



ExMeshTM
METAL SECURITY SOLUTIONS



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About us

Established in 1889, The Expanded Metal Company is a market leading manufacturer in the production of expanded metal mesh and security fencing systems.

Our ExMesh™ Security Product range is designed and manufactured on our purpose built 24,000m² site, situated in Hartlepool, England.

Specifically developed for a range of applications from simple perimeter demarcation to the highest levels of security, our range caters to the most diverse of requirements. Having worked extensively with our clients across sectors such as rail, utilities, schools, retail and local authorities, we understand the unique challenges you face and have individually tailored our systems to meet the most exacting of needs.

Due to the inherent strength of expanded metal, our systems have been specified to target harden the most critical of sites, including airports, financial institutions, prisons and military property. In support of such demand, our product range includes systems which have been awarded the police preferred Secured by Design and LPCB (Loss Prevention Certification Board) accreditations, industry recognised awards which demonstrate the competence and high security performance of our products.





What is expanded metal?

As the pioneer and original patentee of expanded metal, The Expanded Metal Company enjoys unrivalled expertise and understanding of expanded metal production techniques, capabilities and its applications.

Expanded metal mesh has a diverse range of properties, which makes it an ideal material for use within our ExMesh™ Security Product range.

Formed from one piece of material

Nothing to work loose, no fretting strands or strained joints or welds. The homogenous design of expanded metal results in an inherently strong material. Unlike other products available in the market, our panels can not be easily targeted at its welds or simply parted with common tools such as scissor jacks.

Minimum waste

Our process involves slitting and stretching material to create holes rather than punching it out. This provides immediate cost savings, especially when compared to other metal processing methods.

Strength to weight ratio

By expanding metal from its solid sheet form additional strength is added. The uncut knuckles of expanded mesh withstand stress better than welds or joints. This makes expanded metal an ideal lightweight solution whilst also maintaining strength.

Aesthetics

Taking a sample of our mesh and looking through at various angles best illustrates the striking visual properties of expanded metal. Our product is available in a wide array of colours, materials and designs.



Product: Fastrack Enhanced

Why ExMesh™?

- ◆ Completely developed and manufactured in house by the UK's market leader in expanded metal mesh
- ◆ Designed with maximum security in mind. No joins, no welds
- ◆ Industry leading high security LPCB SR2 and SR3 fencing and gate systems
- ◆ All products are hot dip galvanised to BSEN 1461, with optional powder coating available upon request
- ◆ All of our systems are available as a complete package, incorporating posts, fittings and gates
- ◆ Anti-scaling measures inherent by design
- ◆ Available with buried or baseplated post options
- ◆ Good through vision
- ◆ Visually appealing whilst also practical and effective
- ◆ Customer focused with a dedicated technical support team
- ◆ Complete quality assurance, certified BS EN ISO 9001:2008
- ◆ Environmentally responsible and certified BS EN ISO 14001:2004

Accreditations

With our strong heritage and experience within the security industry, 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
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.

Mesh options



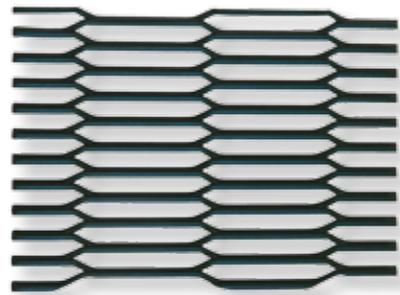
Mesh Ref: 4095
101.60 x 50.80 x 4.5 x 3.00
4.90KG/M2 white weight



Mesh Ref: 4097
101.60 x 50.80 x 3.35 x 3.00
3.42KG/M2 white weight



Mesh Ref: 3396
85.73 x 40.64 x 3.18 x 3.00
4.03KG/M2 white weight



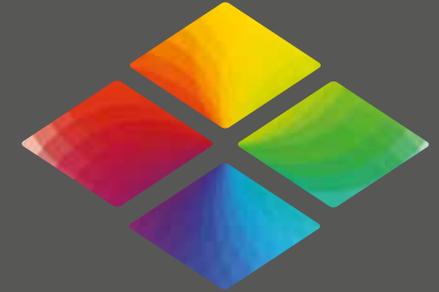
Mesh Ref: 7732
137.16 x 13.25 x 2.87 x 3.00
11.21KG/M2 white weight



Mesh Ref: 1576
38.10 x 16.93 x 4.75 x 3.00
14.52KG/M2 white weight



Mesh Ref: 2089
50.80 x 22.58 x 3.12 x 3.00
7.17KG/M2 white weight



Powder Coating

Our systems can be completely customised to your specification, including the powder coating of your fence to almost any colour. Contact our technical team to discuss your requirements.

