	2.6	0.59	2.90	4	8
3/4" #13 SXM	0.92	23.4	2.00	50.8	0.093	2.36	0.107	2.7	0.90	4.40	4	8
3/4" #9 SXM	0.92	23.4	2.00	50.8	0.140	3.56	0.161	4.0	2.05	10.00	4	8
1 1/2" #16 SXM	1.33	33.8	3.00	76.2	0.062	1.57	0.115	2.9	0.45	2.20	4	8
1 1/2" #13 SXM	1.33	33.8	3.00	76.2	0.093	2.36	0.116	2.9	0.68	3.30	4	8
1 1/2" #9 SXM	1.33	33.8	3.00	76.2	0.140	3.56	0.155	3.9	1.37	6.70	4	8

ALUMINUM

Product	Opening Size				Strand Thickness		Strand Width		Weight		Standard Sheet Size	
	SWD		LWD								SWD	LWD
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs/ Ft²	Kgs./ mts.²	Width ft.	Length ft.
1/2" .051 SXM	0.50	12.7	1.20	30.5	0.051	1.30	0.093	2.3	0.27	1.30	4	8
1/2" .081 SXM	0.50	12.7	1.20	30.5	0.081	2.06	0.096	2.4	0.43	2.10	4	8
3/4" .051 SXM	0.92	23.4	2.00	50.8	0.051	1.30	0.109	2.7	0.16	0.80	4	8
3/4" .081 (L) SXM	0.92	23.4	2.00	50.8	0.081	2.06	0.129	3.2	0.33	1.60	4	8
3/4" .081 (P) SXM	0.92	23.4	2.00	50.8	0.081	2.06	0.166	4.2	0.41	2.00	4	8
3/4" .125 SXM	0.92	23.4	2.00	50.8	0.125	3.18	0.170	4.3	0.65	3.20	4	8
1 1/2" .081 SXM	1.33	33.8	3.00	76.2	0.081	2.06	0.128	3.2	0.22	1.10	4	8
1 1/2" .125 SXM	1.33	33.8	3.00	76.2	0.125	3.18	0.163	4.1	0.43	2.10	4	8

FLATTENED EXPANDED METAL
CARBON STEEL

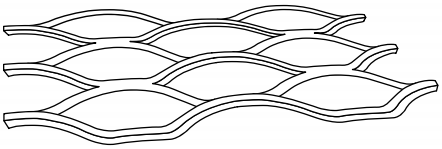
Product	Opening Size				Strand Thickness		Strand Width		Weight		Standard Sheet Size	
	SWD		LWD								SWD	LWD
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs/ Ft²	Kgs./ mts.²	Width ft.	Length ft.
1/4" #20 FXM	0.25	6.4	1.03	26.2	0.030	0.76	0.086	2.1	0.84	4.10	4	8
1/4" #18 FXM	0.25	6.4	1.03	26.2	0.040	1.02	0.086	2.1	1.11	5.40	4	8
1/2" #20 FXM	0.50	12.7	1.26	32.0	0.029	0.74	0.070	1.7	0.41	2.00	4	8
1/2" #18 FXM	0.50	12.7	1.26	32.0	0.039	0.99	0.109	2.7	0.66	3.20	4	8
1/2" #16 FXM	0.50	12.7	1.26	32.0	0.050	1.27	0.103	2.6	0.82	4.00	3,4&5	8&10
1/2" #13 FXM	0.50	12.7	1.26	32.0	0.070	1.78	0.107	2.7	1.39	6.80	3,4&5	8&10
3/4" #16 FXM	0.92	23.4	2.12	53.3	0.048	1.22	0.098	2.4	0.51	2.50	4	8&10
3/4" #13 FXM	0.92	23.4	2.12	53.3	0.070	1.78	0.119	3.0	0.76	3.70	4&5	8&10
3/4" #10 FXM	0.92	23.4	2.12	53.3	0.070	1.78	0.159	4.0	1.15	5.60	4	8
3/4" #9(10) FXM	0.92	23.4	2.12	53.8	0.120	3.05	0.164	4.1	1.70	8.30	3,4&5	8,10&12
1" #16 FXM	1.09	27.7	2.56	65.0	0.048	1.22	0.115	2.9	0.41	2.00	4	8&10
1 1/2" #16 FXM	1.33	33.8	3.20	81.3	0.048	1.22	0.119	3.0	0.39	1.90	4	8
1 1/2" #13 FXM	1.33	33.8	3.20	81.3	0.070	1.78	0.116	2.9	0.57	2.80	4&5	8&10
1 1/2" #9 FXM	1.33	33.8	3.20	81.3	0.109	2.79	0.158	4.0	1.11	5.40	4&5	8&10
1 1/2" #6 FXM	1.33	33.8	3.20	81.3	0.173	4.39	0.255	6.5	2.41	11.72	4	8&10

STAINLESS STEEL

Product	Opening Size				Strand Thickness		Strand Width		Weight		Standard Sheet Size	
	SWD		LWD								SWD	LWD
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs/ Ft²	Kgs./ mts.²	Width ft.	Length ft.
1/2" #18 FXM	0.50	12.7	1.25	31.8	0.040	1.02	0.093	2.3	0.70	3.40	4	8
1/2" #16 FXM	0.50	12.7	1.25	31.8	0.050	1.27	0.093	2.3	0.86	4.20	4	8
1/2" #13 FXM	0.50	12.7	1.25	31.8	0.080	2.03	0.132	3.3	1.78	8.70	4	8
3/4" #16 FXM	0.92	23.4	2.12	53.3	0.050	1.27	0.118	3.0	0.57	2.80	4	8
3/4" #13 FXM	0.92	23.4	2.12	53.3	0.070	1.78	0.120	3.0	0.86	4.20	4	8
3/4" #9 FXM	0.92	23.4	2.12	53.3	0.118	3.02	0.159	4.0	1.95	9.50	4	8
1 1/2" #16 FXM	1.33	33.8	3.20	81.3	0.050	1.27	0.124	3.1	0.43	2.10	4	8
1 1/2" #13 FXM	1.33	33.8	3.20	81.3	0.079	2.01	0.124	3.1	0.66	3.20	4	8
1 1/2" #9 FXM	1.33	33.8	3.20	81.3	0.118	3.02	0.165	4.1	1.31	6.40	4	8

ALUMINUM

Product	Opening Size				Strand Thickness		Strand Width		Weight		Standard Sheet Size	
	SWD		LWD								SWD	LWD
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs/ Ft²	Kgs./ mts.²	Width ft.	Length ft.
1/2" .051 FXM	0.50	12.7	1.27	32.3	0.040	1.02	0.104	2.6	0.25	1.20	4	8
1/2" .081 FXM	0.50	12.7	1.27	32.3	0.060	1.52	0.105	2.6	0.41	2.00	4	8
3/4" .051 FXM	0.92	23.4	2.12	53.8	0.040	1.02	0.122	3.1	0.16	0.80	4	8
3/4" .081 (L) FXM	0.92	23.4	2.12	53.8	0.070	1.78	0.143	3.6	0.31	1.50	4	8
3/4" .081 (P) FXM	0.92	23.4	2.12	53.8	0.070	1.78	0.181	4.6	0.39	1.90	4	8
3/4" .125 FXM	0.92	23.4	2.12	53.8	0.095	2.41	0.187	4.7	0.61	3.00	4	8
1 1/2" .081 FXM	1.33	33.8	3.15	80.0	0.052	1.34	0.143	3.6	0.20	1.00	4	8
1 1/2" .125 FXM	1.33	33.8	3.15	80.0	0.080	2.03	0.181	4.6	0.41	2.00	4	8



Grating

Grating is heavy duty expanded metal produced from carbon steel sheet and plate which contains no joints or welds, as each sheet is a single piece of sturdy steel. Lightweight and economical, expanded metal grating is ideal for use wherever a strong, durable, lightweight surface is needed. It is the standard product specified by engineers for use in catwalks, ramps, stairs, platforms, heavy duty shelving, truck-cab safety screens, ship and off-shore rig flooring and in partitions where high security is important.

The high percentage of open area, characteristic of expanded metal grating, allows snow, water and oil to drain off easily, thus maintaining the excellent slip-resistant surface. The same high percentage of open area also allows excellent passage of heat and light, and contributes to walkway cleanliness. Where building maintenance and safety are important considerations, these features are outstanding.

- **Made from steel plate**
- **Low cost**
- **Easy drainage**

Advantages:

- Anti-slipping surface offers great walking safety.
- Open surface avoids dirt and grease accumulation.
- Minimum fire prevention cost.
- Low maintenance cost.
- Facilitates handling & installation.
- Lower cost compared to traditional bar gratings.

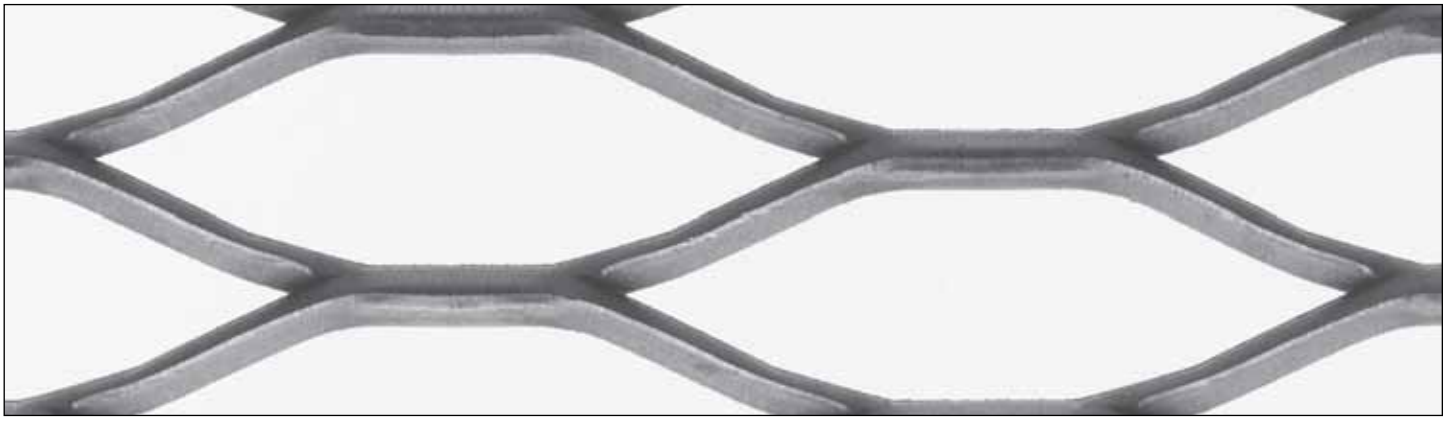
Applications:

- Mezzanines
- Maintenance platforms
- Elevated walkways
- Ramps
- Security platforms
- Transport protection
- Industrial stairs
- Doors
- Window protection
- Cold storage
- Vehicle flooring

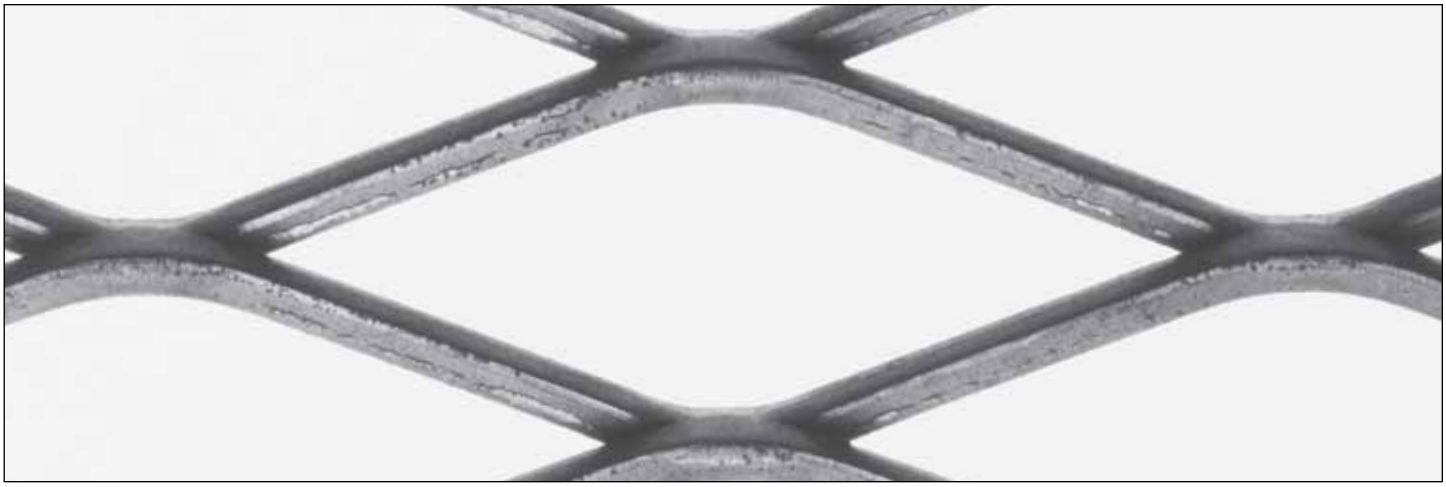
GRATING

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.

