DAMPA® MARINE CEILING SYSTEMS

DAMPA® Clip-In Tile

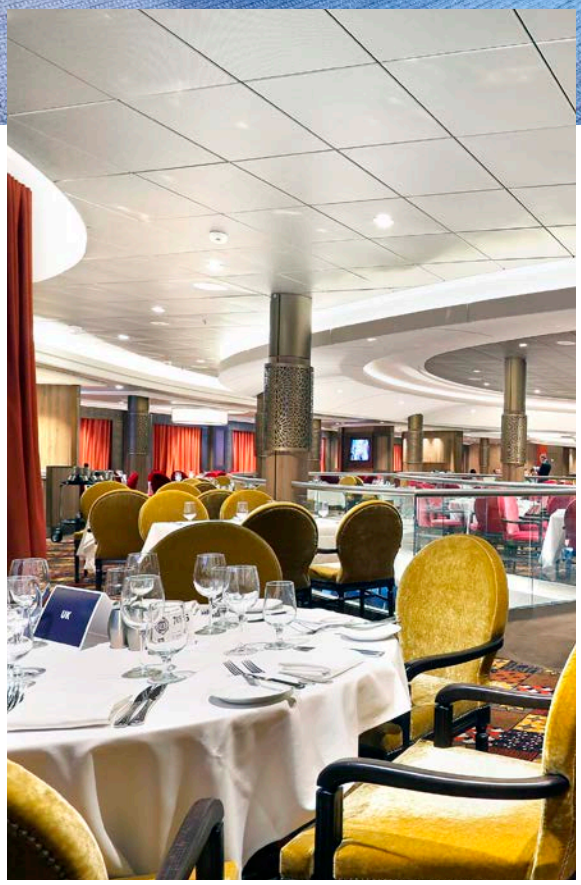
Decorative ceiling with multiple design opportunities

DAMPA®

Made in Denmark

DAMPA® Clip-In Tiles

DAMPA® Clip-In Tiles are part of a complete ceiling system with concealed suspension system



DAMPA® CLIP-IN TILES FOR PUBLIC AREAS

The DAMPA® Clip-In Tile system is available in both steel and aluminium and is available in various designs and surfaces.

The Clip-In system is a c-class ceiling with many different functions and architectural expressions.

DAMPA® Clip-In tiles are mainly designed for public areas in passenger ships, cruise liners and high-speed ferries.

Design

Create your own acoustic ceiling with the multiple combinations of colour, digital print, surface and perforation.

FORM FOLLOWS FUNCTION WITH INTEGRATION

Enjoy the possibility of integrating elements such as light fittings into the DAMPA® Metal Ceilings. Some elements are offered by DAMPA. Others are developed and designed by others, to fit into our ceiling systems.

A ceiling where elements such as light fittings, cooling, heating, ventilation, and sound systems are integrated into, is not only an aesthetic and beautiful solution. It also adds value as a time saving factor in the installation process.

Ventilation

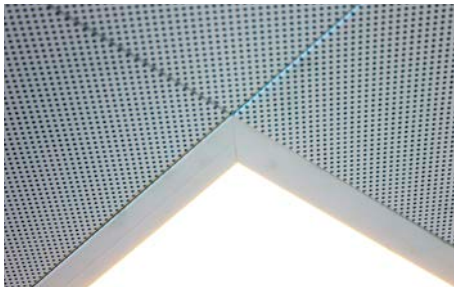
DAMPA® Rainfall is a diffuse ventilation system. By creating different pressure above the ceiling construction we obtain diffuse air flow.

Benefits of a diffuse ventilation system are:
Better indoor climate, less draught and savings on energy.

It is also possible to integrate other ventilation systems in the space above the ceiling.
All celings can be delivered with pre-cut holes to integrate other ventilation systems in the ceiling.

Lighting

Integrated light fittings has been part of our product range for many years. Many years of experience combined with a strong cooperation with our customers, have lead to light fittings which are easy to install in a DAMPA ceiling.



A growing number of LED solutions have been added to our product range and many more will come.
Choose our light fittings, with or with-out emergency light or go with the decorative light fittings, where features, shape and design is more important.

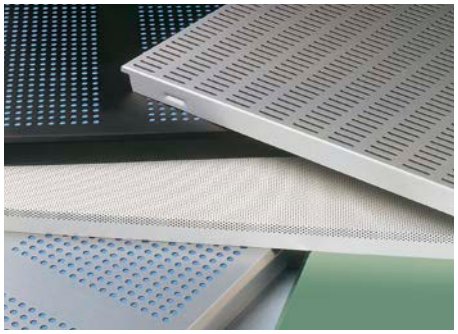
GOOD ACOUSTICS IMPROVE INDOOR CLIMATE

DAMPA metal ceilings ensure an exceptional acoustic environment on board.
The combination of perforation, acoustic felt and insulation will absorb noise and add to a good indoor environment.

