

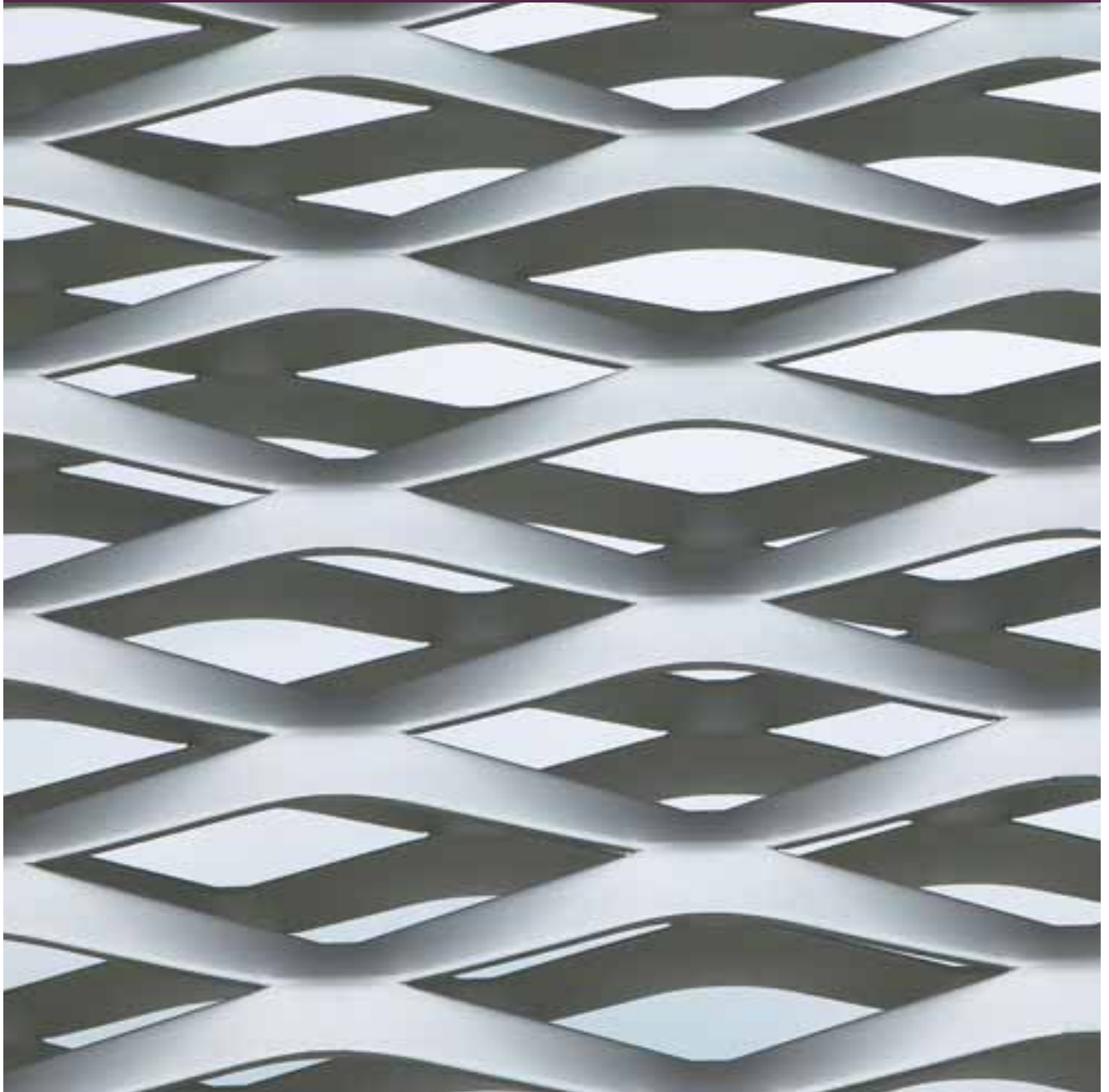


eyetech Expanded Mesh Cladding System

Doc Ref: JTEW - 001

Why choose eyetech?