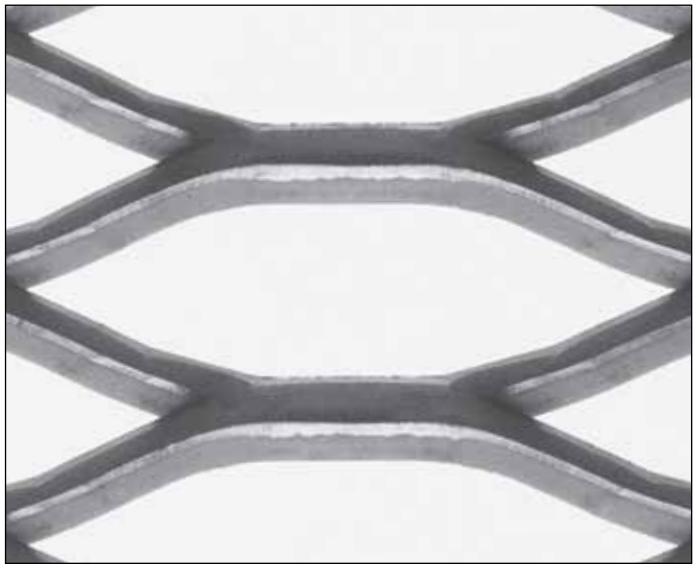
Pattern shown is actual size:



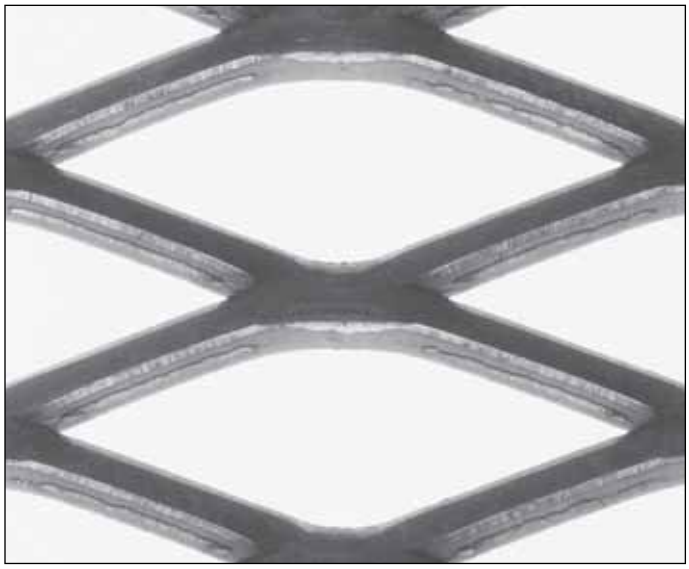
3 lb. Grating



3.14 lb. Grating



4 lb. Grating



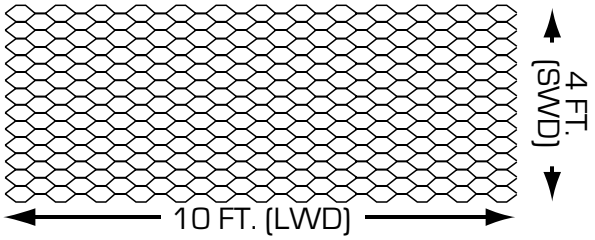
4.27 lb. Grating

EXPANDED METAL GRATING

Carbon Steel Standard Grating

Product	Opening Size				Thickness		Strand Width		Weight		Standard Sheet Size	
	SWD		LWD									
	Inches	mm.	Inches	mm.	Inches	mm.	Inches	mm.	lb/ft²	Kgs./m²	Width SWD	Length LWD
3.0 LB.	1.33	34.0	5.33	135.0	0.185	4.70	0.260	6.6	3.00	14.60	4, 5 & 6	8 & 10
3.14 LB.	2.00	51.0	6.00	152.0	0.252	6.40	0.307	7.8	3.14	15.30	4	8 & 10
4.0 LB.	1.33	34.0	5.33	135.0	0.217	5.50	0.295	7.5	4.00	19.50	4, 5 & 6	8 & 10
4.27 LB.	1.41	36.0	4.00	102.0	0.252	6.40	0.295	7.5	4.27	20.80	4 & 6	8 & 10
5.0 LB.	1.33	34.0	5.33	135.0	0.252	6.40	0.327	8.3	5.00	24.40	4	8 & 10
6.25 LB.	1.41	36.0	5.33	135.0	0.311	7.90	0.346	8.8	6.25	30.50	4	8 & 10
7.0 LB.	1.41	36.0	5.33	135.0	0.311	7.90	0.390	9.9	7.00	34.10	4	8 & 10

3 lb. Grating

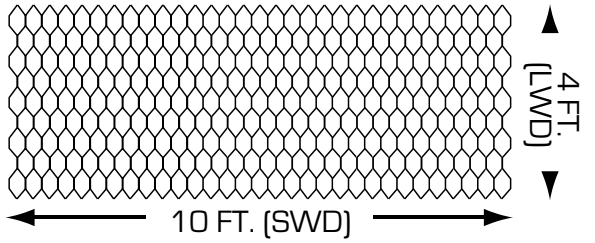


SWD = Short way of diamond
LWD = Long way of diamond

Carbon Steel Catwalk-Long Length SWD

Product	Opening Size				Thickness		Strand Width		Weight		Standard Sheet Size	
	SWD		LWD									
	Inches	mm.	Inches	mm.	Inches	mm.	Inches	mm.	lb/ft²	Kgs./m²	Width SWD	Length LWD
2.0 LB. CW	1.33	34.0	5.33	135.0	0.135	3.40	0.235	6.0	2.00	9.70	10 & 12	2
3.0 LB. CW	1.33	34.0	5.33	135.0	0.185	4.70	0.260	6.6	3.00	14.60	8, 10 & 12	2, 3, 4 & 5
3.14 LB. CW	2.00	51.0	6.00	152.0	0.252	6.40	0.307	7.8	3.14	15.30	8 & 10	2, 3 & 4
4.0 LB. CW	1.33	34.0	5.33	135.0	0.216	5.50	0.295	7.5	4.00	19.50	8 & 10	2, 3 & 4
4.27 LB. CW	1.41	36.0	4.00	102.0	0.252	6.40	0.295	7.5	4.27	20.80	8 & 10	2, 3 & 4
5.0 LB. CW	1.33	34.0	5.33	135.0	0.252	6.40	0.327	8.3	5.00	24.40	8 & 10	2, 3 & 4

3 lb. Grating CW



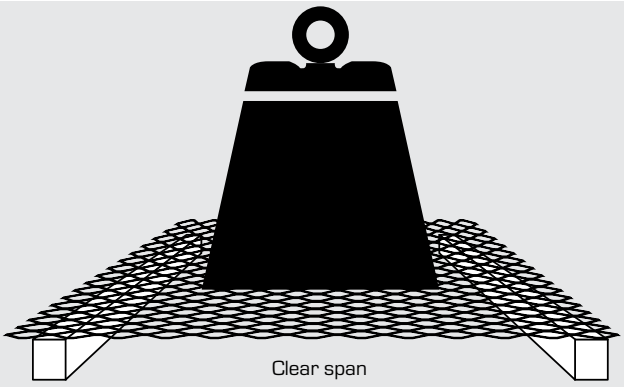
SWD = Short way of diamond
LWD = Long way of diamond

EXPANDED METAL GRATING SELECTION GUIDE

In selecting an appropriate type of grating, the designer decides first on the general characteristics required, such as safety, open area and ease of maintenance. After the basic product is selected, he/she must 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 below.

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 7.0	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							



Clear span

HOW TO ORDER EXPANDED METAL GRATING

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: 30pcs., 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 some cases it can be furnished random sheared to a closer tolerance if required.

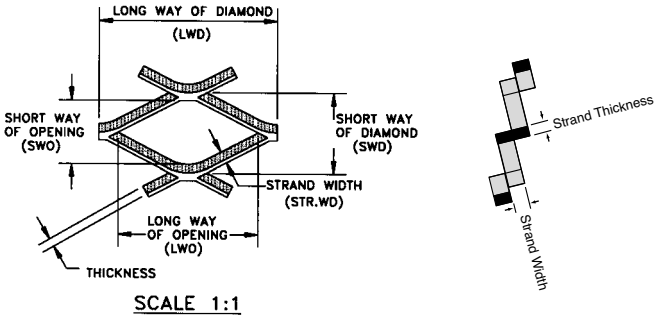
Standard tolerances on special sheet sizes are as follows:

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

Random Sheared Sheets + - 1/4"

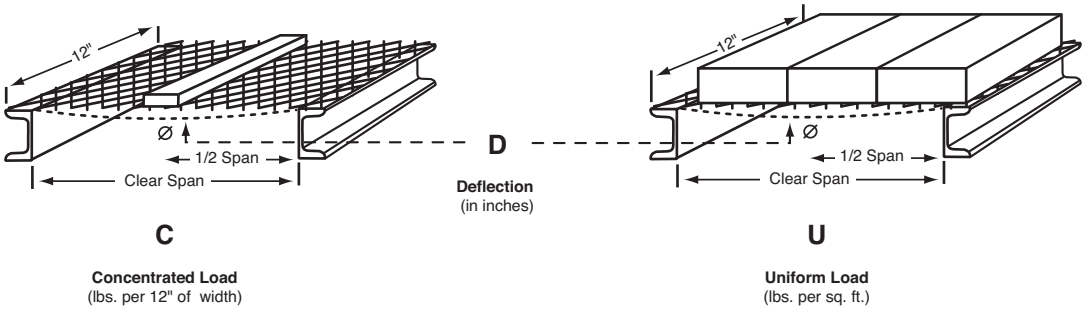
3. Specify the type of metal wanted. Example: Carbon steel, stainless steel, aluminum, etc.

4. If your expanded metal grating requirements involve walkway and platform areas that cannot be specified in simple sheet sizes, contact our Customer Service Department 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 loads are shown in pounds per square foot of grating.

