



THE **EXPANDED** **METAL** COMPANY

Company Overview

A leader and innovator

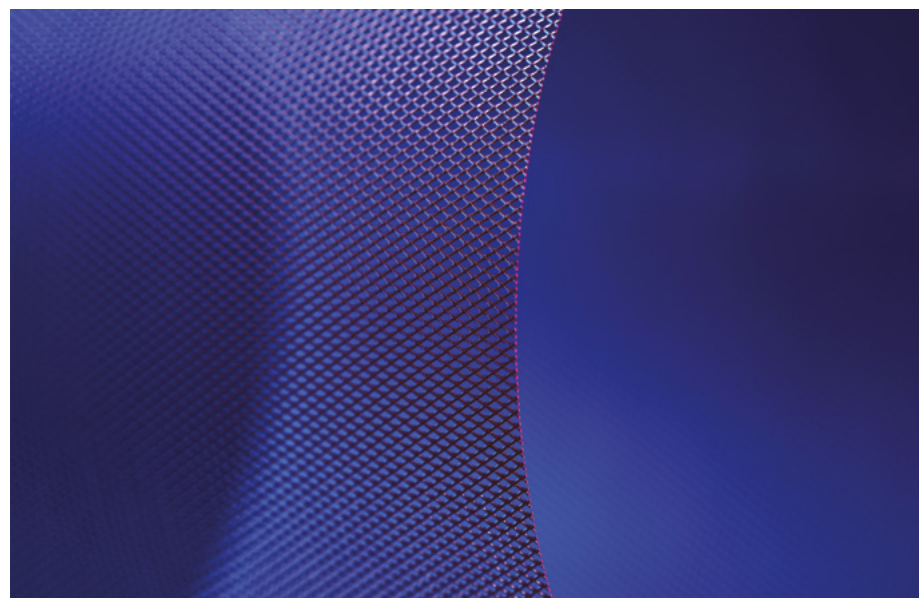
The Expanded Metal Company is a specialist in the development and manufacture of expanded metal mesh products, combining more than a century of industrial experience with cutting edge technical capabilities and advanced production processes.

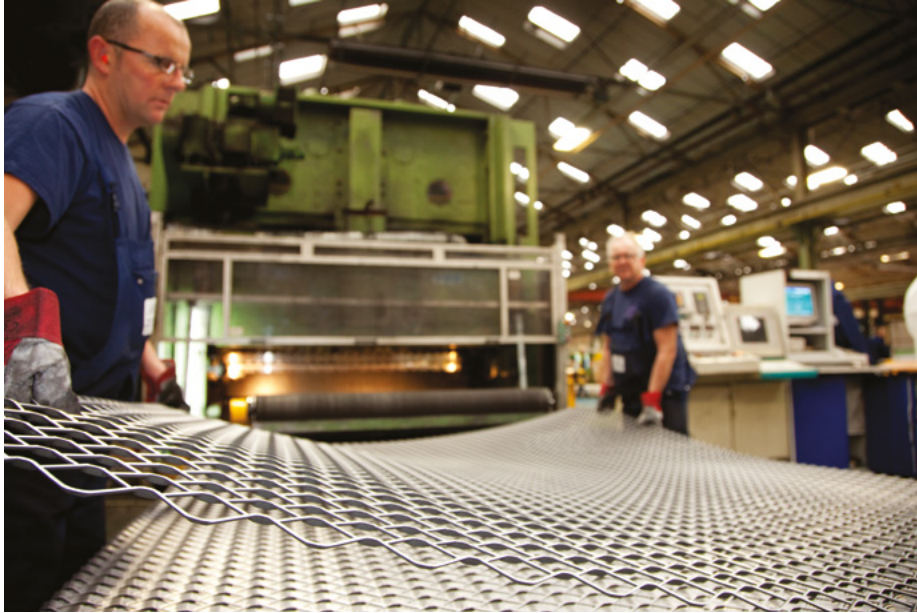
Operating from our extensive 25,000 sqm facility in Hartlepool, North East England – a long established global centre for expanded metal expertise – we offer a wide range of high quality expanded metal mesh products which are used across numerous industries and applications.

Our team works hand in hand with contractors and end users over the course of their projects and we offer specialist fabrication services, so our customers can benefit from additional products and capabilities such as flattening, blending and roll forming.

The Expanded Metal Company operates to exceptionally high standards and we hold both BS EN ISO 9001:2008 Quality Systems and BS EN ISO 14001:2004 Environmental Standards certification. We also hold a OHSASA 18001: 2007 Occupational Health & Safety Management System certificate.