Issue Date: 01/09/2010



IN PARTNERSHIP
WITH



Why choose the **eyetech**
expanded mesh cladding system
from **James & Taylor**

eyetech is a registered trademark owned
by **James & Taylor Ltd.**



- **James & Taylor** have unrivalled experience with expanded mesh cladding
- With **eyetech** you get a 'Design Lifetime Guarantee'
- With **eyetech** you get excellence of product design
- **eyetech** systems are manufactured from the highest quality materials
- **eyetech** systems minimise environmental impact and are fully recyclable
- **eyetech** systems are manufactured to the most stringent accuracy and quality standards
- **eyetech** systems provide the highest levels of durability and quality of finish
- **eyetech** systems allow thoughtful, resolved, quality architecture
- With **eyetech** you get a comprehensive, high quality, project specific design and drawing service
- **eyetech** provides a completely integrated solution
- **eyetech** systems incorporate health and safety features that protect both our clients and the building user
- **eyetech** systems are quantifiably robust
- With **eyetech** you get fully trained, experienced and approved, high quality installation
- **eyetech** provides ease and accuracy of installation
- **eyetech's** material supply and supply logistics are tailored to suit your project
- **eyetech** systems are lightweight and impose minimal loads upon the structure
- **eyetech** has thoroughly engineered vandal resistance and security
- **eyetech's** clients speak for themselves



New Museum of Contemporary Art, New York

eyetech system, designed and supplied by James & Taylor

James & Taylor have unrivalled experience with expanded mesh cladding

In partnership with The Expanded Metal Company, the inventors and originators of the metal expanding process, **James & Taylor** have pioneered the design, development and use of expanded mesh cladding. The result of this development is **eyetech**, a thoroughly engineered and completely integrated range of building systems that have enabled expanded mesh cladding to become the defining feature of some of the world's most remarkable and best loved buildings.

The following pages provide a glimpse at the breadth of **James & Taylor's** experience and the success of the **eyetech** system.



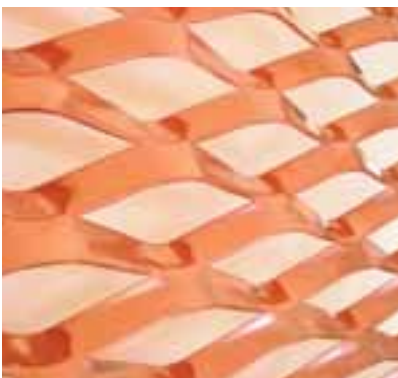


Young Vic Theatre, London

eyetech system, designed and supplied by James & Taylor

With eyetech you get a 'Design Lifetime Guarantee'

The **eyetech** system is unique. It is the only system offered with a 'Design Lifetime Guarantee'. Put simply, when the **eyetech** system is purchased a guarantee is provided for the full duration of the building's design lifetime. This covers all anodised aluminium components and guarantees their corrosion resistance. If the design lifetime is for example 60 years then the duration of the guarantee will be 60 years. This clearly demonstrates our confidence in the quality and durability of the **eyetech** system and provides the purchaser of the **eyetech** system with total peace of mind.





Stephen Lawrence Centre, London

eyetech system, designed and supplied by James & Taylor

With **eyetech** you get excellence of product design

All of the components that comprise the **eyetech** system are purpose designed and the product of continuous development over a 5 year period. This means that they incorporate numerous design refinements, function efficiently, are easy to install and economical.

All design work undertaken by **James & Taylor** is carried out 'in-house' by our own experienced design and structural engineers and covered by **James & Taylor's** professional indemnity insurance.

Primary attachment bracketry incorporates adjustment that accommodates the full range of construction tolerances and mechanisms that allow for all in-service building movements.

Windposts provide limitless link bracket adjustment and neat touches like drilling guide grooves. Link brackets are purpose designed to suit each mesh type and each **eyetech** mesh is engineered to provide the desired appearance, air flow performance and perfectly fit the building module.





ExCeL, London

eyetech system, designed and supplied by **James & Taylor**

eyetech systems are manufactured from the highest quality materials

James & Taylor purchase raw materials directly from their source. This allows **James & Taylor** to control both their quality and consistency.

eyetech mesh is expanded from a special grade of aluminium jointly developed by **James & Taylor** and the aluminium mill. This material allows the high rates of expansion required for some projects without exhibiting the tearing at eyelet ends which plagues proprietary materials. Exacting quality control at the cast house produces aluminium with precisely the correct chemical composition; the basis of a consistent anodic film colour. Exacting quality control at the rolling mill produce a material with the best possible surface finish.