EXPANDED METAL GRATING LOAD TABLE

Load in Pounds...Deflection in Inches

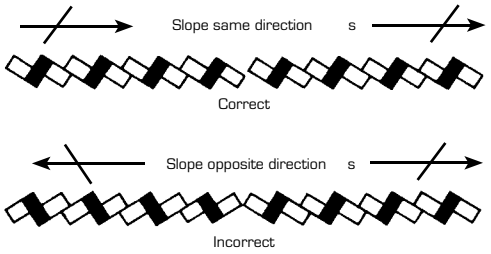
Carbon Steel	Load Condition	Clear Span	50 lbs.	100 lbs.	150 lbs.	200 lbs.	250 lbs.	300 lbs.	350 lbs.	400 lbs.
3.0 lb.	C	25” 30” 35” 40”	.067 .113 .177 **.261**	.134 .226 **.353**	.201 **.339**	**.268**				
	U	25” 30” 35”	.082 .166 **.303**	.163 **.331**	.245	**.326**				
3.14 lb.	C	25” 30” 35” 40”	.055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

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

GRATING

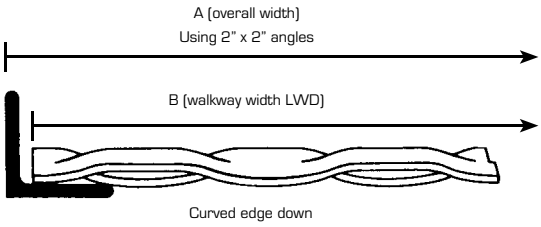
Fabrication and Installation Instructions

We recommend the following:



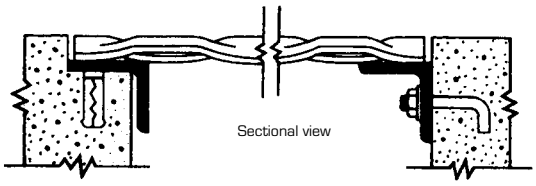
1. Directions for placing grating.

The strands of adjoining sheets should slope in the same direction.



2. Top and bottom of sheet.

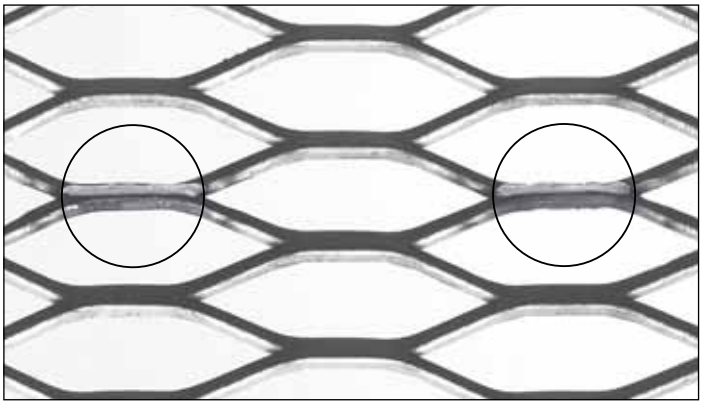
The face of the sheet with flat straight edged mesh intersections is the top side. The reverse face of the sheet has curved edges at the intersections.



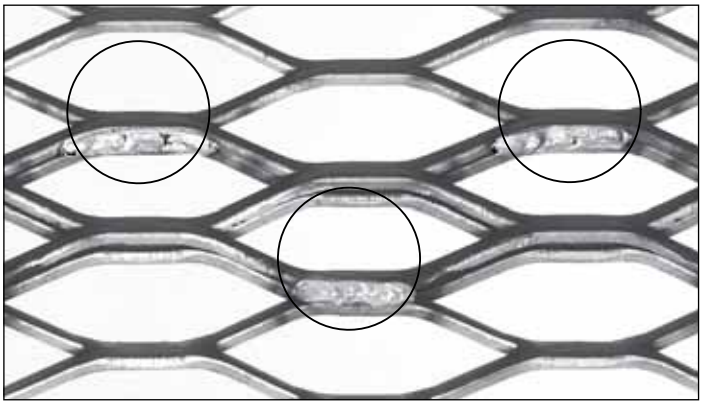
3. Recessed grating for trenches.

The ends of the grating should bear on structural supports.

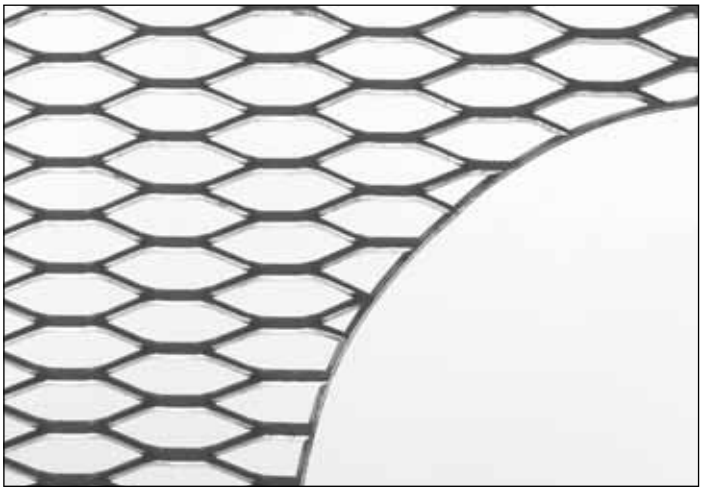
Adjoining (butting or lapped) sheets can be welded together.



4. Sheets joined by butt welding.



5. Sheets joined by overlap welding.



6. Banding of grating at circular and diagonal cuts.

It is easy to fabricate expanded metal grating and cut holes for pipes or structural members. All cut-outs should be edged with bar welded at contact points.

SquareMesh

Unlimited Versatility

Square expanded metal is a new design alternative now offered by New Metals, Inc.

The greater open area allows for decreased material weight while at the same time allows for greater passage of light, heat and liquids.

The high value-weght ratio provided by this product translates to the following:

- New patterns
- Wide diversity of applications such as garden furniture, architectural elements, racks, etc.
- Agricultural applications (replacing perforated metal)

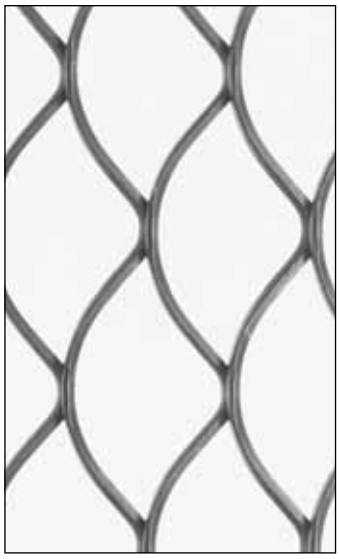
Product	Opening Size				Strand Thickness		Strand Width		Weight		Standard Sheet Size	
	SWD		LWD								SWD	LWD
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs/ Ft²	Kgs./ mts.²	Feet	Feet
SQR 1/4" #20 FXM	0.25	6.3	0.31	7.8	0.033	0.83	0.033	0.8	0.40	1.80	8 & 10	4
SQR 1/4" #18 FXM	0.25	6.3	0.31	78	0.043	1.09	0.043	1.0	0.60	3.00	8 & 10	4
SQR 1/2" #20 FXM	0.50	12.7	0.62	15.6	0.033	0.83	0.033	0.8	0.20	0.90	8 & 10	4
SQR 1/2" #18 FXM	0.50	12.7	0.62	15.6	0.043	1.09	0.043	1.0	0.30	1.50	8 & 10	4
SQR 1/2" #16 FXM	0.50	12.7	0.62	15.6	0.055	1.39	0.055	1.3	0.50	2.40	8 & 10	4
SQR 3/4" #18 FXM	0.75	19.0	0.98	25.0	0.043	1.09	0.043	1.0	0.20	0.98	8 & 10	4
SQR 3/4" #16 FXM	0.75	19.0	0.98	25.0	0.055	1.39	0.055	1.3	0.35	1.60	8 & 10	4
SQR 3/4" #14 FXM	0.75	19.0	0.98	25.0	0.070	1.77	0.070	1.7	0.55	2.60	8 & 10	4
SQR 1" #16 FXM	1.00	25.4	1.23	31.2	0.055	1.39	0.055	1.3	0.25	1.20	8 & 10	4
SQR 1" #14 FXM	1.00	25.4	1.23	31.2	0.070	1.77	0.070	1.7	0.40	1.93	8 & 10	4
SQR 1" #12 FXM	1.00	25.4	1.23	31.2	0.100	2.54	0.100	2.5	0.80	3.80	8 & 10	4

DecoGuard

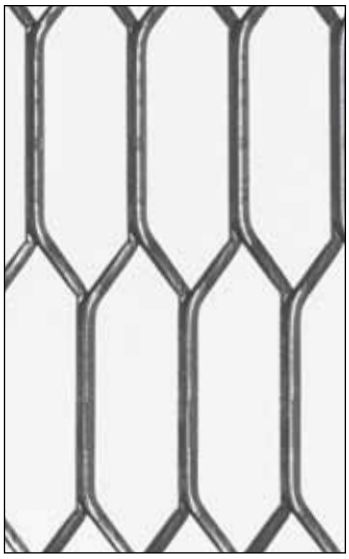
DecoGuard combines attractive design with the strength of steel. Available in 8 distinct designs, DecoGuard can be used anywhere intrusion prevent is a must, such as in window covering, fences, gates and more.

DecoGuard is made from a single piece of steel, is rigid and non-raveling combining aesthetic appeal with significant open area for visibility and free passage of air and light.

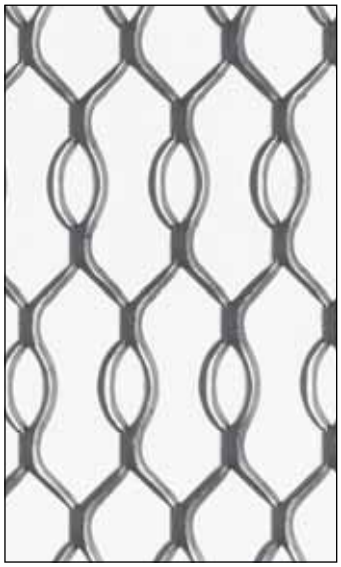
DecoGuard is easy to fabricate. Perimeter welding to bars, tube or angle result in strong, attractive panels for use as a window or door guards, fencing or partitions. Ornamental iron mechanics and welders will appreciate the reduction in labor costs that sheet application provides. Similarly, the mechanic will see a major productivity increase compared to the conventional application of burglar bars.



