DAMPA® MARINE CEILING SYSTEMS

DAMPA® 10/100/200/300

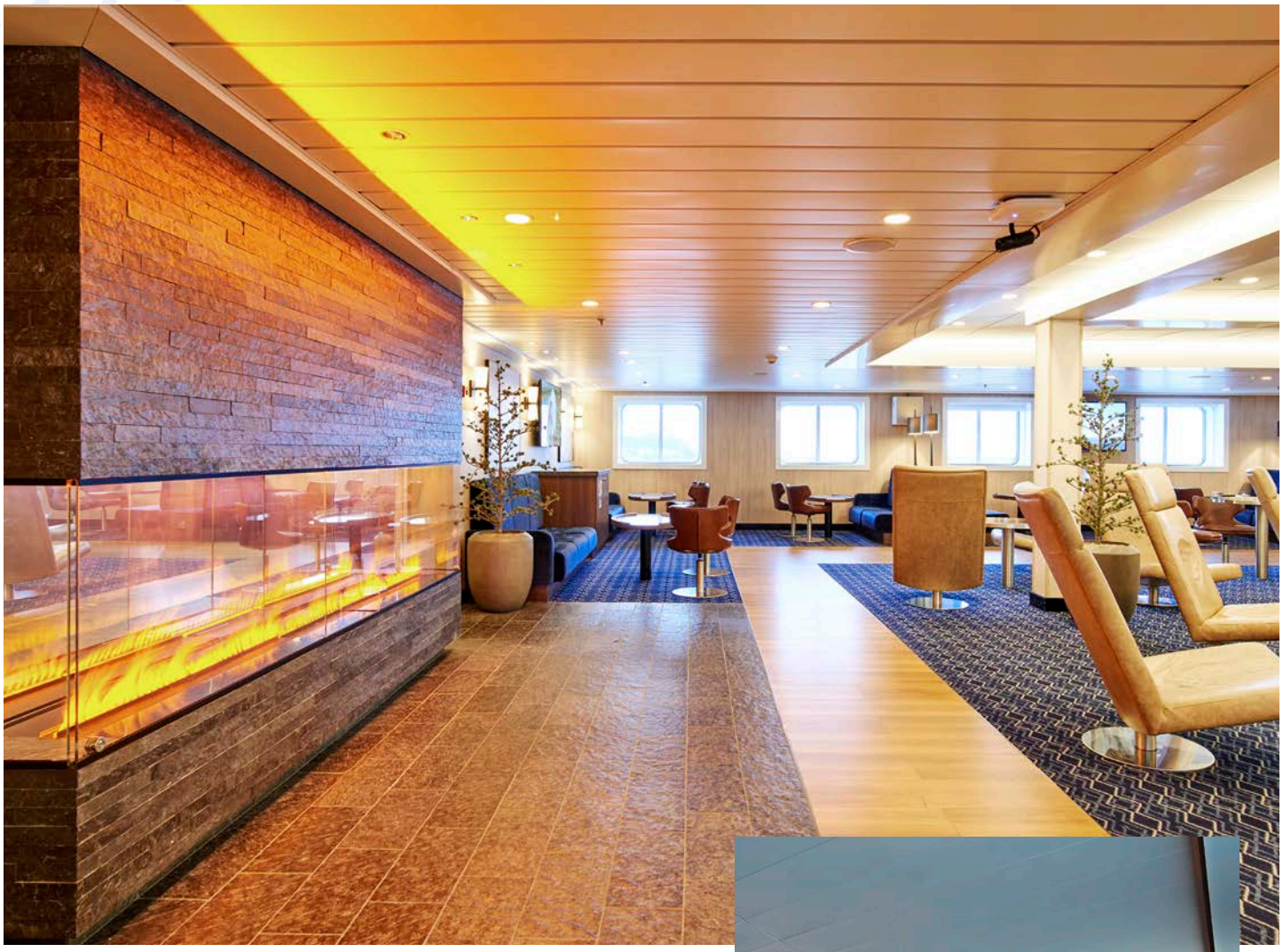
Linear design with decorative panels

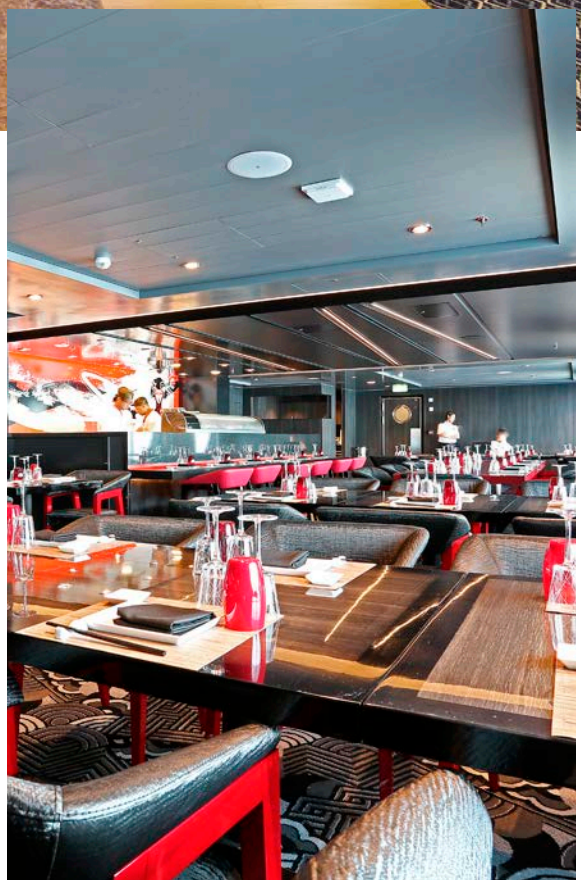
DAMPA®

Made in Denmark

DAMPA® 10/100/200/300

Aluminium panels for public areas





CREATE LINEAR EFFECTS WITH DAMPA PANELS

These panels consist of different modular units which can be installed on the same modular carrier in any combination, offering numerous possible design and functional applications.

DAMPA® 10/100 ceiling units are as standard, supplied without end closing, whereas DAMPA® 200/300 ceiling units are end closed.

Approved as C-class material by leading classification societies.

Product description

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 precut 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.

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 environment.

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

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

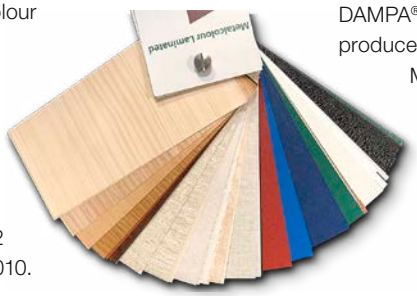
It is only natural to explore the wide range of colours, surfaces and perforation patterns available.

