



**THE EXPANDED  
METAL COMPANY**

**Standard Mesh  
Product Guide**

# A Leader and Innovator

Expanded metal is a form of sheet metal which has been cut and stretched to form a regular pattern of mesh material – typically this has a diamond pattern.

The Expanded Metal Company combines more than a century of industrial experience with cutting edge technical capabilities and advanced production processes.

Operating from our extensive 25,000 sqm facility in Hartlepool, North East England – a long established global centre for expanded metal expertise – we offer a wide range of high quality expanded metal mesh products which are used across numerous industries and applications.

Our team works hand in hand with contractors and end users over the course of their projects and we offer specialist fabrication services.

The company was founded by John French Golding, the inventor and patentee of expanded metal, and we have an industrial heritage dating back to 1889. The Expanded Metal Company was formerly part of the Expamet group of companies.

We stock and supply raised meshes, flattened meshes and a range of specialist meshes for applications including fencing systems, security toppings, walkways, ramps, cages, fencing, filtration, plaster rendering, metal pressings and components.

**Our expanded metal mesh products are used globally across numerous industry sectors, including:**



Acoustics



Aerospace



Agriculture



Architectural



Automotive



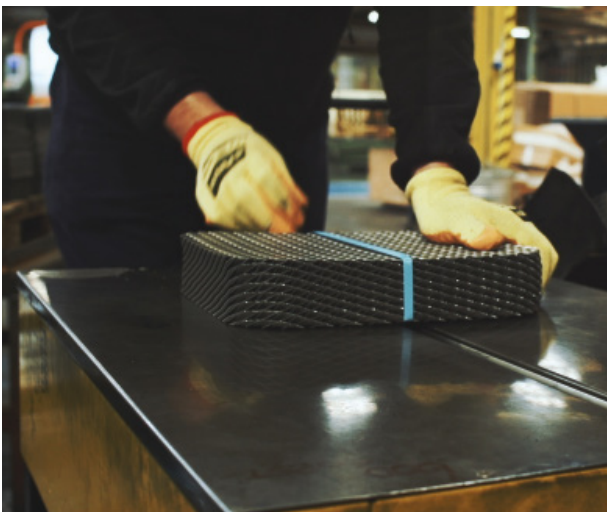
Construction



Filtration



Security



# Benefits

## HIGHLY EFFICIENT

Electricity, magnetic flux and heat can all flow through expanded metal mesh as there is a continuous connection throughout each sheet.

## MINIMUM WASTE

Slitting and stretching is used to create holes, rather than punching them out. This creates immediate cost savings as less raw material is wasted.

## ANTI-SLIP

The knuckles formed from expanding metal give the material a strong grip – plus expanded metal mesh provides natural drainage.

## AESTHETICS

Expanded metal mesh is available in a wide array of colours, materials and designs, and it can be used to stunning effect.

## HIGH STRENGTH TO WEIGHT RATIO

The uncut knuckles of expanded metal mesh withstand pressure better than welds or joints.

## FORMED FROM ONE PIECE OF MATERIAL

Expanded metal mesh is ideal for forming, plus there is nothing to work loose.

## COMPOSITE SUBSTRATES

Expanded metal mesh can be easily combined with other materials such as glass or plastics for added strength and flexibility.

# Contents

## INTRODUCTION

Expanded Metal	2
Metal Mesh	4
Raised Meshes	4
Flattened Meshes	4
Measuring Guide	5

## MILD STEEL

Raised Mesh	6-7
Flattened Mesh	8-9
Raised, Special Shapes	15
Ramps / Walkway Mesh	20

## PRE-GALVANISED

Flattened Mesh	9
Flattened, Experf	14
Raised, Plaster Rendering	16
Raised, Brick Reinforcement	17

## ALUMINIUM

Raised Mesh	10
Flattened Mesh	11
Ramps / Walkway Mesh	21

## STAINLESS STEEL

Raised Mesh	12
Flattened Mesh	13
Flattened, Experf	14
Raised, Plaster Rendering	16
Raised, Soffit Vent Mesh	17

## EXMESH™ SECURITY

Securilath™	17-19
Fastrack / Primary / Electra	22
Paliclad / Fixafence / GRP / Anti-Climb AVSB / Anti-Climb Raptor	23
Super Security / Alleygator / Cages / Boundary Panels	24
Class 2 Fencing / Class 2 Gates / Class 3 Fencing / Class 3 Gates	25

## OTHER

Specialist Mesh Products - Foil / Architectural Mesh / Micromesh / Square Mesh / Filtration	26
Bespoke Solutions	27
Specialist Capabilities	27
Accreditations	27

## Key

	Company Information
	Mild Steel
	Pre-Galvanised
	Aluminium
	Stainless Steel
	Exmesh™ Security
	Specialist Products

*If not otherwise specified, tolerances referred to in the brochure are in line with our standard factory tolerances, which are available on request.*

*All images and content are owned by The Expanded Metal Company and must not be used without prior consent. Copyright © 2019.*

# Expanded Metal Mesh

## An Introduction...

Expanded metal mesh has a diverse range of properties, which makes it a versatile material that can be used throughout a variety of industries.

Expanded metal mesh is manufactured with the use of an expanding machine. Metal sheets or coils are fed through the machine to be slit and stretched simultaneously. The result is a mesh product with no joins or welds, formed from a process that produces minimum waste.

Expanded metal mesh comes in two forms: raised mesh and flattened mesh, which offer different properties.

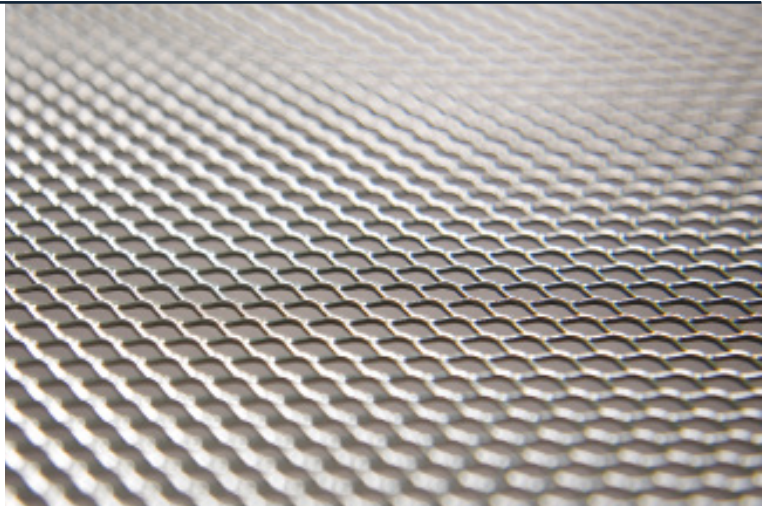


## Raised Meshes

Our raised meshes are available in materials including steel, stainless steel, pre-galvanised steel, titanium, brass, copper, aluminium, tinplate, plastic, nickel and incoloy.

As well as standard raised meshes, our range of raised mesh includes heat resistant meshes, grain drying meshes, anti-dazzle meshes, laths and concrete reinforcement meshes.

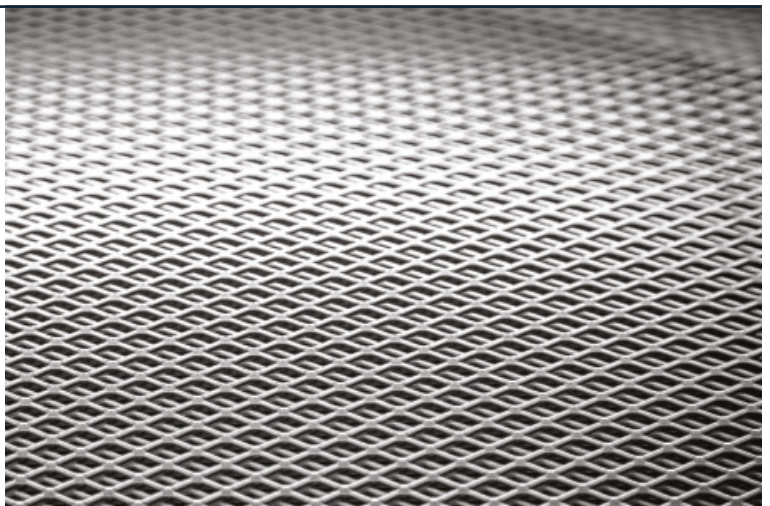
Shape variations include square, hexagonal, minaret and louvre options, as well as standard expanded metal shapes.



## Flattened Meshes

Our flattened meshes are available in a wide range of materials including steel, stainless steel, pre-galvanised steel and aluminium.

As well as standard flattened meshes, our range includes filtration products, laths and concrete reinforcement meshes.

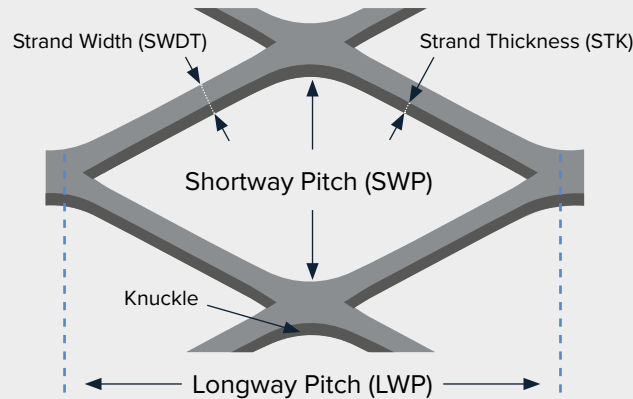


## INTRODUCTION

Below is a visual guide on measuring raised and flattened meshes, and understanding mesh orientation. This guide will help you assess these crucial factors when selecting expanded metal for your applications.

### RAISED MESH

Raised metal mesh has a three-dimensional structure with small ridges, providing enhanced grip and airflow.

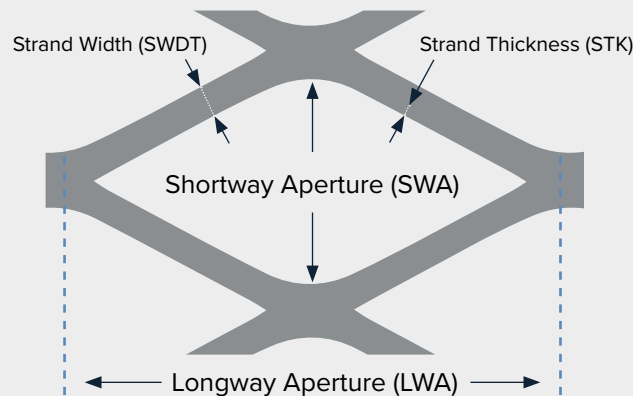


#### KEY TERMINOLOGY

- Longway Pitch (LWP)
- Shortway Pitch (SWP)
- Strand Width (SWDT)
- Strand Thickness (STK)
- Longway Mesh (LWM)
- Shortway Mesh (SWM)

### FLATTENED MESH

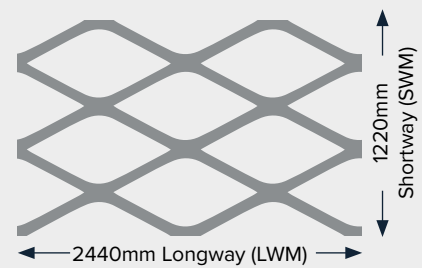
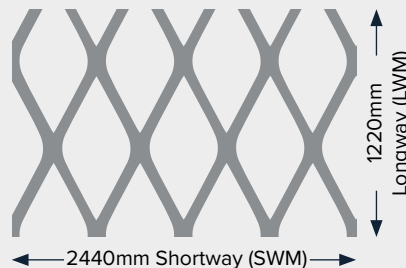
Flattened metal mesh is rolled to create a smooth, two-dimensional surface, making it easier to handle and install while maintaining structural integrity.