The Expanded Metal Company was the first fencing manufacturer in the UK to be awarded 'Secured by Design' status and our SR rated gates and fencing systems have achieved LPCB security accreditation. The Expanded Metal Company is registered on the Utilities Vendor Database and is a registered supplier to the rail industry through the RISQS scheme.





Our story

The Expanded Metal Company has a rich industrial heritage dating back to 1889 and a proud tradition of innovation in expanded metal manufacturing.

The company was founded by John French Golding, the inventor and patentee of expanded metal. His first British patent was issued in 1884 and he forged partnerships with Hartlepool industrialists Mathew Gray, Christopher Furness and Robert Irving Jr. who together with W.B Close, brought the manufacture of expanded metal to Hartlepool.

We have been operating from our site in Hartlepool, UK since 1890, and have since supplied companies across the world with expanded metal mesh.



Sectors and applications

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

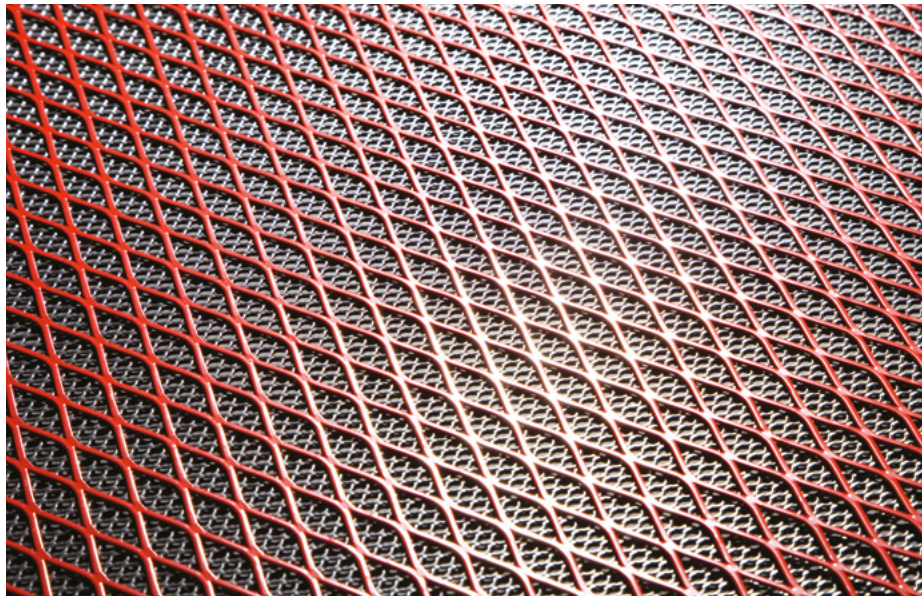
- ◆ Acoustics
- ◆ Aerospace
- ◆ Agriculture
- ◆ Architectural
- ◆ Automotive
- ◆ Construction
- ◆ Filtration
- ◆ Local authorities
- ◆ Manufacturing and engineering
- ◆ Security

Expanded metal mesh: the benefits

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

FORMED FROM ONE PIECE OF MATERIAL

Expanded metal mesh is formed from one piece of material, meaning there is nothing to work loose, no fretting strands or strained joins or welds. The homogenous design of expanded metal results in an inherently strong material. In addition, because it is manufactured from one piece of material, expanded metal mesh is ideal for forming and can easily undergo further processing.

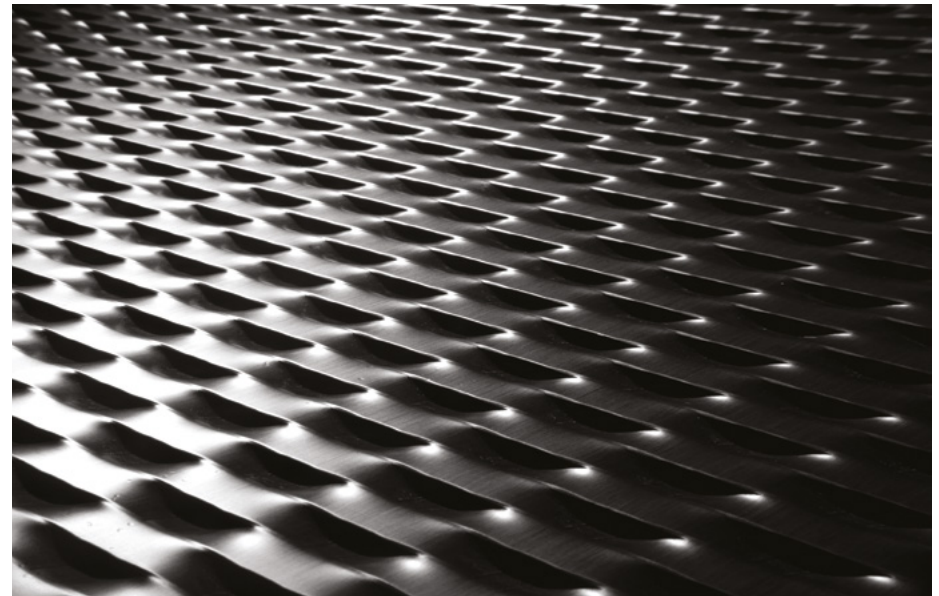


MINIMUM WASTE

Our process involves slitting and stretching material to create holes rather than punching them out. This generates immediate cost savings, especially when compared to other metal processing methods, such as perforation.