All bracketry, nuts, bolts and washers are manufactured from stainless steel. No galvanised mild steel components are used anywhere within the **eyetech** system. Where separation between dissimilar metals is required, washers moulded from special high durability materials are used.





Car Park, Media City, Manchester

eyetech system, designed and supplied by **James & Taylor**

eyetech's systems minimise environmental impact and are fully recyclable

All of the principal stages of **eyetech** production are environmental system certificated to; ISO 144001: 2004. **eyetech** production makes extremely efficient use of all raw materials. The expansion process creates angled, louvre like apertures within the material without any material being wasted. Unlike perforated materials the manufacturing process does not remove or punch out material. With perforated material you end up with almost as much material in the scrap bin as you do which is usable.

The easy to disassemble nature of the **eyetech** system along with easy identification of its different constituent material types makes recycling very straightforward. Unlike powder coated finishes, intensive and costly removal of the anodised finish is not required prior to recycling.





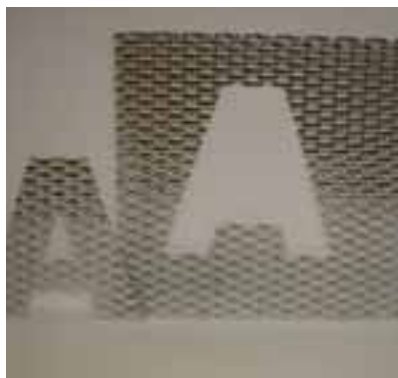
Queen Mary Innovation Centre, London

eyetech system, designed and supplied by **James & Taylor**

eyetech systems are manufactured to the most stringent accuracy and quality standards

eyetech mesh panels are produced to dimensional tolerances that other manufacturers struggle to get anywhere near. In order to ensure that mesh panel edges and joints align accurately during the final installation it is essential that the mesh panel supplied is dimensionally accurate to within just a few millimetres and that the panel is very close to being perfectly square. **eyetech** mesh panels are produced oversize and cut down after expansion in order to achieve this high degree of accuracy. **James & Taylor** have specially developed purpose built laser guided cutting machinery which cuts accurately and economically to size and removes the edge strand distortion and 'hour glassing' inherent with any uncut 'expanded only' mesh.

All **eyetech** bracketry is laser cut and laser etched prior to forming in order to ensure that there are no sharp corners. Careful, quality manufacture means that each component that plays its part in the **eyetech** system is as pleasing to look at as it is efficient in function.



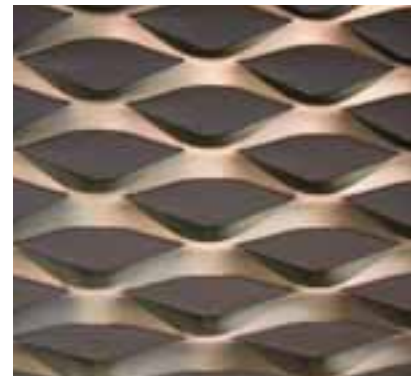


Broadwood Sports Centre, Cumbernauld

eyetech system, designed and supplied by **James & Taylor**

eyetech systems provide the highest levels of durability and quality of finish

The principal components that comprise the **eyetech** system are manufactured from either aluminium or stainless steel. **eyetech** mesh, windposts, cappings and trims are manufactured from aluminium and all are anodised so as to exceed the standards set by BS 3987: 1991 – (Anodic oxidation coatings on wrought aluminium for external architectural applications). Meeting or exceeding this standard is essential in order to ensure a durable finish. When the **eyetech** mesh is expanded from aluminium, then anodising always takes place after the **eyetech** mesh panel is entirely fabricated and complete with its punched attachment holes. No drilling or cutting of the **eyetech** mesh panel is necessary on site.