All meshes are shown at a scale of 1:4



Product Specifier

	Fastrack Page 10	Primary Page 11	Electra Page 12	GRP Page 13	Super Security Page 14	SR2 Page 15	SR3 Page 16	Paliclad Page 17	Fixafence Page 18	Gates Page 19	Alleygator SR2 Page 20
Low to medium security	◆	◆	◆					◆	◆	◆	
Medium to high security	◆	◆						◆		◆	◆
High security					◆	◆				◆	◆
Maximum security					◆	◆	◆			◆	
Specialist				◆		◆	◆			◆	◆
Enhancements available	◆	◆	◆	◆	◆	◆	◆			◆	◆
Available from stock	◆		◆						◆	◆	
Mesh Patterns Available											
4097	◆	◆						◆	◆	◆	
4095	◆	◆	◆					◆	◆	◆	
2089	◆	◆	◆					◆	◆	◆	
7732					◆					◆	◆*
1576	◆	◆				◆	◆	◆		◆	

*bespoke variant

ExMesh™ Fastrack

The preferred system to deter trespass and route crime

Developed in conjunction with the rail industry, this is a secure alternative to palisade or chain link fencing systems. The robust construction of the system means that it has a very long field life and it can be installed in areas where access is restricted or difficult as it is maintenance free. Many of these systems have been installed in other public or unmanned areas that benefit from the above features such as schools, parks and hospital grounds and utility sites.

Fastrack is also a popular choice as an economical and versatile security system for multipurpose applications.

Features & Benefits

- Designed and developed in conjunction with leading rail authorities
- Deters route crime and trespass
- The secure alternative to palisade or chain link
- Versatile design means it can be adapted to any application
- Available with a front face fix option for easy installation where access to the back of the fence is restricted
- Suitable for sloping ground without stepping



Network Rail, Wales



ExMesh™ Fastrack

Technical Spec

Height above ground	Post centres	Post size & type	No of stringers required
1.8m	3000mm	60 x 40 x 3mmRHS	3
2.4m	3000mm	80 x 40 x 3mmRHS	3

Fittings

Retrofit	✗
Base plate	✓
Buried	✓
Sloping	✓
Restricted access	✓
Anti-scaling option	✓



Trackside security fencing



Simple installation

ExMesh™ Primary

The dependable perimeter security for education authorities

Security has always been a high priority for schools and colleges, many are choosing to install fencing to protect both children and property. In response, we have developed Primary, a substantially more secure, yet cost effective alternative. Designed around RHS posts with no potentially dangerous protruding bolts, Primary is safe for both children and the general public.

Features & Benefits

- Safety conscious design with no protruding bolts
- Aesthetically pleasing
- Suitable for sloping ground without stepping
- Medium to high security system
- Police preferred specification



ExMesh™ Primary

Technical Spec

Height above ground	Post centres	Post size & type	No of stringers required
1.8m	3000mm	60 x 40 x 3mmRHS	3
2.4m	3000mm	80 x 40 x 3mmRHS	3

Fittings

Retrofit	✗
Base plate	✓
Buried	✓
Sloping	✓
Restricted access	✓
Anti-scaling option	✓



Sports Village, Middlesbrough



Outdoor activity security



Infant school perimeter

ExMesh™ Electra

The solution to your infrastructure security

Electra has been specifically designed for the electric and telecom industries, particularly for sub-station protection, where security is important. Deterring both trespass and vandalism whilst safeguarding the public. It is difficult to penetrate and can be combined with a security topping to prevent scaling. Optional features such as low cost gravel boards and a reduction in fixings allows maximum security at minimum cost.