STRENGTH TO WEIGHT RATIO

By expanding metal from a solid sheet form, a strong yet lightweight material is created. The uncut 'knuckles' of expanded metal mesh withstand pressure better than welds or joints.

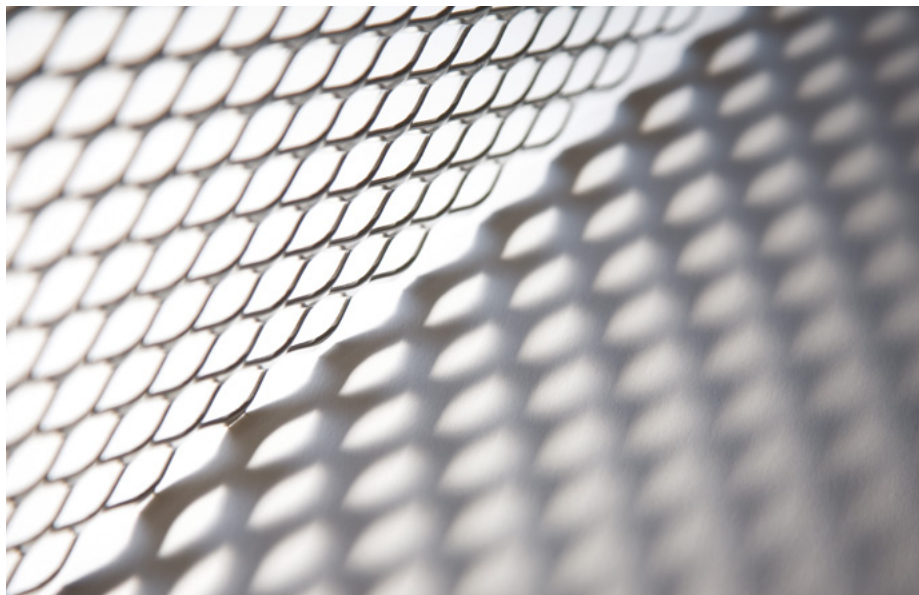


AESTHETICS

Our products are available in a wide array of colours, materials and designs, and can be used to stunning effect.

HIGHLY EFFICIENT

Electricity, magnetic flux and heat can all flow through expanded metal mesh, as there is a continuous connection throughout each sheet. There are no breaks or welds because the mesh has been formed from a single piece of metal.