Our wide range of acoustic ceiling solutions are ideal for rooms intended for high levels of human noise such as public areas, corridors and cabins. A good environment helps the passengers and crew to relax and concentrate.

To reduce the general sound level and reverberation time in a room, perforated ceiling units are the most effective solution.

Unperforated ceiling units offer sound absorption in the low frequency range.
Perforated ceiling units offer good sound absorbing characteristics within the frequency range of human activity.



SURFACES OF YOUR CHOICE

It is only natural to explore the wide range of colours, surfaces and perforation patterns available.

DAMPA provide multiple choices of ceiling surfaces; painted, laminated, digital print, anodized surfaces and clear-lacquered aluminum.

Choice of material makes it possible to create quite extraordinary ceilings.

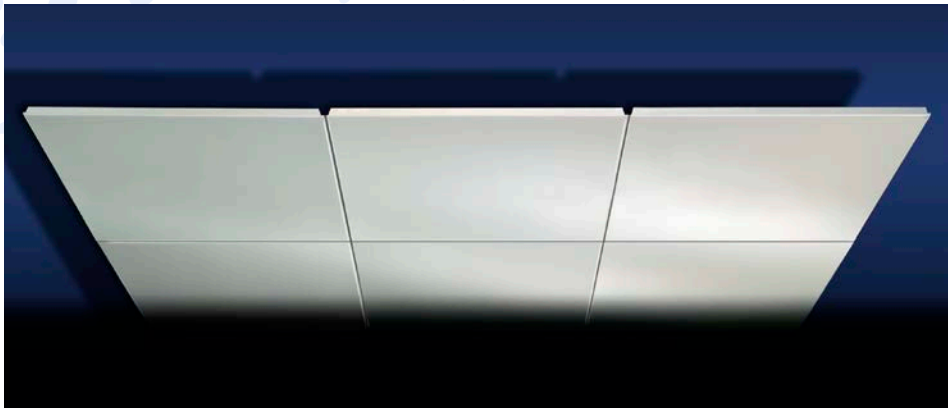
Send us a surface sample of a specific colour and we can analyze it to produce matching colour samples made on aluminum or steel. The matching colour sample will be returned to you for approval.

FIRE & SAFETY

Ensure safe and correct fire ratings on board. For public areas where the decoration and interior design are essential, you can find C-class fire rated solutions.

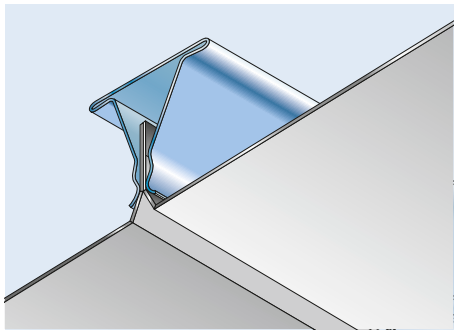
DAMPA® Clip-In, Bevelled Edge

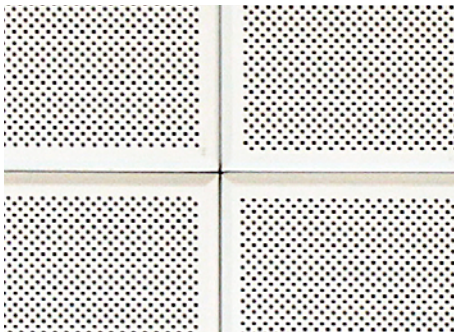
Enhance the square design for public areas, using the tiles with bevelled edge



The special design feature of DAMPA® Clip-In Tiles with bevelled edge is the emphasis of the square shape, by highlighting the joints between each tile.

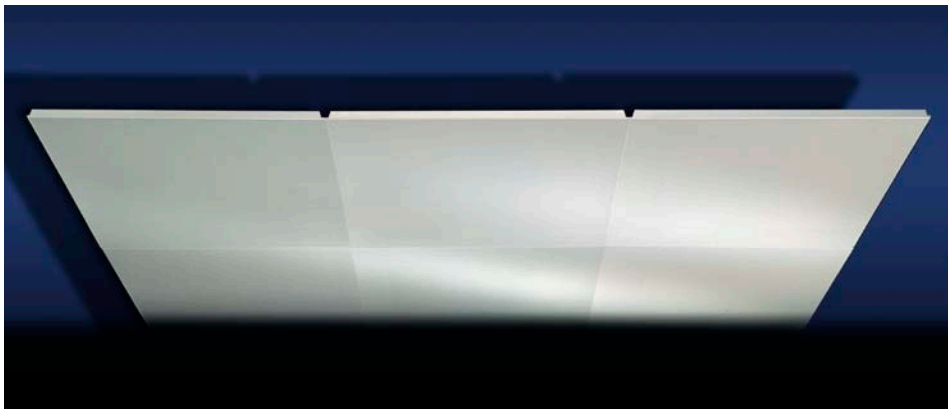
Creative combinations with various standard tiles offer the possibility of individual designs, which means that “the sky is the limit” regarding possible solutions to your building project.





