



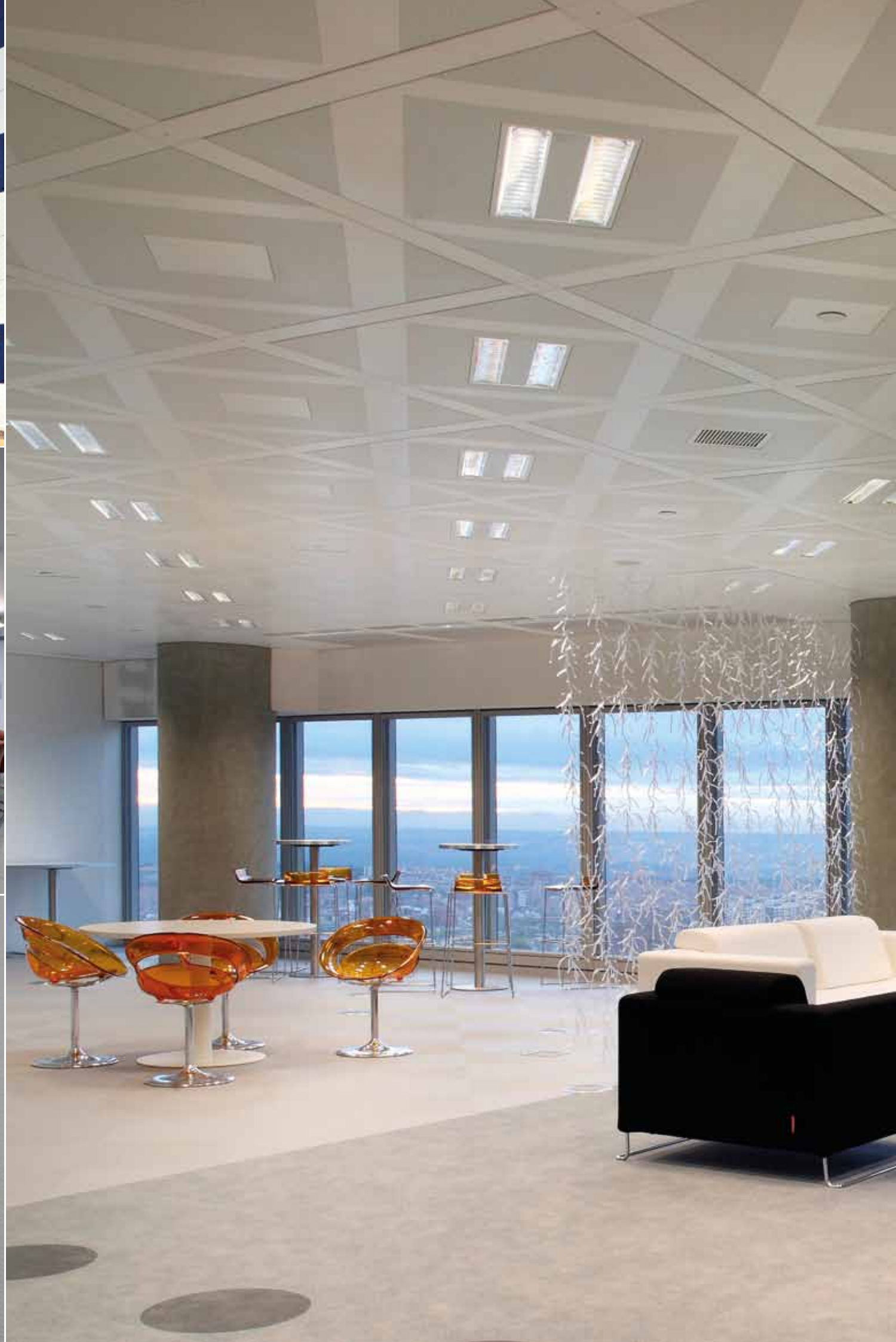
manufacturing world-class interiors

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SAS International is a British manufacturer of interior products, meeting the ever increasing demands of clients and specifiers worldwide.

We are solution led, driven by delivering quality, innovation and maximum value.

Our on-going investment in manufacturing facilities and processes ensure we provide value-engineered solutions across the built environment.