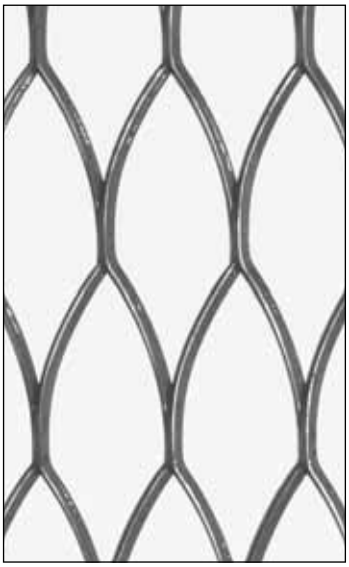
Pacific



Classic



Baroque



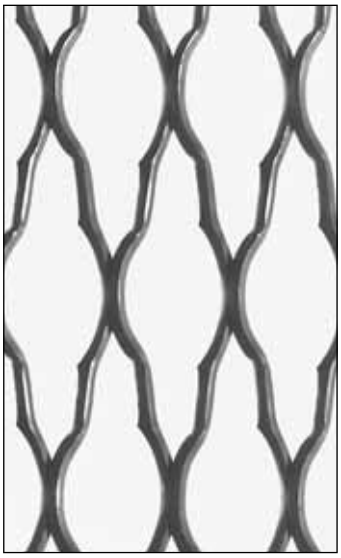
English

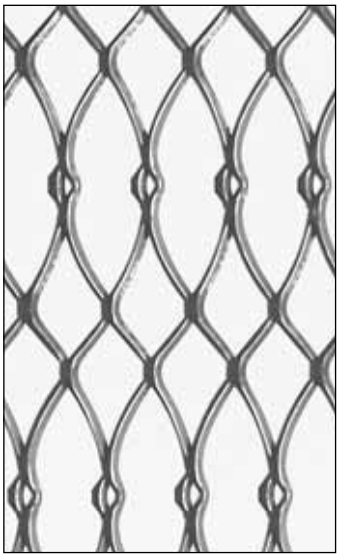
DecoGuard

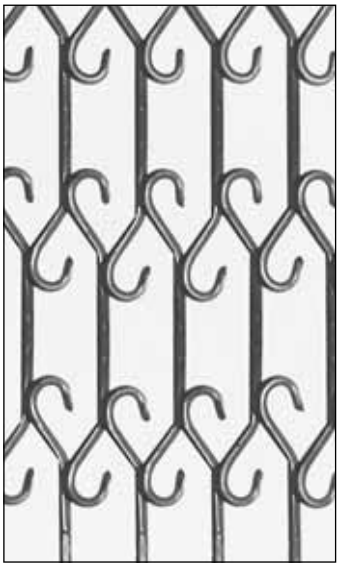
HOW TO ORDER.
DecoGuard is available in standard sheet sizes that make it ideal for a variety of applications. DecoGuard's standard sizes are: 3' x 8', 4' x 8', 8' x 3' and 8' x 4'. In ordering, it is often helpful to include a photocopy of the desired DecoGuard design (Figure A or B).

IMPORTANT!
Note that the expression of sheet dimensions for DecoGuard is the REVERSE that of standard expanded metal.

Where for standard expanded metal 4' x 8' means 4' SWD x 8' LWD, for DecoGuard it means 4' LWD x 8' SWD. Referring to Figure A, the first dimension (8') represents the height of the sheet and coincides with the long side of the figure (LWD) VERTICALLY. The second dimension (3') coincides with the short side of the figure (SWD) HORIZONTALLY.


Florentine


Roman


Granada

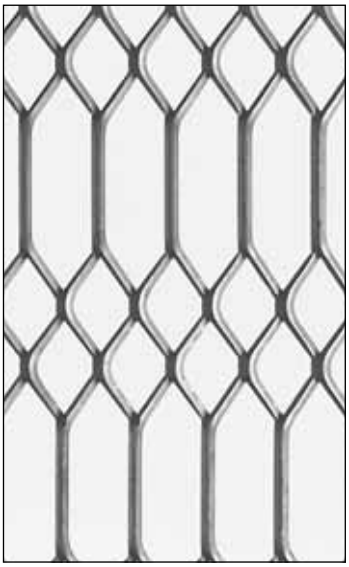

Gothic

Figure (A)

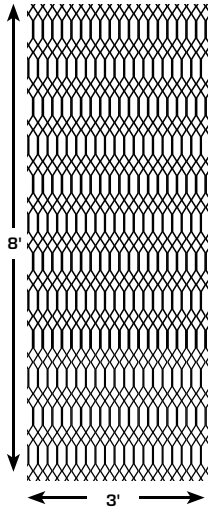


Figure (A) Order as 8' x 3'
Specification:
8' LWD x 3' SWD

Figure (B)

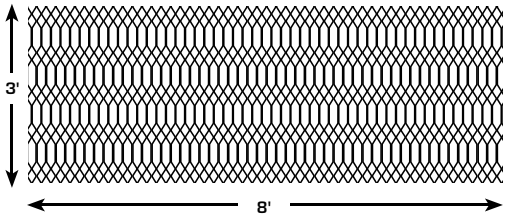
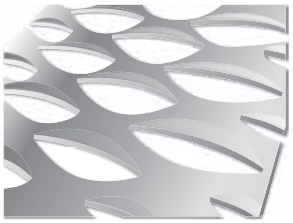


Figure (B) Order a 3' x 8'
Specification: 3' LWD x 8' SWD

SPECIFICATION TABLE

Model	Design		Weight (lbs./100 sq. ft)	Dimensions apply to all models
	Width (in.)	Length (in.)		
Gothic	0.98	5.51	155	3' x 8'
Granada	0.98	3.94	155	
Classic	0.98	5.23	155	4' x 8'
Pacific	1.50	3.00	104	
English	1.30	3.94	117	8' x 3'
Baroque	0.98	3.94	155	8' x 4'
Roman	1.06	3.94	155	
Florentine	1.57	5.24	155	



Louver Mesh

Louver expanded metal has diverse applications, mainly as a security barrier, ideal for perimetral fences where low visibility is desired.

This highly secure and attractive expanded metal mesh deters cutting and climbing. It also allows for airflow, while providing a high degree of visual screening.

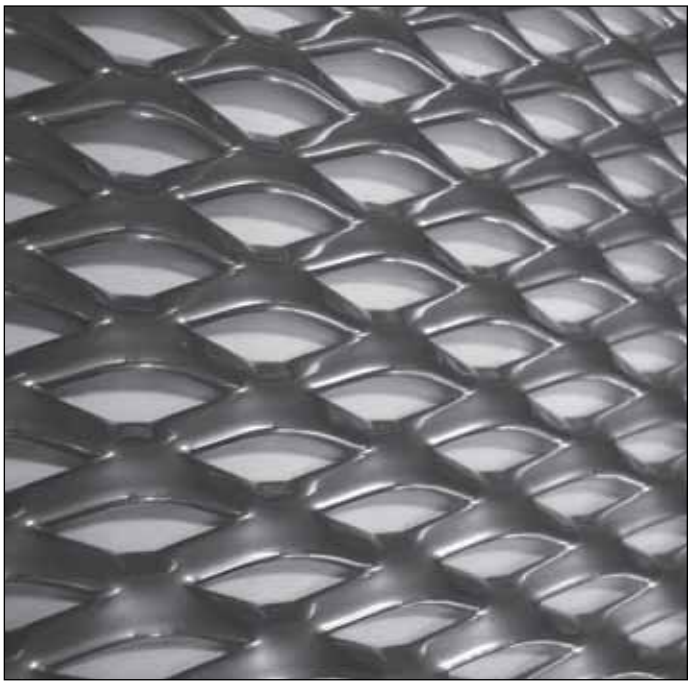
In high security applications, this product deters intrusion by providing:

- Anti-climbing barrier
- Resistance to cutting
- Visual privacy

Offered in several opening sizes and material gauge thicknesses, Louver expanded metal has multiple applications:

- Perimeter security for oil & chemical facilities
- Anti-crash barriers
- Penitentiary facilities
- Military
- Inventory Control
- Partitions

Catalog	Opening Size				Strand Thickness		Strand Width		Weight		Standard Sheet Size	
	SWD		LWD								SWD	LWD
	In	mm	In	mm	In	mm	In	mm	Lbs/ ft^2	Kgs./ m^2	ft.	ft.
LOUVER MESH 70-20	1.02	25.9	3.00	76.2	0.036	0.91	0.350	8.9	1.0	4.90	8, 10 & 12	3 & 4
LOUVER MESH 70-18	1.02	25.9	3.00	76.2	0.048	1.22	0.350	8.9	1.34	6.54	8, 10 & 12	3 & 4
MINI LOUVER 75-14	0.50	12.7	1.20	30.4	0.075	1.90	0.188	4.7	2.30	11.22	8, 10 & 12	4 & 5
LOUVER MESH 94-16	1.28	32.3	3.00	76.2	0.060	1.52	0.600	15.2	2.30	11.22	8, 10 & 12	4 & 5
LOUVER MESH 94-14	1.28	32.3	3.00	76.2	0.075	1.90	0.600	15.2	2.90	14.04	8, 10 & 12	4 & 5



TERMINOLOGY

PRODUCTS:

EXPANDED METAL is sheet simultaneously slit and stretched into a rigid, open mesh. It is readily available in carbon steel. Aluminum, stainless steel and galvanized steel can also be supplied.

FLATTENED EXPANDED METAL is manufactured by processing regular expanded metal in a rolling mill. This rolling reduces the thickness of the sheet and provides a smooth flat surface.

EXPANDED METAL GRATING is sheet or plate expanded into a structural open grating ideal for catwalk and platform applications.

DECORATIVE EXPANDED METAL is manufactured with unique shaped openings which possess great appeal for architects and designers.

REFUSE BASKETS - We produce several types of light weight expanded metal refuse baskets. Catalogs are available.

MINI-MESH EXPANDED METAL is manufactured from light gauge metals with small openings and is ideally suited for use in grilles and antennas.

SQUARE-MESH - Expanded metal produced with a near equal strand width and strand thickness and a relatively square opening. This results in a symmetrical pattern which provides excellent reflective qualities for use in radar screens and antennas.

ANTI - GLARE MESH - Refers to a special group of products used in highway median strips to lessen objectionable headlight glare from oncoming cars.

STAIR TREADS - Expanded metal grating stair treads are fabricated using grating, angles and bars. They are shipped ready for installation.

ACCESSORIES - Framing items can be made available from manufacturing sources. These same items can usually be procured locally at lesser cost.

MINE ROOF SHEETING - A light weight material easily placed and held by conventional bolts to mine roofs. This product serves to protect miners from falling material.

BARRIER MESH - This represents several flattened expanded metals used in drywall and plaster ceilings and walls as a security barrier to prevent penetration or access from room to room.

CONCRETE REINFORCING - There are several expanded metal products designed specifically for use in many concrete applications, particularly in bank vaults and other very high security construction applications. These are used to provide construction cost savings and superior insurance premium savings. Catalogs, installation, recommendations and complete design support are available.

DESCRIPTIVE TERMINOLOGY:

BOND - The point where adjacent strands intersect. The bond is always twice the width of the strand.

CSF - Price and weight of expanded metal are quoted as CSF hundred square feet.

CAMBER - A slight bow which can occur during manufacturing and results in an out-of-square condition.

DEBURRING - Most expanded metal products are processed through rotary steel brushes to remove burrs and rough edges. Exceptions: those products which are too light and might be distorted and grating.

DIAMOND OR OPENING - This is the description of the open area formed by strands and bonds. Normally the open area is diamond shaped.

DISTRIBUTION - Expanded metal products are readily available from inventory maintained by your local Steel Service Center.

FABRICATION - Some fabrication services can be provided by the manufacturer. Quotations will be furnished promptly when drawings are submitted.

FINISHING - Limited finishing can be accomplished at manufacturing plants. This includes annealing, hot dip galvanizing and prime coating. Special finishing such as anodizing, enameling, and plastic coating can be arranged for by contacting your Steel Service Center.

FXM - Commonly used abbreviation for Flattened Expanded Metal.

LWD OR LWO - Long way of diamond or long way of opening is the dimension measured across the sheet in a direction parallel to the largest dimension of the diamond.

LEVELING - All expanded metal products except grating are leveled after having been expanded.

MESH - This is the nominal distance from the mid-point of one bond to the mid-point of the next bond measured across the SWD. Mesh is expressed in inches.

OPENING SIZE - The area enclosed by bonds and strands.

OVERALL THICKNESS - This is the finished thickness and often determines the selection of framing members.

PERCENT OF OPEN AREA - These important relative percentages are used by designers to calculate the degree with which light or air can pass through a piece of expanded metal.

PITCH - The measurement from a point on one diamond to the same point on an adjacent diamond.

SHEET SIZE - While expanded metal can be manufactured in many varying sheet sizes, practical limitations are such that it is wise to select sheet sizes shown in the catalog. Availability can be determined by contacting your Steel Service Center.