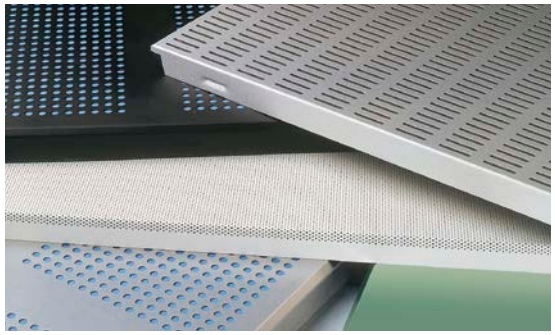
DAMPA provide multiple choices of ceiling surfaces; painted, laminated, digital print, anodized surfaces and clear-lacquered aluminium.

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 aluminium or steel. The matching colour sample will be returned to you for approval.

DAMPA's standard colour is Pure White matte No. 4747-2 similar to RAL 9010.





CLASSIFICATION

Approved as C-class material by leading classification societies and national administrations.

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

PACKAGING

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

Galvanised suspension components are supplied in standard bundles.

All materials should be stored under cover in a dry, ventilated area.

FUNCTIONALITY AND QUALITY

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

DAMPA® Marine Ceiling Systems are produced according to DAMPA's Quality Management System.

Identification and Handling on Site

Ceiling unit boxes are labelled with contents, ceiling unit length as well as deck and room number for easy identification and handling on site.