A modern office interior featuring a large window with a city view, a black sofa, an orange chair, and a glass-walled office area. The ceiling has a grid pattern with recessed lighting. The floor is carpeted. The text "ABOUT SAS INTERNATIONAL" is overlaid on the right side of the image.

ABOUT SAS INTERNATIONAL



SAS International is a global manufacturer of interior fit out products; delivering the highest quality solutions with minimal impact on the environment but maximum impact on the interior space.

Continuous product development is a core part of the SAS International Vision. We know that in today's world, nothing stands still. Innovation drives us.

SAS International has evolved by demanding the best from ourselves to ensure that we deliver the best solutions for project teams and ultimately clients/building users.

With over 40 years' experience SAS International has seen many product developments. In ceilings which have been the essence of our business since we started, the basic wood fibre products of the early 1960s have now become the high performance steel and aluminium products to meet the demands of 21st century buildings.

SAS International now produces sustainable chilled ceilings, active and passive chilled beams, Integrated Service Modules, radiant heating

panels and trench heating solutions. Bespoke architectural metalwork solutions complement our ceiling systems. Partitioning and doors complete the fit-out solution.

Specifiers benefit from our design expertise, flexibility and innovative approach. Our involvement right at design stage means we can best meet demands that legislation may place on a building, provide for ease of buildability in the construction process, and consider ongoing maintenance requirements from the outset.

Benefits accrue from the ease of installation of our products and building occupiers benefit from the practical solutions we deliver. Minimising waste and reducing risk are integral to our processes.

Our philosophy is based upon a long-term approach supporting individual projects, establishing and maintaining supply chain partnerships with clients,

architects and contractors through on-site visits and assistance.

The design and manufacture of products for different sectors and geographical locations can be challenging. Communication and understanding amongst the project team are key drivers in delivering a successful outcome.

With a specialist expert team supported by offices in a number of countries, the process is closely managed and efficiently carried out at every step. We operate in project teams across the globe to help support clients, specifiers, contractors and engineers, from concept to completion.

From commercial, education and healthcare projects to large-scale infrastructure and transportation hubs, the sustainable and practical solutions we deliver provide considerable benefits and savings whilst exceeding design briefs.





AUTO BENDING 1

PERFORATOR 2

PERFORATOR 2

PERFORATOR 1

MANUFACTURING AND ENGINEERING



SAS

SAS International manufactures a broad range of durable, sustainable and aesthetic products, meeting design, performance and integration requirements. All our state of the art factories are ISO 9001, 14001 and 18001 accredited. With total control of the production process we maintain product quality and ensure maximum value.

Our continuous investment in manufacturing facilities and technology enables us to stay ahead in the marketplace, and provide a tailored and quick response for a global market.

Understanding how to integrate building elements and services means we can deliver outstanding design solutions which offer numerous benefits, including cost of construction.

Wherever possible we look to provide value engineering; through the design of products, manufacturing processes that reduce waste, maximising efficiencies and improving on-site installation.

Integration of services at the design stage is key: apertures can be formed to provide an engineered product for site installation or services can be factory-fitted off-site without the risk of damage associated during installation.

Tiles and panels pre-fitted with heating and cooling elements are manufactured in-house and supplied as one integrated unit for ease of shipment and installation. This co-ordination reduces the number of trades required on-site and installation time, minimising waste and risk.

Being self-sufficient is integral to the SAS manufacturing process. We make our own tooling

and maintain our own machinery to ensure lead times are kept to a minimum.

The quality and performance of our products is paramount to the success of our business. Where appropriate we ensure that products and systems are tested in accordance with client specifications.

We have invested in building an independently certified Test Centre Laboratory alongside a dedicated technical team for our room comfort products. This major investment enables us to provide performance data for our range of chilled beams providing clients with further reassurance as to operating efficiencies.





ACHIEVING LONG TERM VALUE



Global construction is being driven by client aspirations and government legislation to produce buildings that have a minimum impact upon the environment. This includes every aspect of the building from design to construction, waste management, end of life and running costs.