SQUARENESS - Products are square within manufacturing tolerances. Should squareness be critical, sheets can be square sheared.

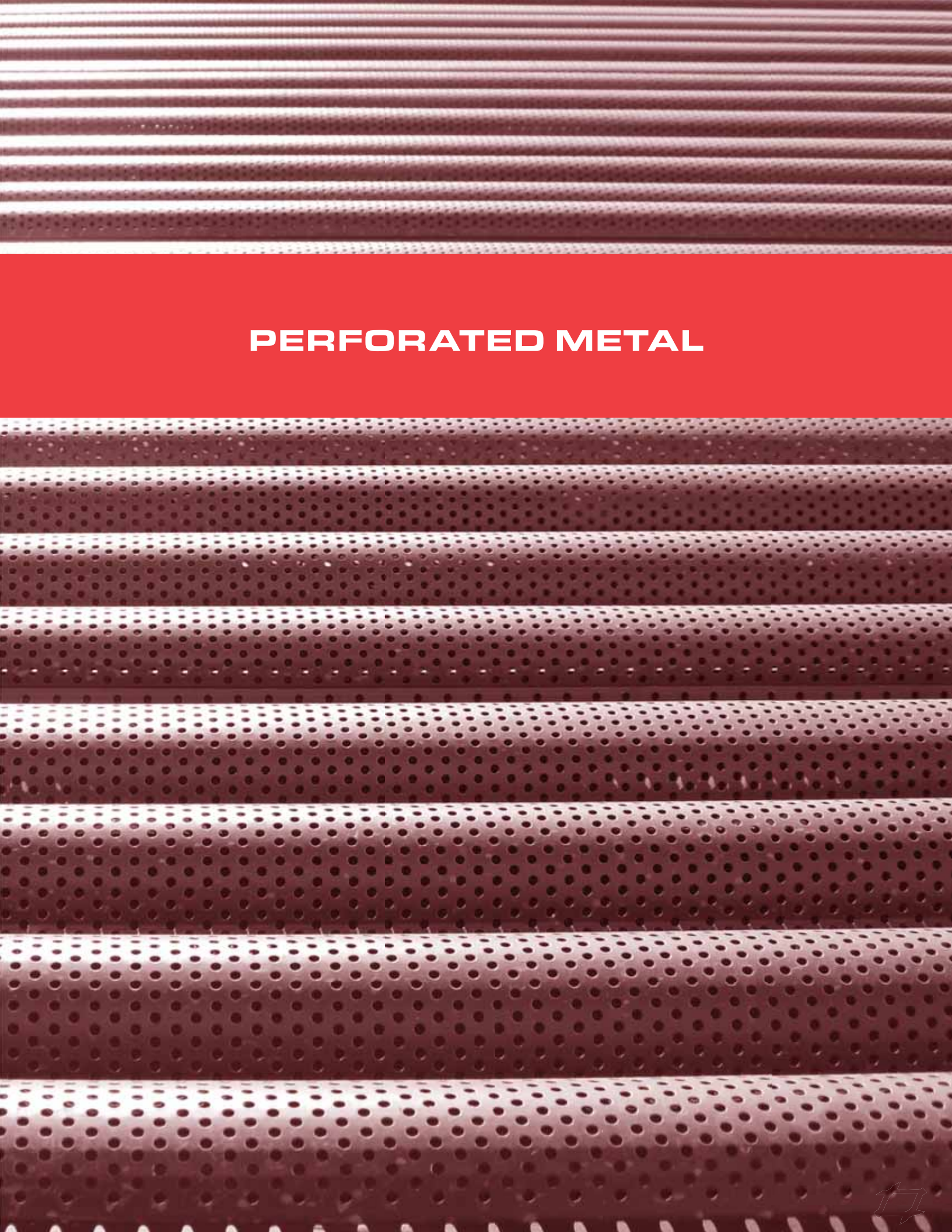
STRAND - The single metal strip which forms the border of the diamond, or opening. Strand width is the amount of material advanced for expanding as differed from strand thickness, which is the thickness of metal from which the expanded metal is produced.

STYLE - It is the approximate gauge or thickness of metal from which expanded metal is made. Usually, but not always, this conforms to manufacturer's standard gauges. Style is expressed by a number. Grating is expressed in pounds per square foot.

SWD OR SWO - Short way of diamond, or short way of opening, is the dimension measured across the sheet in a direction parallel to the smallest dimension of the diamond.

XM - Widely used abbreviation for Expanded Metal.

PERFORATED METAL



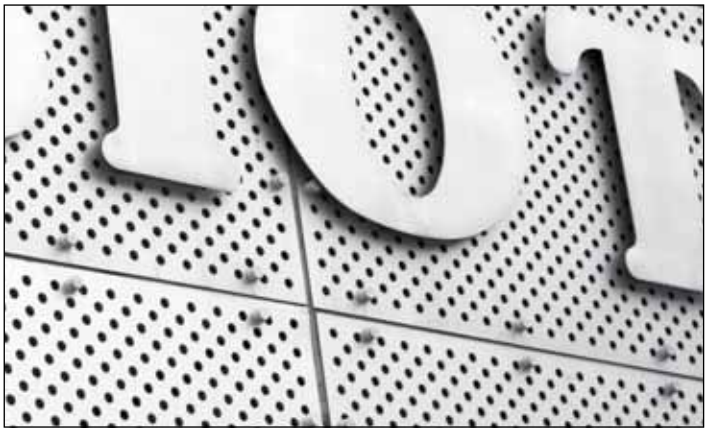
Perforated Metal

Perforated Metal applications are many and vary widely.

Because of newly promoted uses, perforated metal is becoming more and more popular every day.

Engineers, designers and architects are finding new uses for perforated metal in the following forms:

- Architectural elements
- Grain dryers
- Drums
- Decorative benches
- Air & oil filters
- Sound abatement
- Garden & office furniture
- Acoustic systems
- Dust extractors
- Roofing panels
- Lighting panels
- Ventilation
- Refuse baskets



PERFORATED METAL APPLICATIONS

Function

- Cover
- Join
- Divide
- Decorate
- Ventilation
- Classfiication
- Filtering
- Open area
- Protection
- Illumination effects
- Containment

Basic Application

- Architectural components
- Roofing
- Wall panels
- Stairs
- Divisory panels

Special conditions

- Sanitary
- Corrosion
- Abrasive
- High temperatures
- Low temperatures
- Low weight
- Low costs

How perforated metal is used in acoustical applications

There are 2 main acoustical applications for perforated metal:

As a front panel of other material: Used as a protective or decorative cover for acoustical material; this material can be designed to absorb, reflect or dissolve sound in a specific way.

Inside of a resonant absorbent component: When its objective is to remove or reduce sounds that occur in a limited frequency range.

PERFORATED METAL FUNCTIONS BY INDUSTRY & APPLICATION

Industry	Design	EMI-RFI	Liquid Control	Gas & Air Control	Filtering	Acoustic	Heat Dispersion
Aerospace		X		X		X	X
Agricultural				X	X		X
Domestic appliances	X	X	X	X	X		X
Architecture	X			X		X	X
Automotive	X			X			X
IT	X	X					X
Construction	X			X		X	X
Electronics		X		X			X
Food processing			X		X		X
Furniture	X					X	
HVAC				X			X
Lighting	X						
Navy			X	X	X		X
Medical		X		X			X
Mining					X		
Petrochemical			X	X			
POP	X						
Security	X	X			X		
Telecomm		X				X	

HOW TO ORDER PERFORATED METAL

IMPORTANT: When placing an order for perforated metal it is important to make sure the final product will be according to your needs, that's why we recommend to clearly specify:

1. Material / thickness

Clearly specify the type of material needed, as it is necessary to detail grade, thickness, drawing quality, etc.

Example: Carbon steel sheet gauge 12, thickness 2.6mm, SAE 1006 DDQ, or galvanized steel G90, commercial quality, gauge 18, 1.25mm thickness.

If the desired material is not specified, standard carbon steel will be offered.

Round, slotted and decorative perforated metals are offered in several gauges.

Feel free to contact our service department for more detail.

2. Dimensions

Specify dimensions of the sheet to be perforated.

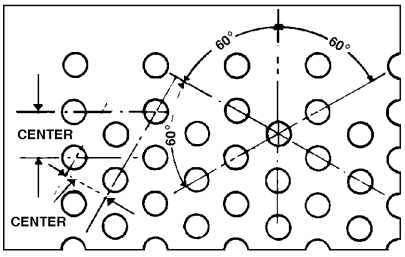
3. Type of perforation

There are several kinds of perforations; round, slotted, squared and decorative. It is important to clearly specify the one you need.

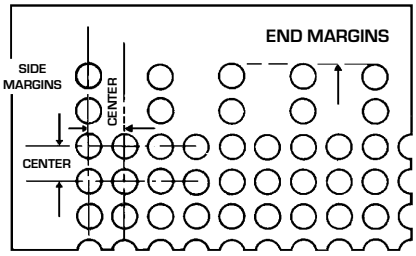
4. Perforation distribution

This is illustrated in the following:

Round perforations

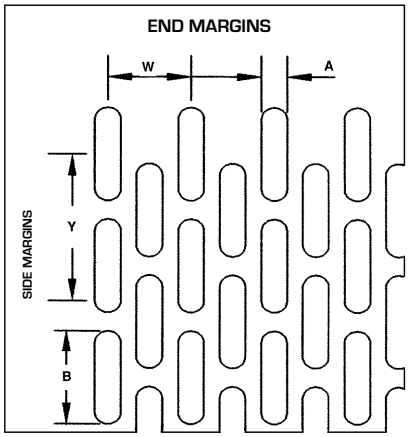


60⁰ Staggered Round Hole Pattern.

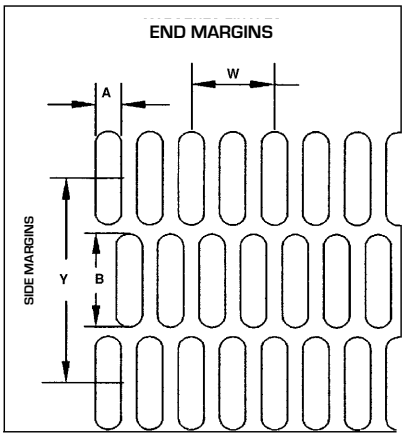


Straight Line Round Hole Pattern

Slotted Perforations



Side Staggered Slotted Hole Pattern



End Staggered Slotted Hole Pattern

Diameter must be specified for round holes. For slotted holes, please specify the length and width of the perforations. In this catalog we present some of our standard diameters, but we can manufacture any perforation according to customer requirements.

6. Spacing of perforations

This can be specified as the distance between hole centers, the percent of open area or, in the case of small holes, as the number of holes per square inch.

7. Margins

Lateral and end margins are also important. They should be specified in detal; if not, standard margins will be offered.

In order to have a better understanding of your requirements, please provide us with a print or drawing of the perforated sheets to be ordered, in order to avoid any errors in the process.