New Museum of Contemporary Art, New York

eyetech system, designed and supplied by **James & Taylor**

eyetech systems allow thoughtful, resolved, quality architecture

eyetech systems are designed to maintain the distinctive pattern, flow and textural qualities of the expanded mesh around the entire building façade.

eyetech fixing systems are designed so that adjacent mesh strand ends always align correctly. This ensures continuity of the strong diagonal patterning which is key to this materials architectural appeal. Each panel of **eyetech** mesh is designed and manufactured to fit its particular location within the **eyetech** façade. Cutting and drilling of **eyetech** panels on site is not required.





New Museum of Contemporary Art, New York

eyetech system, designed and supplied by James & Taylor

With **eyetech** you get a comprehensive, high quality project specific design and drawing service

Everybody that purchases the **eyetech** system is provided with a design and drawing service of the very highest quality at no additional cost. The design and drawing package consists of:

- Typical system configuration drawings that communicate the proposed design for initial architectural approval.
- Substructure general arrangement drawings that show substructure components and component references, longitudinal windpost setting out, windpost bracket mid-height levels and windpost levels.
- Mesh general arrangement drawings that notate mesh panel type references and mesh panel installation levels.
- Large scale detail drawings that show assembly details, fastener specifications and fastener tightening torques.
- **eyetech** operation and maintenance manual.





