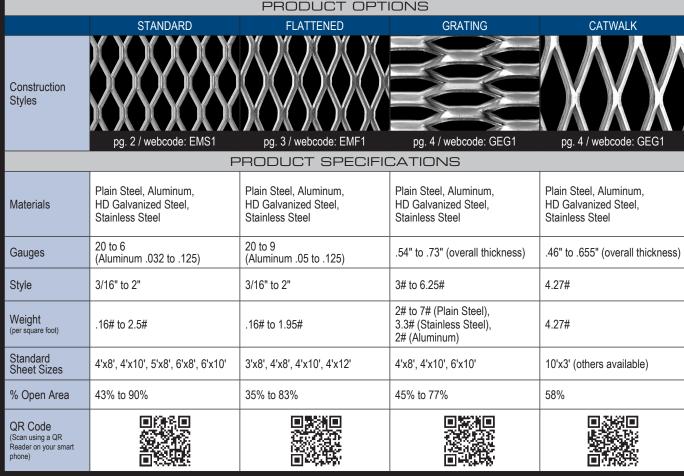


McNICHOLS CO. Industrial & Architectural Hole Product Solutions since 1952 800.237.3820 | mcnichols.com





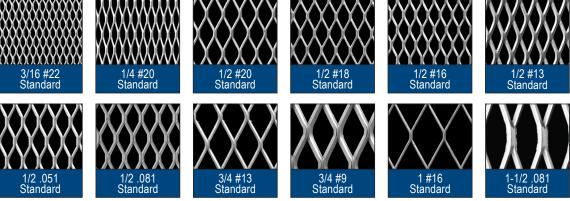


Not all product combinations are available. See ${\it mcnichols.com}$ for availability.



STANDARD EXPANDED WEB CODE: EMS1

Standard Expanded Metal, also known as Raised Expanded, has diamond-shaped openings with a slightly raised surface. This product comes in a wide variety of opening sizes, gauges, materials and sheet sizes.

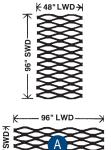


NOTE: Pictures are not to scale. For actual scale diagrams please see bottom of page 12.