DAMPA® Clip-In, Sharp Edge

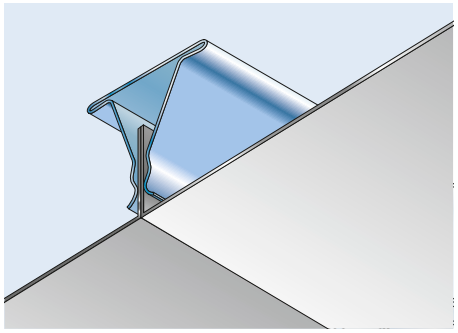
Create a flat, uniform and “borderless” ceiling surface, using the tiles with sharp edge

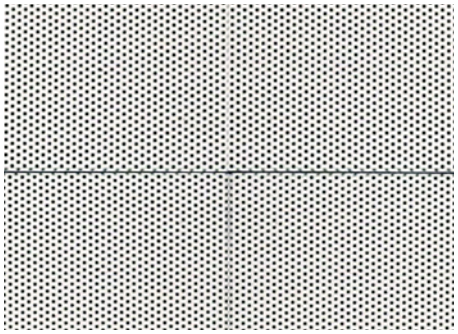


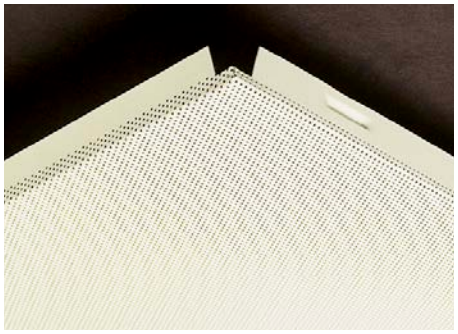
The DAMPA® Clip-in Tiles with sharp edge presents a continuous, uniform and “borderless” ceiling surface look, with precise levelling of the sharp edged tiles.

Create the impression of a “non-modular” ceiling, by applying perforation exceeding the edge of the tile.

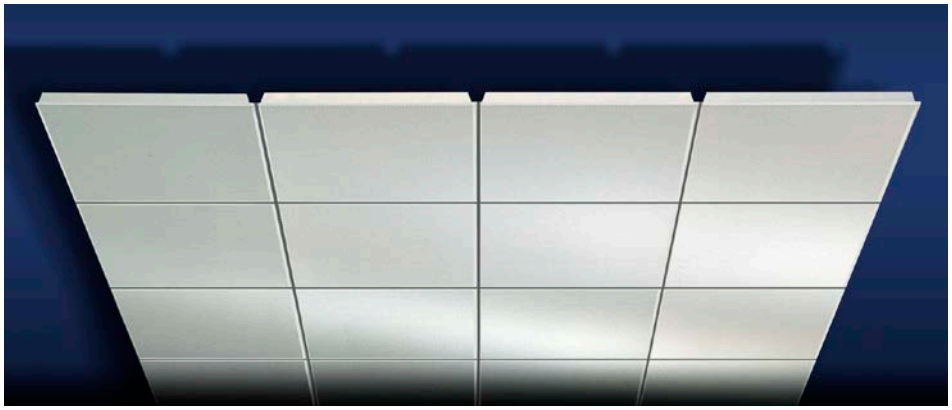
Enhance the continuity layout further by installing unperforated tiles.