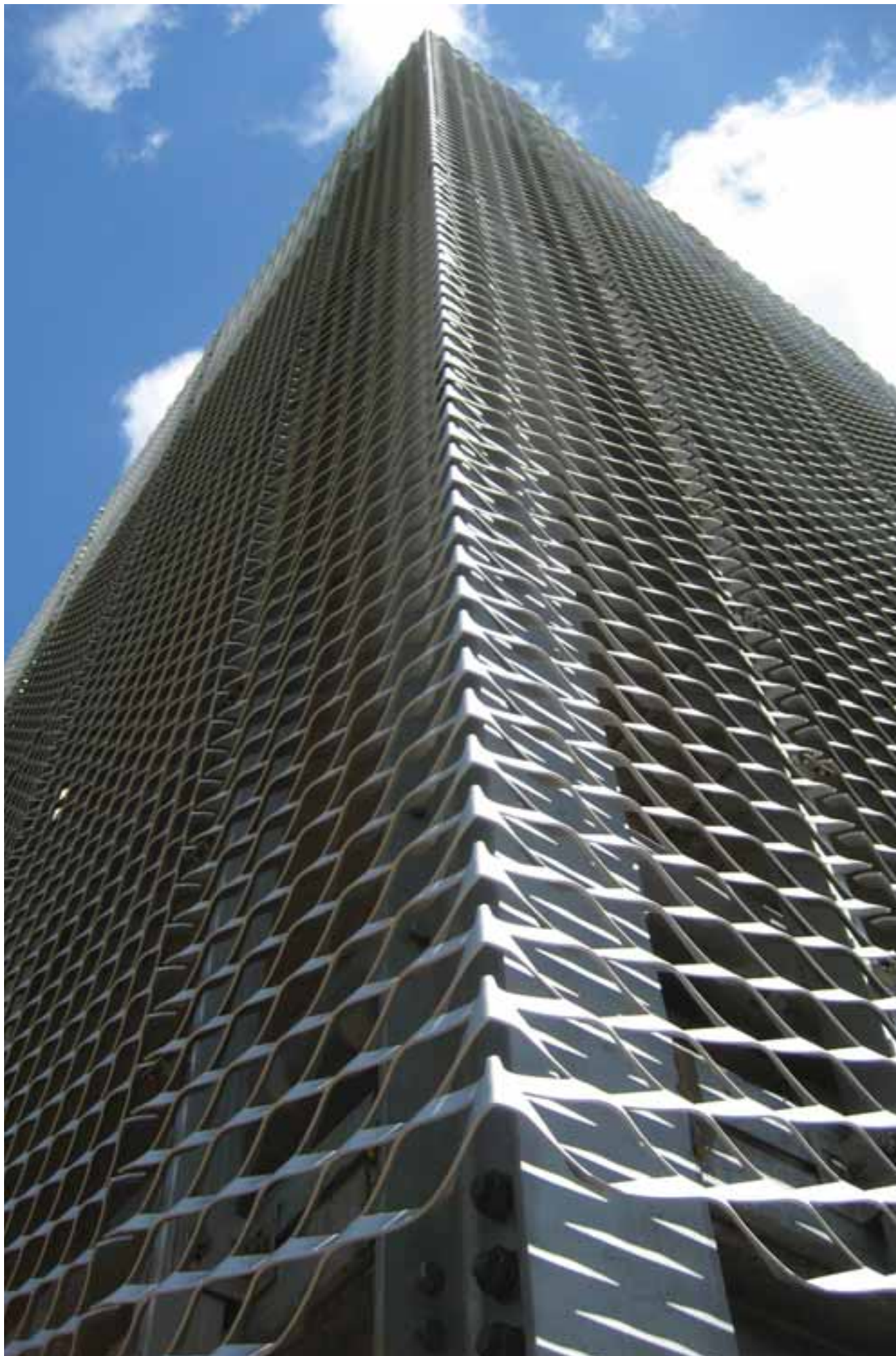
Car Park, St. David's 2, Cardiff

eyetech system, designed and supplied by James & Taylor

eyetech provides a completely integrated solution

eyetech systems are a complete range of thoroughly developed and entirely integrated components. System accessories available are; capping, cill and edge trims, handrails and anti-climb, folded corners, curved panels, closer rod and security fastener options.





Car Park, Loughborough University, Loughborough

eyetech system, designed and supplied by **James & Taylor**

eyetech systems incorporate health and safety features that protect both our clients and the building user

James & Taylor have developed a special process that de-burrs the expanded mesh making the material tactile and safe for use in locations where it can be readily reached by the building users.

James & Taylor can provide a complete range of integrated edge, soffit and capping trims that neatly frame any exposed mesh edges.



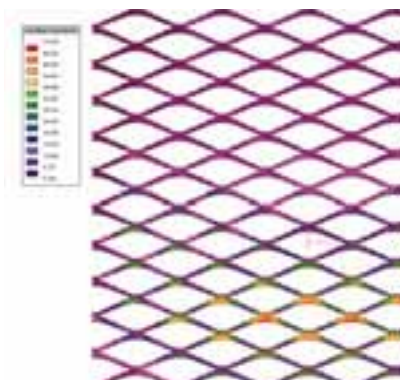


Stephen Lawrence Centre, London

eyetech system, designed and supplied by **James & Taylor**

eyetech systems are quantifiably robust

eyetech systems are designed to be extremely robust and require the minimum of maintenance. James & Taylor have developed an accurate 3D drawing programme (EAVgen) which is used as the basis for the finite element analysis of **eyetech** meshes prior to their detailed design and manufacture. Using specially developed design tools such as EAVgen, James & Taylor are able to accurately predict the behaviour of a particular specified **eyetech** mesh when subjected to all 'in-service' loads.





Young Vic Theatre, London

eyetech system, designed and supplied by James & Taylor

With **eyetech** you get fully trained, experienced and approved, high quality installation

James & Taylor ensure that the **eyetech** system is only installed by fully trained and approved specialist contractors.

James & Taylor recognise that the success of an **eyetech** project depends to a great extent upon the quality of its installation.





The Greater Manchester Police HQ MSCP, Manchester

eyetech system, designed and supplied by James & Taylor

eyetech provides ease and accuracy of installation

Building systems that are easy to install are invariably better installed. The **eyetech** system has been designed to be lightweight, adjustable and installer friendly. The standard primary bracketry accommodates lateral structure tolerances of $\pm 30\text{mm}$ and vertical structure tolerances of $\pm 25\text{mm}$. Limitless longitudinal adjustment is usually provided by attachment of the primary bracketry to a continuous horizontal cast-in channel. If fixing to a steelwork structure or fixing to concrete where a cast-in channel is not possible or has been miscast, horizontal slots are provided within the primary bracketry and vertical adjustment is achieved at the windpost to primary bracket attachment points.