#### KEY TERMINOLOGY

- Longway Aperture (LWA)
- Shortway Aperture (SWA)
- Strand Width (SWDT)
- Strand Thickness (STK)
- Longway Mesh (LWM)
- Shortway Mesh (SWM)

### SHEET ORIENTATION



**QUALITY INFORMATION:** Unless otherwise specifically stated all specifications and particulars of weights and dimensions stated are approximate only and are manufactured to nominal manufacturing tolerances. In the spirit of continuous product development and improvement, we reserve the right to change product specifications without notice.

**HEALTH & SAFETY INFORMATION:** COSHH We are not aware of any risk to individuals arising from chemicals or other substances present on or in our products from reasonable usage. However, there exists the possibility of superficial injury in the form of cuts or grazes due to the nature of metal generally. Suitable PPE should be used when handling our product.

# Mild Steel, Raised Mesh



Acoustics



Agriculture



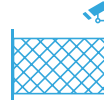
Transport



Logistics



Construction



Security



Utilities



Manufacturing

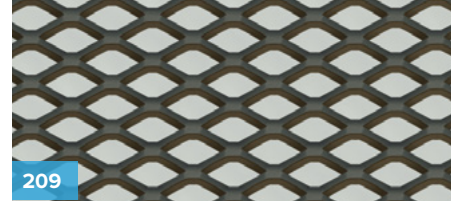
Pattern	Pitch (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness			LW	SW
220	5.84	3.50	0.79	0.60	2.11	55	1250 X 1250	
203	10.24	5.64	0.79	0.60	1.31	72	1250 X 1250	
209	10.24	5.64	1.55	1.00	4.30	45	1250 X 1250	



220

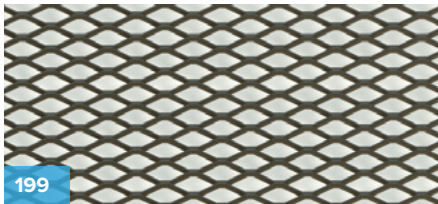


203



209

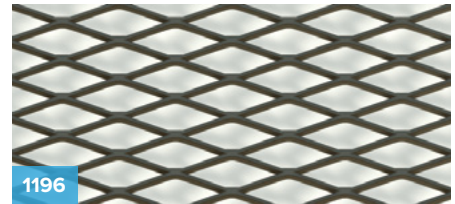
Pattern	Pitch (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness			LW	SW
199	14.29	5.64	1.17	1.00	3.30	59	1250 X 1250	
0798	19.05	7.43	1.70	1.00	3.60	54	1250 X 2500	
1196	28.58	9.52	1.98	1.20	3.90	58	2440 X 1220	



199

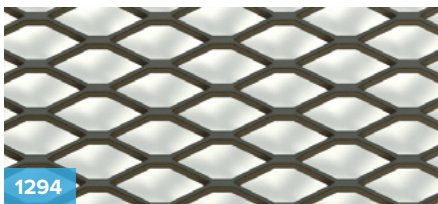


0798



1196

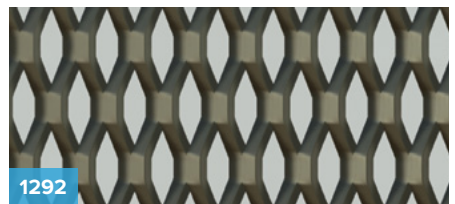
Pattern	Pitch (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness			LW	SW
1294	30.48	11.72	2.36	1.60	5.10	60	2440 X 1220	
1295	30.48	11.72	1.98	1.60	4.20	66	2440 X 1220	
1292	30.48	13.86	4.75	2.50	14.70	25	1220 X 1525	



1294

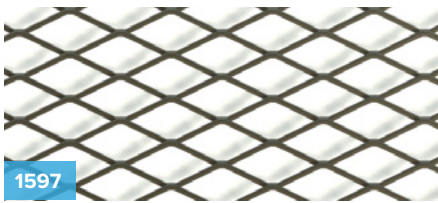


1295



1292

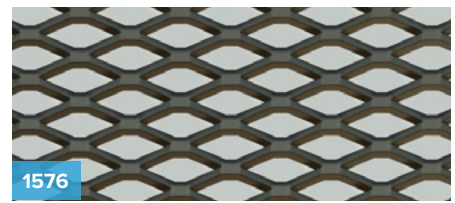
Pattern	Pitch (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness			LW	SW
1597	38.10	16.48	2.25	1.60	3.40	73	2440 X 1220	
1595	38.10	16.93	3.08	1.60	4.60	64	2440 X 1220	
1576	38.10	16.93	4.75	3.00	13.20	44	2440 X 1220	



1597

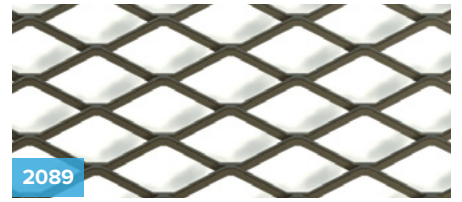


1595

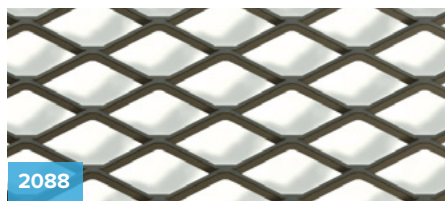
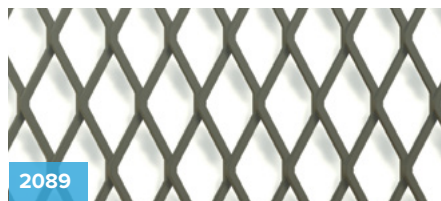


1576

Pattern	Pitch (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness			LW	SW
2093	50.80	22.58	3.05	1.60	3.40	73	2440 X 1220	
2091	50.80	22.58	2.52	2.50	4.40	78	2440 X 1220	
2089	50.80	22.58	3.12	3.00	6.50	72	2440 X 1220	



Pattern	Pitch (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness			LW	SW
2089	50.80	22.58	3.12	3.00	6.50	72	1220 X 2440	
2088	50.80	22.58	3.89	3.00	8.10	66	2440 X 1220	
3092	76.20	33.87	3.58	3.00	5.00	79	2440 X 1220	

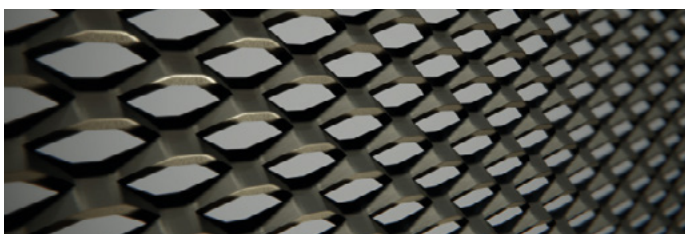
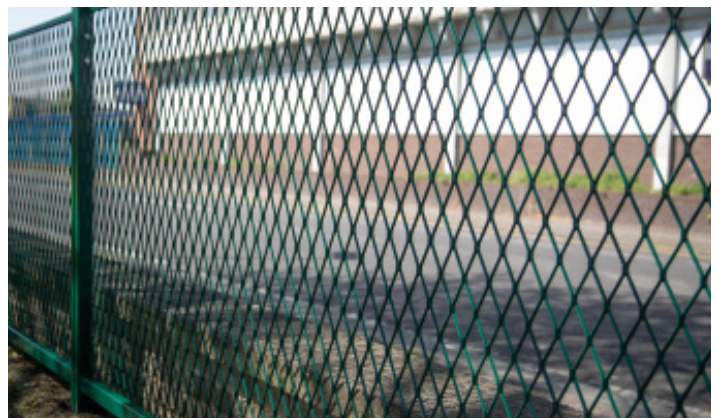


Pattern	Pitch (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness			LW	SW
3396	85.73	40.64	3.18	3.00	3.70	84	2440 X 1220	
4097	101.60	50.80	3.35	3.00	3.10	87	2440 X 1220	
4599	114.30	39.33	4.60	3.00	5.50	77	2440 X 1220	



**MILD STEEL RAISED MESH  
TYPICAL APPLICATIONS:**

- Speaker grilles
- Boltboxes
- Spark guards
- Pedestrian
- Walkways
- Fencing
- Trailer ramps
- Pallets
- Stillages
- Sheep flooring
- Cages
- Pedestrian barriers



To place an order, download a datasheet or request a sample, visit our website [expandedmetalcompany.co.uk](http://expandedmetalcompany.co.uk) or call us on **+44 (0) 1429 867388**

Other sizes available with our bespoke service

# Mild Steel, Flattened Mesh



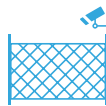
Agriculture



Construction



Manufacturing



Security



Utilities



Telecommunications

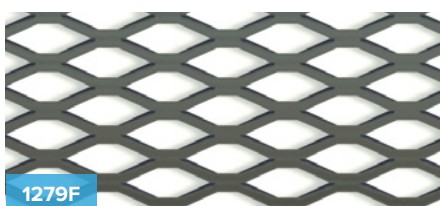
Pattern	Pitch (mm)		Strand (mm)		Aperture (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness	LWA	SWA	Width (A/F)	Thickness (A/F)			LW	SW
706F	4.75	2.38	0.76	0.60	2.79	0.81	0.76	0.58	3.00	35	1250 X 1250	
226F	5.84	3.50	0.79	0.60	3.81	2.03	0.79	0.58	2.10	56	1250 X 1250	
217F	10.24	5.64	1.14	1.00	6.85	3.56	1.30	0.94	3.00	58	1250 X 2500	



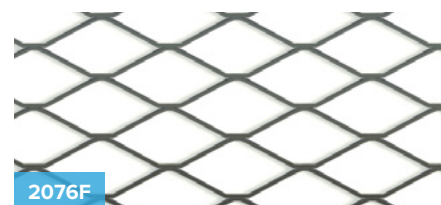
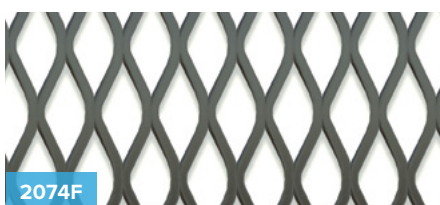
Pattern	Pitch (mm)		Strand (mm)		Aperture (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness	LWA	SWA	Width (A/F)	Thickness (A/F)			LW	SW
0794F	19.05	7.43	1.70	1.00	14.22	4.83	1.85	0.96	3.30	57	1250 X 2500	
1280F	30.48	11.72	2.36	1.20	24.38	7.11	2.39	1.14	3.60	60	2440 X 1220	
1282F	30.48	11.72	2.06	1.20	24.38	7.62	2.08	1.14	3.20	65	2440 X 1220	



Pattern	Pitch (mm)		Strand (mm)		Aperture (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness	LWA	SWA	Width (A/F)	Thickness (A/F)			LW	SW
1281F	30.48	11.72	1.98	1.60	24.38	7.87	2.06	1.47	4.10	66	2440 X 1220	
1279F	30.48	12.19	3.18	1.60	23.11	5.84	3.20	1.52	6.30	48	2440 X 1220	
1585F	38.10	16.93	2.31	1.20	33.53	12.45	2.34	1.14	2.50	73	2440 X 1220	



