



metal ceilings

SAS Metal Ceiling, Room Comfort and Architectural Metalwork products are specified and installed on numerous educational projects; in these demanding environments SAS have provided durable yet easy to maintain metal solutions.

SAS has 40 years experience in providing acoustic solutions. To meet the requirements of legislation, SAS design and manufacture performance led products to meet acoustic absorption and attenuation demands.

All SAS products can meet the reverberation times set under BB93 (Acoustic Design of Schools) for all pupils, including special hearing requirements, achieving Class A / $0.90\alpha\omega$ acoustic absorption. Class A acoustic products provide high levels of acoustic absorption and can remove the need for secondary acoustic treatments within classroom.

Innovative energy efficient heating and cooling products manufactured by SAS that can be integrated seamlessly include chilled ceilings, chilled beams and radiant heating.

Exceptional whole of life costs are achieved using 100% recyclable steel. All SAS products contain a minimum of 20% recycled content in accordance with national standards.

To meet design requirements and objectives SAS metal products can be supplied in a range of RAL colours. SAS FT offers a semi-matt/low gloss appearance, visually similar to emulsioned plasterboard, but with the durability of metal. It is ideal in areas of natural daylight and is used to create a feeling of space, reducing lighting hot spots.

Metal Ceilings

SAS can provide a range of suspended metal ceilings to meet any design or performance requirement.

SAS metal ceilings are guaranteed to remain serviceable for 25 years. A polyester powder coating offers a highly durable and easy to clean solution with an exceptional life span and minimal maintenance costs.

Clip-in or lay-in tiles provide an ideal solution for education projects. Clip-in tiles can ensure voids are kept secure in appropriate environments while a washable polyester powder coated finish offers a cost-effective, hygienic, wipe clean solution.



Acoustic Lighting Rafts

System 600 acoustic lighting rafts are suspended from an open structural soffit which enables free air movement to the structural slab for natural thermal mass heating and cooling.

Rafts or modules are available in a range of curved, flat or angled profiles and can integrate M&E specified services, such as cabling, fire detection and control systems. The range of design options is endless and System 600 can be tailored to suit any environment.

To meet the requirements of BB90 (Lighting Design for Schools) the rafts are designed to include apertures for any lighting manufacturers luminaires and lighting control systems. Luminaires and up-lighters are some of the different intelligent lighting options available to create natural lighting effects, integrating lighting and acoustic comfort in one unit, reducing capital and installation costs.

To meet the demands of BB93, a range of acoustic treatments is available to absorb sound through the perforations in the face panel and reflected sound from the structural soffit onto the rear of the panel.

Manufactured from metal, the durable finish provides cost effective solutions while reducing whole of life costs. The experience we have gained working with architects and M&E consultants has enabled us to develop cost effective solutions. By employing standing components, capital costs are reduced while still allowing project customisation.

Heating and Cooling

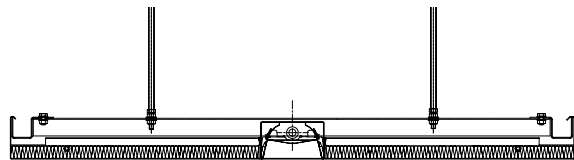
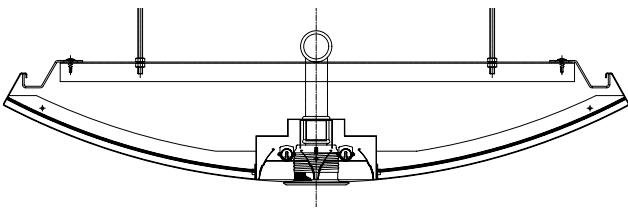
In naturally ventilated schools with exposed soffits, System 600 aids natural thermal mass heating and cooling. The open soffit can provide a cooling potential of up to 25 W/m².

Chilled beams or Radiant Heating panels can be incorporated within the design of acoustic lighting rafts for environments where mechanical cooling or heating is required.

Chilled beams offer a more energy efficient alternative to traditional air conditioning methods, supplementing the passive cooling provided by the exposed thermal mass. Energy efficiency is obtained due to the higher operating temperatures, between 14°C and 17°C, and the ability to combine chilled beams with free cooling and ground sourcing systems.

Raft mounted Radiant Heating panels are a modern energy efficient alternative to traditional wall mounted radiator systems. Integrated with in an acoustic lighting raft, they radiate heating downwards, warming objects and people in the occupied space.

Neither system has moving parts, such as fans, or need to have filters replaced; reducing both maintenance schedules and the associated costs.



SAS Architectural Metalwork includes a range of integrating products for educational projects including:

Acoustic Attenuators

In naturally ventilated schools, it is necessary to provide acoustic separation between rooms while maintaining air flow. Acoustic attenuators, designed to meet the requirements of BB101, create a series of sound absorbing chambers between room and corridors without affecting cross-ventilation.

Acoustic Baffles

With large open atria, acoustic baffles effectively control any unwanted and drifting noise. Metal vertical baffles provide a low maintenance, easy clean solution with an exceptional life cycle. In naturally ventilated buildings they can assist with cross-ventilation at soffit level.

Acoustic Rafts

In auditoriums, rafts can provide acoustic absorption without the depth needed for acoustic baffles. Acoustic rafts have the same properties as System 600 acoustic lighting rafts, absorbing sound though the face and reflected sound from the soffit.

Acoustic Wall Panelling

In areas where acoustic lighting rafts are not suitable, acoustic wall panels can provide an acoustic solution to BB93.

Acoustic wall panels can be supplied utilising standard ceiling components, to provide a cost effective solution. When wall panelling is installed at frieze level usable classroom space is maximised. A range of colours and shapes are available to highlight different teaching humanities.

Bulkheads

Metal bulkheads provide a means of changing levels between two horizontal planes. They can be manufactured in different sizes and shapes, providing a curved or bullnose feature.

The installed cost of a traditional bulkhead using wet trades can result in higher final installed costs, when compared to a durable off-site manufactured metal solution.



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Head Office: SAS International, 31 Suttons Business Park, London Road, Reading RG6 1AZ, United Kingdom T: +44 (0)118 929 0900
For details of our offices worldwide please visit www.sasintgroup.com or email enquiries@sasintgroup.com

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