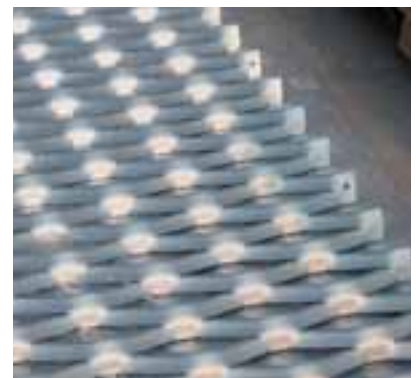


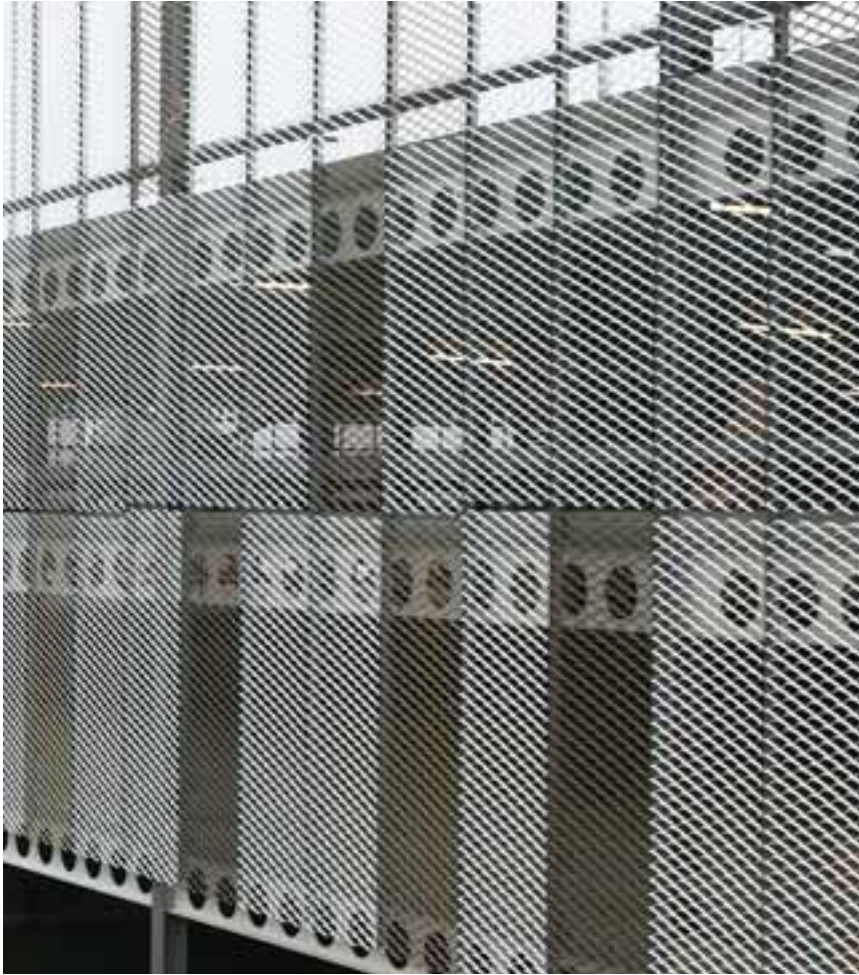
Broadwood Sports Centre, Cumbernauld

eyetech system, designed and supplied by **James & Taylor**

eyetech's material supply and supply logistics are tailored to suit your project

James & Taylor coordinate the sequence of design, manufacture and material supply to suit particular project requirements. **eyetech** packaging, component referencing and deliveries are carefully planned to provide materials for the right location on site at the right time.





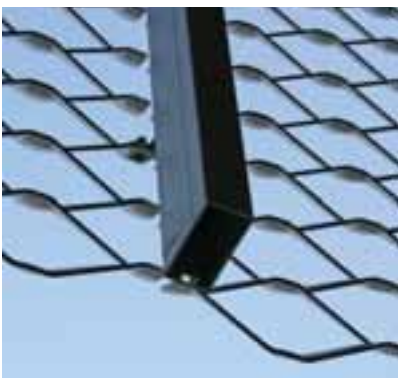
Hospital Car Park, Milton Keynes

eyetech system, designed and supplied by James & Taylor

eyetech systems are lightweight and impose minimal loads upon the structure

The **eyetech** expanding process forms a unique 3 dimensional material that is inherently stiffer than the equivalent 2 dimensional perforated material. This means that individual **eyetech** panels are capable of spanning further and the amount of substructure required to support them is reduced.