Pattern	Pitch (mm)		Strand (mm)		Aperture (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness	LWA	SWA	Width (A/F)	Thickness (A/F)			LW	SW
1584F	38.10	16.93	3.08	1.60	32.77	10.92	3.18	1.50	4.40	63	2440 X 1220	
2074F	50.80	21.77	4.32	3.00	39.12	18.29	4.72	2.74	7.60	66	1220 X 2440	
2076F	50.80	22.58	2.31	1.20	43.43	18.03	2.31	1.14	1.90	80	2440 X 1220	

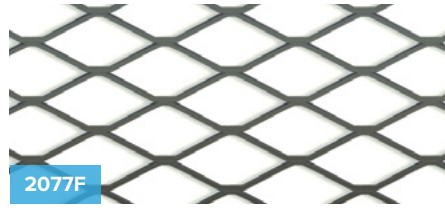




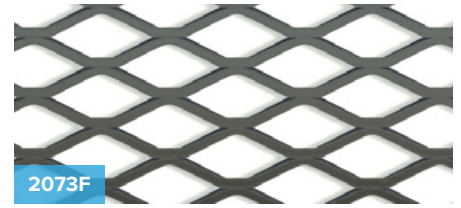
Pattern	Pitch (mm)		Strand (mm)		Aperture (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness	LWA	SWA	Width (A/F)	Thickness (A/F)			LW	SW
2076F	50.80	22.58	2.31	1.20	43.43	18.03	2.31	1.14	1.90	80	1220 X 2440	
2077F	50.80	22.58	3.05	1.60	43.18	17.27	3.23	1.45	3.20	73	2440 X 1220	
2073F	50.80	22.58	4.39	3.00	42.93	14.22	4.60	2.69	8.60	61	2440 X 1220	



2076F



2077F



2073F

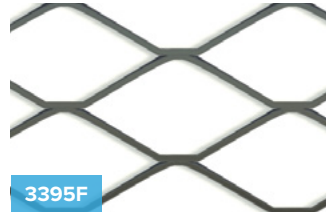
Pattern	Pitch (mm)		Strand (mm)		Aperture (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness	LWA	SWA	Width (A/F)	Thickness (A/F)			LW	SW
2490F	60.96	23.45	5.50	4.00	46.99	15.49	6.00	3.50	13.20	54	1220 X 2440	
3394F	85.73	39.33	4.75	2.50	69.85	37.08	5.49	2.16	4.00	77	1220 X 2440	
3395F	85.73	39.79	3.76	2.00	76.96	32.77	3.81	1.85	2.80	81	2440 X 1220	
3393F	85.73	40.64	6.50	3.00	77.47	27.18	6.53	2.82	7.20	68	2440 X 1220	



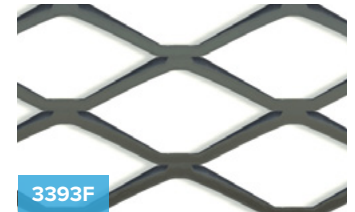
2490F



3394F



3395F

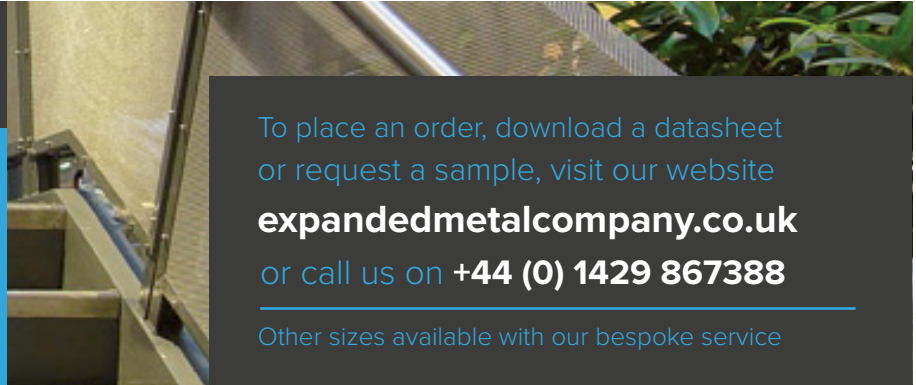


3393F

A/F = After Flattening

### MILD STEEL FLATTENED MESH TYPICAL APPLICATIONS:

- Ballustrading
- Stillages
- Animal flooring
- Bird guarding
- Machine guards
- Electromagnetic screens



To place an order, download a datasheet or request a sample, visit our website [expandedmetalcompany.co.uk](http://expandedmetalcompany.co.uk) or call us on **+44 (0) 1429 867388**

Other sizes available with our bespoke service

## Pre-Galvanised, Flattened Mesh



Acoustics

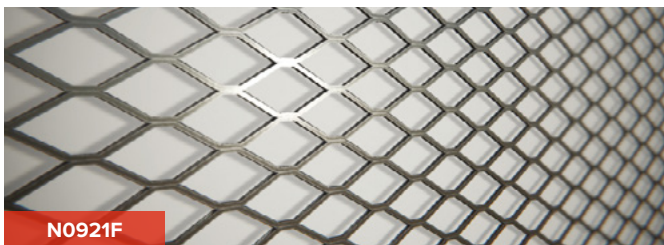


Filtration



Agriculture

Pattern	Pitch (mm)		Strand (mm)		Aperture (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness	LWA	SWA	Width (A/F)	Thickness (A/F)			LW	SW
N0921F	30.48	11.72	1.60	1.00	25.15	8.64	1.65	0.94	2.06	72	2440 X 1070	



N0921F



N0921F

# Aluminium, Raised Mesh



Automotive



Manufacturing



Design

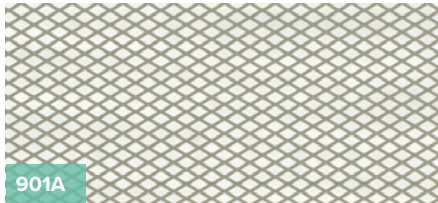


DIY



Transport

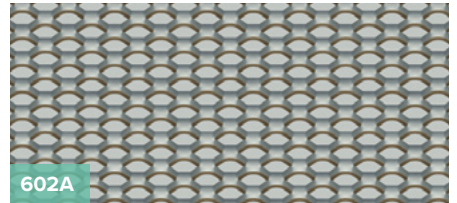
Pattern	Pitch (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness			LW	SW
901A	3.18	1.81	0.28	0.32	0.30	69	610 X 10Mtr Coils	
601A	5.84	3.50	0.79	0.50	0.61	55	1250 X 1250	
602A	5.84	3.39	1.17	0.50	0.94	31	1250 X 1250	



901A



601A



602A

Pattern	Pitch (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness			LW	SW
351A	10.24	5.64	1.55	0.90	1.30	45	1250 X 1250	
0798A	19.05	7.43	1.70	0.90	1.10	54	1250 X 2500	

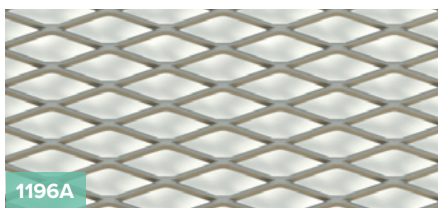


351A

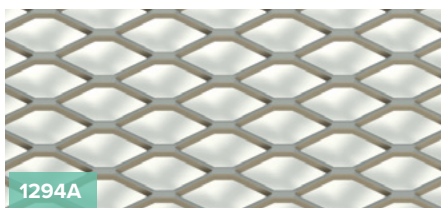


0798A

Pattern	Pitch (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness			LW	SW
1196A	28.58	9.52	1.98	1.20	1.40	58	2500 X 1250	
1294A	30.48	11.72	2.36	1.50	1.80	60	2500 X 1250	
1598A	38.10	16.93	2.31	1.20	0.90	73	2500 X 1250	



1196A



1294A



1598A

Pattern	Pitch (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness			LW	SW
2089A	50.80	22.58	3.12	3.00	2.30	72	1250 x 2500	



2089A



2089A

# Aluminium, Flattened Mesh



Automotive



Manufacturing



Design



DIY

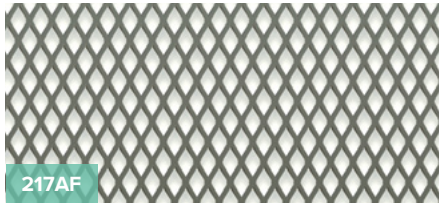


Transport



Construction

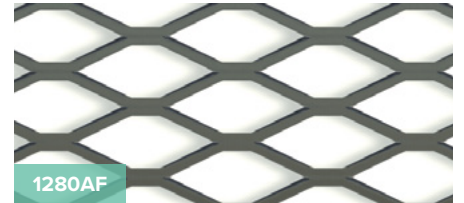
Pattern	Pitch (mm)		Strand (mm)		Aperture (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness	LWA	SWA	Width (A/F)	Thickness (A/F)			LW	SW
217AF	10.24	5.64	1.17	0.90	6.86	3.56	1.27	0.89	1.00	58	1250 X 2500	
0794AF	19.05	7.43	1.70	0.90	13.97	4.83	1.80	0.89	1.00	57	1250 X 2500	
1280AF	30.48	11.72	2.36	1.20	24.13	6.86	2.39	1.14	1.30	59	2500 X 1250	



217AF

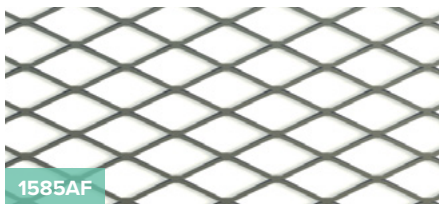


0794AF

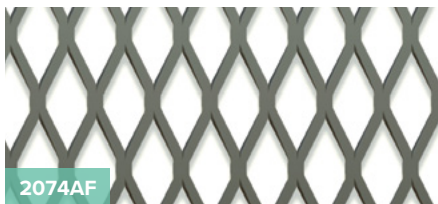


1280AF

Pattern	Pitch (mm)		Strand (mm)		Aperture (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness	LWA	SWA	Width (A/F)	Thickness (A/F)			LW	SW
1585AF	38.10	16.93	2.31	1.20	35.05	11.94	2.34	1.14	0.90	72	2500 X 1250	
2074AF	50.80	21.77	4.32	3.00	40.64	17.78	4.04	3.00	2.80	69	1250 X 2500	
2077AF	50.80	22.58	2.97	1.50	42.93	17.02	3.12	1.45	1.10	73	2500 X 1250	



1585AF



2074AF



2077AF

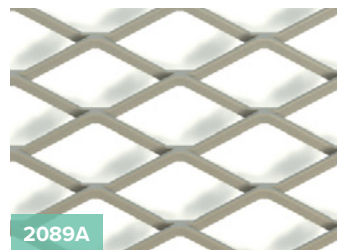
A/F = After Flattening

## ALUMINIUM RAISED MESH TYPICAL APPLICATIONS:

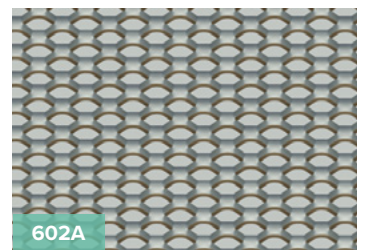
- Radiator grilles
- Lightweight ramps
- Car body repair
- Arts and crafts

