

DAMPA® MARINE CEILING SYSTEMS

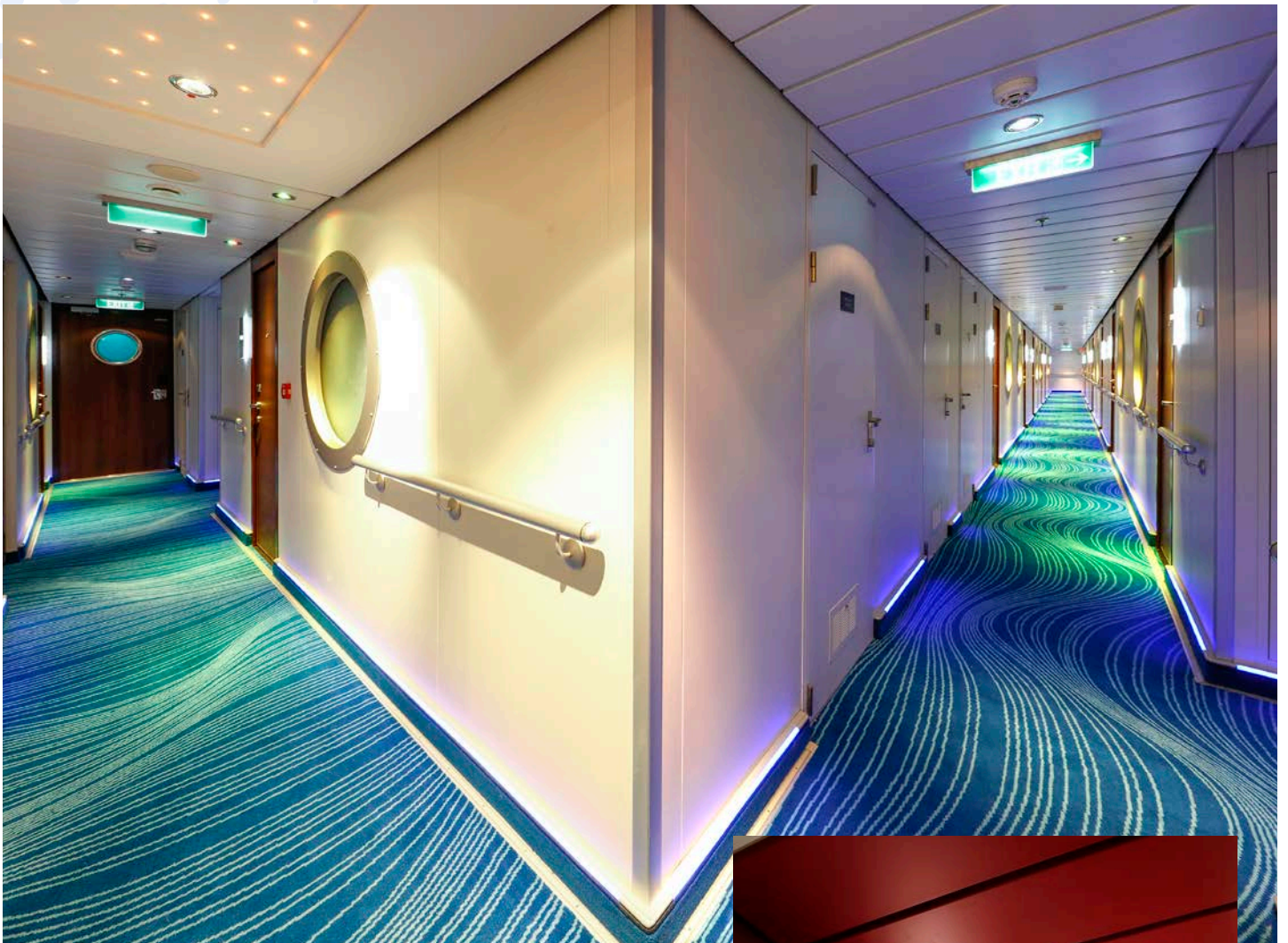
DAMPA® DCC 200/300

Fire rated ceiling system

DAMPA®

 Made in Denmark

DAMPA® DCC 200/300

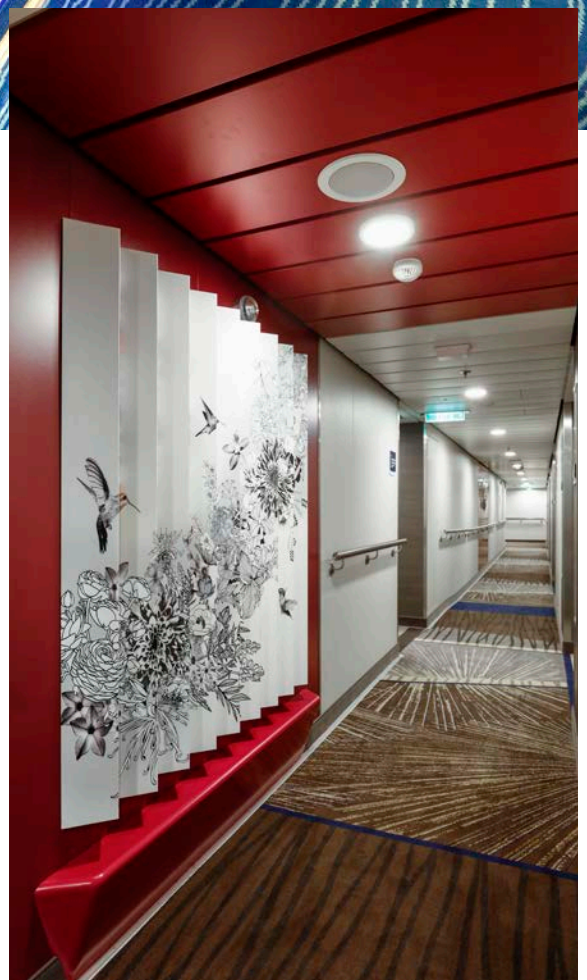


B-15 FIRE RATED CEILING SYSTEM

DAMPA® DCC 200/300 consists of linear ceiling panels in a standard modular width of 200/300 mm.

By use of only a few basic components a functional and aesthetically pleasing ceiling can be designed to suit a range of applications and areas.

The panels can be supplied perforated or plain, and in any specified length, from 600 to 5000 mm as standard.



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 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.

It is also possible to integrate other ventilation systems in the space above the ceiling.

All ceilings 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.

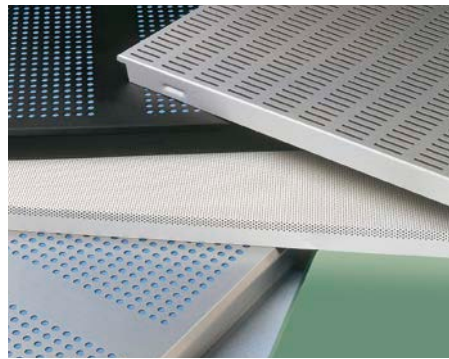
A growing number of LED solutions have been added to our product range and many more will come.

Choose our light fittings, with or without emergency light or go with the decorative light fittings, were 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 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 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

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

Send us a sample of a specific colour and we 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.