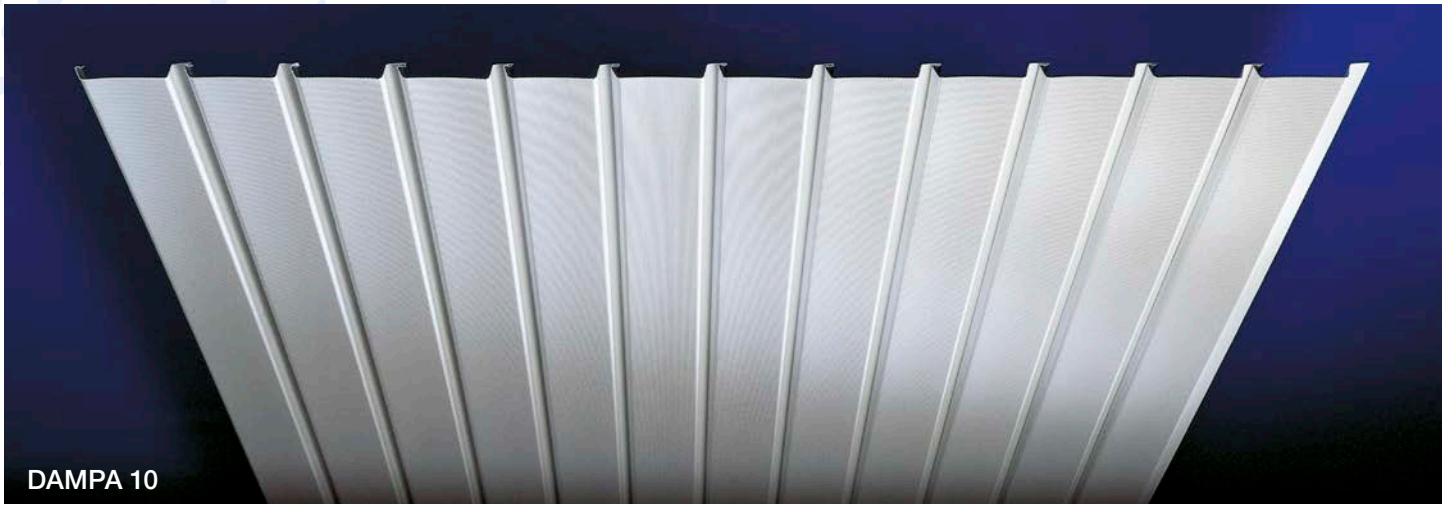
Please contact DAMPA with your specific requirements.

DAMPA® **329174 - 1** **13 / 14**

Area	Product	Product (continued)	Colour
DECK 0, FIRE ZONE 4 BB : SPT. 165-178	3777 DCC TYPE 308 0.6 MM STEEL UNPERFORATED	25 MM MINERAL WOOL PAINTED IN CATALOGUE COLOUR	RAL 9010 PURE WHITE MATT NO. 4747-2

Room number:	Prod.	Pcs.	mm	Detailed Specification	Layer
PHOTOLAB	M	1	2496	Module 275 WOF	1
		1	2382	A-420, 330 x 130 B-1142, ø198	3
		1	2382	A-1142, ø55 SPRINK	4
		1	2382	A-1200, ø55 SPRINK	5
	M	1	1150	Module 200 WOF	7
		1	1150	A-650, ø55 SPRINK	7
	M	1	925	Module 75 WOF	2
	*	2	840	Module 200 WF A-420, ø170	2, 2
	*	2	840	Module 200 WOF A-420, ø170	6, 6
		1	675	A-338, ø55 SPRINK	2
		1	675	A-338, ø55	6
3.6.03 13:06	Total:	13	17577	Total m²: 5.0	

DAMPA® 10 Panel


DAMPA 10

DAMPA® 10 panels are produced in aluminium and is specially suited for public areas. Special for DAMPA® 10 panels is the characteristic oblique edge, which enhances the closed groove between each panel. The panel joints form a 20 mm closed groove, which is repeated at all perimeters for building tolerances.
Concealed suspension system.

Type N	Type O	Type P	Type Q
0.45 mm aluminium units. Perforated with 1.0 mm holes at 2 mm centres, open area 22%. With black acoustic felt bonded to the reverse side. Weight 1.5 kg per sq.m	0.45 mm aluminium units. Unperforated. Weight 1.7 kg per sq.m.	0.45 mm aluminium units. Perforated with 1.0 mm holes at 2 mm centres, open area 22%. With acoustic felt bonded to the concealed surface using non-toxic waterproof glue. With air injection slots in the wide flange in one row of 3 × 7 mm at 10 mm centres providing a free injection area of 0.0021 sq.m/lin.m unit. With inlay of 12 mm mineral wool sealed in PE-sleeves. Weight 1.8 kg per sq.m.	0.45 mm aluminium units. Unperforated. With air injection slots in the wide flange in one row of 3 × 7 mm at 10 mm centres providing a free injection area of 0.0021 sq.m/lin.m unit. Weight 1.7 kg per sq.m.

Modules

DAMPA® 10 panels consist of 100 mm modular ceiling units - suitable for flat as well as curved configurations - offering many possible design and functional applications. The ceiling units are manufactured in any length from 600 mm up to 5000 mm as standard, shorter or up to 6000 mm on request.

They are available either in individual length to fit actual room dimensions or standard lengths according to specifications.

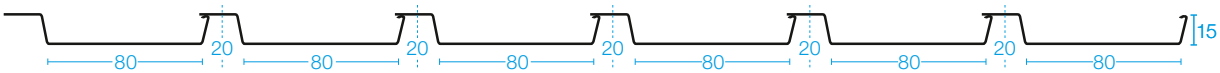
DAMPA 10 ceiling units are as standard supplied without end closing.