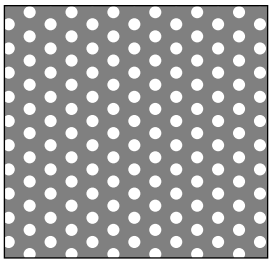
8. Other Materials

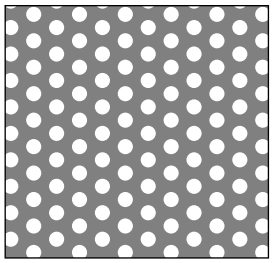
Other materials that can be perforated include the following:

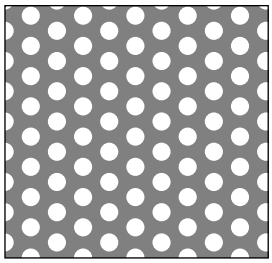
- **Brass**
- **Aluminum**
- **Copper**
- **Bronze**
- **Galvanized steel**
- **Stainless steel**
- **Laminated wood**
- **Plastic**
- **Combined materials**
- **Covered materials**

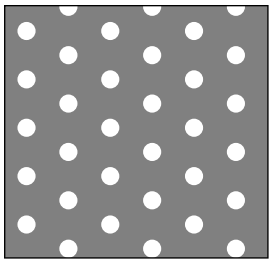
Perforation in these materials offers a wide variety of opportunities for the creative designers in the construction industry.

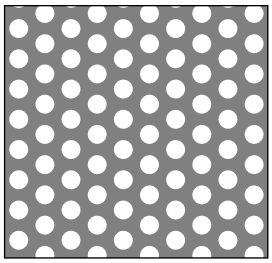
ROUND HOLES

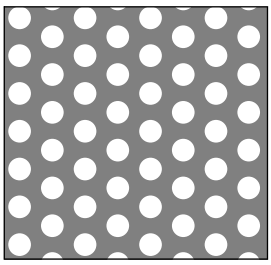

E062/125 22% open area

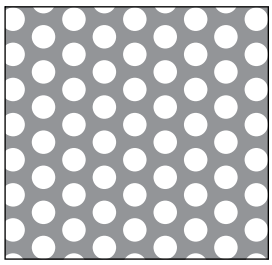

E078/137 29% open area

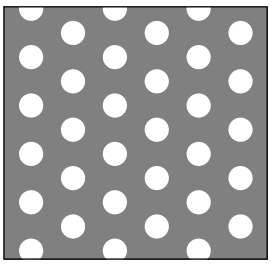

E093/157 32% open area

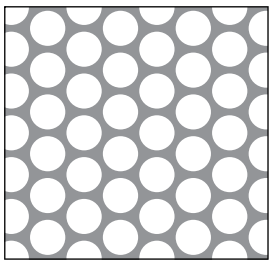

E093/250 13% open area

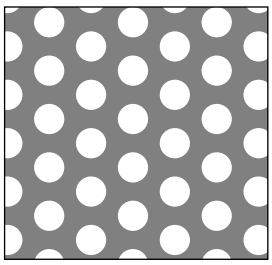

E098/157 35% open area

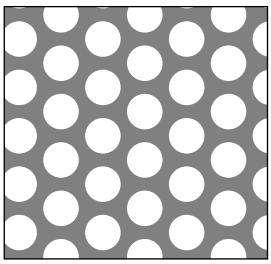

E118/196 33% open area

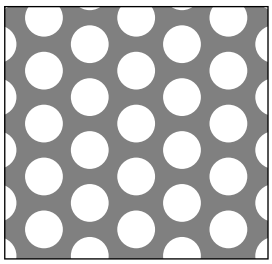

E125/187 41% open area

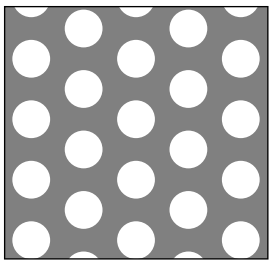

E125/250 23% open area

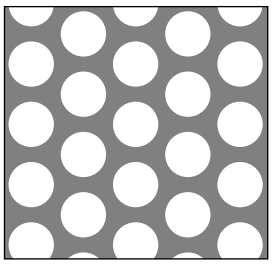

E157/187 64% open area

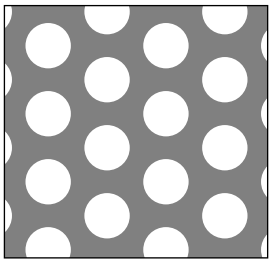

E157/250 36% open area

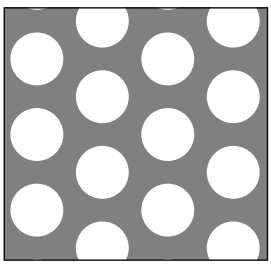

E187/250 51% open area

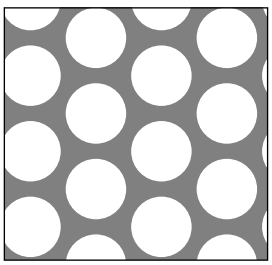

E196/275 46% open area

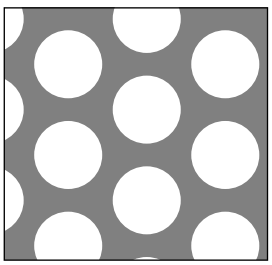

E196/314 35% open area

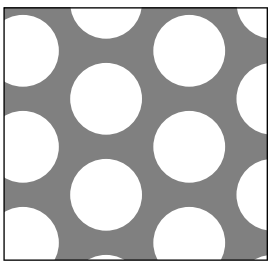

E236/314 51% open area

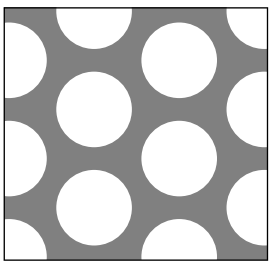

E236/354 40% open area

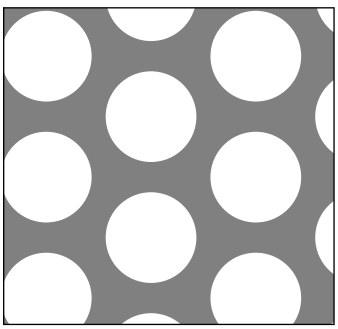

E275/393 44% open area

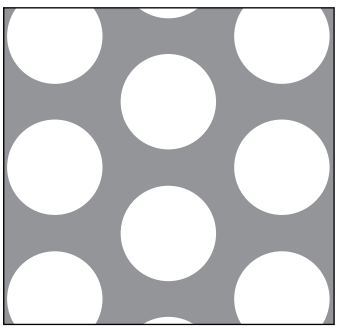

E314/393 58% open area

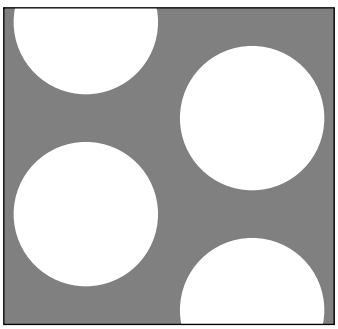

E354/472 51% open area

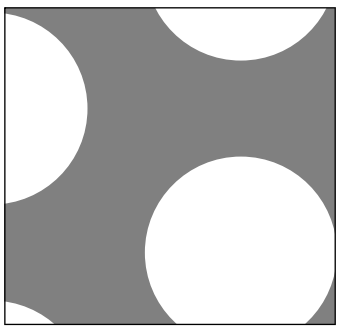

E375/500 51% open area


E393/511 54% open area


E472/629 51% open area


E500/687 48% open area


E750/1000 51% open area


E1000/1500 40% open area

PERFORATED METAL - ROUND HOLES

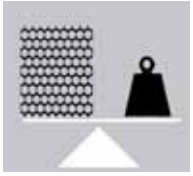
PRODUCT	PERFORATION DIAMETER		DISTANCE BETWEEN CENTERS		HOLES PER SQ IN	OPEN AREA %
	mm.	in.	mm.	in.		
E062/125	1.6	.062	3.2	.125	74	22
E078/137	2.0	.078	3.5	.137	62	29
E078/157	2.0	.078	4.0	.157	47	22
E093/157	2.4	.093	4.0	.157	47	32
E093/250	2.4	.093	6.4	.250	18	13
E098/157	2.5	.098	4.0	.157	47	35
E118/196	3.0	.118	5.0	.196	30	33
E125/187	3.2	.125	4.7	.187	33	41
E125/250	3.2	.125	6.4	.250	18	23
E157/187	4.0	.157	4.7	.187	23	64
E157/250	4.0	.157	6.4	.250	18	36
E187/250	4.7	.187	6.4	.250	18	51
E196/275	5.0	.196	7.0	.275	15	46
E196/314	5.0	.196	8.0	.314	12	35
E236/314	6.0	.236	8.0	.314	12	51
E236/354	6.0	.236	9.0	.354	9	40
E275/393	7.0	.275	10.0	.393	7	44
E314/393	8.0	.314	10.0	.393	7	58
E354/472	9.0	.354	12.0	.472	5	51
E375/500	9.5	.375	12.7	.500	5	51
E393/511	10.0	.393	13.0	.511	4	54
E472/629	12.0	.472	16.0	.629	3	51
E500/687	12.7	.500	17.4	.687	2	48
E750/1000	19.1	.750	25.4	1.000	1	51
E1000/1500	25.4	1.000	38.1	1.500	0.5	40

Note: All products in table are offered in several gauges. Please contact our service department for a list of available gauges and specs.
The product codes starting with an "E" represent staggered perforation pattern.

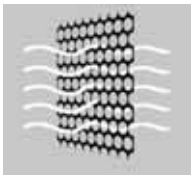
Advantages of perforated metal

- Allows free air passage
- Reduces weight per area
- Beautiful, functional design
- Perforated surface is easy to clean

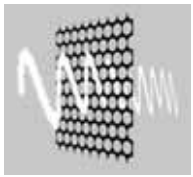
Perforated metal...