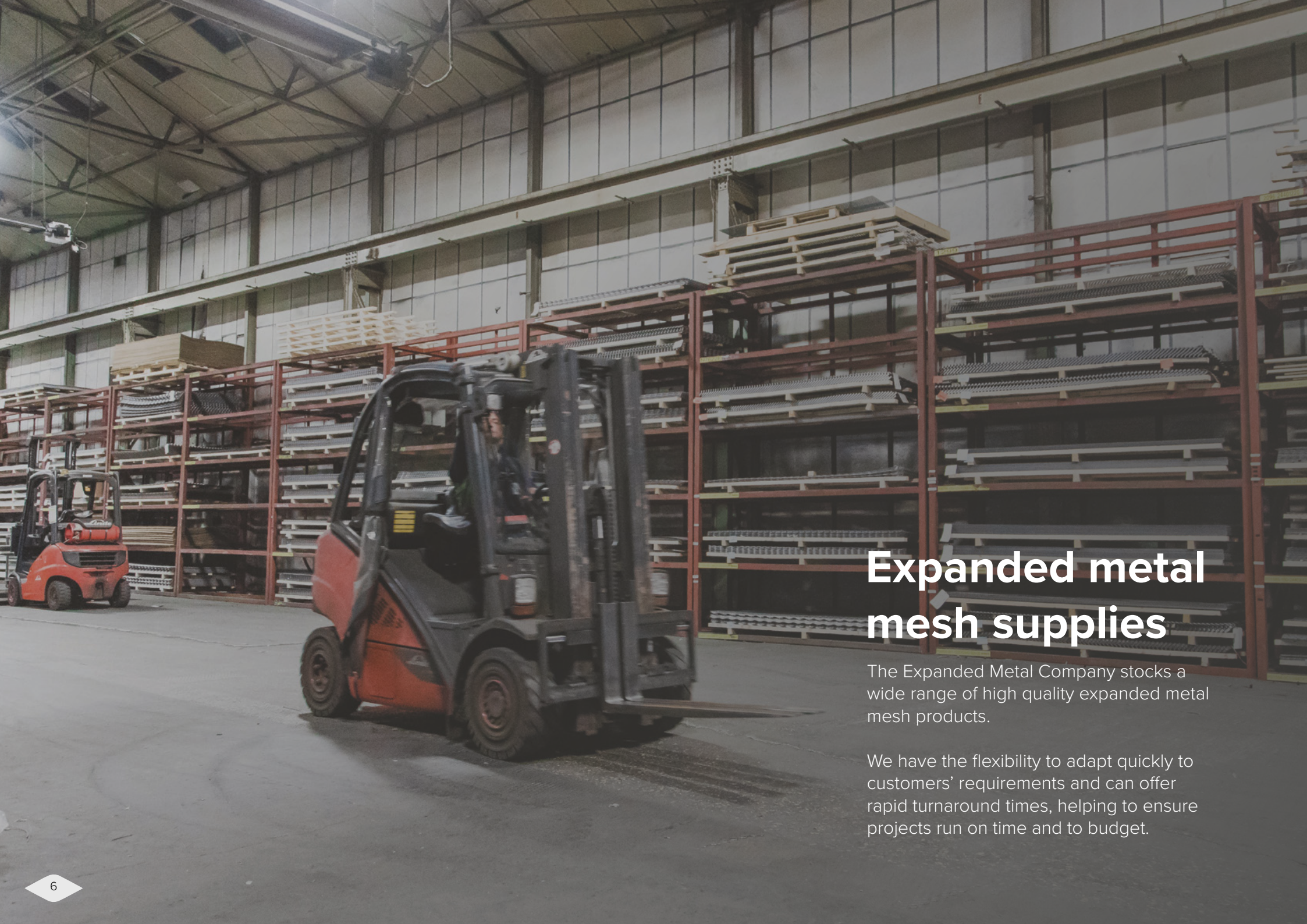
ANTI-SLIP

The knuckles formed by expanding mesh give the material a strong grip: this is particularly beneficial when building stair treads, ramps and walkways.

COMPOSITE SUBSTRATES

Expanded metal mesh can be combined with other materials to give products added strength and flexibility. For example, glass, plastics and other composites can be either incorporated into, or attached to, meshes.

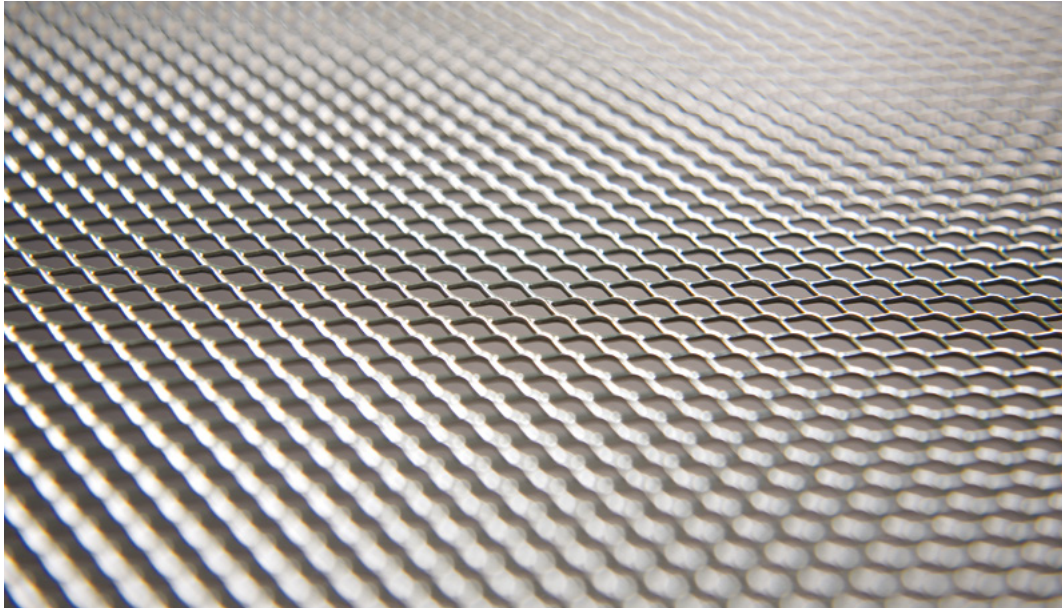




Expanded metal mesh supplies

The Expanded Metal Company stocks a wide range of high quality expanded metal mesh products.