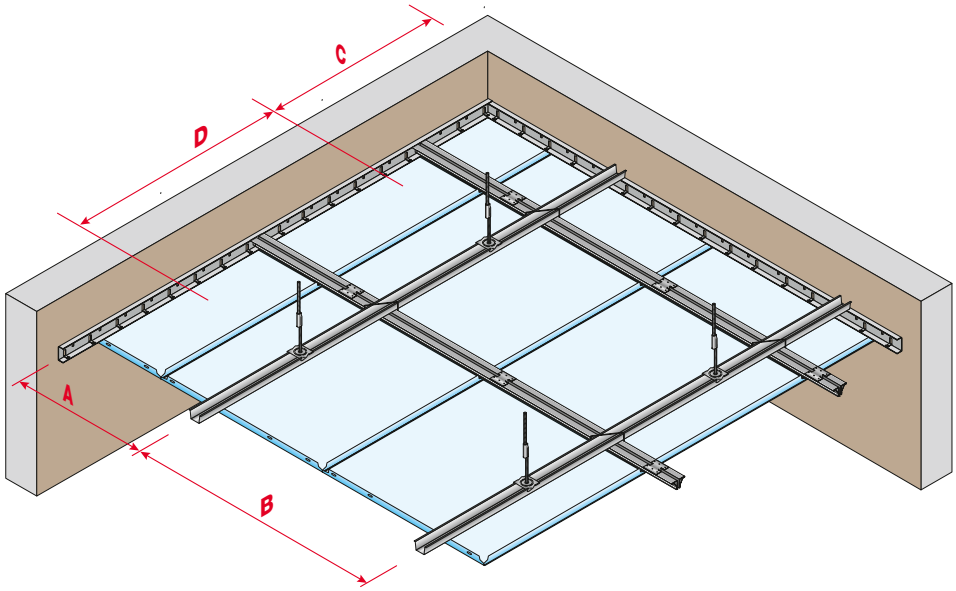
DAMPA® Rainfall Ventilation

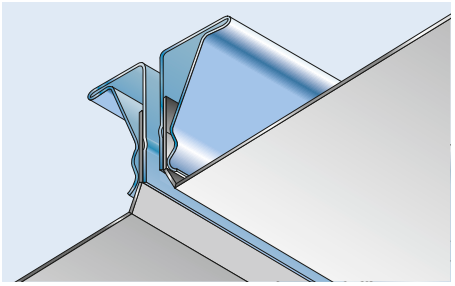


DAMPA® Rainfall ventilation is a diffuse ventilation system. By creating different pressure above the ceiling construction we obtain diffuse air flow. Benefits of a diffuse ventilation system are: Better indoor climate, less draught and savings on energy.

DAMPA® Clip-In Tiles can be installed with a gap of variable size crosswise to the carrier for air injection in areas where the ceiling void is used as air supply chamber.

By use of Carrier No. 10 tiles can be installed with an open groove of variable size surrounding each individual tile.





By using DAMPA Spacer Clip No. 1 a groove of 2-15 mm is achieved.
Other spacings can be made upon request.

All carrier and hanger centres are maximum distances		
A	Wall first Carrier No. 14	600 mm
B	Carrier No.14 to next Carrier No.14	1200 mm
C	Wall to first hanger	600 mm
D	Hanger to hanger	1200 mm

DAMPA® Clip-In, Modules

MODULES - SHARP EDGE			
Aluminium		**Steel**	
300 x 300 x 0.7 mm	2.4 kg/square meter	300 x 300 x 0.5 mm	5.1 kg/square meter
300 x 600 x 0.7 mm	2.3 kg/square meter	300 x 600 x 0.5 mm	4.7 kg/square meter
600 x 600 x 0.7 mm	2.2 kg/square meter	600 x 600 x 0.5 mm	4.5 kg/square meter
600 x 1200 x 0.7 mm	2.2 kg/square meter		
Type AL-15 (Perforated) Type AL-0 (Unperforated)		Type ST-15 (Perforated) Type ST-0 (Unperforated)	

MODULES - BEVELLED EDGE			
Aluminium		**Steel**	
300 x 300 x 0.7 mm	2.4 kg/square meter	300 x 600 x 0.5 mm	4.7 kg/square meter
300 x 600 x 0.7 mm	2.3 kg/square meter	600 x 600 x 0.5 mm	4.5 kg/square meter
600 x 600 x 0.7 mm	2.2 kg/square meter		
Type AL-15 (Perforated) Type AL-0 (Unperforated)		Type ST-15 (Perforated) Type ST-0 (Unperforated)	

DAMPA® Clip-In Tiles is available in aluminium and steel and in many sizes both as unperforated, perforated and recessed.

The standard type AL-15/ST-15 tiles are perforated with 1.8 mm holes at 3.5 mm centres, open area 20.5% and, depending on modular size, with 5-10 mm unperforated border on all four sides.