			STA	ZND.	ARE	EXPA	NDE	ED STC	OCK	LIST		
STYLE	#/SQ. FT.			OPENIN		STRAND		OVERALL	MESHES		OPEN AREA	SHEET SIZES
		SWD	LWD	SWO	LWO	THICKNESS	WIDTH V STEI	THICKNESS	SWD	LWD		
3/16 #22 S	.45#	.19"	.50"	.14"	.345"	.031"	.034"	.070"	63	24	61%	8'x3'
1/4 #20 S	.86#	.25"	1.0"	.125"	.718"	.036"	.072"	.135"	48	12	45%	4'x8'
1/4 #18 S	1.14#	.25"	1.0"	.110"	.718"	.048"	.072"	.147"	48	12	43%	4'x8'
1/2 #20 S	.43#	.50"	1.2"	.438"	.938"	.036"	.072"	.140"	24	10	80%	4'x8'
1/2 #18 S	.70#	.50"	1.2"	.438"	.938"	.048"	.088"	.172"	24	10	72%	4'x8'
1/2 #16 S	.86#	.50"	1.2"	.375"	.938"	.060"	.087"	.175"	24	10	65%	4'x8'
1/2 #13 S	1.47#	.50"	1.2"	.312"	.938"	.090"	.096"	.204"	24	10	57%	4'x8'
3/4 #16 S	.54#	.923"	2.0"	.813"	1.750"	.060"	.101"	.210"	13	6	78%	4'x8'
3/4 #13 S	.80#	.923"	2.0"	.750"	1.688"	.090"	.096"	.205"	13	6	76%	4'x8'
3/4 #9	1.9#	.923"	2.0"	.688"	1.562"	.015"	.134"	.312"	13	6	68%	4'x10', 6'x10'
1 #16 S	.44#	1.00"	2.4"	.938"	2.062"	.060"	.087"	.192"	12	5	82%	4'x8'
1-1/2 #16 S	.40#	1.33"	3.0"	1.250"	2.625"	.060"	.108"	.230"	9	4	85%	4'x8'
1-1/2 #13 S	.60#	1.33"	3.0"	1.188"	2.500"	.090"	.105"	.242"	9	4	85%	4'x8'
1-1/2 #6 S	2.50#	1.33"	3.0"	1.110"	2.313"	.194"	.203"	.433"	9	4	69%	4'x8', 4'x10'
1-1/2 #9	1.2#	1.33"	3.0"	1.125"	2.375"	.134"	.144"	.312"	9	4	76%	4'x8', 4'x10'
2 #9 S 10 ga.	.90#	1.85"	4.0"	1.563"	3.375"	.134"	.149"	.312"	6.5	3	84%	4'x8'
				5	STAIN	ILESS S	TEEL (TYPE 30)4)			
1/2 #18 S	.73#	.50"	1.2"	.437"	.937"	.050"	.087"	.164"	24	10	70%	4'x8'
1/2 #16 S	.91#	.50"	1.2"	.437"	.937"	.062"	.087"	.164"	24	10	70%	4'x8'
1/2 #13 S	1.87#	.50"	1.2"	.325"	.875"	.093"	.119"	.225"	24	10	52%	4'x8'
3/4 #16 S	.60#	.923"	2.0"	.812"	1.750"	.062"	.106"	.202"	13	6	83%	4'x8'
3/4 #13 S	.91#	.923"	2.0"	.750"	1.687"	.093"	.107"	.202"	13	6	80%	4'x8'
3/4 #9 S 10 ga.	2.05#	.923"	2.0"	.687"	1.562"	.140"	.160"	.300"	13	6	67%	4'x8', 5'x8'
1-1/2 #13 S	.68#	1.33"	3.0"	1.250"	2.625"	.093"	.115"	.222"	9	4	83%	4'x8'
1-1/2 #9 S 10 ga.	1.37#	1.33"	3.0"	1.125"	2.500"	.140"	.155"	.280"	9	4	77%	4'x8'
					AL		N 300	03-H14				
3/16 #.032 S	.16#	.190"	.50"	.160"	.360"	.032"	.034"	.070"	63	24	66%	4'x4'
1/2 #.051 S	.27#	.50"	1.2"	.375"	.937"	.051"	.093"	.158"	24	10	65%	4'x8'
1/2 #.081 S	.44#	.50"	1.2"	.375"	.937"	.081"	.096"	.186"	24	10	60%	4'x8', 4'x10'
3/4 #.081 L S	.32#	.923"	2.0"	.750"	1.68"	.081"	.129"	.220"	13	6	76%	4'x8'
3/4 #.081 H S	.41#	.923"	2.0"	.750"	1.68"	.081"	.165"	.300"	13	6	69%	4'x8'
3/4 #.125 S	.65#	.923"	2.0"	.687"	1.68"	.125"	.169"	.305"	13	6	68%	4'x8'
1-1/2 #.081 S	.22#	1.33"	3.0"	1.187"	2.50"	.081"	.128"	.240"	9	4	85%	4'x8'
					Н	OT DIP G	SALVA	NIZED				
3/4 #9 S	1.9#	.923"	2.0"	.688"	1.562"	.150"	.134"	.3120"			68%	6'x8'
I-1/2 #10 S	.9#	1.33"	3.0"	1.188"	2.50"	.093"	.134"	.2840"			80%	6'x8'

NOTE: Measurements are approximates and subject to mill tolerances. All chart specifications may vary. Please inquire if they are critical to your application.

, SWD & LWD Dimensions



It is important when ordering to give the proper SWD (short way of design) and LWD (long way of design) dimensions. Stock size sheets are like figure A above.

-Random Shearing



Standard Sheets - Bond or machine run all sides (On flattened material some patterns may result in one random sheared LWD.)



Bond sheared LWD Random sheared SWD



Bond sheared SWD Random sheared LWD



Random Sheared LWD & SWD

Shearing Terminology

SWD: short way of design LWD: long way of design SWO: short way of opening LWO: long way of opening

U-Edging

FLATTENED EXPANDED WEB CODE: EMF1

Flattened Expanded Metal is Standard Expanded Metal that has been flattened.



.051











1/2 #13 Flattened

U-edging is a U-shaped strip that is attached to the edge of the expanded metal sheet by a press-fit or weld. It makes the edges safe and provides an attractive appearance. U-edging is available in 10 or 12 foot nieces

pieces.									
Туре	Open	Size	Gauge	Material					
401	1/4"	1"x120" 1.5"x120" .75"x144" 1"x144"	18	Steel, Alum.					
402	1/8"	1"x120" 1"x144"	18	Steel, Alum.					
403	1/16"	1"x144"	18	Steel, Alum.					
438	3/8"	1"x120"	18	Steel					
450	1/2"	1"x120"	18	Alum					

More framing options available, please inquire.