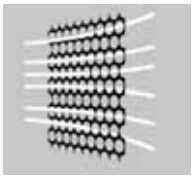
Is lighter per sq. inch



Allow temperature flow

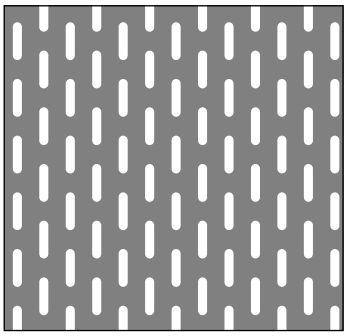


Allow sound passage

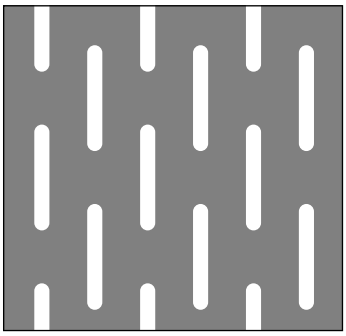


Allow air passage

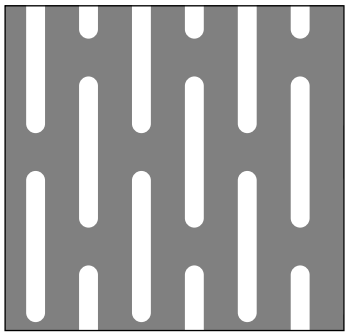
SLOTTED HOLES



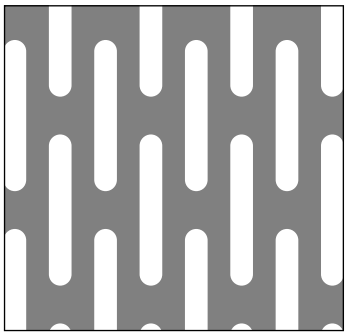
SS 1.2 x 5/7 x 7.5 22% open area



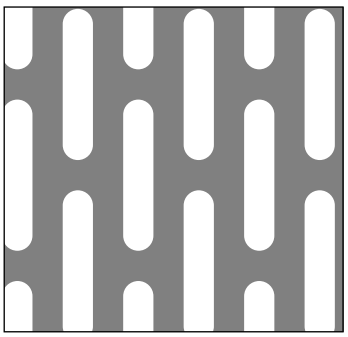
SS 2.0 x 14/14 x 21 18% open area



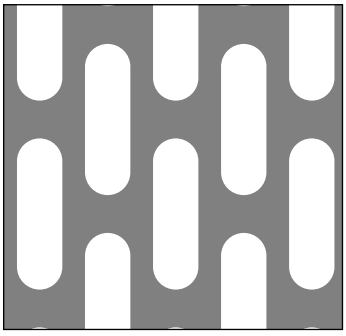
SS 2.5 x 20/14 x 25 28% open area



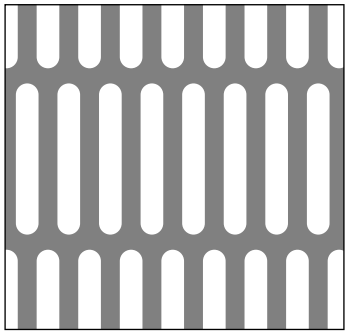
SS 3.0 x 20/12 x 25 40% open area



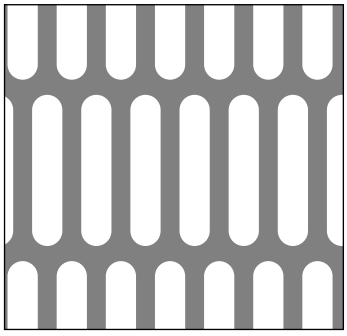
SS 4.0 x 20/16 x 24 40% open area



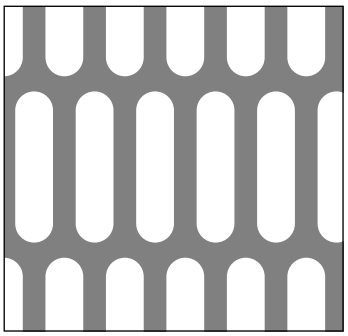
ES 6.0 x 20/18 x 25 50% open area



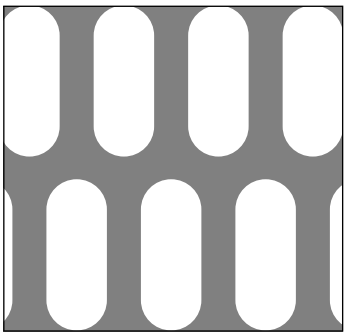
ES 3.0 x 20/11 x 44 24% open area



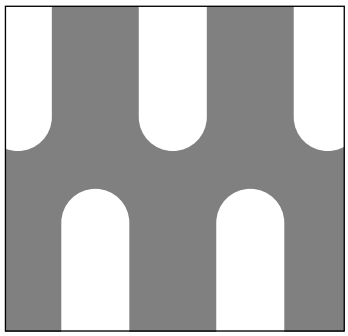
ES 4.0 x 20/13 x 44 27% open area



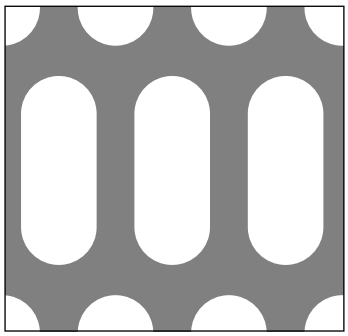
ES 5.0 x 20/16 x 44 28% open area



ES 8.0 x 20/25 x 46 28% open area



ES 9.0 x 30/41 x 70 18% open area



ES 10.0 x 25/30 x 58 26% open area

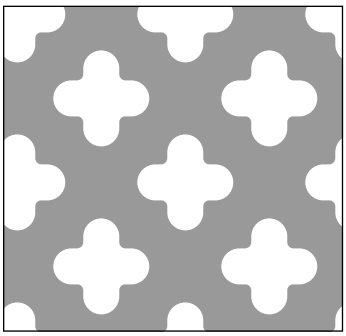
SLOTTED HOLES

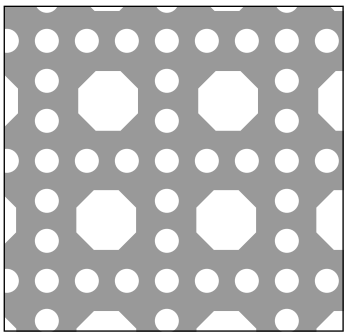
PRODUCT	SIZE OF PERFORATION		DISTANCE BETWEEN CENTERS		OPEN AREA %	PERFORATION PATTERN	STANDARD GAUGE
	Width "A" (mm.)	Length "B" (mm.)	"W" (mm.)	"Y" (mm.)			
SS 1.2 X 5/7 X 7.5	1.2	5	7	7.5	22	SS-LW	20
SS 2.0 X 14/14 X 21	2	14	14	21	18	SS-LW	14
SS 2.5 X 20/14 X 25	2.5	20	14	25	28	SS-LW	18
SS 3.0 X 20/12 X 25	3	20	12	25	40	SS-LW	20
SS 4.0 X 20/16 X 24	4	20	16	24	40	SS-LW	20
SS 6.0 x 20/18 x 25	6	20	18	25	50	SS-LW	22
ES 2.0 X 20/8 X 44	2	20	8	44	22	ES-NW	22
ES 3.0 X 20/11 X 44	3	20	11	44	24	ES-NW	22
ES 4.0 X 20/13 X 44	4	20	13	44	27	ES-NW	20
ES 5.0 X 20/16 X 44	5	20	16	44	28	ES-NW	22
ES 8.0 X 20/25 X 46	8	20	25	46	28	ES-NW	22
ES 9.0 X 30/41 X 70	9	30	41	70	18	ES-NW	22
ES 10.0 X 25/30 X 58	10	25	30	58	26	ES-NW	20

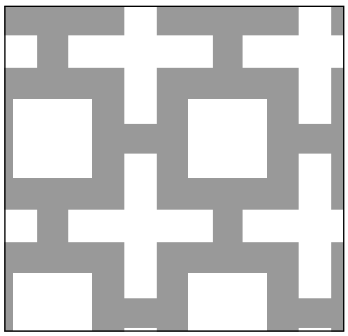
Nomenclature: SS = Side Staggered
ES = End Staggered
LW = Holes run the long way of the sheet
NW = Holes run the narrow way of the sheet

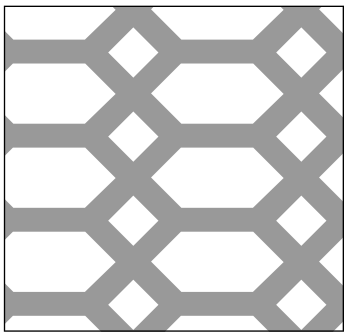
Note: Please contact our service department for sizes and/or gauges not shown above