As a business we have taken the strategic decision to focus on metal products to achieve the highest performance, long term value and sustainability demanded today. In addition, our associated room comfort product ranges are energy efficient (helping to reduce energy usage and carbon emissions) and fully recyclable at end of life.

Through better design, responsible sourcing of materials and innovative manufacturing techniques, we are able to provide our clients with solutions that help their buildings to achieve suitable ratings under systems such as BREEAM, LEED, Ska Rating, Green Star and Estidama's Pearl Rating System.

The use of steel provides many benefits over comparable materials during the life-cycle of a

product. Steel is a unique product in recycling terms – its properties remain unchanged no matter how many times it is recycled. The use of steel in construction sets the standard in the reduction of waste. Waste generated during manufacture can be recycled; there is little waste from steel products on site. Steel making by-products can be used by the wider construction industry for a range of products including road stone and lightweight aggregate.

Aspects such as the gauge of the metal, the grade of steel or aluminium, the method of painting, the thickness of paint coating and the final surface performance are critical factors to both the aesthetic appearance and long-term performance of the installation and therefore sustainability considerations. SAS International's paint coatings for example can be guaranteed for up to 40 years.

SAS International purchases all timber and wood based products from sources that have a commitment to offer either Forestry Stewardship Council (FSC) Chain of Custody, Programme for the Endorsement of Forest Certification (PEFC) Chain of Custody or complies with the FSC standard for non-FSC Certified Controlled wood.

Glass is used in our partitioning and door solutions. As with steel, glass is 100% recyclable. We therefore work with our Float Glass suppliers to ensure the use of cullet (recycled glass feedstock) is maximised.

Finally ISO 14001 (Environmental Quality System) accreditation ensures that we reduce the environmental impact of our manufacturing processes with regular management reviews.





METAL CEILINGS

acoustic metal ceilings, clip-in systems, lay-in systems, hook-on systems, linear strip systems, acoustic rafts, canopies, waveform ceilings, vaulted ceilings, radial ceilings, bespoke ceiling systems



Ceilings form a key design element within any building interior, combining outstanding performance qualities with aesthetics. It is important that ceilings seamlessly blend into the design character of a building. Whether they are designed to provide enhanced acoustic control or form a design statement, ceilings play an essential role in the effective use of interior space.

SAS International provides a complete range of metal ceiling systems to meet clients' demands, whether functional or aesthetic. These solutions play an active role in addressing acoustic requirements and occupant comfort, improving cleanliness and seamlessly integrating partitioning systems. These benefits go beyond aesthetics and demonstrate the role that ceilings have to play in modern building environments.

Ceilings should fulfil the functional needs of a building, providing solutions that allow architects and designers to create the spaces they envisage. Integrating mechanical and electrical services is a key benefit of ceiling systems. Many functional elements can be integrated or incorporated,

reducing the need for other remedial building works and increasing internal space.

SAS International is a designer and manufacturer of metal ceiling systems which set the benchmark for the sector. Our systems incorporate performance, innovative design and value engineering to provide our clients with a fit-for-purpose sustainable solution that adds value.

For over 30 years, recyclability and waste management have been an integral part of our manufacturing processes as well as part of the build solution we offer. Our metal ceiling solutions have a lifespan in excess of 25 years with only very basic maintenance. Using approved architectural powder

coatings the paint finish can be guaranteed for 40 years. This provides the durability and longevity that many clients are increasingly specifying.

Manufactured to the highest standards and fully recyclable, our Metal Ceiling tiles can be suspended in a number of ways with visible and concealed grid options: clip-in systems, lay-in systems, hook-on systems, rafts and canopies. We understand it is not necessary to take a 'best fit solution'. Each ceiling is different, as all buildings and projects are not the same, and a tailored approach should be utilised wherever possible. Demands will vary and with our manufacturing expertise we can ensure all aspects from building shape to environmental concerns are taken into account.





PARTITIONING | DOORS

drywall systems, relocatable systems, demountable systems,
fully glazed systems, bespoke glass, fire screens, operable walls,
veneered doors, laminate doors, bespoke doors, doorsets



In the predominantly 'open plan' modern working environment the segmentation of space is important to the overall workflow. Simple and functional division of space can be achieved through the use of partitioning systems and doors which offer privacy and acoustic benefits whilst also ensuring the most efficient use of space.