Special Colours

Almost any colour shade is available on request in the following gloss levels (at 60°), designated by code numbers 1 or 2:

xxx-1, gloss 80 +/-5

xxx-2, matt 10 +/-2

Special colour requests will be converted to the nearest NCS colour codes.

Brushed Stainless Steel

DCC 300 Type 308 is available in 0.5 mm Brushed stainless steel; quality AISI 304, grain size 220, for use in galleys, laundries, etc.



CLASSIFICATION

Approved as C-class, B-0 and B-15 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.

FIRE RATING AND APPROVALS

DAMPA® DCC 200/300 Ceiling System has been tested in accordance with the latest SOLAS and IMO requirements regarding fire, flame-spread and toxicity, and has been approved by leading authorities worldwide.

DAMPA® DCC 200/300 fulfils the B-class standards B-0 and B-15, as well as a A-class standards A-15 and A-30 as a construction component.



NON-TOXICITY

In the event of fire, no toxic fumes, hazardous to human life or to ship's electronic equipment, are produced from the stove-enamelled surface of DAMPA® DCC 200/300 Ceiling Panels.

This fact has been confirmed by an independent test institute.

CALORIFIC VALUE

The calorific value of the stove-enamelled surface (the energy contribution value in the event of fire) is less than IMJ/sq.m., far below the present SOLAS requirements.