## ALUMINIUM FLATTENED MESH TYPICAL APPLICATIONS:

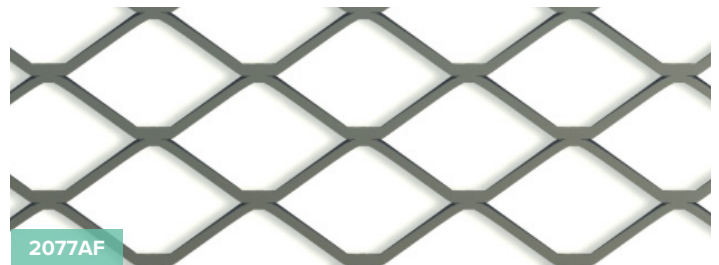
- Bird guards
- Gutter guards
- Greenhouse staging



2089A



602A



2077AF

To place an order, download a datasheet or request a sample, visit our website [expandedmetalcompany.co.uk](http://expandedmetalcompany.co.uk) or call us on +44 (0) 1429 867388

Other sizes available with our bespoke service

# Stainless Steel, Raised Mesh



Construction



Manufacturing

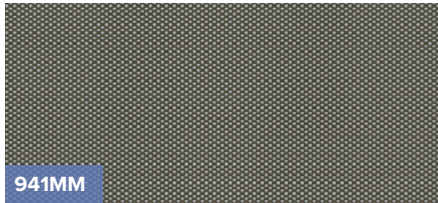


Agriculture

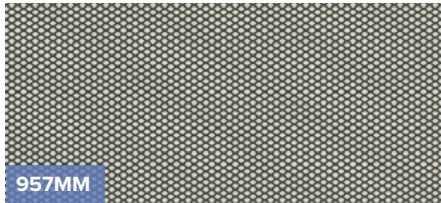


Food Industry

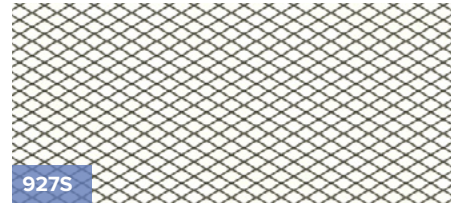
Pattern	Pitch (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness			LW	SW
941MM	1.00	0.67	0.20	0.15	0.80	38	212 X 1000	
957MM	1.50	0.92	0.22	0.15	0.60	52	313 X 1000	
927S	3.18	1.81	0.25	0.15	0.30	72	420 X 10Mtr Coils	



941MM



957MM

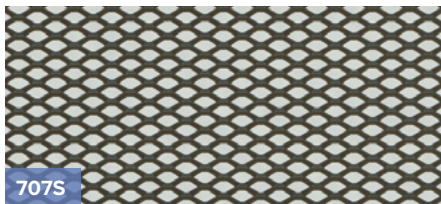


927S

Pattern	Pitch (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness			LW	SW
926S	3.18	1.95	0.79	0.46	3.00	19	610 X 1070	
707S	4.75	2.38	0.56	0.46	1.70	53	1250 X 1250	
227S	5.84	3.39	0.81	0.50	1.91	52	1250 X 1250	



926S

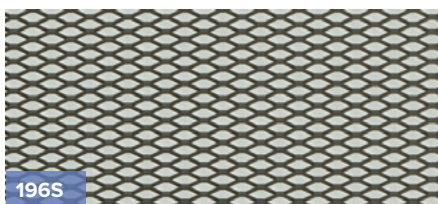


707S

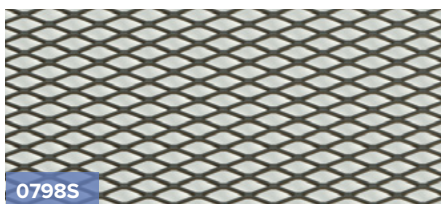


227S

Pattern	Pitch (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness			LW	SW
196S	14.29	5.54	1.33	0.90	3.50	52	1250 X 1250	
0798S	19.05	7.26	1.71	0.90	3.40	53	2500 X 1250	
1590S	38.10	16.48	1.91	1.50	2.80	77	2500 X 1250	



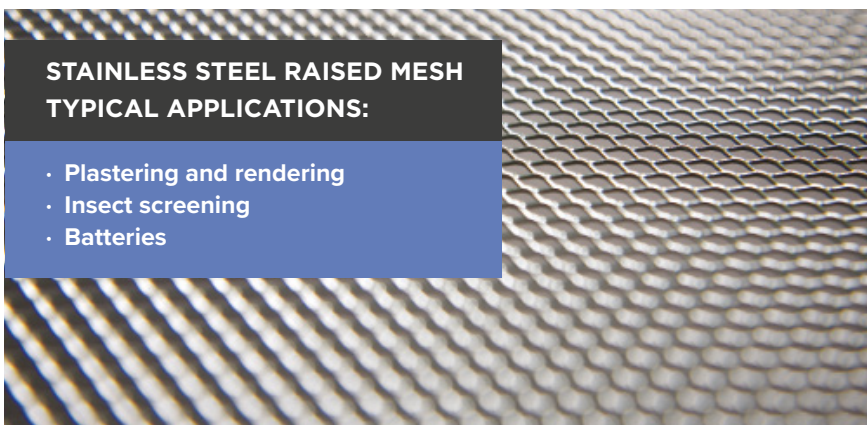
196S



0798S



1590S



## STAINLESS STEEL RAISED MESH TYPICAL APPLICATIONS:

- Plastering and rendering
- Insect screening
- Batteries

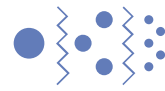


957MM

# Stainless Steel, Flattened Mesh



Acoustics

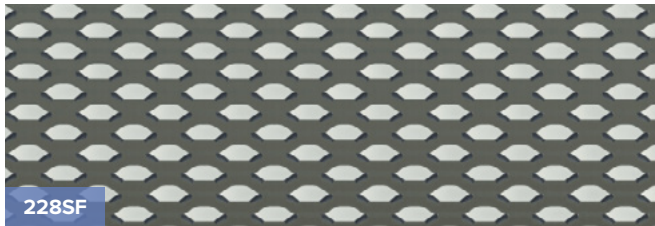


Filtration

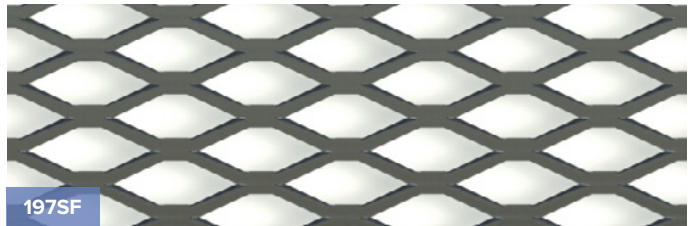


Construction

Pattern	Pitch (mm)		Strand (mm)		Aperture (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness	LWA	SWA	Width (A/F)	Thickness (A/F)			LW	SW
228SF	5.84	3.39	1.22	0.50	3.00	1.00	1.22	0.56	2.80	29	1250 X 1250	
197SF	14.29	5.54	1.33	0.70	10.50	3.50	1.33	0.70	2.70	57	1250 X 1250	

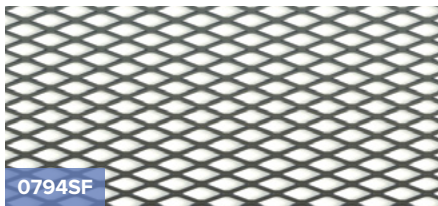


228SF

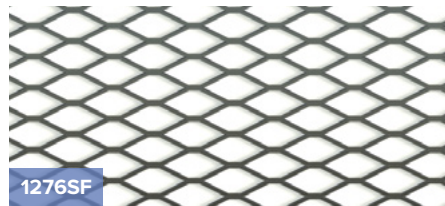


197SF

Pattern	Pitch (mm)		Strand (mm)		Aperture (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness	LWA	SWA	Width (A/F)	Thickness (A/F)			LW	SW
0794SF	19.05	7.26	1.71	0.90	14.22	4.58	1.83	0.86	3.00	56	1250 X 1250	
1276SF	30.48	11.72	1.83	1.20	25.00	8.00	1.98	1.09	2.90	67	2500 X 1250	
1583SF	38.10	16.48	1.91	0.90	35.05	12.56	1.96	0.86	1.60	76	2500 X 1250	



0794SF

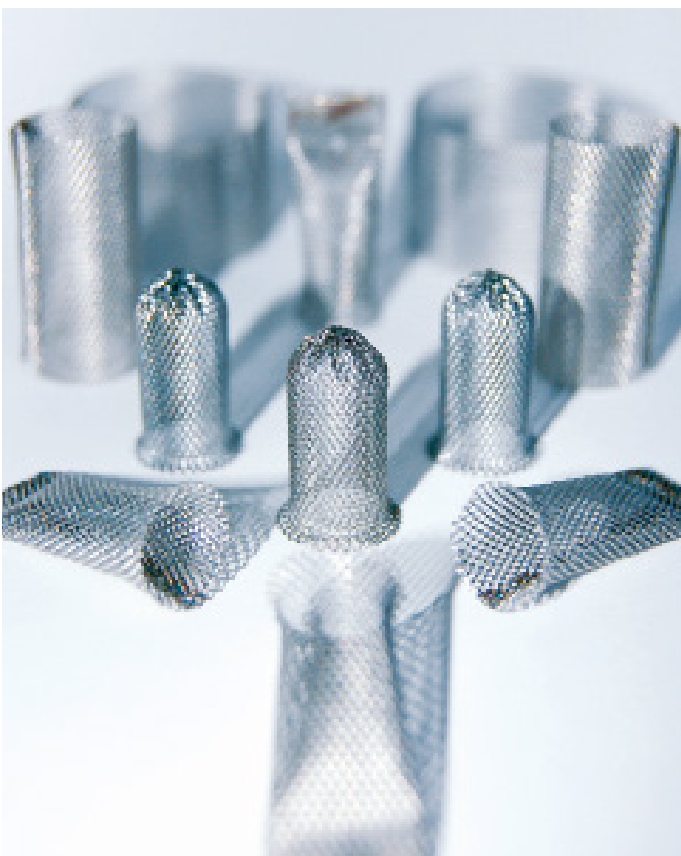


1276SF



1583SF

A/F = After Flattening



## STAINLESS STEEL FLATTENED MESH TYPICAL APPLICATIONS:

- Acoustics
- Filtration
- Flue guards

To place an order, download a datasheet or request a sample, visit our website [expandedmetalcompany.co.uk](http://expandedmetalcompany.co.uk) or call us on **+44 (0) 1429 867388**

Other sizes available with our bespoke service

# Pre-Galvanised, Flattened, Experf

Experf offers a budget-friendly alternative to perforated metal. As the metal is expanded rather than punched through, there is no waste in the production process, resulting in significant cost savings.