Optional Extra

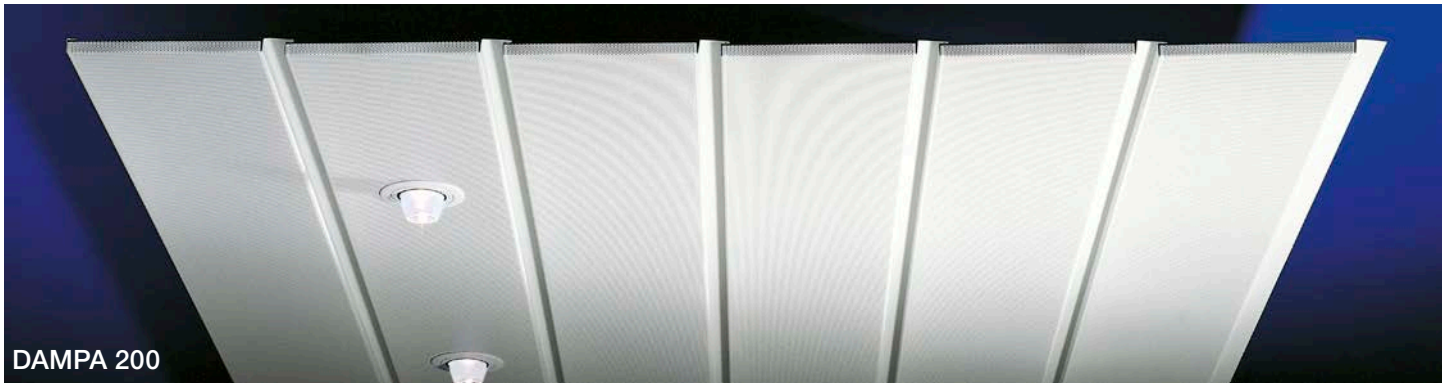
Ceiling units to be installed in combination with perforated ceiling units with air injection slots (type P) are to be supplied with mineral wool sealed in PE-sleeves.

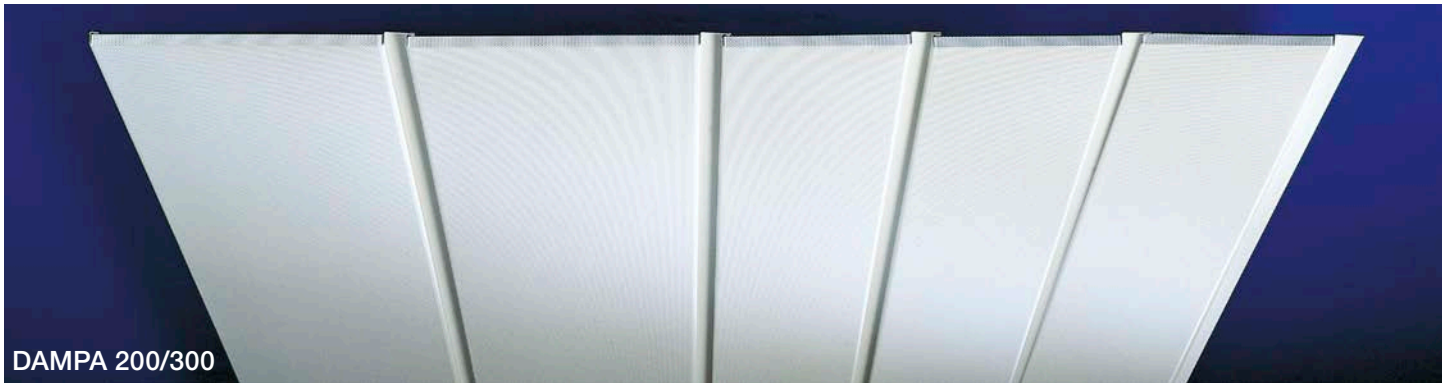
All ceiling units can as optional extra be supplied with inlay of 12 mm mineral wool, to obtain even higher sound absorption.

Weight 0.3 kg per sq.m.



DAMPA® 200/300 Panel


DAMPA 200


DAMPA 200/300

DAMPA® 100/200/300 panels are produced in aluminium and is a closed ceiling panel with 20 mm groove, or 10 mm on request. DAMPA® 100/200/300 panels require minimal hanger positions due to the well-proven rigid and easily adjustable suspension principle.