Features & Benefits

- Specifically designed and developed with the electric and telecoms industry
- Deters trespassing and vandalism
- Smaller post sizes make this an ideal fencing system for small compounds
- Available with a front face fix option for easy installation where access to the back of the fence is restricted

ExMesh™ Electra

Technical Spec

Height above ground	Post centres	Post size & type	No of stringers required
1.8m	Dependent upon mesh	50 x 50 x 3mmSHS	3
<i>*Other non-stock heights available upon request</i>			

Fittings

Retrofit	✗
Base plate	✓
Buried	✓
Sloping	✓
Restricted access	✓
Anti-scaling option	✓



Site security



Electra substation gate



Transformer protection

ExMesh™ GRP

The secure non-conductive system

This specialist product consists of glass reinforced plastic (GRP) panels and posts, that offers a host of special benefits. Can be used as a permanent or temporary barrier system with heights available from 1m up to 6m lending itself to a whole range of safety and security applications.

Features & Benefits

- Non-conductive fencing system
- Non-magnetic
- Non-corrosive
- Fire resistant
- Invisible to radar
- Robust, capable of sustaining impact loads in excess of 1 metric ton
- Lightweight
- Withstands ultra-violet rays

ExMesh™ GRP

Technical Spec

Material thickness	Diamond aperture	Panel height	Panel width	Post type (up to)	Post type
25.4mm	44.5mm	1m	4m	6m (max)	H
12.7mm	57.1mm	1m	4m	6m (max)	H
25.4mm	44.5mm	1.25m	4m	6m (max)	H
12.7mm	57.1mm	1.25m	4m	6m (max)	H

Alternative heights are available on request (can be cut to custom size)

Fittings

Retrofit	✗
Base plate	✗
Buried	✓
Sloping	✓
Restricted access	✓
Anti-scaling option	✓



Airport security unseen by radar



Non-corrosive chemical site



Non-conductive transformer protection

ExMesh™ Super Security

The original parallel strand high security fencing

The complete ExMesh™ Super Security fencing system is one of the highest levels of security available on the market and has an exclusively profiled mesh pattern that prevents conventional cutting tools being used as the gaps are too small to get tools or blades through.

Features & Benefits

- ExMesh™ Super Security is the superior alternative to welded mesh, with no joins or welds
- The design of the mesh makes it extremely difficult to cut and climb
- Can be used on undulating ground and slopes
- Exclusive mesh design eliminates the need for stringers
- Non-conductive transformer protection

ExMesh™ Super Security

Technical Spec

Height above ground	Post centres	Post size & type	No of stringers required
2.4m and upwards	2400mm	Dependent upon mesh	0

Fittings

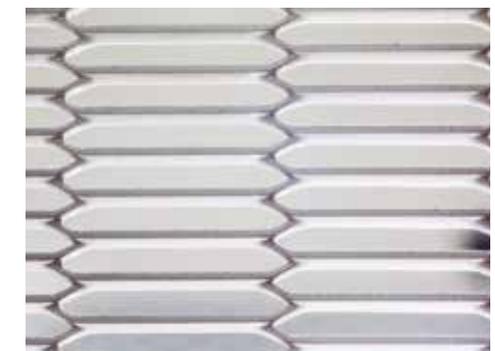
Retrofit	✗
Base plate	✓
Buried	✓
Sloping	✓
Restricted access	✗
Anti-scaling option	✓



Perimeter machine guarding



High value exterior site equipment



Unique design deters climbing and cutting

ExMesh™ SR2

The high to maximum security trespass deterrent

ExMesh™ SR2 is one of the first fencing systems in the UK to gain Loss Prevention Certification Board (LPCB) SR2 accreditation under the standard LPS 1175. This tough and durable mesh delivers insurance approved superior perimeter protection for high security sites.