Acoustics



Agriculture



Filtration

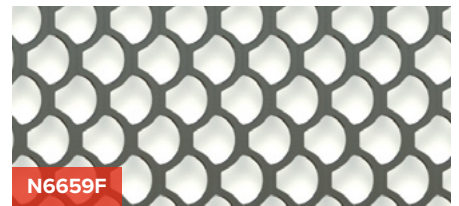
Pattern	Pitch (mm)		Strand (mm)		Aperture (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness	LWA	SWA	Width (A/F)	Thickness (A/F)			LW	SW
N8614F	8.00	5.44	1.05	0.70	6.10	3.70	1.20	0.70	1.90	61	1250 X 2500	
N6664F	8.00	5.98	1.40	0.70	6.15	3.69	1.50	0.70	2.40	52	1250 X 2500	
N6659F	10.00	6.93	1.35	0.70	6.10	4.82	1.40	0.70	2.00	61	1250 X 2500	



N8614F



N6664F



N6659F

# Stainless Steel, Flattened, Experf



Acoustics



Agriculture



Filtration

Pattern	Pitch (mm)		Strand (mm)		Aperture (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness	LWA	SWA	Width (A/F)	Thickness (A/F)			LW	SW
N7486F	8.00	5.54	1.20	0.70	6.71	3.60	1.20	0.70	2.20	60	1250 X 2500	



N7486F

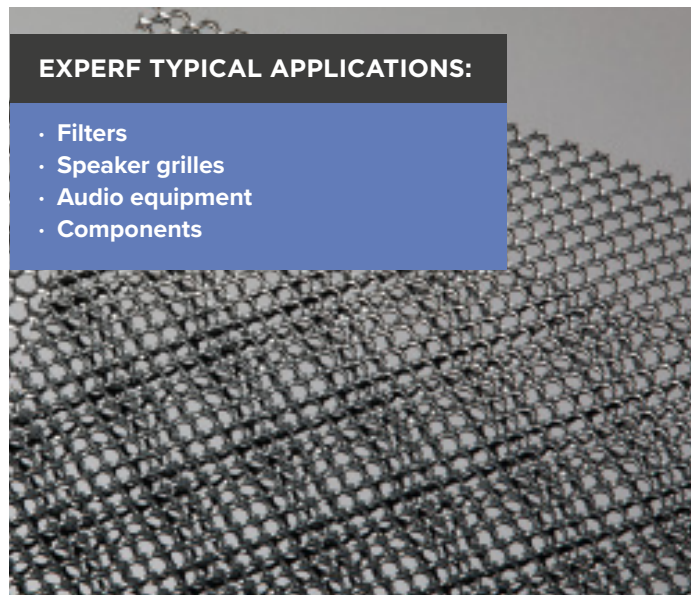


N7486F

A/F = After Flattening

## EXPERF TYPICAL APPLICATIONS:

- Filters
- Speaker grilles
- Audio equipment
- Components



To place an order, download a datasheet or request a sample, visit our website [expandedmetalcompany.co.uk](http://expandedmetalcompany.co.uk) or call us on **+44 (0) 1429 867388**

Other sizes available with our bespoke service

# Mild Steel, Raised, Special Shapes

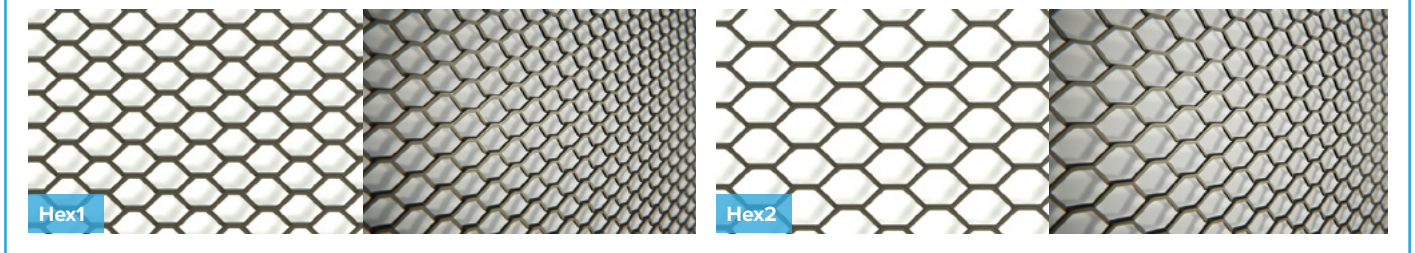


Design

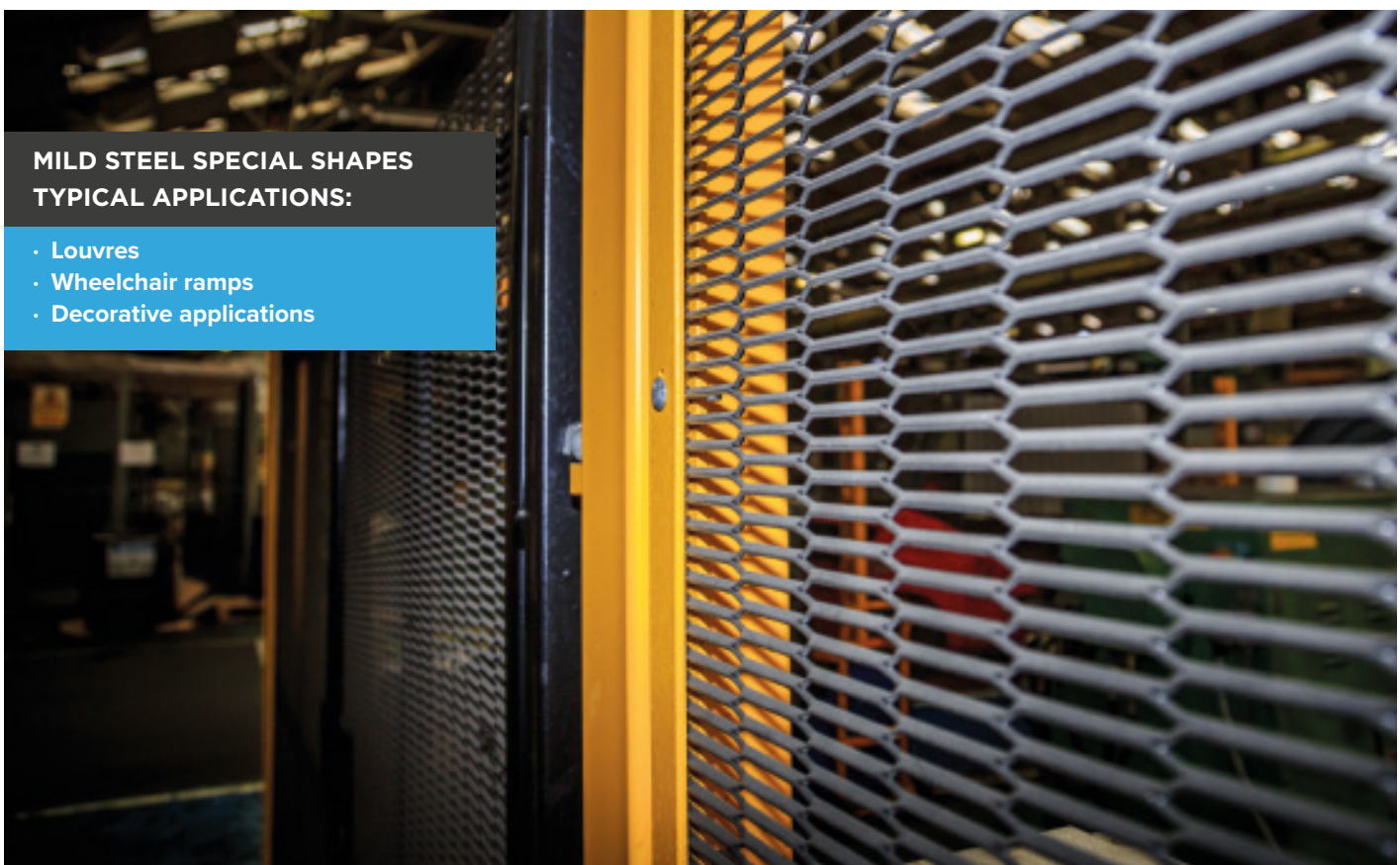
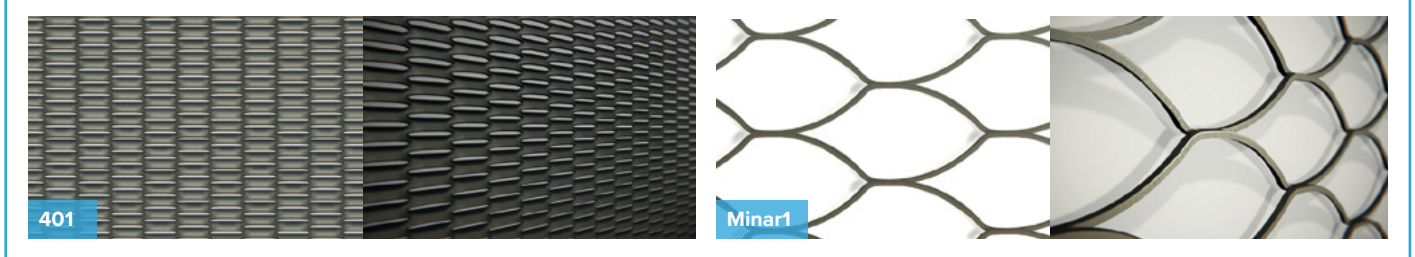


Construction

Shape	Pattern	Pitch (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
		LWP	SWP	Width	Thickness			LW	SW
Hexagon	Hex1	19.05	9.50	1.22	1.20	2.40	74	1250 X 1250	
Hexagon	Hex2	25.40	11.67	1.27	1.20	2.00	78	1250 X 1250	



Shape	Pattern	Pitch (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
		LWP	SWP	Width	Thickness			LW	SW
Parallel	401	28.58	3.67	2.31	0.75	3.70	53	1250 X 1250	
Minaret	Minar1	137.16	56.85	3.25	3.00	2.70	89	2340 X 1220	



**MILD STEEL SPECIAL SHAPES  
TYPICAL APPLICATIONS:**

- Louvres
- Wheelchair ramps
- Decorative applications

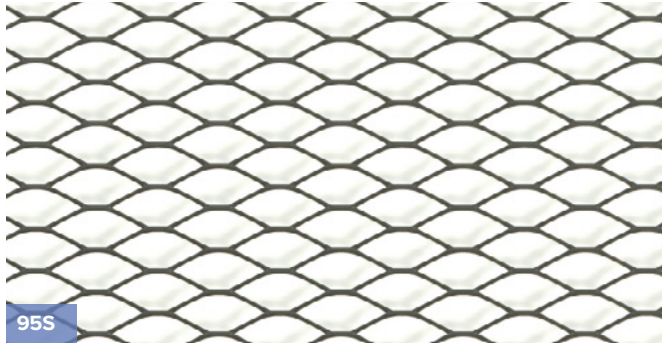
# Construction Products



Construction

## Stainless Steel, Raised, Plaster Rendering

Pattern	Pitch (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness			LW	SW
95S	30.48	10.50	1.50	0.46	1.10	71	2500 X 700	



## Stainless Steel, Raised, Soffit Vent Mesh

Soffit vent mesh has been developed to prevent the ingress of birds, rodents and insects within eaves, vents and other open spaces.

For wholesale enquiries, we can supply our soffit vent mesh in dispenser boxes complete with your company's artwork.



Pattern	Pitch (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Coils
	LWP	SWP	Width	Thickness			
SVM1	3.18	1.81	0.25	0.15	0.30	72	75 X 30Mtr





The ExMesh™ Securilath™ system has been developed as a discreet method of significantly delaying the most determined intruder from creating an aperture large enough to gain entry into a premises.

ExMesh™ Securilath™, which was developed in the 1990s by The Expanded Metal Company, is the only security mesh range to be certified by the Loss Prevention Certification Board (LPCB) when applied to timber stud, block walls and metal stud.

Securilath™ can be installed at the time of construction into internal or external walls (solid or stud), ceilings and roofs, or can be retrofit whilst refurbishment is carried out. The option of finishing with dry lining or render is not lost with Securilath™, as our range covers both options.

Securilath™ is easily fixed to brickwork, blockwork, stud partitioning, ceiling joists and roofs in metal or timber. Securilath™ sheets should be butted together and not overlapped. For additional security we suggest reducing the spacing shown when Securilath™ is fixed adjacent to doors or windows.