Type 203/303	Type 204/304	Type 205/305	Type 206/306
0.55/0.70 mm aluminium units. Perforated with 1.0 mm holes at 2 mmcentres, open area 22%. With acoustic felt bonded to the concealed surface using non-toxic waterproof glue. Weight 1.5/1.8 kg per sq.m.	0.55/0.70 mm aluminium units. Unperforated. Weight 1.8/2.2 kg per sq.m.	0.55/0.70 mm aluminium units. Perforated with 1.0 mm holes at 2 mm centres, open area 22%. With acoustic felt bonded to the concealed surface using non-toxic waterproof glue. With two rows of 3 × 7 mm air injection slots in the wide flange at 10 mm centres providing a free area of 0.0042 sq.m/lin.m unit plus inlay of 12 mm mineral wool sealed in PE-sleeves. Weight 1.8/2.1 kg per sq.m.	0.55/0.70 mm aluminium units. Unperforated. With two rows of 3 × 7 mm air injection slots in the wide flange at 10 mm centres providing a free injection area of 0.0042 s q.m/lin.m unit. Weight 1.8/2.2 kg per sq.m.

Modules

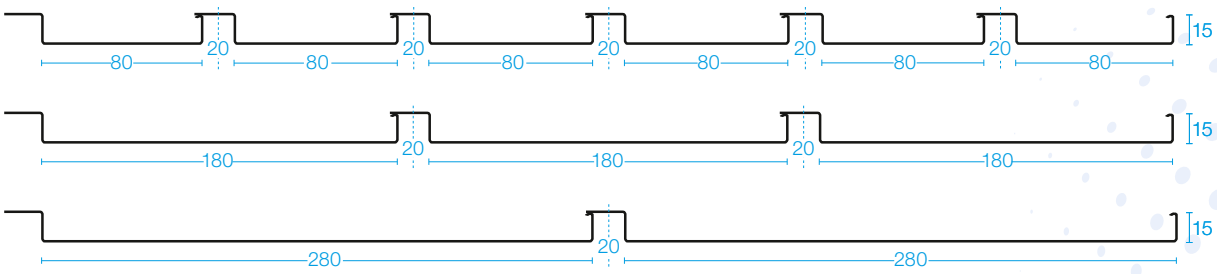
DAMPA® 200/300 consists of individual demountable linear aluminium ceiling panels available in 200 mm or 300 mm modules, and in 15 mm deep and 20 mm closed groove as standard.

Optional Extra

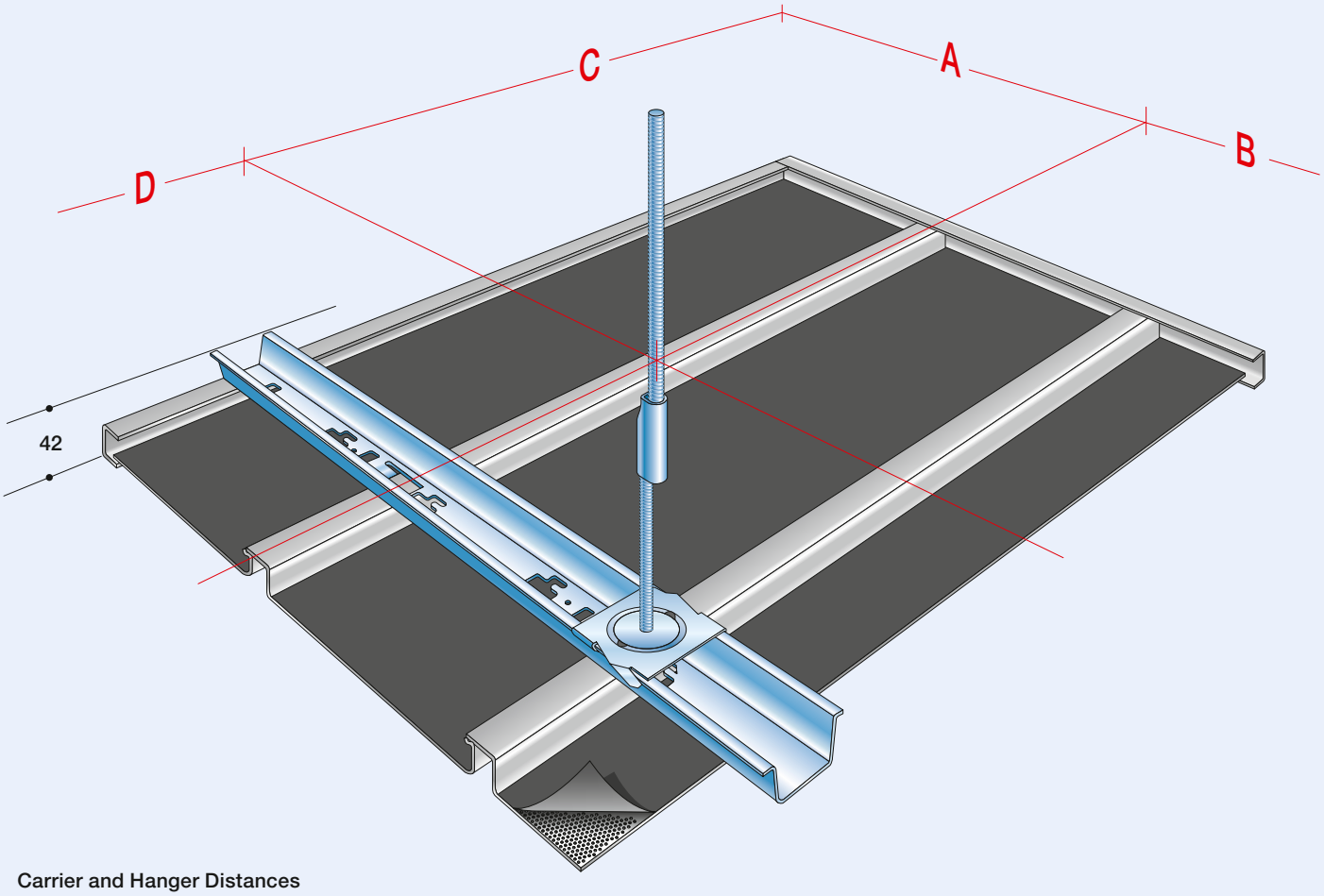
Ceiling units to be installed in combination with perforated ceiling units with air injection slots (type 205/305) are to be supplied with mineral wool sealed in PE-sleeves.