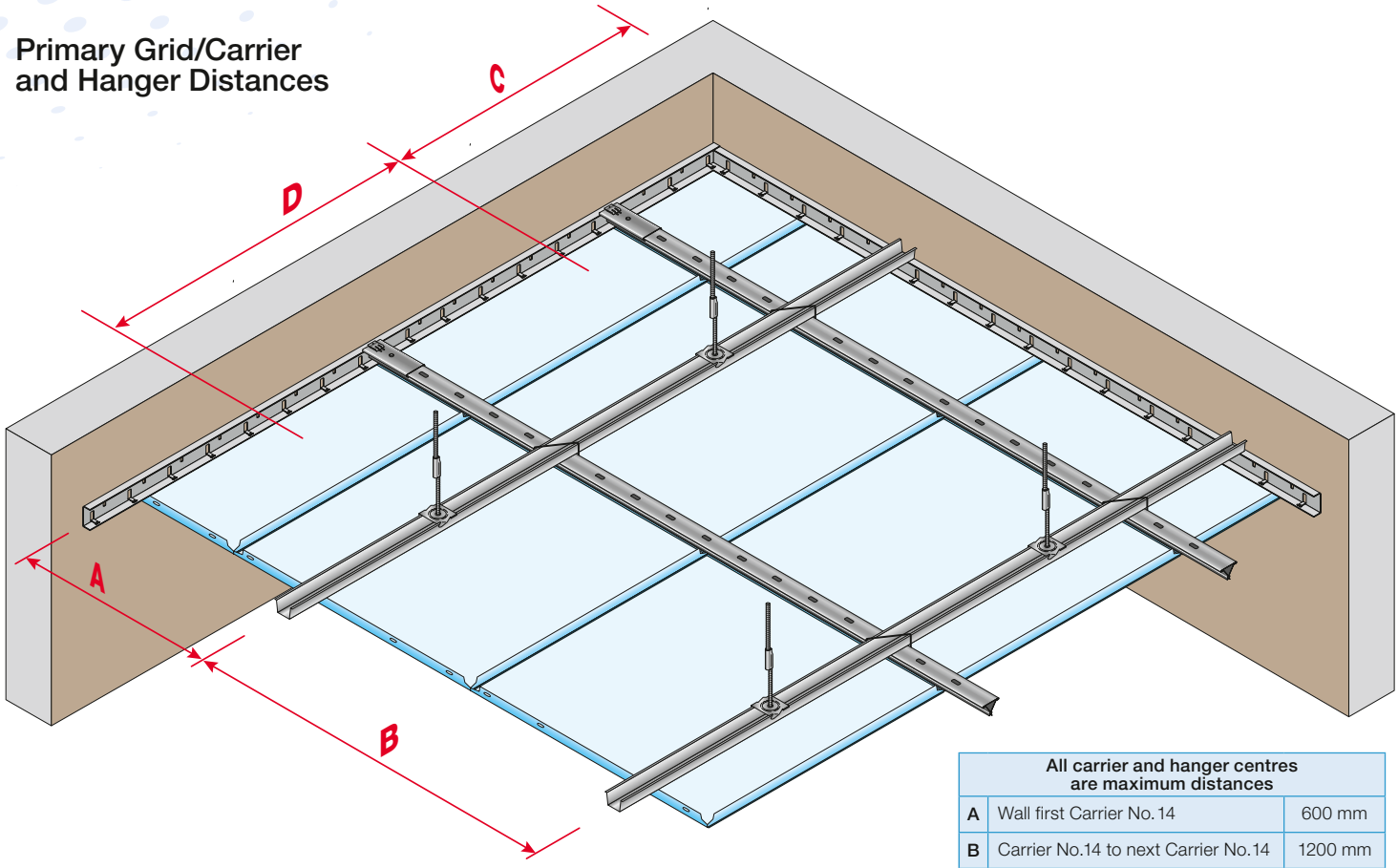
DAMPA also offers a wide range of standard perforation types in various patterns.

Perforated tiles are as standard provided with black acoustic felt bonded to the reverse side, other colours on request.

Installation of DAMPA® Clip-In Tile

The installation of DAMPA® Clip-In Tiles, with or without bevelled edge, in a concealed suspension system creates a flat and uniform ceiling surface.

Primary Grid/Carrier and Hanger Distances



All carrier and hanger centres are maximum distances		
A	Wall first Carrier No. 14	600 mm
B	Carrier No.14 to next Carrier No.14	1200 mm
C	Wall to first hanger	600 mm
D	Hanger to hanger	1200 mm

Installation Principles

Unless the carriers can be installed directly to existing gridwork, we recommend a secondary grid system to minimise the number of suspension points and provide for greater flexibility during installation.

DAMPA's primary grid system consists of Carrier No. 14 and the well-proven rigid and easily adjustable suspension principle.

Carrier No. 4 is connected to the primary grid by use of Coupling Clip No. 3, whereas Carrier No. 10 is to be secured to the primary grid by use of pop rivets.

Perimeter Details

For ceiling layouts ending with full tiles, use Carrier No. 10 parallel to the other carrier along the perimeter where appropriate.

Where tiles have to be cut, use Edge Trim No. 11 for aluminium and Edge Trim No. 36 or steel tiles. If so required, Tiles with Bevelled Edge can by use of Carrier No. 10 be installed with an open groove of variable size surrounding each individual tile.