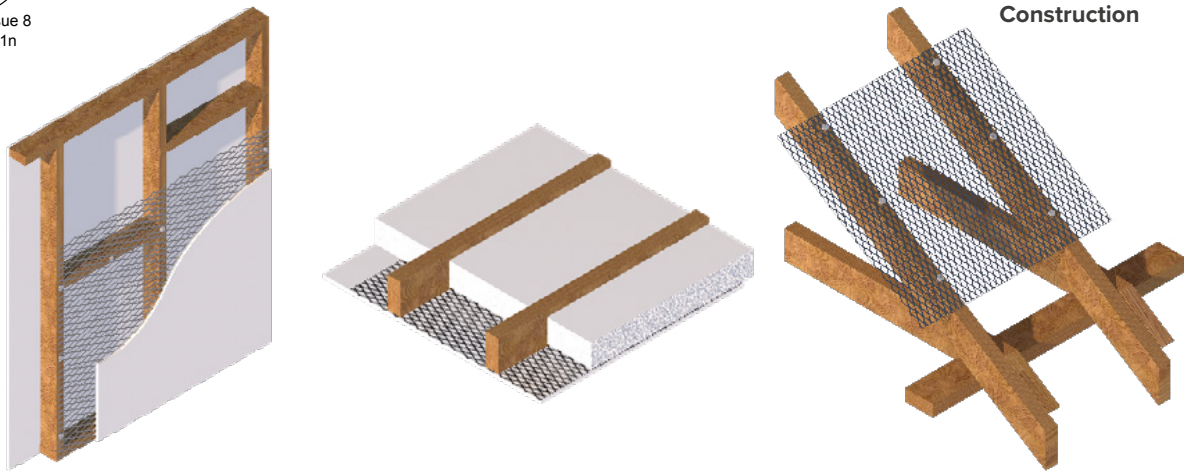
LPS 1175: Issue 8  
Cert No. 731n



Construction



Security

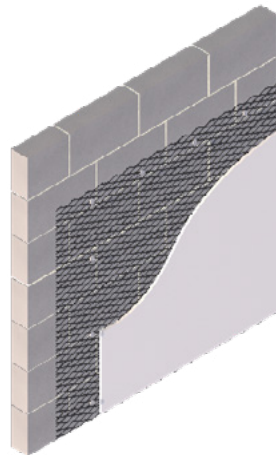
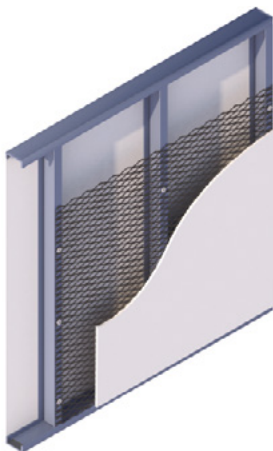


### Metal stud walls, purlins and roofs

Securilath™ fixed to metalwork with No. 6 or 8 x 30 zinc plated self tapping screws, complete with min 25mm dia x 1.5mm galvanised washers fixed at maximum 450mm centres.\*

### Brick or blockwork applications

Suitable for both render and plaster finishes Securilath™ HDR mesh fixed with M6 plug and M6 x 50mm screw complete with minimum 25mm dia x 1.5mm galvanised washers at maximum 450mm centres in both directions.\*

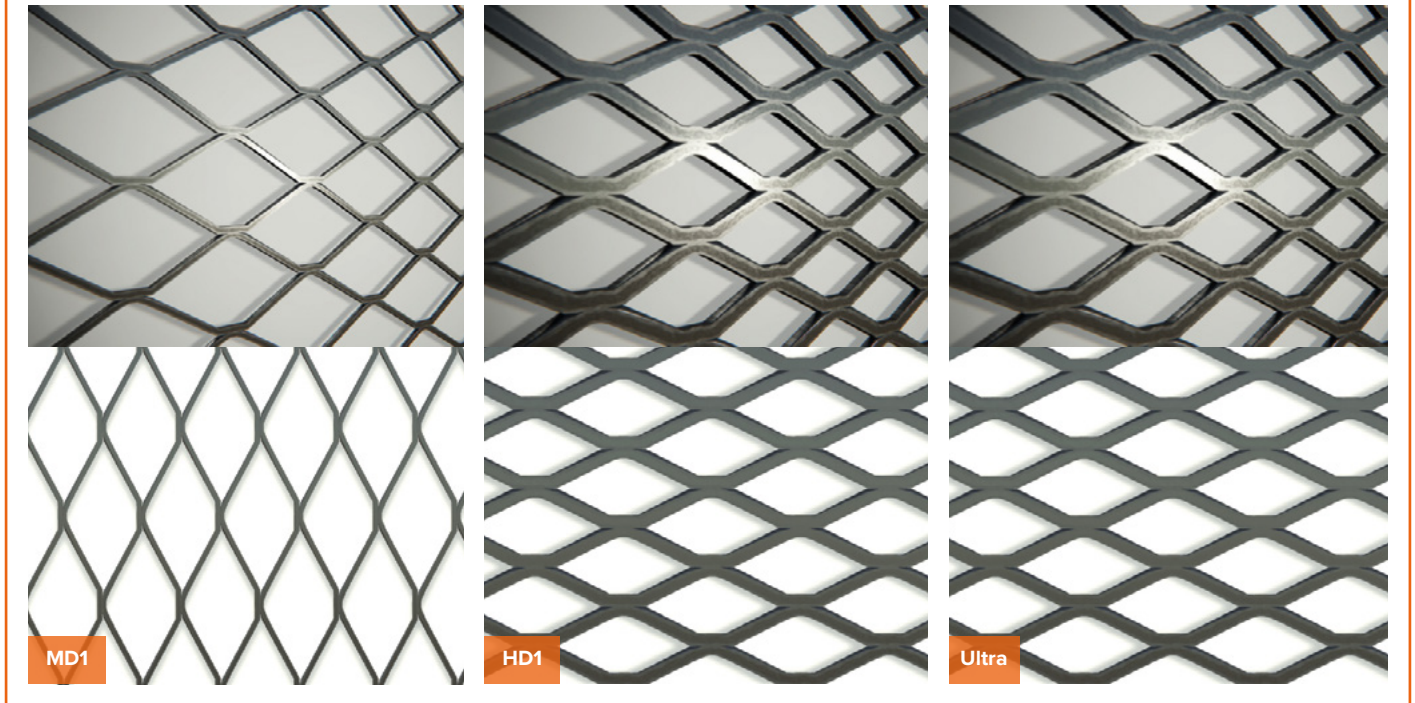


**Facing fixings** We suggest that plasterboard facing is fixed onto Securilath™ and stud using bugle head drywall screw fixings PN2 3.5 x 55 BZP at maximum 450mm centres. Plywood should be fixed using 4.5mm x 50mm BZP or passivated wood screws at maximum 450mm centres.

\*LPCB ratings are only achieved when installing the Securilath™ mesh onto block and timber/metal stud to fitting instructions (available upon request).

# Securilath™ Flattened Mesh

Pattern	Pitch (mm)		Strand (mm)		Aperture (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness	LWA	SWA	Width (A/F)	Thickness (A/F)			LW	SW
MD1	50.80	22.58	2.31	1.20	43.43	18.03	2.31	1.14	1.90	80	1220 X 2440	
HD1	50.80	22.58	4.39	3.00	42.93	14.22	4.60	2.69	8.60	61	2440 X 1220	
Ultra	50.80	22.58	4.39	3.00	42.93	14.22	4.60	2.69	8.60	61	2440 X 1220	



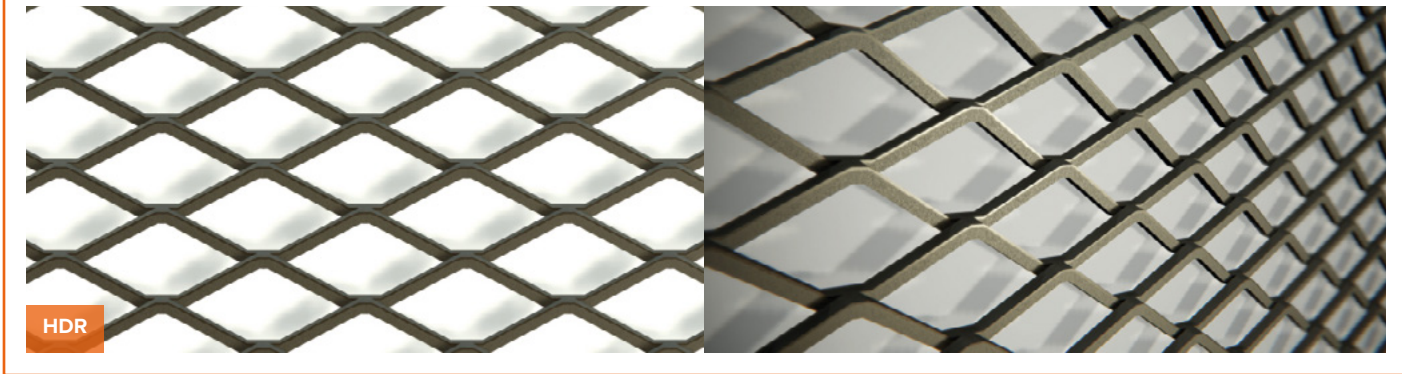
## TYPICAL APPLICATIONS:

- Cash handling stores
- Wholesale & retail outlets
- Control rooms
- Petrol station kiosks
- Firearm stores
- High value goods stores
- Computer rooms
- Secure units
- Remote facility security
- Pharmaceutical stores

To place an order, download a datasheet or request a sample, visit our website [expandedmetalcompany.co.uk](http://expandedmetalcompany.co.uk) or call us on +44 (0) 1429 867388

Other sizes available with our bespoke service

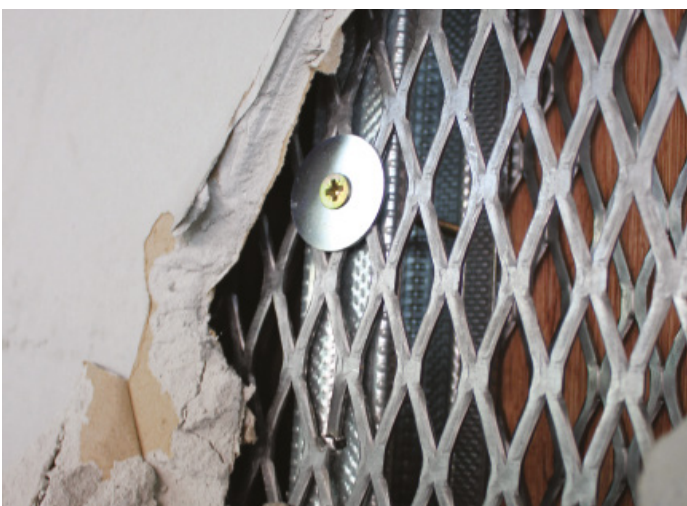
Pattern	Pitch (mm)		Strand (mm)		Weight (KG/M2)	Open Area %	Stock Sheet (mm)	
	(LWP)	(SWP)	Width	Thickness			LW	SW
HDR	50.80	22.58	3.12	3.00	6.50	72	2440 X 1220	



## Technical information

Mesh	Application	Finish options	Certification details
<b>Securilath™ MD1</b>	Lighter weight option for security in walls and partitions	Mild steel, galvanised, painted	19mm plywood face, LPS 1175 SR1 (Issue 8 Cert No. 731n)
<b>Securilath™ HD1</b>	Heavyweight option for security in walls and partitions	Mild steel, galvanised, painted	19mm plywood face, LPS 1175 SR2 (Issue 8 Cert No. 731n)
<b>Securilath™ HD1-PB</b>	Heavyweight option for security in walls and partitions	Mild steel, galvanised, painted	12mm plasterboard face LPS 1175 SR1 (Issue 8 Cert No. 731n)
<b>Securilath™ Ultra</b>	Double skinned option for extra security in walls and partitions	Mild steel, galvanised, painted	Mesh fitted to both sides with 19mm plywood faces, LPS 1175 SR3 (Issue 8 Cert No. 731n)
<b>Securilath™ HDR</b>	LPCB ratings are only achieved when installing the mesh on timber stud, metal stud or block wall per provided fitting instructions.	Mild steel, galvanised, painted	Min 140mm Medium Density Block LPS 1175 SR3 (Issue 8 Cert No. 731n)

LPCB ratings are only achieved when installing the mesh on timber stud per provided fitting instructions.