All ceiling units can as optional extra be supplied with inlay of 12mm mineral wool, to obtain even higher sound absorption.

Weight 0.3 kg per sq.m.



DAMPA 10/100/200/300 ceiling units can all be installed in any combination on the same Modular Carrier No. 40



Carrier and Hanger Distances

All carrier and hanger centres are maximum distances.

A:	Wall to first hanger	600 mm
B:	Hanger to hanger	1200 mm
C:	Wall to first Modular Carrier No. 40 in connection with:	
	Edge Trim No. 13	300 mm
	Edge Trim Type 1	300 mm
	Angle Runner No. 1.	1200 mm
D:	Modular Carrier No. 40 to next Carrier No. 40	1200 mm

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

Installation Principles

DAMPA 10/100/200/300 ceiling units can all be installed in any combination on the same Modular Carrier No. 40 with a minimum of suspension points due to the well-proven rigid and easily adjustable suspension principle.

After fixing of the perimeter trims, the modular carriers are suspended.

When using either Edge Trim No. 13 or Angle Runner No. 1 and No. 2, a slot is cut at the ends of Modular Carrier No. 40 to splice into the horizontal flange of the edge trim or of the angle runner.

Installation of Ceiling Units

DAMPA 10/200/300 ceiling units are normally installed progressively, starting at either end of the room.

Ceiling units can, however, be left out to be installed later.

Built-In Heights

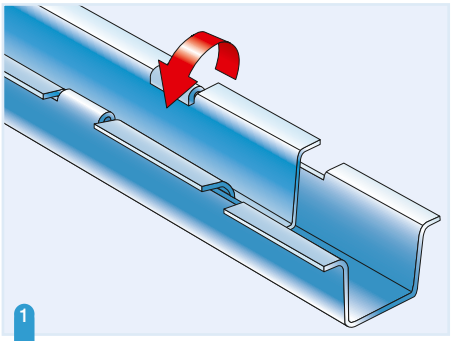
The minimum constructional height of a DAMPA® 10/100/200/300 Ceiling System, which is installed directly to possible existing gridwork, is 21 mm by use of Modular Carrier No. 44 and 41 mm by use of Modular Carrier No. 40.

Perimeter Details

Where ceiling lengths can be predetermined, use Angle Runner No. 1 transversely to ceiling units with a shadow frieze to accommodate building tolerances.

Where ceiling units have to be cut, use Edge Trim Type 2 parallel to ceiling units and Type 1 transversely.

Both types can be secured directly to the wall or if a shadow frieze is required, on to the Edge Trim No. 13 or Angle Runner No. 2.

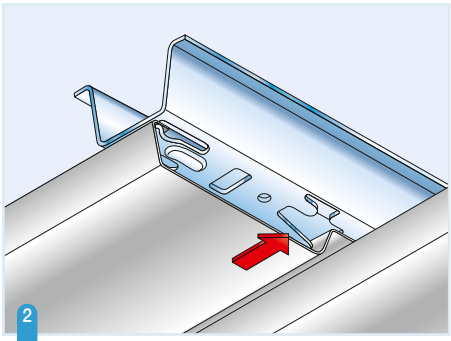


1

Splicing of Carriers

Modular Carrier No. 40 is provided with pre-punched lugs and cutouts for modular splicing.

Locate the carrier ends so that the cutouts overlap and lock together by folding the lugs inwards.