3/4 #13

Flattened

FLATTENED EXPANDED STOCK LIST







				• • • —								
STYLE	#/SQ. FT.		SN SIZE			STRAND						COMMON SHEET SIZES
		SWD	LWD	SWO	LWO			THICKNESS	SWD	LWD	AREA	
3/16 #22 F	.43#	.20"	.51"	.115"	.300"	.024"	.040"	.024"	60	23	55%	8'x3'
1/4 #20 F	.43#	.25"	1.05"	.110"	.715"	.024	.040	.024	48	11.6	35%	4'x8'
1/4 #20 F	1.08#	.25"	1.05"	.110	.715"	.030	.080"	.040"	48	11.6	35%	4'x8'
1/2 #20 F	.40#	.50"	1.05	.375"	1.00"	.040	.000	.040	24	9.5	65%	4'x8'
1/2 #20 F	.40#	.50"	1.25"	.312"	1.00"	.029	.079	.029	24	9.5	60%	4'x8' & 10'
1/2 #16 F	.82#	.50"	1.25"	.312"	1.00"	.059"	.097	.059"	24	9.5	63%	3'x8', 4'x8', 4'x10'
1/2 #10 F	1.40#	.50"	1.25"	.265"	1.00"	.030	.107"	.030	24	9.5	52%	
		.923"	2.10"	.750"			-	.078		5.7		3'x8', 4'x8', 5'x8', 4'x10', 5'x10'
3/4 #16 F	.51#	.923"	2.10"	.750	1.75"	.048"	.111"		13	5.7	74%	4'x8', 4'x10'
3/4 #14 F	.63#		_				.105"	.061"	13	_	74%	4'x8', 4'x10'
3/4 #13 F	.75#	.923"	2.10"	.688"	1.781"	.078"	.106"	.078"	13	5.7	74%	4'x8', 4'x10", 5'x10'
3/4 # 9 F 10ga.	1.71#	.923"	2.10"	.563"	1.688"	.120"	.165"	.120"	13	5.7	63%	4'x8', 4'x10', 4'x12', 5'x10', 6'x10'
1 #16 F	.41#	1.00"	2.50"	.813"	2.250"	.050"	.098"	.050"	12	4.68	78%	4'x8'
1-1/2 #16 F	.38#	1.33"	3.20"	1.062"	2.750"	.048"	.119"	.048"	9	3.75	83%	4'x8'
1-1/2 #13 F	.57#	1.33"	3.20"	1.062"	2.750"	.078"	.116"	.078"	9		80%	4'x8'
1-1/2 #9 F 10ga.	1.14#	1.33"	3.20"	1.000"	2.563"	.110"	.158"	.110"	9	3.75	75%	4'x8', 4'x10'
						S STEE		PE 304				I
1/4 #18 F	1.43#	.25"	1.20"	.080"	.66"	.047"	.090"	.047"	48	11.6	28%	4'x8'
1/2 #18 F	.69#	.50"	1.26"	.312"	1.00"	.040"	.098"	.040"	24	9.5	60%	4'x8'
1/2 #16 F	.86#	.50"	1.26"	.312"	1.00"	.050"	.099"	.050"	24	9.5	60%	4'x8'
1/2 #13 F	1.78#	.50"	1.26"	.240"	.915"	.080"	.132"	.080	24	9.5	45%	4'x8', 4'x10'
3/4 #18 F	.46#	.923"	2.10"	.750"	1.812"	.040"	.118"	.040"	13	5.7	75%	4'x8'
3/4 #16 F	.57#	.923"	2.10"	.750"	1.812"	.050"	.118"	.050"	13	5.7	75%	4'x8'
3/4 #13 F	.86#	.923"	2.10"	.625"	1.75"	.080"	.120"	.080"	13	5.7	75%	4'x8'
3/4 # 9 F 10ga.	1.95#	.923"	2.10"	.562"	1.697"	.119"	.165"	.119"	13	5.7	61%	4'x8', 4'x9', 4'x10'
1-1/2 #16 F	.43#	1.33"	3.15"	1.062"	2.75"	.050"	.128"	.050"	9	3.8	80%	4'x8'
1-1/2 #13 F	.65#	1.33"	3.15"	1.000"	2.625"	.080"	.130"	.080"	9	3.8	80%	4'x8'
1-1/2 #9 F 10ga.	1.31#	1.33"	3.15"	.937"	2.625"	.119"	.165"	.119"	9	3.8	75%	4'x8'
					Αl		M 30	003-H14	4			
1/2 #.051 F	.26#	.50"	1.27"	.312"	1.00"	.040"	.104"	.040"	24	9.5	61%	4'x8'
1/2 #.081 F	.42#	.50"	1.27"	.312"	1.00"	.060"	.105"	.060"	24	9.5	58%	4'x8'
3/4 #.051 F	.16#	.923"	2.125"	.75"	1.812"	.040"	.122"	.040"	13	5.66	72%	4'x8'
3/4 #.081 LF	.30#	.923"	2.125"	.687"	1.75"	.070"	.143"	.070"	13	5.66	70%	4'x8'
3/4 #.081 HF	.39#	.923"	2.125"	.687"	1.75"	.070"	.181"	.070"	13	5.66	63%	4'x8'
3/4 #.125 F	.62#	.923"	2.125"	.625"	1.75"	.095"	.187"	.095"	13	5.66	62%	4'x8', 4'x10'
1-1/2 #.081 F	.21#	1.33"	3.15"	1.062"	2.75"	.060"	.143"	.060"	9	3.8	77%	4'x8'
1-1/2 #.125 F	.41#	1.33"	3.15"	1.00"	2.75"	.080"	.181"	.080"	9	3.8	70%	4'x8'

