



acoustic lighting rafts

Office for Public Works, Ireland

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Product Description

An acoustic lighting raft is a module made up of sound absorbing perforated panels that incorporate luminaires. Rafts are suspended directly from a flat structural soffit, or in coffers, allowing free air movement to the structural slab for natural thermal mass cooling. See page 28.

Acoustic lighting rafts not only offer a modern, cost effective, 'fit for purpose' solution, whilst allowing for design flexibility and reduced capital and installation costs.

Features:

- Range of acoustic treatments available
- Robust durable solution
- Allows for natural thermal mass cooling
- Minimal maintenance costs
- The durable metal finish provides a cost effective solution helping to reduce life cycle costs
- Rafts can be supplied additionally with intelligent lighting
- Rafts can be designed to incorporate low pressure hot water radiant heating panels
- Sloped debris protectors can be incorporated on the topside of rafts.

Perforations

A range of acoustic treatments are available to absorb sound, both through the perforations in the face panel and reflected sound from the structural soffit onto the rear of the panel.

Shapes and Sizes

SAS International has an enhanced range of rafts that can be tailored to any environment. Rafts are available in a range of shapes to suit project requirements.

Flat Designs

Flat rafts provide the ideal solution in many environments. Luminaires can be integrated within the raft or mounted independently between rafts.



Curved Designs

Curved rafts allow a larger acoustic area to be incorporated. The raft allows for an integrated central luminaire with acoustic pads to the larger outer surface area.

Bespoke Designs

Acoustic lighting rafts can be designed and tailored to any project or environment. Rafts can incorporate service ducts, removable panels for partitioning or other specified services, including fire detection and control systems.

Finish

Polyester powder coated with a RAL 9010 smooth finish supplied as standard. A fine textured finish (SAS FT), anti-bacterial coating (SAS AB) and other colours. See page 25 for a range of other paint finish options.

Sustainable Design

Acoustic lighting rafts are an ideal solution where incorporating sustainable design technologies. Acoustic rafts can be installed to allow free air movement to exposed concrete slabs, and cooling can be achieved, whilst offering design flexibility in a range of environments and providing for occupant comfort.

In the education sector, worldwide studies have shown that excellent acoustics boost learning potential. Regulatory frameworks are being introduced to enable this. For example in the UK it is necessary to meet the requirements of Building Bulletin 93 (Acoustic Design of Schools) while balancing the requirements of BB101 (Ventilation of School Buildings).

Acoustic lighting rafts provide acoustic absorption, whilst also allowing sustainable thermal mass cooling to take place.

See pages 16 to 20 for Acoustic Comfort Specification and page 28 for further information on Thermal Mass Cooling.

Integrating Partitioning

Environments require a degree of flexibility for partitioning. Acoustic lighting rafts, with removable panels in between modules, allow full height partitioning to be installed where required.

Installing full height partitioning to the soffit, allows acoustic attenuation between two spaces to be reduced.

M&E Integration

As with traditional suspended ceilings there is a need to integrate specified M&E services within the ceiling. Luminaires and up-lighters are some of the intelligent lighting options available to create natural lighting effects.

Acoustic lighting rafts allow additional M&E services to be integrated. Air handling, cabling, PA and fire detection and control systems are some of the services that can be designed and integrated within the rafts.

Radiant Heating Service Panels

Acoustic lighting rafts can also be designed to incorporate low pressure hot water radiant heating panels, which ensure comfortable and productive working environments for the occupants.