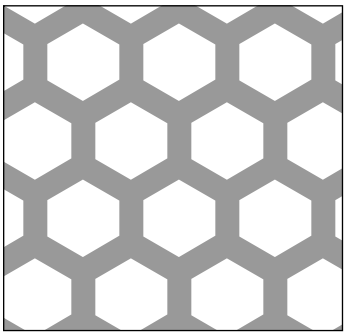
DECORATIVE HOLES

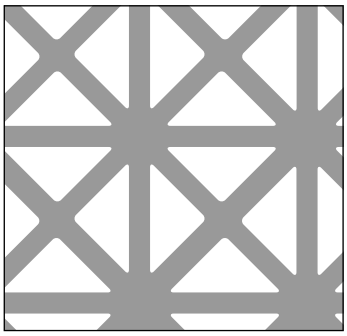

PD 1001 36% open area

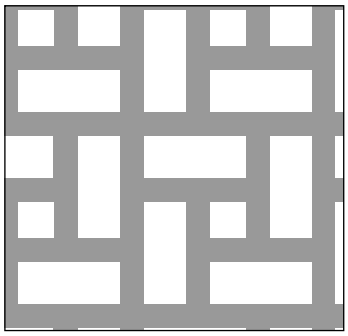

PD 1002 30% open area

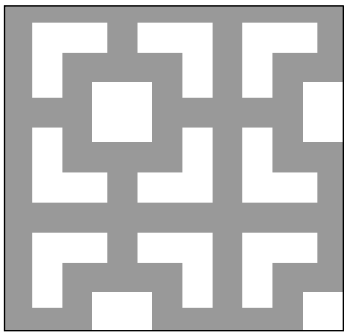

PD 1003 41% open area

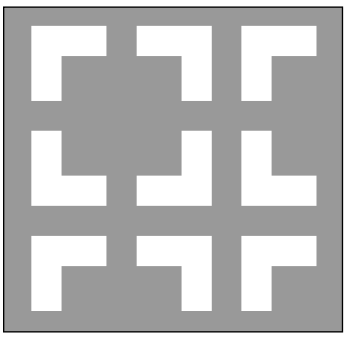

PD 1004 53% open area

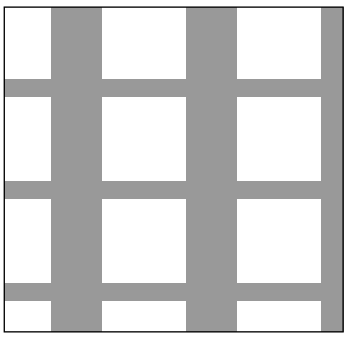

PD 1005 54% open area

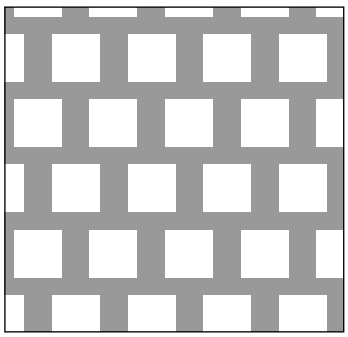

PD 1006 42% open area

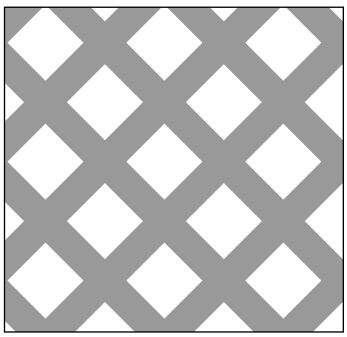

PD 1007 50% open area

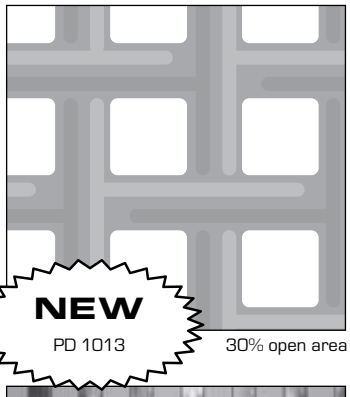

PD 1008 37% open area


PD 1009 29% open area

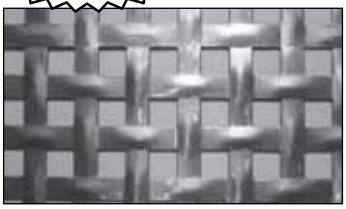

PD 1010 42% open area

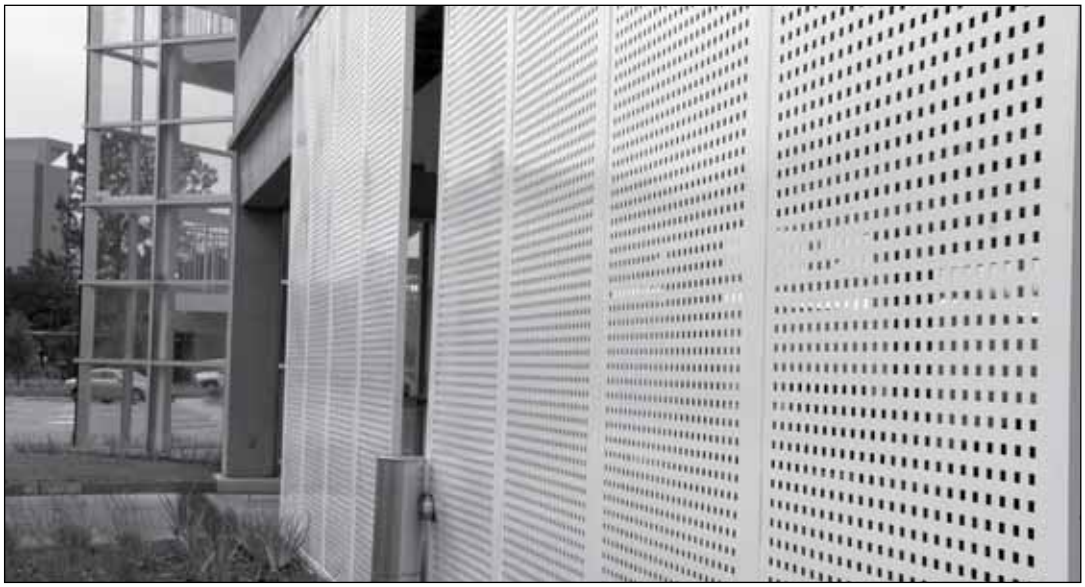

PD 1011 45% open area


PD 1012 40% open area



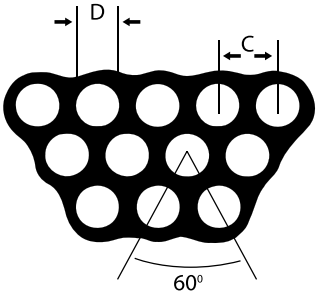
PD 1013 30% open area





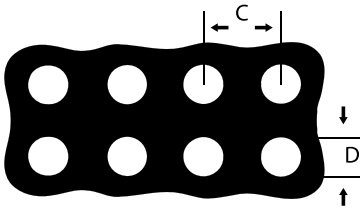
FORMULAS FOR DETERMINING PERCENTAGE OF OPEN AREAS

Staggered Round Holes



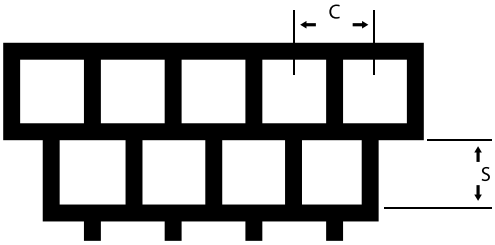
$$\frac{D^2 \times 90.69}{C^2} = \%$$

Straight Round Holes



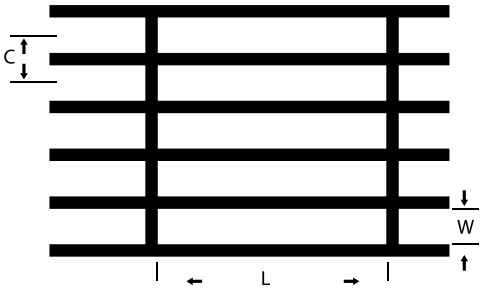
$$\frac{D^2 \times 78.54}{C^2} = \%$$

Square Holes (straight or staggered)



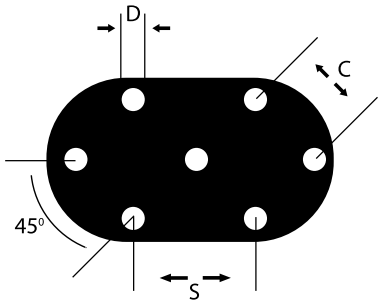
$$\frac{S^2 \times 100}{C^2} = \%$$

Square End Slot



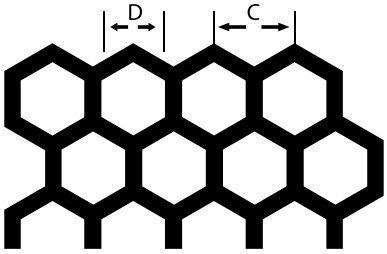
$$\frac{L \times W}{C^2} \text{ X } 100 = \%$$

45° Staggered Centers Pattern



$$\frac{157.08\ D^2}{S^2} = \%$$

Hexagon



$$\frac{100 \times D^2}{C^2} = \%$$

To find the holes per square inch:

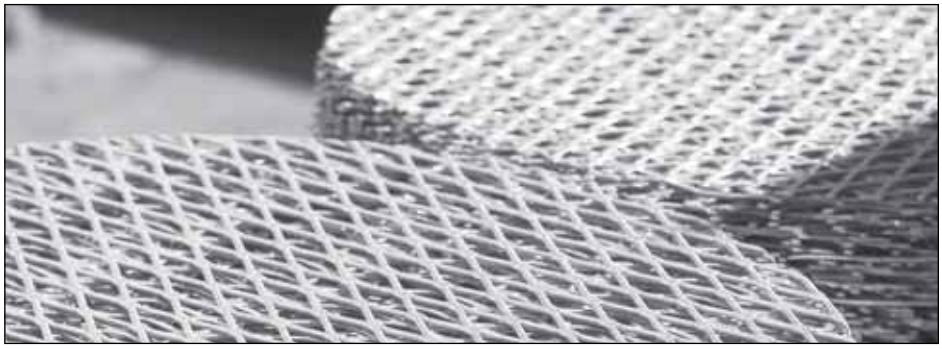
$$\text{H.P.S.I.} = \frac{\%\ \text{Open area}}{78.54 \times D^2}$$

ADDITIONAL SERVICES

Our company has risen to the challenge of the growing trend to provide our customers with more and more value-added services. We have partnered with firms in diverse industries such as furniture, equipment, filtration, appliances, lighting, and others, thereby becoming a highly specialized supplier of custom made parts.

Some of the value added processes that are offered include:

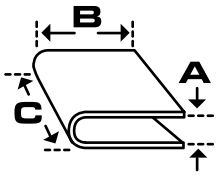
- Precision Leveling
- Cut to size
- Slitting
- Fabrication
- Circle cutting
- Anodizing
- Chroming
- Forming
- Rolling
- Welding
- Painting
- Coating
- Packaging
- Bar code labeling
- Laser and plasma cutting



U-CHANNEL EDGING

U-Channel edging is a U-shaped strip that is attached to the edge of the expanded and/or perforated metal sheets by a weld or press-fit, allowing for safer handling and an aesthetic appearance for diverse applications, such as furniture, shelving, stair in-fill panels, etc.

U-Channel edging is available in four standard profiles designed to make your work easier and safer:

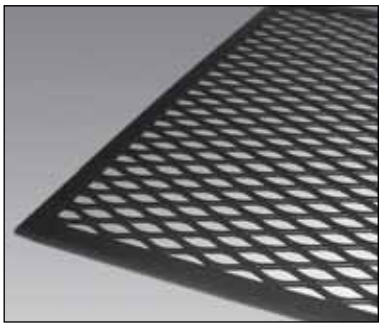


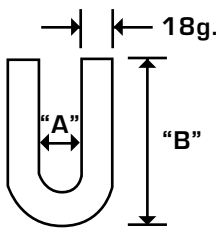
NM PART	DESCRIPTION	Opening (A)	Length (C)	Width (B)	Gauge	Lbs. Ea.
181190	U-Channel 1/2x1/8x144 CS	1/8"	144"	1/2"	18	1.75
181214	U-Channel 1x1/4x144 CS	1/4"	144"	1"	18	4.14
181236	U-Channel 1x1/8x144 CS	1/8"	144"	1"	18	4.14
181237	U-Channel 1x1/16x144 CS	1/16"	144"	1"	18	4.14

CS = Carbon Steel. Electrogalvanized and other materials available on special order. Custom lengths also available.

CUSTOM FRAMED PARTS ALSO AVAILABLE

We welcome the opportunity to quote expanded metal and/or perforated metal panels framed in u-channel edging. Powder coating and other special finishes are also available.





EXPANDED METAL REFUSE BASKET

Designed and sturdily built for long, trouble free service, this product manufactured by New Metals, Inc. is now being specified and used exclusively by many leading municipalities, park systems, environmental landscaping groups and institutions of all types.

SPECIFICATIONS

ROLLED TOP EDGING for easy handling, continously welded to mesh along entire perimeter.

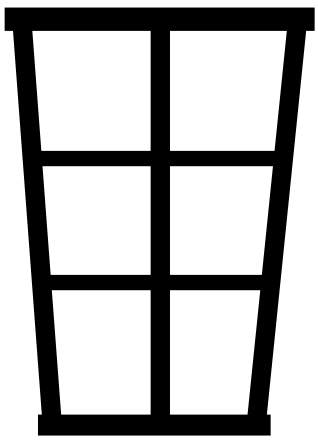
SIX EQUALLY-SPACED VERTICAL RIBS welded to mesh at every point of contact to add extra strength.

REINFORCING BANDS compression welded to mesh at every point of contact.

SINGLE SHEET EXPANDED METAL BODY will not ravel. Small diamond pattern presents a modern appearance and prevents escape of small pieces of refuse.

ONE PIECE DISHED BOTTOM perforated to provide drainage of rain and melting snow.

The expanded metal refuse basket is available in several finishes, including powder coated, hot-dipped galvanized and plastic coated. Other available options include decorative mesh patterns, nameplates and debris skirts.



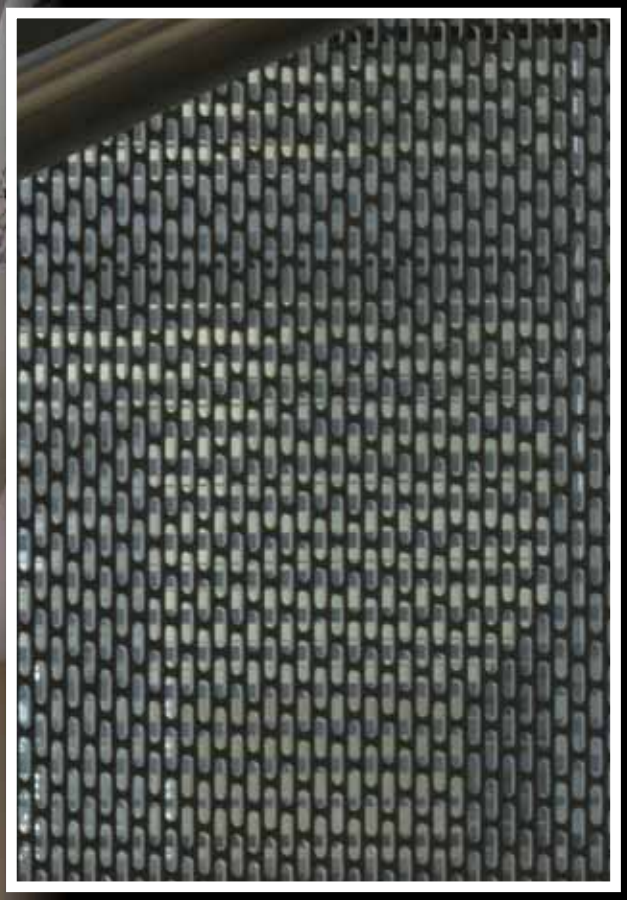
Top Diameter 24”

Height 33”

Bottom Diameter

19 1/4”

WEIGHT:	**Galvanized**	**33.0 Lbs.**
	Powder Coated	**30.0 Lbs.**
CAPACITY:	**45 Gal.**	

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RACING SHOX

EXPANDED METAL & PERFORATED METAL

New Metals' products offer a wide range of applications to offer comfort, design and function to your instalation or facility. Please feel free to contact our experts for more information on the limitless possibilities of these materials, to ensure a long life in your designs.

For more information, please feel free to call us:

1-888-639-6382

NEW METALS INC.

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