Installation of Tiles

Perimeter tiles are installed first by engaging the cut edge into the edge trim and then securing the profiled edge into the carrier.

Corner tiles must be installed before adjacent perimeter tiles.

Tiles with Bevelled Edge and with Square Edge are secured to Carrier No. 4 (or No. 10) by applying an upward pressure using the palm of the hand at all four corners.

Clip-In Carriers

The distance from wall to first Carrier No. 4 or to Carrier No. 10 depends on the ceiling layout, just as the distances between clip-in carriers depend on the modular size of the different tiles available.

If lighting, air diffusers or integrated fittings are incorporated into the ceiling, it may be necessary to provide additional hangers to accommodate the extra weight.

Packaging

Tiles and painted perimeter trims are supplied in rigid, non returnable cardboard boxes.

Galvanised suspension components are supplied in standard bundles. All materials has to be stored under cover in a dry, ventilated area.

Classification

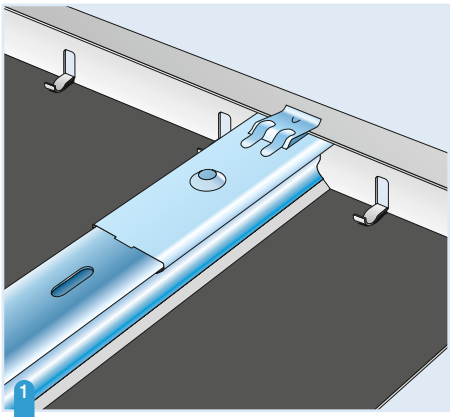
Approved as C-class material by leading classification societies.

This includes both perforated and unperforated executions, with or without bonded acoustic felt and/or inlay of mineral wool, whether sealed in PE-sleeves or not.

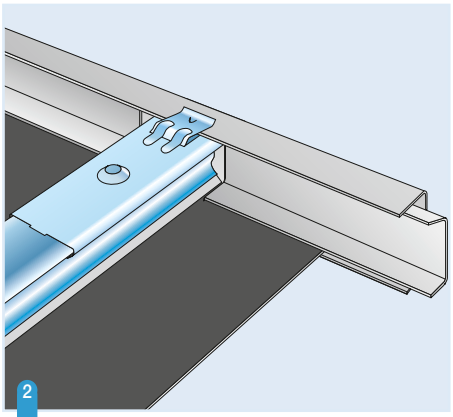
Functionality and Quality

All DAMPA Marine Ceiling Systems are manufactured to high standards within close tolerances to ensure accurate, fast and reliable installation.

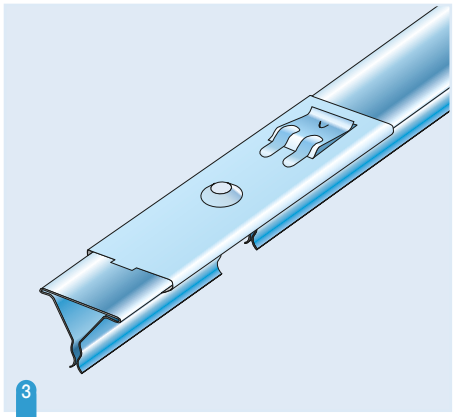
The DAMPA Marine Ceiling Systems are produced in accordance with DS/EN ISO 9001



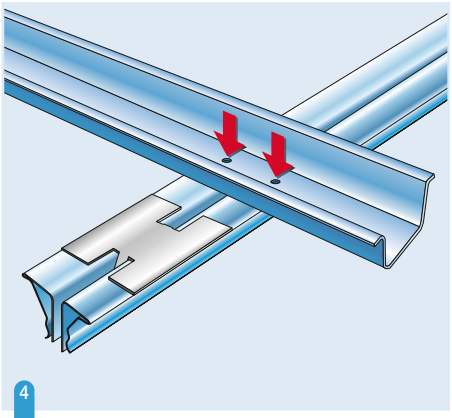
1 Edge Trim No. 11 is used to secure cut aluminium perimeter tiles.
Carrier Splice No. 4 is secured to the top flange of the lower carrier. It also locates on the top flange of the edge trim to maintain the correct tile height.



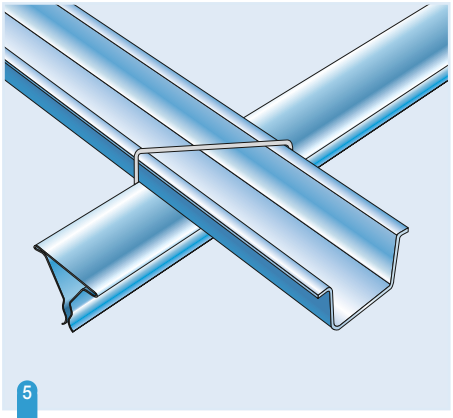
2 Cut steel perimeter tiles are supported using Edge Trim No. 36 and held in position with Wedge No. 4 as shown above.