We have the flexibility to adapt quickly to customers' requirements and can offer rapid turnaround times, helping to ensure projects run on time and to budget.

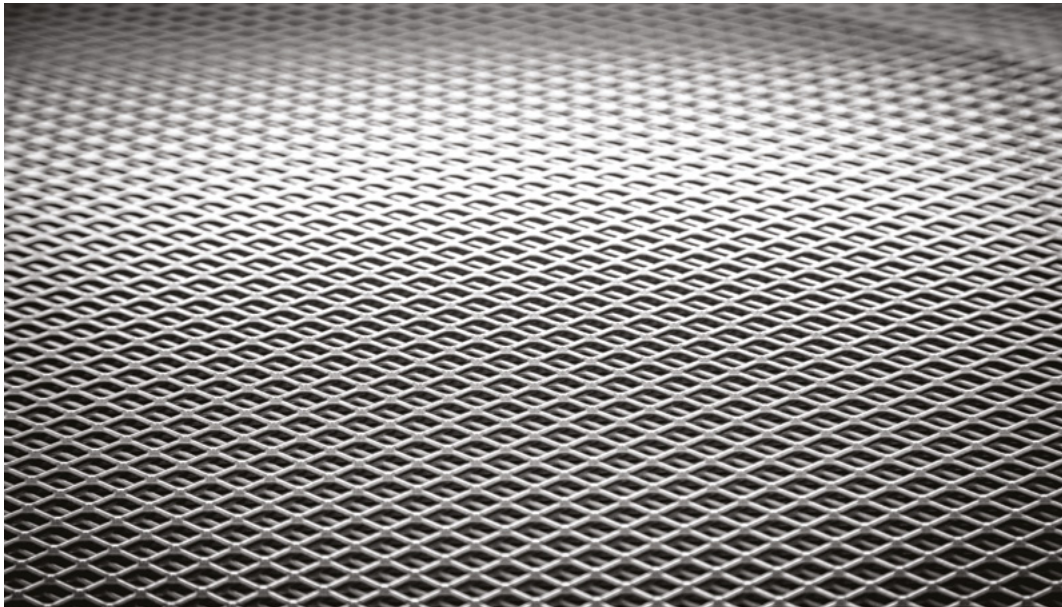


RAISED MESHES

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.

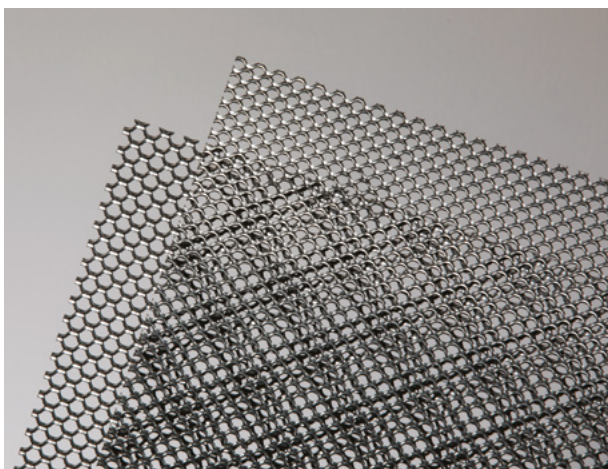
Specialist products

The Expanded Metal Company has developed a range of specialist products, designed for specific industrial and aesthetic uses.

Our specialist products include:

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. It is suitable for applications including acoustic insulation, ceiling tiles, facades, furniture, speaker grilles, air intake screens, filtration, light fixtures and store displays.



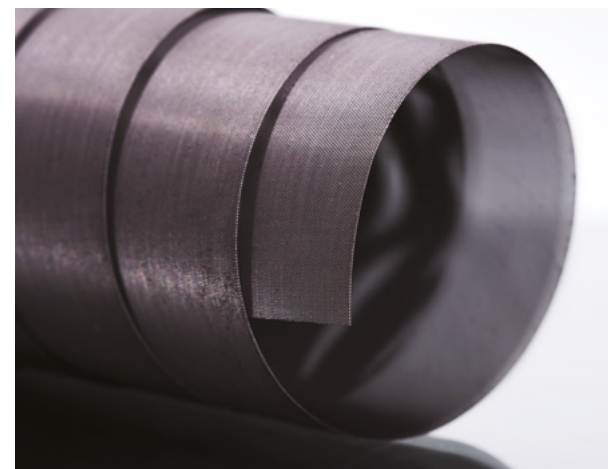
FOIL

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/m², it has all the benefits of traditional expanded metal in a light and cost effective form.



