system 330 lay-in tiles (c-profile suspension)



System Description

SAS System 330, linear or tartan grid, is a lay-in tile system that provides functionality and outstanding performance with a range of cost effective design options.

System 330 offers the facility to design the ceiling to any building grid size. Tiles are available in a range of shapes and sizes to meet individual project requirements.

System 330 'CoolCeil' incorporates a Radiant Chilled Ceiling element in the rear of the tile, further details are available on page 173.

Supported from either an Omega C-Profile with a M6 thread form or a plain C-Profile. Both profiles can be fitted with a gasket that provides a tight seal between profile and tile.

System features:

- Infinite range of modules for any building module
- Flexible layouts for relocation of partitions
- Optional Radiant Chilled Ceiling solution
- Optional hinge down mechanisms
- Minimum 25-year product life expectancy

Tile Sizes

System 330 panels can be made in mm increments to meet building module size; a range of rectangular and square tiles can be manufactured.

Large square mega panels can be manufactured in sizes up to $1500\,\mathrm{x}\,1500\,\mathrm{mm}$. For further details please contact our technical department.

Finish

Polyester Powder coated supplied as standard with a RAL 9010 smooth finish; a fine textured finish (SAS FT), anti-bacterial coating (SAS AB) and other colours are available. See page 36 for a full range of paint finish options.

Grid System

Profile suspension, C-Profile and Omega C-Profile, see pages 151–155 for components.

Shape

Tiles are available in square, rectangular, mega panels, coffered, curved and trapezoidal forms to meet individual project requirements.

Perforation

Typically supplied with 1522, 1820 or 2516 perforation. See page 103 for full details and perforation options

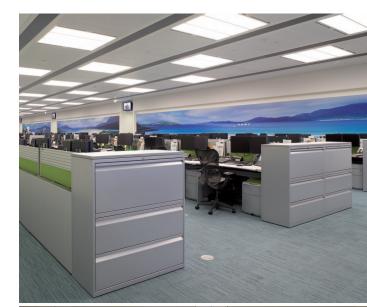
Integration

Apertures can be formed during manufacturing for luminaires and other services, see pages 38–39 for further details

Weight

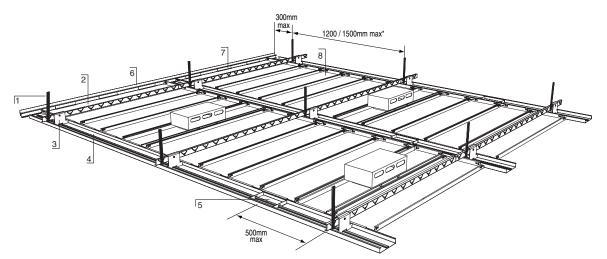
Approximately 14kg/m² for linear grid steel tiles, acoustic/insulation pad and suspension system.

Approximately 15kg/m² for tartan grid steel tiles, acoustic/insulation pad and suspension system.





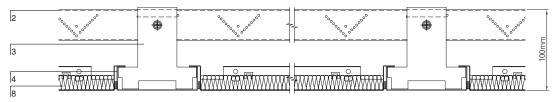




1] Emac Hanger 2] Emac Channel 3] C-Profile Hook-over Suspension Bracket 4] C-Profile / Omega C-Profile 5] C-Profile Splice 6] Perimeter Trim 7] Perimeter Wedge 8] System 330 Tile

Emac suspension components can be found on page 144, System 330 / SAS C-Profile component details can be found on page 151. Perimeter trims and accessories can be found on page 115.

Section Drawing



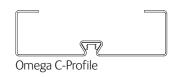
Acoustic Performance Data		Attenuation	Absorption		
		dB		Class	
		uв	NRC	αω	
	Plain tile.	43	N/A		
	Perforated tile with acoustic fleece.	13	Class C		
			0.70	0.65	
	Perforated tile with 18mm x 80kg/m³ acoustic pad.	30	Class A		
	decastic pad.		0.85	0.90	
	Perforated tile with 30mm x 80kg/m³ acoustic pad and steel backing plate.	48	Class C		
	debasee pad und steer saeking plate.		0.80	0.70	
	Perforated tile with 18mm x 80kg/m³ acoustic pad and 12.5mm plasterboard.	49	Class C		
			0.75	0.65	

Results above extracted from tests undertaken using perforation reference S1820.

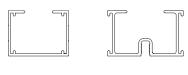
 $^{^*\}mbox{Lightweight}$ installations only, see page 166 for full details.

C-Profile Options





Extruded Aluminium Profiles





The C-Profile suspension grid is available in a range of widths.

An optional foam gasket features a brush seal strip that provides a tight seal between profile and tile, (supplied loose for on-site installation).

By introducing C-Profile cross noggins at modular centres a two-dimensional tartan grid can be achieved.