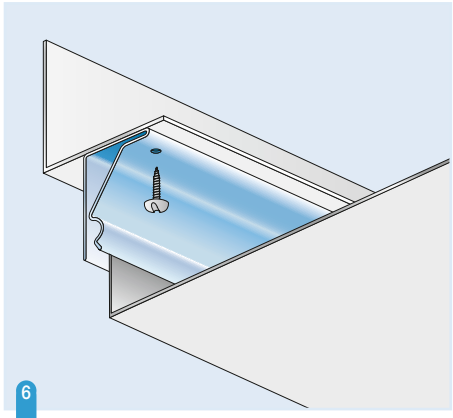
3 Carrier Splice No. 4 is centrally positioned over the joints in Carrier No. 4.
The distance from the joint to a point of fixation must not exceed 500 mm.
A gap of 2-4 mm should be maintained to allow for expansion.



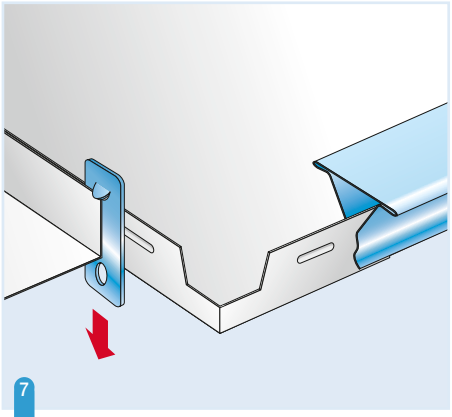
4 Spacer Clip No. 1 is used to create a gap of 4 mm between the carriers, prior to securing these to the primary grid.



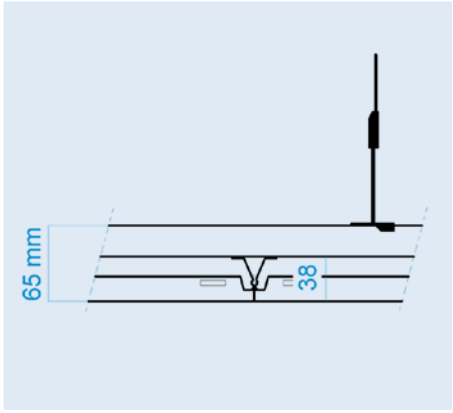
5 Coupling Clip No. 3 is used to secure Carrier No. 4 to Carrier No. 14 of the primary grid.



6 Carrier No. 10 is used as perimeter detail to support full tiles.



7 The Dismantle Tool is used to remove and reinstate individual tiles anywhere in the ceiling. To remove, insert the Dismantle Tool up into the tile joint close to the corner and pull down gently.



Built-In Heights

The minimum constructional height of a DAMPA Clip-In Ceiling System installed directly to possible existing gridwork is 38 mm.
The minimum constructional height including DAMPA primary grid/ Carrier No. 14 is 65 mm.

Weight

The weight of the DAMPA® Clip-In Ceiling System largely depends on the chosen size of tiles and the choice of material (steel or aluminium). Small tile sizes influence the number of Carrier No. 4 or Carrier No. 10 but do not increase the consumption of possible primary gridwork.

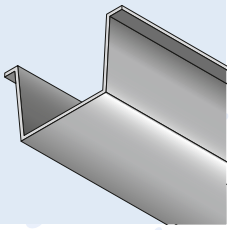
The total weight of a 600 x 600 mm DAMPA® Clip-In ceiling is only approx. 2.9 kg per sq.m for aluminium and only approx. 5.2 kg per sq.m for steel.

The additional average weight of possible primary gridwork as illustrated is approx. 1.2 kg per sq.m.

For possible specific project-related weight calculations, please see the weight of each item.

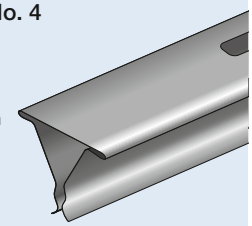
Modular Carrier No. 14

Height: 27 mm
Width: 51 mm
Length: 4000 mm
Weight: 0.75 kg/lin.m
Material: 1.0 mm galvanised steel



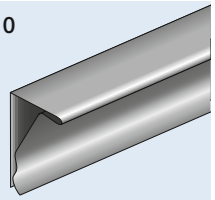
Modular Carrier No. 4

Height: 28 mm
Width: 35 mm
Length: 4000 mm
Weight : 0.42 kg/lin.m
Material: 0.5 mm galvanised steel