Features & Benefits

- One of the few fencing systems to gain LPCB SR2 accreditation
- Unique post stringer and mesh design significantly deters attackers
- Can be used on undulating ground and slopes up to 30 degrees
- Excellent through vision enabling CCTV equipment to be used with this fencing system



ExMesh™ SR2

Technical Spec

Height above ground	Post centres	Post size & type	No of stringers required
2.4m	2400mm	80 x 40 x 3mmRHS	5
3.0m	2400mm	100 x 50 x 3mmRHS	6

Fittings

Retrofit	✗
Base plate	✓
Buried	✓
Sloping	✓
Restricted access	✗
Anti-scaling option	✓



Water treatment compound



Essex & Suffolk water treatment works



Essex & Suffolk water treatment works

ExMesh™ SR3

The ultimate high security system



ExMesh™ SR3 is one of the few fencing systems in the UK to gain Loss Prevention Certification Board (LPCB) SR3 accreditation under the standard LPS 1175. This tough and durable system delivers insurance approved superior perimeter protection for high security sites. It utilises the same mesh as our SR2 system, but is double skinned to significantly deter the most aggressive attack.

Features & Benefits

- One of the few fencing systems to gain LPCB SR3 accreditation
- Our exclusive double skinned system offering ultimate security
- Available as a complete SR3 rated system, including pedestrian and vehicle gates
- Unique post stringer and mesh design significantly deters attackers
- Can be used on undulating ground and slopes up to 30 degrees

ExMesh™ SR3

Technical Spec

Height above ground	Post centres	Post size & type	No of stringers required
2.4m	2400mm	80 x 40 x 3mmRHS	5
3.0m	2400mm	100 x 50 x 3mmRHS	6

Fittings

Retrofit	✗
Base plate	✓
Buried	✓
Sloping	✓
Restricted access	✗
Anti-scaling option	✓



Crossrail project, London



Expert SR3 installation at Victoria Docks, London



Installation of second skin

ExMesh™ Paliclad

The retrofit upgrade to palisade fencing

Paliclad is designed to upgrade an existing palisade fencing system and offers a cost effective solution to upgrade security. The addition of mesh increases the time it takes to break through the fence. It does not compromise on visibility but completely stops any transfer of goods through the fence. Paliclad can be fitted to any palisade fence and deters trespass, plus eliminating the need for a costly whole new system.

*Designed to suit application

Features & Benefits

- Addresses the most common methods used to infiltrate palisade systems by offering a second line of defence
- Simple installation over pre-installed palisade systems
- Can be installed on any palisade system
- Provides a cost and time effective alternative to replacing an entire palisade system



Increased security to palisade systems

ExMesh™ Paliclad Fittings

Retrofit	✓
Base plate	✗
Buried	✗
Sloping	✗
Restricted access	✗
Anti-scaling option	✓



Alternative meshes available



Easy to install security fixings

ExMesh™ Fixafence

The economical upgrade for use on existing posts

An ideal fencing system solution where costs and access are restricted. ExMesh™ Fixafence is a mesh that clamps onto existing fence posts making it a versatile and economical system for sites that require a convenient and low cost replacement fence or upgrade.

*Designed to suit application.

Features & Benefits

- Designed to be installed on existing or new concrete and metal posts
- Accommodates most types of existing post
- Patented clamp design
- A higher security replacement for existing woven wire systems



Unique clamping system for new or existing posts

ExMesh™ Fixafence

Technical Spec

Height above ground	Post centres	Post size & type	No of stringers required
1.8m	3000mm	Fixes to existing	3
2.1m	3000mm	Fixes to existing	3
2.4m	3000mm	Fixes to existing	3

Fittings

Retrofit	✓
Base plate	✗
Buried	✗
Sloping	✗
Restricted access	✗
Anti-scaling option	✓



Trackside refurbishment on existing posts



Handles sloping curves easily



ExMesh™ Gates

The high visibility, high security solution for pedestrian and vehicle access

High security gates to suit any ExMesh™ fencing system. Available with single or double leaf. We offer fast turnaround for special requirements as all of our gates are manufactured in house at our Hartlepool plant.