Workspace is an expensive overhead for any business and its flexible but efficient use is essential to provide for the ever changing needs of an organisation whilst also providing essential functionality that keeps the business operating at an optimum level.

SAS International designs and manufactures a range of partitioning systems and doors that are flexible and diverse enough to offer a complete solution for any environment, without compromising on quality or performance.

When specifying partitioning and doors it is often the finish, material and colour that immediately

come to mind. However, acoustic and fire performance criteria are also key considerations in the specification.

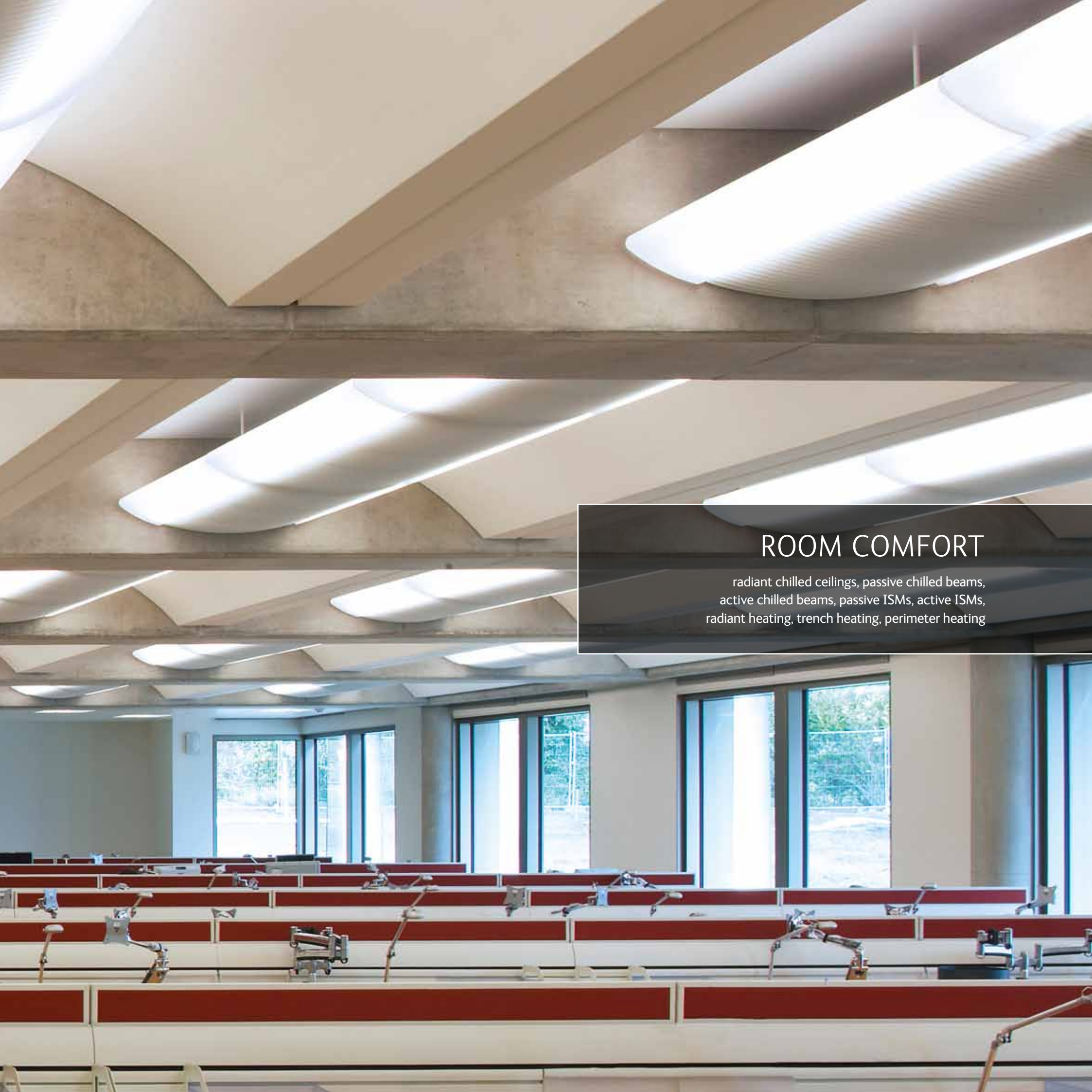
At SAS International we provide an off-the-shelf or a bespoke door manufacturing service offering choice of finishes as well as expert technical advice. With our bespoke solution it is possible to combine aesthetics with acoustic performance and fire resistance properties. Our Doors are available in veneered, laminated or bespoke finishes and meet acoustic and fire resistance requirements.