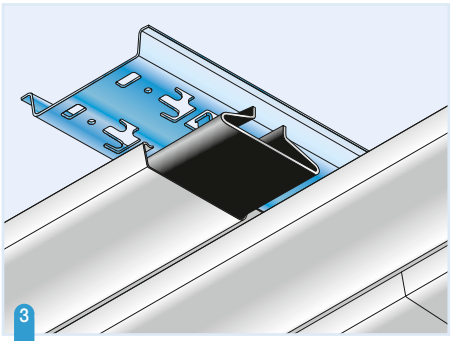


2

Securing the Units

If necessary, the ceiling units can be locked in position by pushing down the reverse clip behind the wide flange.

For DAMPA 10 use the longer reverse clips and for DAMPA 100/200/300 use the shorter of the two.

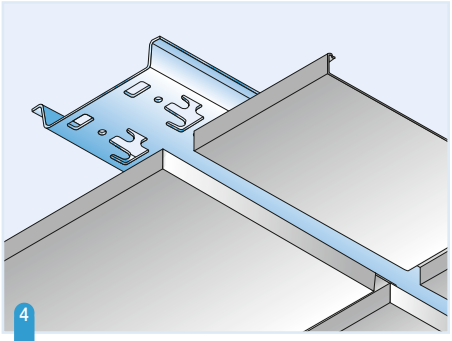


3

Closed Jointing Details

Closed joints are formed under Modular Carrier No. 43 (double carrier) rigidly suspended from the deckhead above.

Only the DAMPA 10 ceiling, using a splice inlay, can be butt jointed without end closings. Locate the splice inlay in the unit and hold in position while securing to carrier. Install second unit to complete closed joint. The splice inlay must not be pushed into the units after installation.

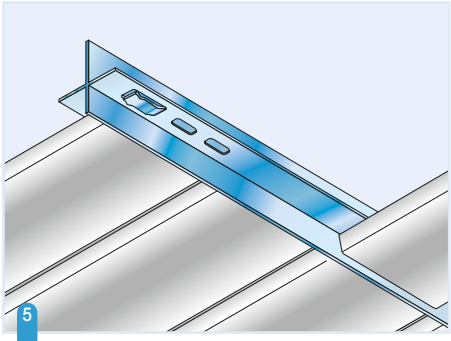


4

Featured Joint

Featured joints of DAMPA 200 and 300 ceiling units are formed under Modular Carrier No. 43 (double carrier) rigidly suspended from the deckhead above.

In this case the carriers are to be ordered in painted execution.



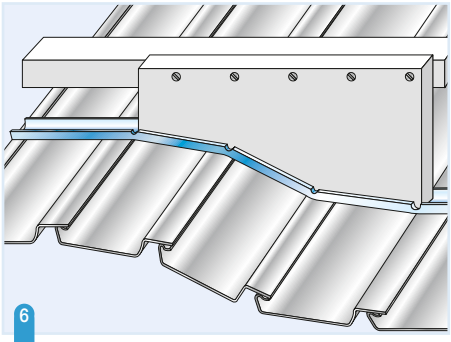
5

Jointing Detail Using Pluschannel Type 3

This jointing principle is suitable for all DAMPA 10/100/200/300 ceiling units.

The ceiling units are engaged into the clips of the Pluschannel Type 3, rigidly suspended from the deckhead above.

The distance between pluschannels and modular carriers or two pluschannels must not exceed 300 mm.



6

Curved

DAMPA 10 ceiling units can be installed as concave or convex curved surfaces down to a minimum radius of 500 mm using Modular Carrier No. 44.

The carrier is fastened at 300 mm centres to a pre-shaped hard core or metal structure spaced at 1200 mm centres maximum.

Curved surfaces of DAMPA 10/100/200/300 ceiling units to a radius of 20 m or more, corresponding to an arch of 100 mm over a span of 4 m, may be formed with standard Modular Carrier No. 40 suspended from standard hangers.

Weight

The average weight of a DAMPA® 10/100/200/300 ceiling including suspension components is as low as 2.7 - 3.4 kg per sq.m depending on type and execution.

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

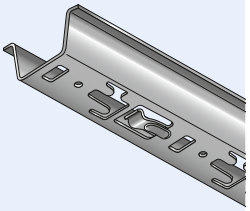
Dismantling

It is possible to remove and reinstale individual ceiling units without the use of tools.