# Mild Steel, Ramps / Walkway Mesh

We offer high strength mesh products suitable for walkways, gantries, stair treads and ramps. Drawing on the advantages of expanded metal mesh, these rigidly tested products offer structural strength combined with superb grip and anti-slip properties, making them ideal for use in a wide range of internal and external environments.



Manufacturing



Engineering



Utilities



Offshore



Construction

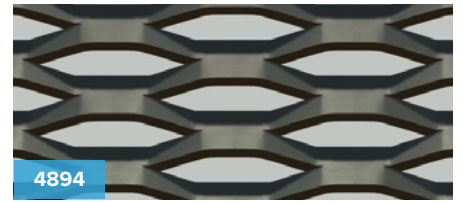
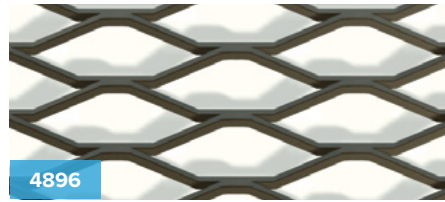
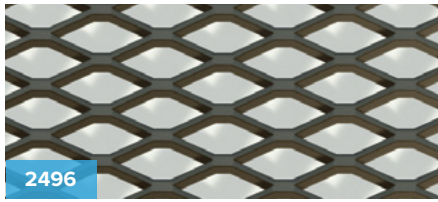


Transport

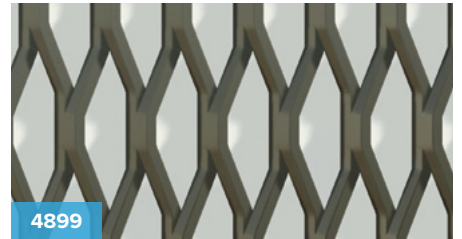
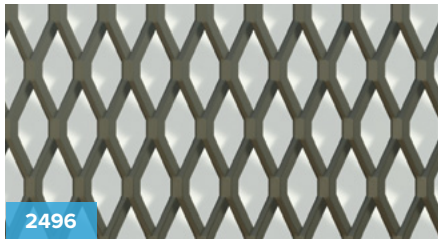


Logistics

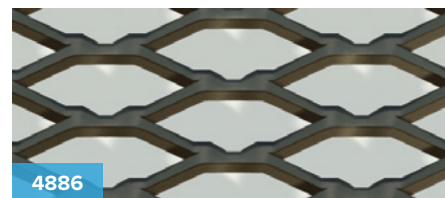
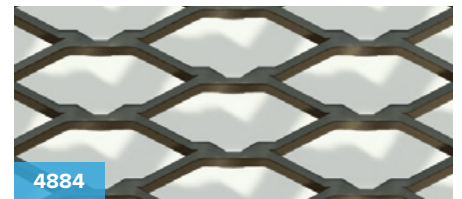
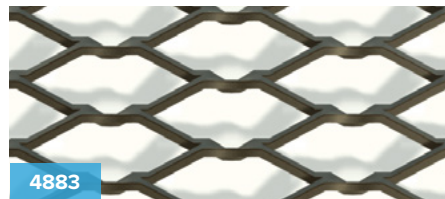
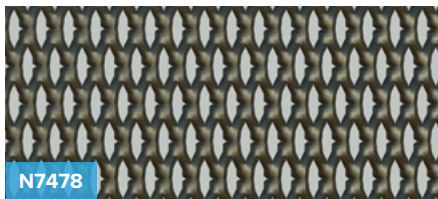
Pattern	Pitch (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness			LW	SW
2496	60.96	25.40	6.10	4.50	17.30	51	2440 X 1220	
4896	121.92	33.87	6.35	4.50	13.20	65	2440 X 1220	
4894	121.92	35.85	13.06	6.00	25.00	50	2265 X 1830	



Pattern	Pitch (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness			LW	SW
2496	60.96	25.40	6.10	4.50	17.30	51	1220 X 2440	
4896	121.92	33.87	6.35	4.50	13.20	65	1220 X 2440	
4899	121.92	35.85	9.53	6.00	25.00	50	1220 X 2440	



Pattern	Pitch (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness			LW	SW
N7478	38.10	13.85	5.00	2.50	14.20	28	1220 X 1525	
4883	121.92	33.87	6.35	4.50	13.23	62	2440 X 1220	
4884	121.92	33.87	7.90	4.50	16.46	53	2440 X 1220	
4885	121.92	33.87	9.53	4.50	19.85	43	2440 X 1220	
4886	121.92	35.56	9.53	6.00	25.21	46	1220 X 2440	
4887	121.92	38.10	13.06	6.00	32.25	32	2265 X 1830	



# Aluminium, Ramps / Walkway Mesh



Manufacturing



Engineering



Utilities



Offshore



Construction

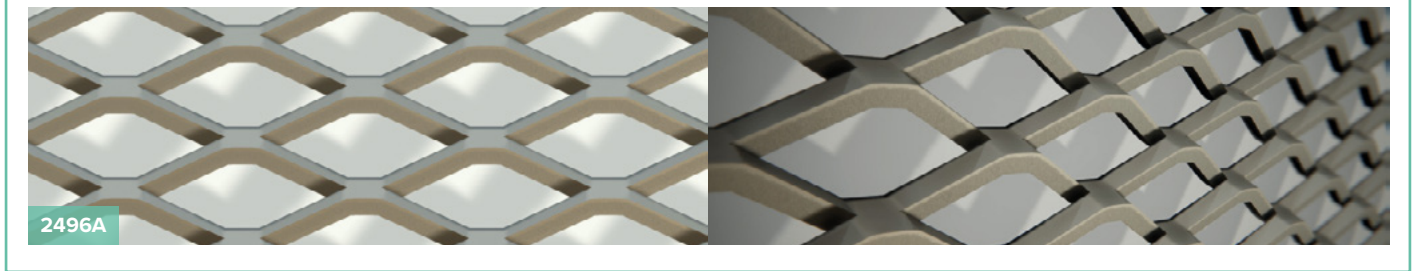


Transport



Logistics

Pattern	Pitch (mm)		Strand (mm)		Weight (KG/M <sup>2</sup> )	Open Area %	Stock Sheet (mm)	
	LWP	SWP	Width	Thickness			LW	SW
2496A	60.96	25.40	5.82	4.70	6.10	52	2500 X 1250	



## Clips

Our galvanised walkway clips are designed to provide a mechanical, secure fitment of walkway mesh panels to steelwork. Clip LRD17A consists of an upper saddle engaging over two knuckles of the mesh with a screw passing through the saddle and tightening into a lower clamping strip which is notched to engage with the bottom edge of a knuckle. The advantage of this arrangement is that the need to tighten a nut from below is eliminated. With saddle and clamping strip held together by the screw, the end of the clamping strip is worked through the mesh, positioned correctly and the screw tightened. For our heavier walkway pattern 4894, both saddle and strip must be positioned separately before the screw is tightened. The recommended distance between clips is 750mm. Specifically to accommodate walkway pattern 2496, we offer clip FD943 which consists of a hook bolt and clamp.

Information on clip installation is provided for guidance only. We recommend consultation with structural engineers before installation.



**RAMPS AND WALKWAY MESH TYPICAL APPLICATIONS:**

- Gantries
- Disabled access ramps
- Pedestrian walkways
- Trailer ramps
- Foot bridges

To place an order, download a datasheet or request a sample, visit our website [expandedmetalcompany.co.uk](http://expandedmetalcompany.co.uk) or call us on **+44 (0) 1429 867388**

Other sizes available with our bespoke service

# ExMesh™ Engineering

The ExMesh™ Engineering range offers innovative, certified physical security solutions up to LPCB Loss Prevention Standard (LPS) 1175 Security Rating (SR) 3.

ExMesh™ is employed in the protection of staff and assets in sectors and environments including critical national infrastructure, defence, prisons, utilities, education and the public sector.

Expanded metal mesh has numerous qualities which make it highly suitable for use in security applications and ExMesh™ panels cannot be easily targeted at their welds or simply parted with common tools such as scissor jacks.

Visit [www.exmeshengineering.com](http://www.exmeshengineering.com) to find out more about our range of security products, or call the ExMesh™ team on +44 (0)1429 867 388



## ExMesh™ Fastrack

A fencing solution developed in conjunction with the rail industry

- Maintenance-free
- Suitable for sloping ground without stepping
- Available with a front face fix option for easy installation



## ExMesh™ Primary

A robust, cost effective fencing solution used by many education authorities

- Safety conscious design with no protruding bolts
- Police preferred specification



## ExMesh™ Electra

A security system specifically designed for the electric and telecoms industry

- Ideal fencing system for small compounds
- Available with a front face fix option for easy installation



## ExMesh™ Paliclad

A cost effective upgrade to existing palisade fencing system

- Provides a second line of defence
- Easy to install on any palisade system



## ExMesh™ Fixafence

A mesh that clamps onto existing or new fence posts

- Ideal for sites which require a low cost replacement/upgrade
- Patented clamp design



## ExMesh™ GRP

A non-conductive security fencing system consisting of glass reinforcing plastic (GRP)

- Invisible to radar
- Non-magnetic, non-corrosive and fire resistant



## ExMesh™ Anti-Climb AVSB (Anti-Vandal Scaling Barrier)

A security enhancement for use in deterring trespassers and protecting property

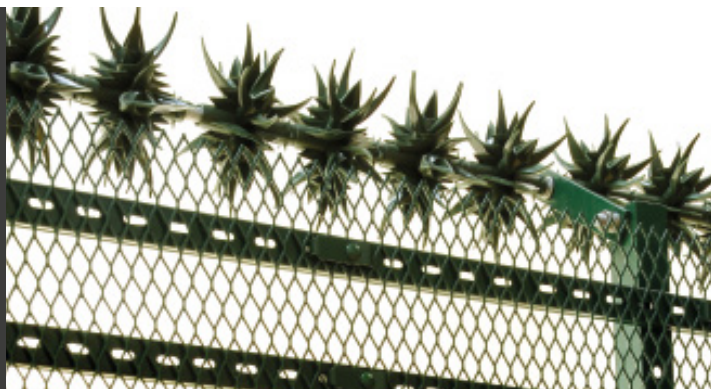
- Fitted around rotating bar - ensures criminals cannot gain a footing
- Can be mounted to any surface through specialist fixings



## ExMesh™ Anti-Climb Raptor

A security enhancement for use in deterring trespassers and protecting property

- Manufactured from durable plastic – low maintenance
- Fitted around rotating bar - ensures criminals cannot gain a footing