Manufactured to the highest standards, SAS Partitioning can be fully demountable and

relocatable which can be integrated with the ceiling and repositioned with little cost or effort. Partitions are available in wood, metal, aluminium and glass and have been designed to meet stringent standards without compromising on aesthetic demands. Our System 8000 60/60 fully relocatable, fully glazed partitioning system successfully combines contemporary aesthetics with outstanding fire performance and leads the market.

SAS International provides a range of partitioning systems including, drywall systems, relocatable systems, demountable systems, glazed systems, bespoke glass, fire screens and operable wall systems.





ROOM COMFORT

radiant chilled ceilings, passive chilled beams,
active chilled beams, passive ISMs, active ISMs,
radiant heating, trench heating, perimeter heating



Increasing energy costs and the desire for sustainability has had a significant impact upon the design and refurbishment of the built environment. Room comfort is the subject of scrutiny by regulators within the sector and an area where increasing efficiencies will be demanded, both through legislation and by property occupiers.

Projects now demand long term value of any product balanced with environmental credentials and greater design flexibility to meet occupant comfort demands.

SAS International prides itself in being at the forefront of sustainable manufacturing and the delivery of energy efficient solutions. Our Room Comfort products have been developed over many years to offer efficient alternatives to traditional heating and cooling systems.

Our Room Comfort systems include chilled ceilings, passive or active chilled beams and Integrated Service Modules (ISM's), which allow for the integration of other services such as lighting, cabling and acoustic pads.

Over a building's life-cycle approximately 80%

of the energy is used during its operational use, therefore reducing this use over an average 30-year life-span of a building has significant impact on costs and the environment.

SAS chilled ceilings offer an option to reduce energy usage, using water supply and return temperatures at around 14°C to 17°C, while maintaining up to 90 watts per sqm of cooling capacity.

Passive chilled beams produce outputs in the region of 300 watts per metre length (W/m) and active chilled beams can achieve cooling outputs of 500W/m, and also use water as a heat transfer method.

We can also provide radiant heating, trench heating and perimeter heating through our specialist division, HCP.

Occupant comfort in an interior environment impacts upon productivity and morale. Our products can help make a difference, not only to the environment but also to the productivity of a workforce or contentment of school children.

Our Room Comfort products are designed to provide energy efficient solutions whilst ensuring comfort within a building at every level. We work closely with our clients to specify systems that answer the needs of their project and improve the working environment; and with our independently certified Test Centre Laboratory we can truly demonstrate proven performance and operating efficiencies.

In addition to this, our experienced technical team has the knowledge and expertise to provide added value to any project, from design to installation.





ARCHITECTURAL METALWORK

acoustic lighting rafts, acoustic baffles, acoustic attenuators, acoustic wall panelling and cladding, service bulkheads, service rafts, service binnacles, service gantries, spandrel panels, column casings, solar management



Welcome to Terminal 4

Zones
C
D
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F

Airline ticket services

2

Airline ticket services

02

OBALT

Jet Airways

ONE OF THE BEST

SAS International has been a leader in the manufacture and design of Architectural Metalwork for more than 40 years. Our dedication to the production of value-engineered solutions, which excel in both design and application, has driven our business to provide outstanding Architectural Metalwork solutions for projects worldwide.

SAS International has an integrated approach to Architectural Metalwork, combining building elements and design with mechanical and electrical services to create solutions that offer benefits to all parties. These value-engineered solutions are designed to be both practical and sustainable, whilst also meeting the needs and requirements of a specific environment or application.