To remove, pull the unit towards you horizontally and simultaneously push the nearest adjacent one

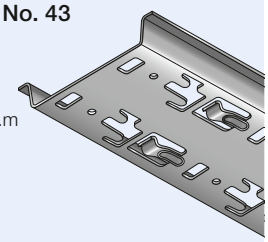
Modular Carrier No. 40

Height: 26 mm
Width: 52 mm
Length: 4000 mm
Weight: 0.43 kg/lin.m
Material: 0.6 mm galvanised steel



Modular Carrier No. 43

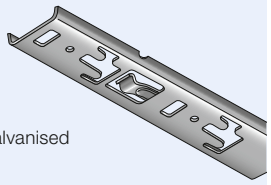
Height: 26 mm
Width: 124 mm
Length: 4000 mm
Weight : 0.83 kg/lin.m
Material: 0.6 mm galvanised steel



Modular Carrier No. 44

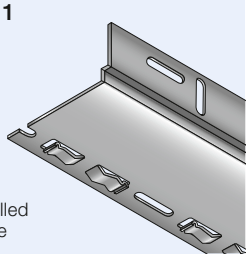
Module 100 for curved configurations

Height: 5.5 mm
Width: 52 mmm
Lenght: 4000 mm
Weight: 0.22 kg/lin
Material: 0.6 mm galvanised steel



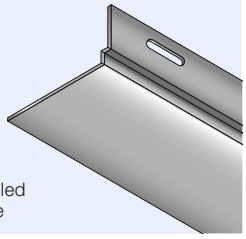
Angle Runner No. 1

Height: 38 mm
Width: 80 mm
Length: 4000 mm
Weight: 0.92 kg/lin.m
Material: 1.0 mm galvanised steel, stove-enamelled black or white



Angle Runner No. 2

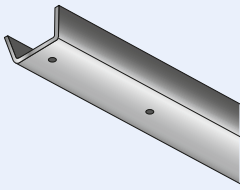
Height: 38 mm
Width: 80 mm
Length: 4000 mm
Weight: 0.92 kg/lin.m
Material: 1.0 mm galvanised steel, stove-enamelled black or white



Runner Splice No. 12

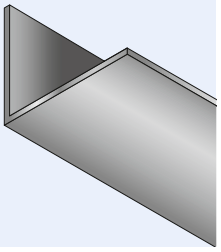
for Modular Carrier No. 43

Height: 20 mm
Width: 36 mm
Length: 321 mm
Weight: 0.17 kg/each
Material: Galvanised steel



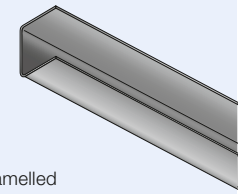
Edge Trim No. 13

Height: 40 mm
Width: 55 mm
Length: 4000 mm
Weight : 0.80 kg/lin.m
Material: 1.0 mm galvanised steel, stove-enamelled black or white



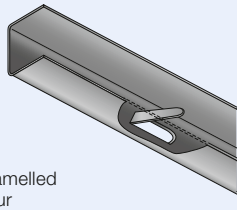
Edge Trim Type 1

Height: 16 mm
Width: 15 mm
Length: 3000 mm
Weight : 0.09 kg/lin.m
Material: 0.7 mm aluminium, chromated and stove-enamelled in ceiling colour



Edge Trim Type 2

Height: 16 mm
Width: 15 mm
Length: 3000 mm
Weight : 0.09 kg/lin.m
Material: 0.7 mm aluminium, chromated and stove-enamelled in ceiling colour

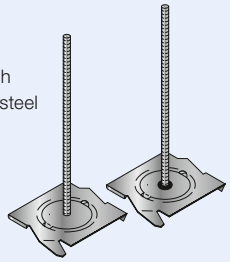


Suspension No. 1

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

Suspension No. 3

No. 1 with vibration absorbing rubber bush

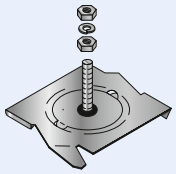


Suspension No. 4

(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

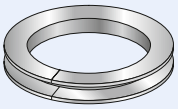
Total length: 50 mm
Weight: 0.015 kg/each
Material: Galvanised steel

Threaded Rod M8

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

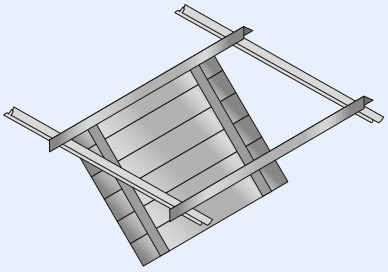
Pillar Ring

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



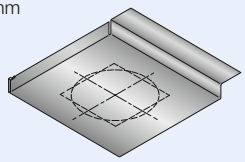
Access Hatch

Width: 600 mm
Length: 600 mm
Material: Galvanised steel



Adaptor Panel

Height: 16 mm
Size: 300 x 300 mm, 400 x 400 mm and 600 x 600 mm
Material: Galvanised steel, stove-enamelled. Colour to be stated.



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

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