Woven wire screening systems require tensioning so that they are capable of resisting normal 'in-service' loads. This necessitates the strengthening of the structure at the points between which the woven mesh will be tensioned along with considerable additional cost.





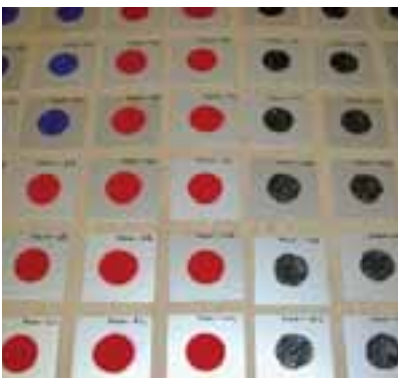
Queen Mary Innovation Centre, London



eyetech system, designed and supplied by James & Taylor

eyetech has thoroughly engineered vandal resistance and security

eyetech systems are designed to accommodate most vandal loads. These may be loads derived from, for example; an attempt to climb the façade. All readily accessible fasteners are vandal resistant with **James & Taylor** able to offer a range of security options that are selected dependent upon the level of perceived risk. **eyetech** systems are designed to be robust and not deform or distort. **eyetech** system finishes are selected and tested for their resistance to all common forms of graffiti.





Highcross, John Lewis Car Park, Leicester

eyetech system, designed and supplied by James & Taylor



Car Park, St. David's 2, Cardiff

eyetech system, designed and supplied by James & Taylor

eyetech's clients speak for themselves

New Museum of Modern Art, New York

"James & Taylor is the best we've ever seen. The level of coordination is extraordinary. They don't just give you specs—their specs are developed from personal experience. Their services range from façade engineering, fabrication research, and anodisation techniques to coordination for shipping and transport. They basically did whatever it took to ensure the mesh fabrication process for the New Museum moved smoothly and on schedule, from the aluminium mill to the fabrication plant in the UK and all the way to the job site."

- Toshihiro Oki, SANAA Architect.

"It's exceeded all the expectations we had. It has the effect of blurring the edges of the building and when the sun shines on it you get different patterns forming on it which change from noon to sunset." - Toshihiro Oki, SANAA Architect.

General Hospital Car Park, Milton Keynes

"The subtle colours and texture of the façade creates a dynamic solution to the cladding requirements of the car park. The idea behind the cladding of the building was to establish a balance between natural and man made materials, which would help to create a contemporary aesthetic. We feel that the highly engineered look of **eyetech** complements the glazed Reglit models which enclosed the stair core, whilst contrasting well with larch cladding boards and stone gabion walls which are filled with locally sourced stone. The **eyetech** material is also robust enough to negate the need for pedestrian handrailing. And the anodised finish means it will need little or no maintenance – an important consideration in any building, but particularly in a busy public place like this."

- John Dixon, Ingleton Wood LLP.

John Lewis Car Park, Highcross, Leicester

"We considered various mesh materials, but we chose **eyetech** because it can appear both solid and transparent, depending on how you use it. It gives the car park great visual interest. As you walk down the main road, you can see it changing from different perspectives."

- Andy Gollifer, Gollifer Langston Architects.

Stephen Lawrence Centre, London

"**eyetech** is elegant, yet robust. The way it reflects light and the subtle variations according to the weather or time of day are beautiful. The end result is fantastic."

- A spokesman for Adjaye Associates.

"**eyetech** is a material we've wanted to work on with a façade for a while. It's elegant, yet robust. The way it reflects light and the subtle variations according to the weather or time of day are beautiful...We worked with **James & Taylor** from early on in the design process, and they assisted greatly with the detailing that went into the finished façade. The end result is fantastic."

- Project Director, Adjaye Associates.

Young Vic Theatre, London

"The layer of aluminium mesh panels held off over a hand-painted background envelopes the auditorium, which is the prime element of the project. The installation demanded a high level of accuracy and attention to detail. We have been delighted with **James & Taylor's** collaborative and professional input."

- Roger Watts, Haworth Tompkins Architects.



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& TAYLOR**

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METAL COMPANY**
A GIBRALTAR INDUSTRIES COMPANY



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