Providing Architectural Metalwork for interior fit-out solutions, from commercial, education and healthcare projects to large infrastructure projects and transportation hubs, SAS International has the

knowledge, expertise and experience to support a wide range of applications and requirements.

Our range of Architectural Metalwork products includes acoustic lighting rafts, acoustic baffles, acoustic attenuators, acoustic wall panelling and cladding, service bulkheads, service rafts, service binnacles, service gantries, spandrel panels, column casings and solar management solutions.

At every step of the design and manufacturing process we focus upon delivering sustainable solutions that meets our clients' requirements and expectations. A key design and manufacturing

consideration is the whole life costing of every Architectural Metalwork solution we produce. We understand that a tailored approach should be taken whenever possible to eliminate unnecessary waste and provide a solution which has a life-span in excess of 25 years. Working with our clients at every step of the process we ensure that the result is appropriate, efficient and sustainable.

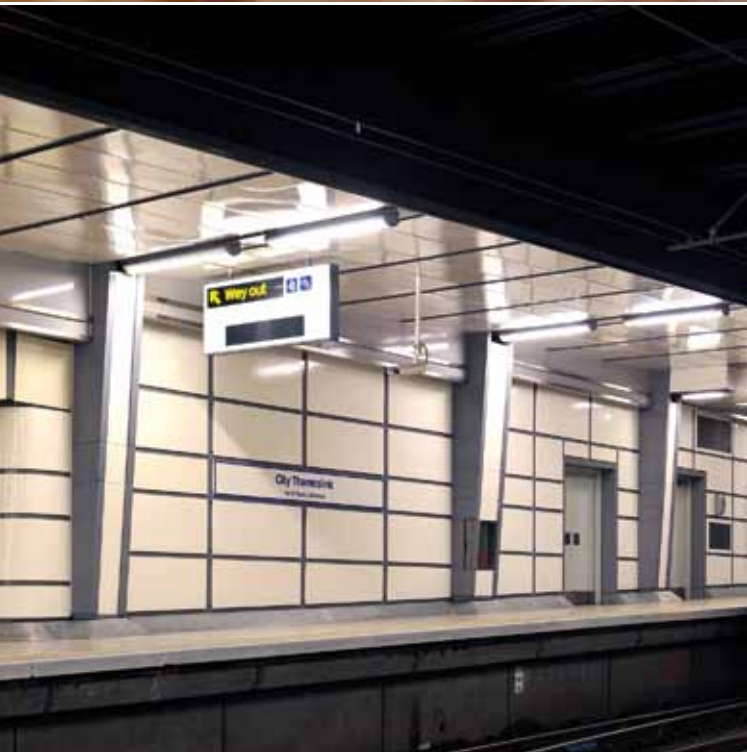
Driven by innovation and providing value-added, superior performance solutions, SAS Architectural Metalwork supports your designs with our expertise.





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PROJECT MANAGEMENT
design | supply | install



Providing one-stop design, cost and delivery certainty, SAS Project Management is the specialist design-led installation division of SAS International. Managing projects through design, supply and installation.

On many of today's major construction projects clients and main contractors wish to limit their risk and have the comfort and benefits of all-encompassing warranties; SAS Project Management is pleased to take on this role. A single point of contact from start to finish.

SAS Project Management enables projects to be personally managed by our in-house team, which can be particularly beneficial for technically challenging applications or for buildings where there is a high degree of mechanical or design complexity.

SAS Project Management can help to realise innovative technical design features right from design stage, for example to deliver a performance chilled beam in a landmark building or a precision metal solution for large scale infrastructure project.

Individual project managers co-ordinate the full range of SAS International products and the supply and integration of third party products.

Where chilled ceilings and beams require design and performance to meet architectural,

mechanical and electrical demands, SAS project managers work with our in-house Room Comfort specialist while co-ordinating the project teams' requirements. They can liaise with clients and design teams on preferred on-site installation processes, and work with locally seconded specialist contractors and/or directly with the main contractor on a worldwide basis.

SAS Project Management can therefore help ensure consistent, high installation standards are met and maintained wherever your project is, further providing our clients with peace of mind.