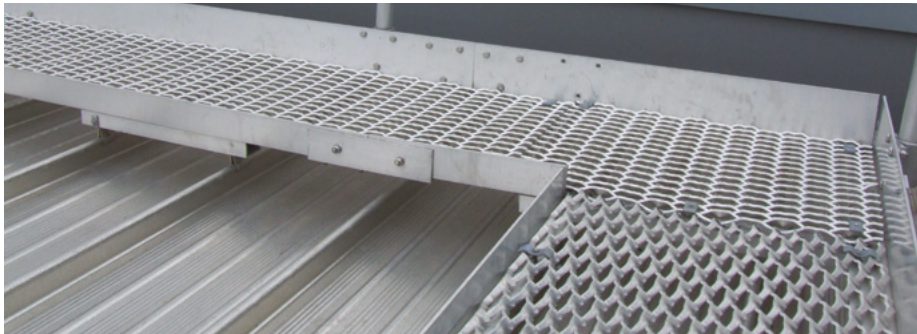
MICROMESH

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.



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.



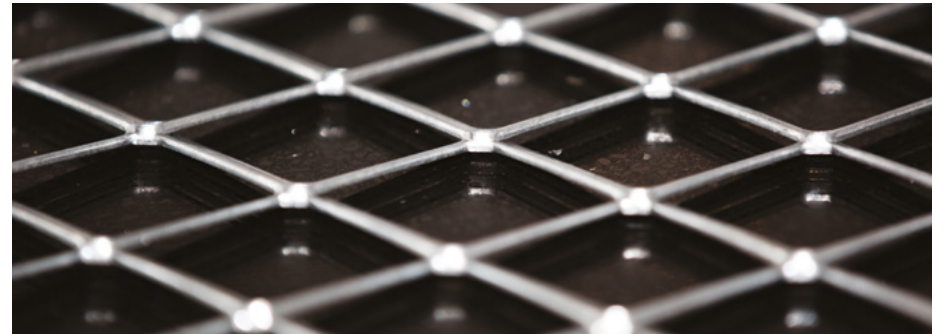
ARCHITECTURAL MESH

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.



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.





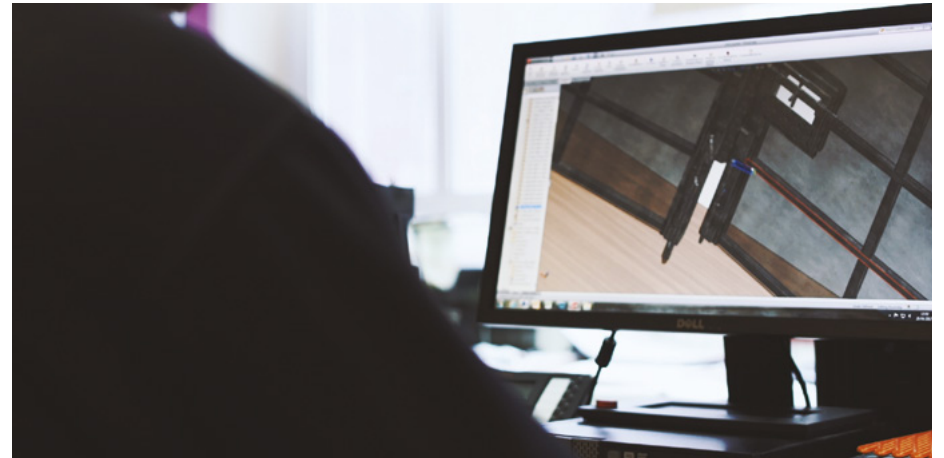
Bespoke solutions

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, we have a deep understanding of the needs of numerous sectors, from construction and security to filtration, automotive, architecture and aerospace. This means that 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.

As well as manufacturing and supplying expanded metal mesh products 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, leading to greater efficiency and savings in time and money.

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



ExMesh™

The ExMesh™ security 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.