## ExMesh™ Super Security

A parallel strand high security fencing solution

- Can be used on undulating ground and slopes



## ExMesh™ Alleygator

An access security system featuring a special gate design, accredited to LPS 1175: Issue 5 SR2

- Unique self-locking deadlock
- Offers optional pedestrian opening, vehicle opening or both



## ExMesh™ Cages

A secure storage solution which includes anchor bolts

- Able to withstand high impact
- Available in rigid and modular varieties



## ExMesh™ Boundary Panels

A versatile demarcation solution ideal for local authorities and housing schemes

- Easy to install and low maintenance
- Available in 2.4mtr wide x 1.2mtr high and various colours





## ExMesh™ Class 2 Fencing

A high security fencing accredited to LPCB LPS 1175: Issue 6 SR2

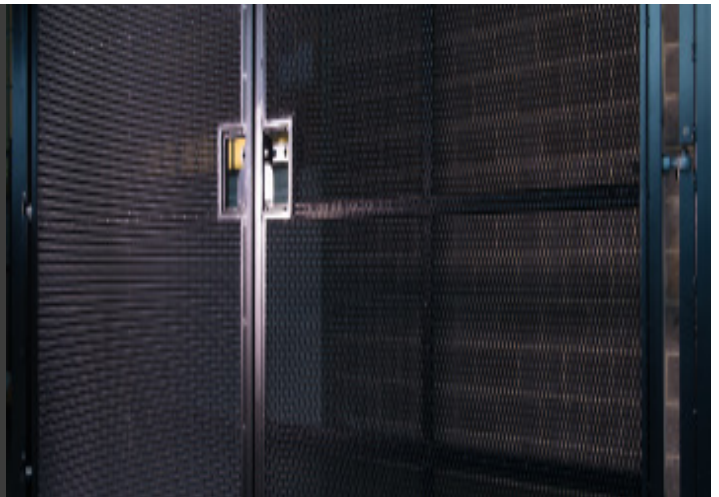
- Unique post stringer and mesh design significantly deters attackers
- Can be used on undulating ground and slopes up to 30 degrees



## ExMesh™ Class 2 Gates

High security gates accredited to LPCB LPS 1175: Issue 7 SR2

- Offers one of the largest security rated opening options available
- Can be fitted with toppings such as anti-climb measures



## ExMesh™ Class 3 Fencing

High security gates accredited to LPCB LPS 1175: Issue 7 SR3

- Double skinned for extra security
- Unique post stringer and mesh design significantly deters attackers



## ExMesh™ Class 3 Gates

High security gates accredited to LPCB LPS 1175: Issue 7 SR3

- Double skinned for extra security
- Fully protected locking mechanism

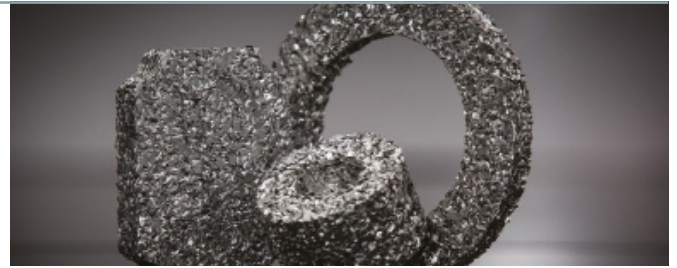


# Specialist Products

We serve a wide range of sectors with specialist solutions

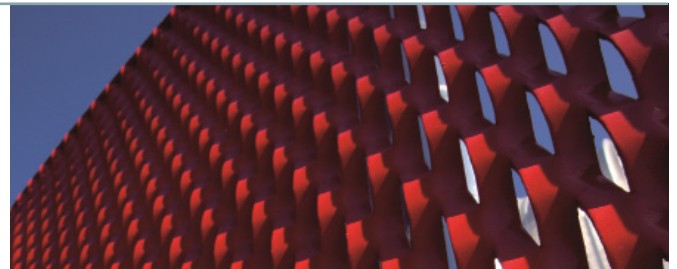
## Foil

Our unique aluminium foil performs in a diverse range of applications, including filtration and explosion suppression, and can be folded, wrapped and compressed. Manufactured from 0.05mm aluminium and weighing less than 100g/m<sup>2</sup>, it has all the benefits of traditional expanded metal in a light and cost effective form.



## Architectural Mesh

Flexible, durable and striking, our architectural mesh is available in a wide variety of materials, colours, patterns, finishes and textures. Architects and developers use architectural mesh on a range of internal and external projects, from internal wall displays to large scale building cladding and facades.



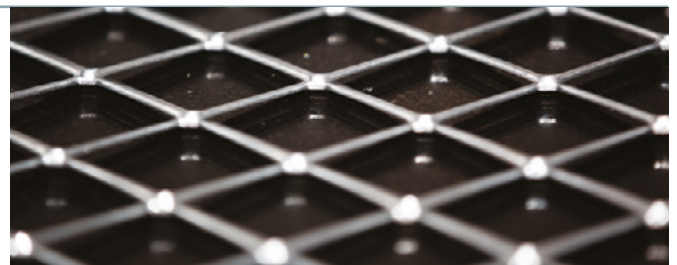
## Micromesh

Micromesh is an extremely fine mesh which can be created from a range of ductile materials. Designed for use in challenging technological and scientific applications, Micromesh is a precision product that retains all of the benefits of expanded metal and provides significant cost savings when high value raw materials are used.



## Square Mesh

Square Mesh is a cost effective, high performance, lightweight product that has multiple capabilities. Up to 60% lighter than standard expanded metal, it's a budget-friendly material for general fabrication, for use across a range of sectors. It is a viable alternative to welded wire mesh and can be used as a lightweight fencing and demarcation solution.



## Filtration Mesh

We develop and supply expanded metal meshes for the global filtration sector, and our range of fine expanded meshes have multiple applications across both air and liquid filtration. We offer filtration mesh supplies, filter panels and filter components, as well as expanded aluminium foil, which can be layered to form filter panels.



# Bespoke Solutions

The Expanded Metal Company works closely with contractors and end users to create bespoke solutions for projects, drawing on the strength of our wide-ranging design and manufacturing expertise and our high class production techniques.

Our tooling design capabilities and the manufacturing skills of our experienced workforce combine to create effective solutions to overcome project challenges. Plus, our team can guide and support clients throughout a project, and provide specialist advice based on real industry know-how.

Our expertise has been employed to create everything from barbecue mesh to architectural cladding for award-winning buildings, bullet filters and stunning tree-top walkways.

## Specialist Capabilities

Our extensive manufacturing facilities and advanced engineering expertise means that we can offer a wide range of specialist capabilities in metal work.

We have the skills and experience to meet numerous fabrication requirements. This means that customers do not have to contract out this work to additional providers. In addition, our specialist capabilities can be brought to bear in creating additional metal products.

### OUR CAPABILITIES INCLUDE:

- ◆ Roll forming
- ◆ Power pressing
- ◆ Shearing
- ◆ Plasma cutting
- ◆ Uniform cutting
- ◆ Spot welding
- ◆ Press braking
- ◆ CAD/CAM wire erosion
- ◆ Drilling



## Accreditations



TransQ



UVDB



Secured By Design



LPCB



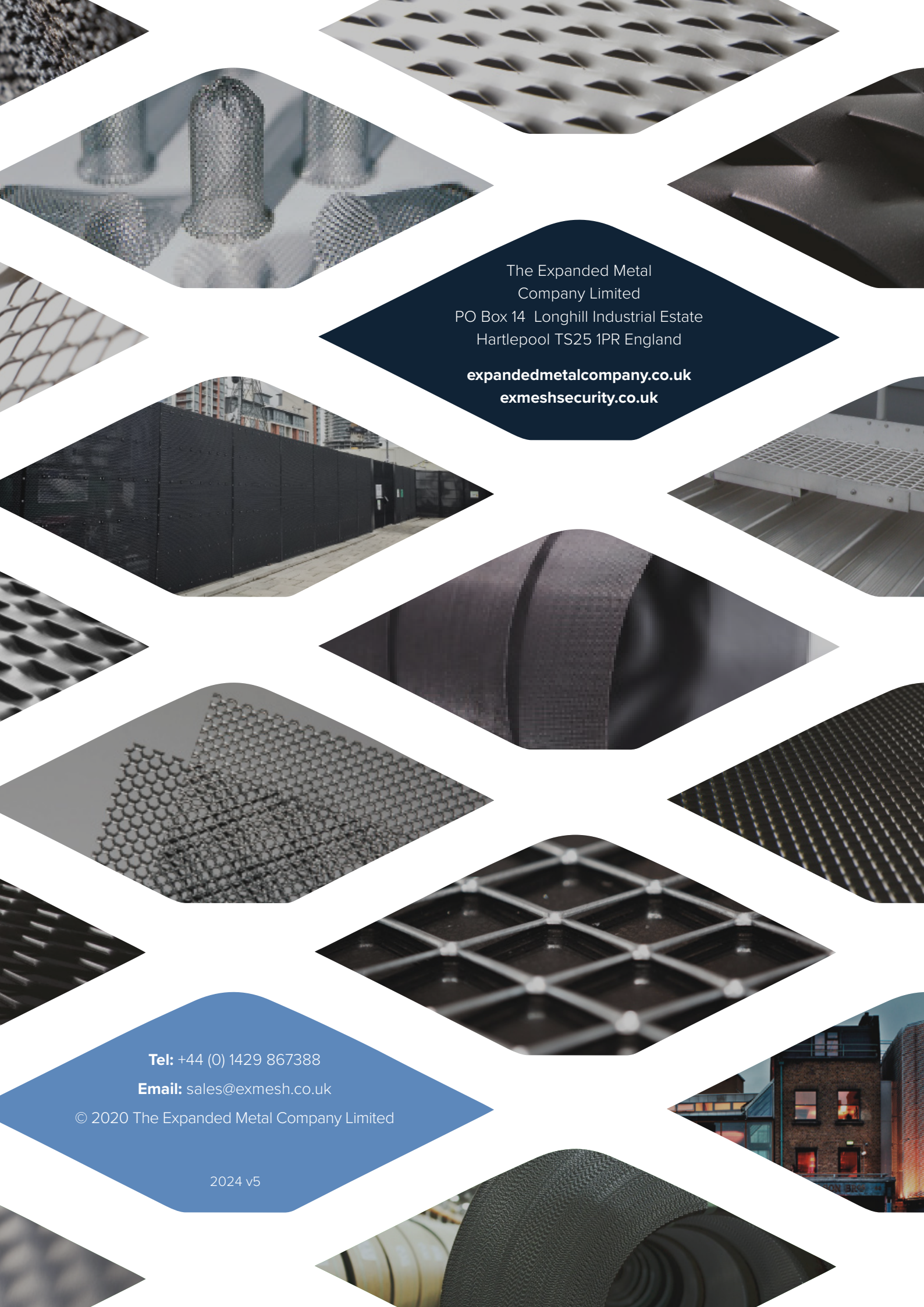
ISO 9001:2008



ISO 14001:2004



OHSASA 18001:2007



The Expanded Metal  
Company Limited  
PO Box 14 Longhill Industrial Estate  
Hartlepool TS25 1PR England

[expandedmetalcompany.co.uk](http://expandedmetalcompany.co.uk)  
[exmeshsecurity.co.uk](http://exmeshsecurity.co.uk)

**Tel:** +44 (0) 1429 867388

**Email:** [sales@exmesh.co.uk](mailto:sales@exmesh.co.uk)

© 2020 The Expanded Metal Company Limited

2024 v5