HOT DIP GALVANIZED

.096"

.107"

.111"

.165"

.050"

.078

.048"

.120"

Hemmed Edging



McNICHOLS®

Hemmed Edging is a new high-quality, architectural, folded-edge framing option. More information available. please inquire.

Attachment Clips



4040SQ0399

MATERIAL:

Pre-Galvanized Steel SIZE:

2.95" square

This clip is typically used to attach Expanded Metal to drywall applications where additional security within walls is needed.

NOTE: Measurements are approximates and subject to mill tolerances. All chart specifications may vary. Please inquire if they are critical to your application.



1/2 #16 F

1/2 #13 F

3/4 #16 F

3/4 #9 F

1.25"

1.25"

2.1'

2.1"

.50

.312"

.265'

.75"

.563"

1.0"

1.0'

1.75'

1.688'

.98# .50"

.56# .923"

1.88# .923"

© 2013

1.61#

24

24

13

13

9.5

5.7

.05"

.07"

.048"

.120"

9.5 63% 4'x8', 4'x10'

5.7 63% 4'x8', 4'x10'

52%

4'x8'

74% 5'x10', 4'x8'

EXPANDED GRATING & CATWALK WEB CODE: GEG1

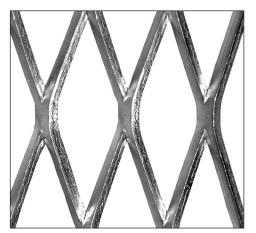




Expanded Grating or Expanded Catwalk is an economical solution for ramps, flooring, catwalks, platforms, walkways, treads or other types of lightweight structural applications. Standard Expanded Grating is similar to regular Expanded Metal only considerably heavier and load bearing. Expanded Metal Catwalk Grating is structurally stronger than Standard Expanded Grating because the long way of the diamond runs across a shorter span.

	GRATING & CATWALK STOCK LIST											
STYLE	mod.		N SIZE	OPENIN		STRAND		OVERALL	MESHES		OPEN	COMMON
	FT.	SWD	LWD	SWO	LWO	THICKNESS	WIDTH	ITICKNESS	SWD	LWD	AREA	SHEET SIZES
	PLAIN STEEL											
3.00#	3.00#	1.33"	5.33"	.940"	3.44"	.183"	.264"	.540"	9	2.25	60%	4'x8'
3.14#	3.14#	2.00"	6.00"	1.625"	4.88"	.250"	.312"	.656"	6	2	69%	4'x8', 4'x10', 6'x10'
4.00#	4.00#	1.33"	5.33"	.940"	3.44"	.215"	.300"	.618"	9	2.25	55%	4'x8', 4'x10'
4.27#	4.27#	1.41"	4.00"	1.000"	2.88"	.250"	.300"	.625"	8.5	3	58%	4'x8', 3'x10'
5.00#	5.00#	1.33"	5.33"	.813"	3.38"	.250"	.331"	.655"	9	2.25	50%	4'x8'
6.25#	6.25#	1.41"	5.33"	.813"	3.38"	.312"	.350"	.715"	8.5	2.25	50%	4'x8'
	STAINLESS STEEL TYPE 304											
4.50#	4.50#	1.41"	4.00"	1.00"	2.88"	.250"	.300"	.625"	8.5	3	58%	4' x 10'
						ALUMII	NUN	5052-H	132			
2.00#	2.00#	1.33"	5.33"	.940"	3.44"	.250"	.387"	.730"	9	2.25	48%	4'x8'

NOTE: Measurements are approximates and subject to mill tolerances. All chart specifications may vary. Please inquire if they are critical to your application.



Close up I	Expanded	Grating.	Photo	not to	scale.