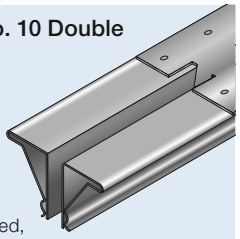
Modular Carrier No. 10

Height: 33 mm
Width: 19 mm
Length: 4000 mm
Weight : 0.5 kg/lin.m
Material: 0.6 mm galvanised steel, stove-enamelled



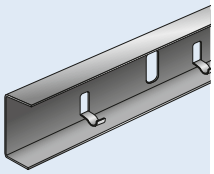
Modular Carrier No. 10 Double

Height: 33 mm
Width: 19 mm + gab
Length: 4000 mm
Weight : 0.5 kg/lin.m
Material: 0.6 mm galvanised steel, stove-enamelled, black



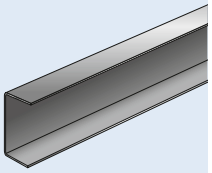
Edge Trim No. 11

Height: 38 mm
Width: 15 mm
Length: 4000 mm
Weight: 0.32 kg/lin.m
Material: 0.6 mm galvanised steel, stove-enamelled in ceiling colour



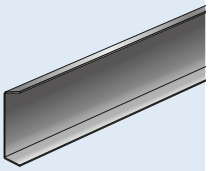
Edge Trim No. 36

Height: 38 mm
Width: 15 mm
Length: 4000 mm
Weight: 0.32 kg/lin.m
Material: 0.6 mm galvanised steel, stove-enamelled in ceiling colour



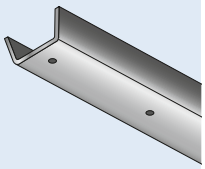
Wedge No. 4

Height: 37 mm
Width: 14 mm
Length: 274 mm
Weight : 0.06 kg/each
Material: 0.5 mm galvanised steel



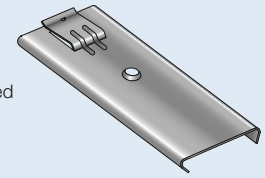
Runner Splice No. 12

Height: 20 mm
Width: 36 mm
Length: 321 mm
Weight: 0.15 kg/each
Material: Galvanised steel



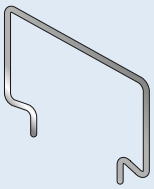
Carrier Splice No. 4

Height: 12 mm
Width: 40 mm
Length: 110 mm
Material: Galvanised steel



Coupling Clip No. 3

Height: 41 mm
Width: 64 mm
Material: Ø 2 mm galvanised spring steel

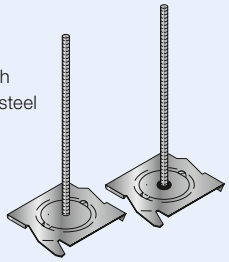


Suspension No. 1

Total height: 150 mm
Weight: 0.05 kg/each
Material: Galvanised steel

Suspension No. 3

No. 1 with vibration absorbing rubber bush

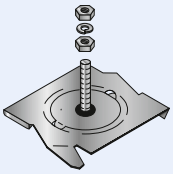


Suspension No. 4

(with vibration absorbing rubber bush)

Total height: 32 mm
Diameter: 6 mm std. M6 pitch
Weight: 0.05 kg/each
Material: Galvanised steel

(Not to be used in combination with Rod Clip No. 2 and Threaded Rod M8)



Rod Clip No. 2

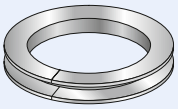
Total length: 50 mm
Weight: 0.015 kg/each
Material: Galvanised stee

Threaded Rod M8

Diameter: 8 mm
Length: 200, 300, 400, 500, 600 and 2000 mm
Weight: 0.30 kg/lin.m
Material: Galvanised steel

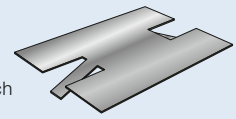
Pillar Ring

Height: 16 mm
Diameter: 200-1000 mm
Material: 0.7 mm aluminium, chromated and stove-enamelled



Spacer Clip No. 1

Height: 12 mm
Width: 44 mm
Length: 60 mm
Weight : 0.024 kg/each
Material: 1.0 mm galvanised steel, stove-enamelled

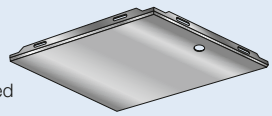


Dismantling Tool

Width: 25 mm
Length: 75 mm
Material: 0.3 mm spring steel

Access Hatch for Tiles

Width: 600 mm
Length: 600 mm
Material: Galvanised steel or aluminium, stove-enamelled



We reserve the right to alter described material without prior notification.

DAMPA®

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