SAS DIRECT

manufacturing interiors, delivering value

ceilings | partitioning | doors | glass | dry lining

SAS
DIRECT

www.sasdirect.co.uk

BNI XYP



SAS Direct delivers value. Depots across the UK and Ireland offer contractors our quality products direct from the manufacturer at competitive prices. SAS Direct was established to meet the growing demand for commodity construction products without the need to purchase through a third party.

SAS Direct services customers with a substantial stock for immediate purchase both pick up and next day delivery at the best available price.

In the current economic environment, pricing is a top priority for customers purchasing commodity products, along with availability and good customer service.

With a defined product range that relates directly to the contractor and the trades, SAS Direct

Depots provide SAS International manufactured products and associated products for a range of fit-out solutions.

SAS Direct offers SAS metal ceiling systems, dry lining trims, tee grid, partitioning and doors along with associated ranges including plasterboard, dry lining and ironmongery products.

A nationwide team of SAS Direct surveyors and glazing specialists install glass for SAS International

partitioning systems and other applications.

SAS Direct delivers the quality the market demands at the most competitive price, with the reassurance that products come from SAS International manufacturing facilities accredited to ISO 9001 and ISO 14001 standards.

A dedicated website, www.sasdirect.co.uk, offers detailed descriptions and technical information of the wide selection of products available.





THE SAS DIFFERENCE

We value long-term business relationships. By continuously investing in research and development, and training we are able to meet the future requirements of our customers.

After Sales

The SAS After Sales service division was established to provide a specialist advice point and resource for all repairs, maintenance and alteration services. It means that doubt in the authenticity of any alterations to existing products and applications can be avoided. This is particularly useful where bespoke products have been specified.

We understand that changes can occur to building interiors throughout their lifetime. To ensure that we are able to offer the correct advice in a timely manner we keep a database of all current and past projects so original specifications, plans or drawings can be used if required. If clients need to adapt their spaces, expand or restructure departments, integrate new technologies or building services, or simply allow for general, on-going maintenance we have the information that is needed to facilitate this.

Services include:

- Site Surveys
- Replacement of damaged materials
- Extensions and modifications to installations
- Integration of new building services or replacing and upgrading services
- Acoustic upgrades for ceilings, partitioning and wall panelling

- Emergency repairs
- Technical advice

Training

Our technical advice also extends to the provision of training. We understand that our customers need to have the best information possible in order to specify products and make installation as simple as possible.

For specifiers we regularly make RIBA/CIBSE accredited CPD (Continuous Professional Development) presentations to architects and building service engineers. We are also able to offer training seminars at architects' and contractors' offices tailoring sessions to their exact needs.

We also offer hands-on site training and supervision for projects to encourage the use of best practice installation techniques. This in turn helps to not only improve the quality of on-site installation of our products, but can also reduce potential site damage and wastage.

Every SAS facility has a dedicated training and mock-up area. In addition to training internal staff about product developments, we provide hands-on practical installation training for

contractors and classroom-based seminars for specifiers and clients.

Research, Design and Development

SAS is driven by innovation. We do not plan for research and development in a traditional way. We take opportunities from projects we work on and design teams that we collaborate with. Many new systems develop organically when technology and processes are updated and reviewed.

We define our approach to design as a "can do solution" rather than offering an off-the-shelf product. Because of this our collaboration with project teams is led by consultation and development. We aim to deliver a solution as close to a design as possible.

Our commitment to the design and review process is demonstrated by the visualisation of our solutions in product mock-ups. They are an important way of understanding and visualising bespoke product installations or technical products.

All of these activities add value for our customers and help demonstrate our continued passion for achieving excellence and delivering the highest quality solutions.



www.sasintgroup.com



Manufacturing and supplying interior fit out products globally
delivering quality, innovation and value

metal ceilings | partitioning | doors | room comfort | architectural metalwork
www.sasint.co.uk www.sasint.ae www.sasint.es www.sasint.fr www.sasint.ie



Specialist design-led installation division
providing cost and deliverable certainty

design | supply | install
www.saspm.com



Nationwide division delivering
value direct to the contractor

ceilings | partitioning | doors | glass | drylining
www.sasdirect.co.uk