GRATING & CATWALK LOAD TABLE

STEEL	CLEAR SPAN										
SIEEL	23"	30"	35"	42"	47"	54"	60"				
50 lbs./LF	3.0	3.0	3.0	3.0	3.0	4.0	5.0				
30 IDS./LF	3.14	3.14	3.14	3.14	3.14	4.27	6.25				
100 lbs./LF	3.0	3.0	3.0	4.0	5.0						
100 lbs./LF	3.14	3.14	3.14	4.27	6.25						
150 lbs./LF	3.0	4.0	4.0	5.0	6.25]					
150 IDS./LF	3.14	4.27	4.27	6.25		•					
200 lba/l F	3.0	4.0	4.27	6.25							
200 lbs/LF	3.14	4.27	5.0								
250 lbs./LF	4.0	5.0	5.0								
250 IDS./LF	4.27		6.25	Distance between supports is measured from inside							
300 lbs./LF	4.0	5.0	6.25								
300 IDS./LF	4.27	6.25		o inside							
250 lba /l F	4.0	6.25			eage of ne	xt support.					
350 lbs./LF	4.27		1								

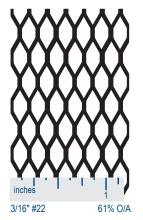
NOTE: The concentrated load deflection for the above selection chart does not exceed the 1/4" maximum deflection, and the generally accepted recommendation for normal pedestrian comfort.



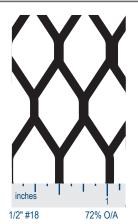
CATWALK FIXED SPAN LOAD TABLE									
CLEAR SPAN	LOAD	24"	36"	48"					
	U	275	100						
3.00# Steel	D	.250	.220						
3.00# Steel	С	275	165	75					
	D	.250	.250	.250					
	U	375	150	50					
3.14# Steel	D	.250	.240	.250					
3.14# Steel	С	375	155	75					
	D	.250	.250	.250					
	U	350	150	50					
4.00# Steel	D	.240	.245	.250					
4.00# 3(66)	С	440	220	100					
	D	.250	.250	.250					
	U	500	165	60					
4.27# Steel	D	.245	.245	.250					
4.21# 01661	С	400	225	100					
	D	.250	.240	.250					
	U	600	175	100					
5.00# Steel	D	.240	.240	.250					
3.00# Steel	С	540	310	140					
	D	.245	.250	.250					
	U	800	300	115					
6.25# Steel	D	.220	.250	.240					
0.20# 0.6661	С	800	300	150					
	D	.220	.240	.240					
2.00# Aluminum	С	250	100	50					
2.00# Aluminum	D	.250	.250	.250					
4.50# Stainless	С	300	150	100					
4.50# Stailliess	D	.217	.192	.212					

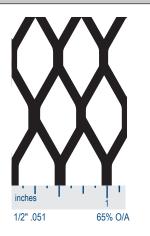
- U Uniform Load pounds/sq. ft.;
- D Deflection in inches;
 C Concentrated Load pounds/per ft. width at mid span

EXPANDED METAL DIAMOND OPENINGS TO SCALE











Inspired to Serve!

Discover what literally hundreds of thousands of customers have come to know and trust since 1952 - McNICHOLS is the worldwide leader in providing Perforated Metal, Expanded Metal, Wire Mesh, Designer Metals, as well as a full line of Grating and Flooring Products. Our loyal customers continue to rely on our experience, vast product inventory and shipping options to produce the right hole solution for their projects. As an ISO 9001:2008 certified company, we will provide you with an unsurpassed level of Service, Quality, and Performance... that's The Hole Story®!

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SERVICE

Whether your requirements are large or small, our highly trained Hole Team Associates are committed to meeting your needs accurately and efficiently.

QUALITY

All of our service centers are ISO 9001:2008 certified with fabricators that are American Welding Society (AWS) Certified. Our quality programs help insure that you receive your hole products with the highest level of service.

PERFORMANCE

With same day stock shipment we can meet your needs in the fastest, most efficient manner possible. Our number one goal is to serve our customers by getting hole products to them when they need it.



please inquire.

LOCATIONS

We have 18 service centers strategically located throughout the U.S. to provide our customers with fast service!

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2502 N. Rocky Pt. Drive, Ste. 750, Tampa, FL 33607 PO Box 30300, Tampa, FL 33630

ATI ANTA

Blda 6. #300 1980 Shiloh Road NW Kennesaw, GA 30144

BALTIMORE

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BOSTON

33 High Street North Billerica, MA 01862

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2307 Distribution Ctr. Dr., #F Charlotte, NC 28269

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CLEVELAND

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3540 W. Miller Road, #240 Garland, TX 75041

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NJ/NYC Area

2 Home News Row New Brunswick, NJ 08901

PHOENIX

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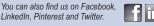
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