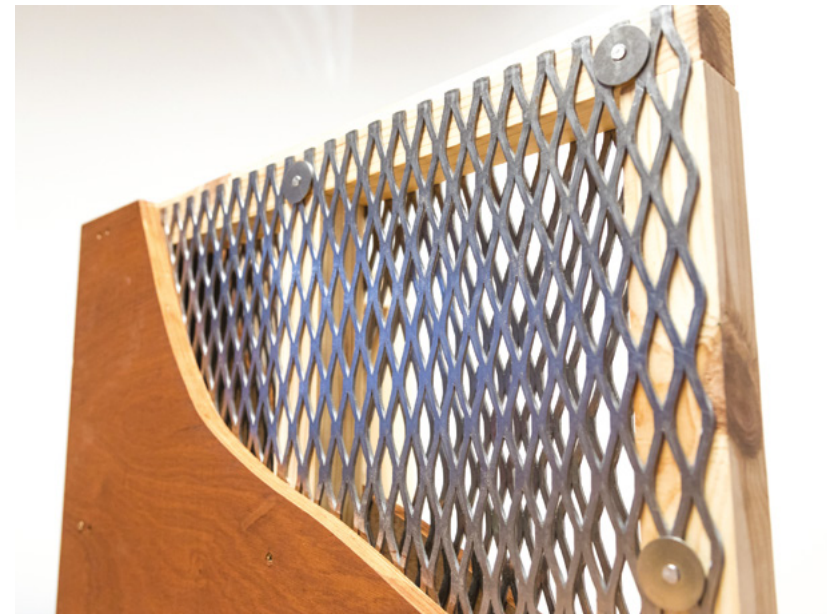
Expanded metal mesh has numerous qualities which make it highly suitable for use in security applications and ExMesh™ panels cannot be easily targeted at their welds or simply parted with common tools such as scissor jacks.

Visit www.exmeshsecurity.co.uk



The ExMesh™ range includes:

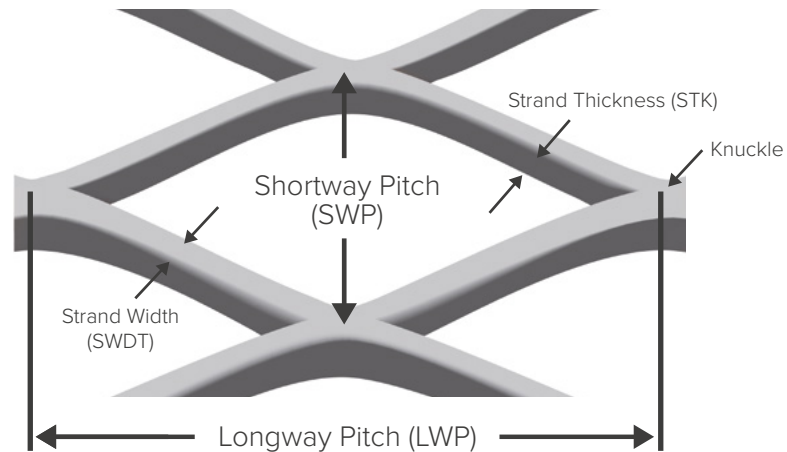
- ◆ **ExMesh™ Securilath™** — a discreet method to target harden critical areas
- ◆ **ExMesh™ Fastrack** — a fencing solution developed in conjunction with the rail industry
- ◆ **ExMesh™ Primary** — a robust, cost effective fencing solution used by many education authorities
- ◆ **ExMesh™ Electra** — a security system specifically designed for the electric and telecoms industry
- ◆ **ExMesh™ GRP** — a non-conductive security fencing system consisting of glass reinforcing plastic (GRP)
- ◆ **ExMesh™ Super Security** — a parallel strand high security fencing solution
- ◆ **ExMesh™ SR2** — high security fencing accredited to LPCB LPS 1175: Issue 6 SR2
- ◆ **ExMesh™ SR3** — one of the few fencing systems in the UK accredited to LPCB LPS 1175: Issue 7 SR3.
- ◆ **ExMesh™ Gates** — high security gates with accreditation up to LPCB LPS 1175: Issue 7 SR3
- ◆ **ExMesh™ Paliclad** — a cost effective upgrade to existing palisade fencing system
- ◆ **ExMesh™ Fixafence** — a mesh that clamps onto existing fence posts
- ◆ **ExMesh™ Alleygator** — an access security system featuring a special gate design, accredited to LPS 1175: Issue 5 SR2
- ◆ **ExMesh™ Anti-Climb** — a security enhancement for use in deterring trespassers and protecting property
- ◆ **ExMesh™ Cages** — a secure storage solution which includes anchor bolts



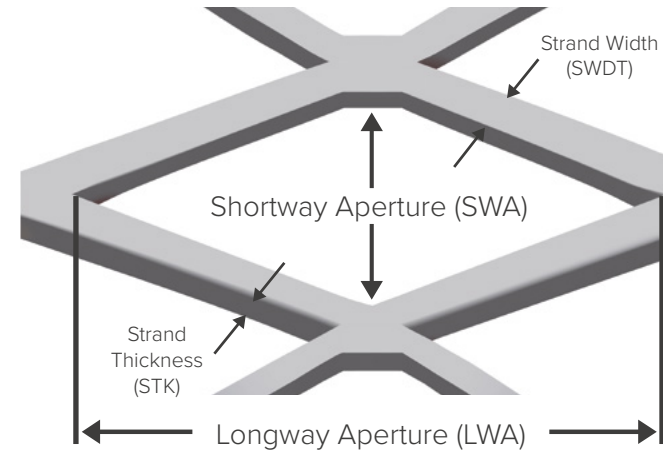
Measuring Guides

Our guide to measuring raised and flattened meshes, and mesh orientation.

