

HARNESSING THE OFF-SITE SOLUTION FOR LIGHTING AND ACOUSTICS

By Malcolm Stamper, Brand Manager, SAS International

Off-site construction is one of the most talked about techniques to help facilitate the build process. How this works in practice can vary but if we take the example of pre-assembled systems, installation time in comparison to traditional methods is one of the key advantages.

Modules, manufactured off-site, have been employed in the design of new schools where various construction and education demands for acoustic, lighting and service standards need to be met.

SAS International's acoustic rafts have been used as an alternative to suspended ceiling systems as a modern, cost-saving solution. Acoustic lighting rafts are becoming increasingly popular within schools, particularly the new 'Academies' because they leave an open soffit for sustainable natural mass cooling, and offer increased design flexibility and significant capital and installation cost savings.

Offering an intelligent acoustic and lighting solution, rafts can be flat, faceted or curved in section to express relief in the ceiling. Luminaries and up-lighting effects are incorporated to deliver illumination of the soffit and re-create natural environmental lighting.

Passive/active cooling elements can be included if required within highly glazed facades to overcome solar gains. Radiant heating and any number of other services such as computer cabling, sprinkler and PA systems can also be included.

Manufactured from metal with a polyester power coating the rafts have the same performance properties of more traditional suspended metal ceiling systems. They are a highly durable and easy to clean solution with an exceptional lifespan and minimal maintenance costs. In addition, they integrate easily with other metal education solutions, such as acoustic baffles and wall panels.

As floating rafts don't cover the entire ceiling plane, capital costs can be reduced. Offsite prefabrication and the pre-integration of lighting and other services into the raft ensures that manufacture and onsite installation costs can be kept down. Fast installation is a real benefit, with SAS's product solutions typically taking as little as 25% of the time required to install a suspended ceiling with fan coils.

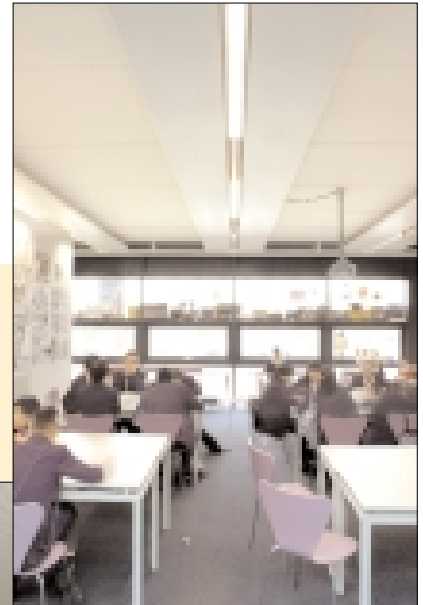
Modules pre-assembled and pre-tested offsite also ensure an immediate high quality installation; zero defects and a reduction in secondary damage on site are real benefits. Production of modules in an

In addition there can be a reduction in site costs such as accommodation, storage, logistics and site project management.

On a final note, and an important one to bear in mind, co-ordination with other trades and work carried out on site is key to reap the full benefits of off-site installation for these modules on-site.

At the Business Academy, Bexley, the open plan design placed significant demands on the building and the architect wanted to use

demanding working areas such as the science laboratories, metal systems were used to meet acoustic and rigorous cleaning and maintenance requirements.



organised, controlled manufacturing environment offsite is also inherently safer than traditional installation on site.

The risk of project over-run can also be reduced. Fixed production, delivery and installation times lead to a more certain build programme.

acoustic baffles. As a solution, SAS International designed a series of twelve metre acoustic baffles that also acted as solar shades directing sunlight into the three main atrium areas.

In individual classrooms acoustic floating rafts were used leaving an open soffit for natural mass cooling. In more

SAS International designs and manufacturers a wide range of metal solutions including suspended ceilings and prefabricated modules which are available in a variety of different colours and finishes and have an expected lifespan of over 25 years. www.sasint.co.uk, Tel: 0118 929 0900.