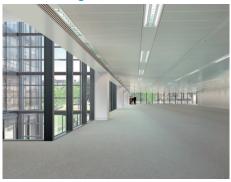
The Omega C-Profile features a continuous thread-form that allows the easy location and relocation of partition heads by means of an M6 bolt, without causing damage to the ceiling.

A range of narrower aluminium extruded C-Profile and Omega C-Profiles are available to meet design requirements.

The profiles can be suspended from either an Emac channel or direct from the soffit.

See page 129 for further details.

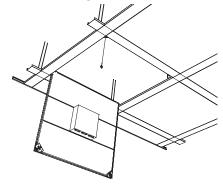
Service Integration



SAS metal ceilings tiles can be supplied with factory formed apertures, see pages 38–40 for further details.

C-Profiles can also be supplied with factory formed apertures for service integration. System 330 panels can be supplied with stiffeners to support centrally mounted luminaires. The flexible nature of System 330 means that solutions can be engineered to meet individual project requirements.

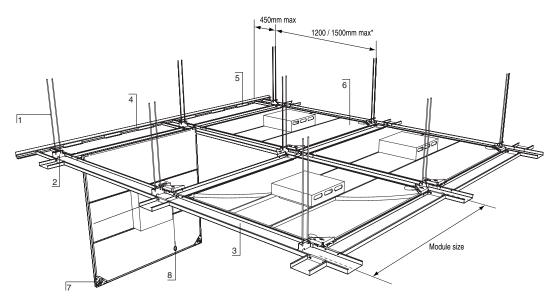
Mock Crossing Boxes



Our traditional tartan grid system, SAS System 335, utilised Trim strips (C-Profiles) and Crossing Boxes suspended from threaded rods and hanger brackets.

System 330 can replicate these crossing boxes by pressing mock crossing boxes into the C-Profile. The use of C-Profiles provides a more rigid ceiling structure than traditional crossing boxes.

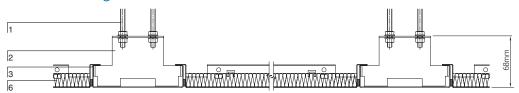
4] Perimeter Trim



- 1] Threaded Rod 2] C-Profile Suspension Bracket for threaded Rod 3] C-Profile / Omega C-Profile 5] Perimeter Wedge 6] System 330 Tile 7] Touch Latch 8] Safety Cable
- *Lightweight installations only, see page 166 for full details.

Emac suspension components can be found on page 144, System 330 / SAS C-Profile component details can be found on page 151. Perimeter trims and accessories can be found on page 115.

Section Drawing

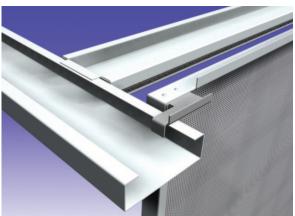


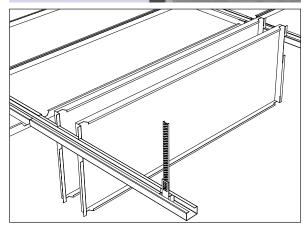
System 330 tartan grid can also be suspended using Emac hanger brackets and Emac primary channel, see page 79 for section drawing.

Acoustic Performance Data		Attenuation	Absorption	
	dB		Class	
		db db	NRC	αω
	Plain tile.	43	N/A	
	Perforated tile with acoustic fleece.	13	Class C	
			0.70	0.65
	Perforated tile with 18mm x 80kg/m³	30	Class A	
	acoustic pad.		0.85	0.90
	Perforated tile with 30mm x 80kg/m³ acoustic pad and steel backing plate.	48	Class C	
			0.80	0.70
	Perforated tile with 18mm x 80kg/m³ acoustic pad and 12.5mm plasterboard.	49	Class C	
			0.75	0.65

Results above extracted from tests undertaken using perforation reference S1820.









SAS can provide a range of hinge solutions that allow simple and safe access to the ceiling void for service maintenance. This is particularly important when larger panel sizes are used with the additional weight of luminaires or other integrated services.

Touch Latch and Pivot Pin

The touch-latch release mechanism allows access by simply pushing the panel up to release the end of the panel. A fixed bolt can be unscrewed to facilitate the release of the panel, in instances where complete tile removal is necessary.

Flying Arm

The flying arm is a hook-over bracket supplied fixed to the upstand of the panel. Access is obtained by pushing up the opposite end of the panel sliding back to reveal the flange and lowering to a vertical position (lift & tilt).

Hinge Notch

The hinge notch allows tiles to be hung vertically from C-Profiles providing clear unobstructed access to the ceiling void. This enables runs of tiles to be hung together during maintenance without causing damage to the tile.

System 330 tiles can be supplied with a SAS French Hook detail, the tiles feature a continental downturn flange that hook over the C-Profile.

Safety Cables

Safety cables are recommended for all hinged options to avoid the panel swinging down uncontrollably. When the tile integrates luminaires or a Chilled Ceiling, safety cables should be used to avoid any potential damage to the service.