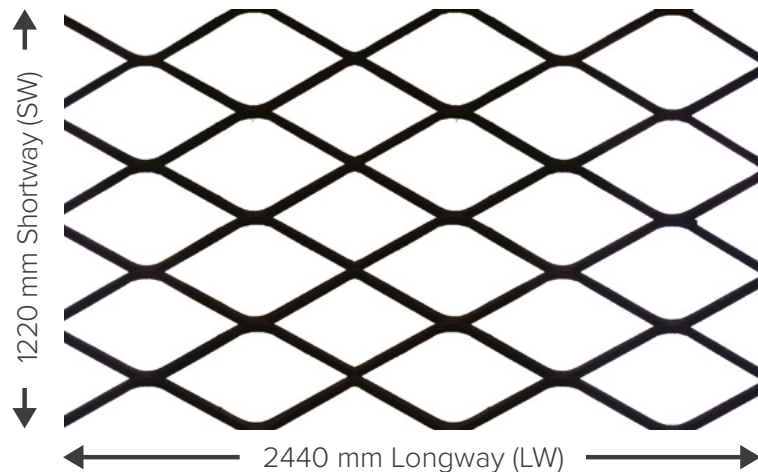
RAISED MESH GUIDE



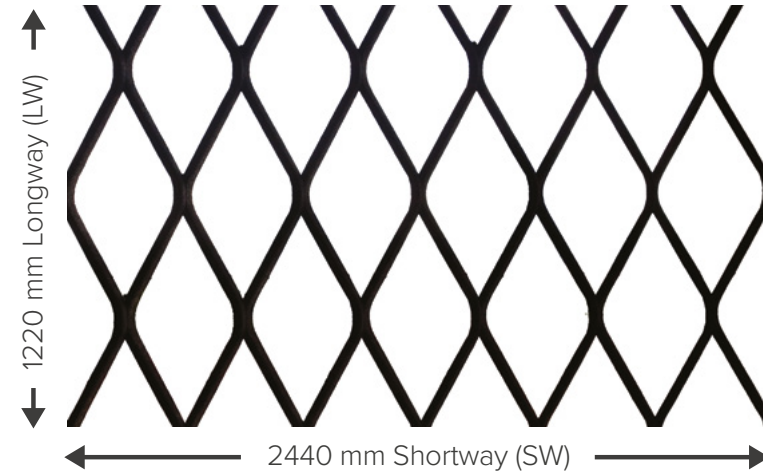
FLATTENED MESH GUIDE



ORIENTATION GUIDE



ORIENTATION GUIDE



Accreditations

With our strong heritage and experience, we pride ourselves on delivering a quality product and working to the highest possible standard. Below are just a selection of the awarding bodies and accreditors who recognise our dedication to delivering an impeccable service and rigorously tested product.



RISQS

ExMesh™ Security Products is a registered supplier to the rail industry through the RISQS scheme.



UVDB

(Utilities Vendor Database) ExMesh™ Security Products is a registered supplier to the utilities sector. UVDB is the supplier database allowing you to source and pre-qualify current and potential suppliers, products and services to the UK utility industry.



SECURED BY DESIGN

The Expanded Metal Company was the first fencing manufacturer in the UK to be awarded 'Secured by Design' status. 'Secured by Design' identifies technical standards and tests the competency of security products and their resistance to criminal attack.



LPCB

Our SR rated gates & fencing systems have undergone rigorous testing to achieve LPCB security accreditation, making them some of the most highly secure systems available in the world.



ISO 9001:2008

The British Standards Institution has awarded The Expanded Metal Company a BS EN ISO 9001:2008 Quality Systems Certificate which ensures quality production, distribution and customer service.



ISO 14001:2004

The British Standards Institution has awarded The Expanded Metal Company a BS EN ISO 14001:2004 Environmental Standards certificate.



OHSASA 18001: 2007

The British Standards Institution has awarded The Expanded Metal Company a OHSASA 18001: 2007 Occupational Health & Safety Management System certificate.

We're here to help. Please contact our friendly team to discuss your unique requirements.



**THE EXPANDED
METAL COMPANY**

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