Features & Benefits

- Available in a range of sizes and mesh infills in both pedestrian and vehicle layout
- Ranging in widths from 1M to 10M and heights according to application
- Incorporates lockable sliding latches with alternatives upon request
- Compatible with all ExMesh™ fencing systems, including high security SR3
- Tamper proof hinge covers are used as standard to maximise security

ExMesh™ Gates

Fittings

Retrofit	✗
Base plate	✓
Buried	✓
Sloping	✗
Restricted access	✓
Anti-scaling option	✓



SR3 high security gate



Design capabilities for specialist locks



4095 Double Gate

ExMesh™ Alleygator

The access security system



A special gate design that incorporates a gate frame with side infill panels and additional overhead panels where required. These gates can be installed as a kit to offer rapid high security access control to restricted areas. These gates can have pedestrian opening, vehicle opening or both. All gates are custom made to fit the exact site requirements and no two gates can be accessed with the same key, which are a unique design making them virtually impossible to copy.

Features & Benefits

- LPCB SR2 rated
- Visually pleasing and suitable for residential installations
- Good through vision
- Come complete with unique self-locking deadlock
- Anti-climb and anti-cut properties
- All posts are installed into the ground
- Interchangeable panels

ExMesh™ Alleygator Fittings

Retrofit	✗
Base plate	✓
Buried	✓
Sloping	✗
Restricted access	✓
Anti-scaling option	✓



Secure residential and amenity access



Replaceable panel construction



Aesthetic and unobtrusive design

ExMesh™ Anti-Climb

The perfect security enhancement

Our Anti-Climb range is the perfect solution for deterring trespassers and protecting your property and grounds. Our Anti-Climb system can be mounted onto many surfaces using standard fixing brackets, including: walls, coping stones and most types of existing fencing systems.

AVSB is our highly effective premier topping product. Mountable to any surface through specialised fixings, toppings are the best way of deterring trespass and vandalism, offering maximum protection to property and grounds. Made with strong, secure expanded metal mesh panels, AVSB is fitted around a central bar, where it rotates freely, so criminals cannot gain a footing.

Raptor is a more aesthetically pleasing alternative to AVSB, and is made from durable plastic. A central bar allows the individual units of Raptor to rotate freely, making it difficult to gain a foothold, therefore preventing criminal damage and trespass.

Features & Benefits

- Low maintenance
- Available in a wide range of designs to suit any surface
- From barbed and razor wire extensions, through to rotating vanes
- Deters trespass and vandalism



Lightweight, high impact design



The ultimate deterrent



ExMesh™ anti-climb deterrent



Adjustable locking brackets

ExMesh™ Cages

The secure storage solution

Available in two options, rigid and modular, our cage range offers a highly effective storage solution. Whilst we carry a range of sizes in stock, all cages can also be manufactured to meet individual specifications. Each cage can be easily assembled using fixings provided which include anchor bolts to secure the cage to an existing concrete base.

Features & Benefits

- Available in rigid and modular varieties
- Good through vision
- For use internally and externally
- Strong and durable
- High impact resistant
- All cages are lockable with padlocks

Product	Height	Width	Depth
GC1	1600mm	2068mm	700mm
GC2	1600mm	1400mm	700mm
GC3	800mm	1400mm	700mm
GC4	800mm	700mm	700mm

Product	Height	Width	Depth
CA1	2480mm	2520mm	1260mm
CA2	2480mm	2520mm	2480mm
CA3	2480mm	2520mm	3700mm
CA4	2480mm	2520mm	4920mm
CA5	2480mm	2520mm	6140mm



Solid cage range



External modular cage



Optional locking systems



Solid cage range

ExMesh™ Securilath

The versatile target hardening solution



Our LPCB accredited Securilath™ system has been developed as a discreet method to target harden the most critical of areas, significantly delaying determined intruders from creating an aperture large enough to gain entry to your premises. Securilath™ is a versatile material which can be easily fitted during construction or retro-fit, ideally situated within internal and external walls, ceilings, roofs and windows.

Features & Benefits

- LPCB tested and accredited
- Available in medium, heavy and ultra options
- Cost effective and easy to install
- Suitable for both render and plaster finishes
- Adopted worldwide by financial institutes, retailers and high-risk sites



External blockwork



High security plasterboard installation



Internal high security stock room



Internal plywood wall

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

We offer a comprehensive CPD service for specifiers.

Installation guides are available upon request.

ExMesh™ Security products are manufactured by:



**THE EXPANDED
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