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.

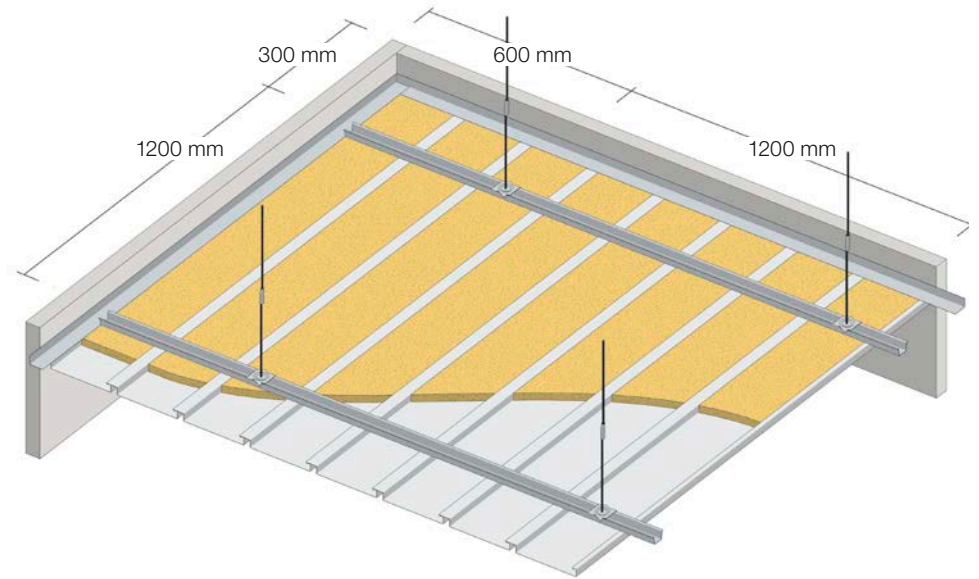
DAMPA® DCC 200/300

Installation principles

The Basic Principle

Edge Trim No. 13 or DAMPA Top Profiles along the entire perimeter.

Suspension hangers and Modular Carrier No. 16 provide the ceiling support.



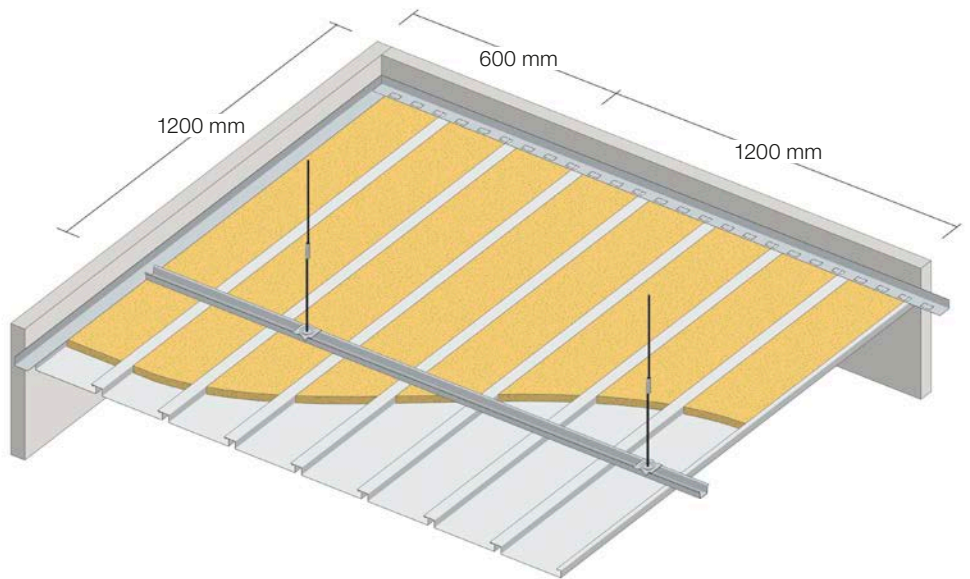
Reduction of hangers

Can be achieved by providing alternative support at panel ends.

This can be obtained by using Angle Runner No. 29 (illustrated), or alternatively Modular Carrier No. 45 secured to DAMPA Top Profiles.

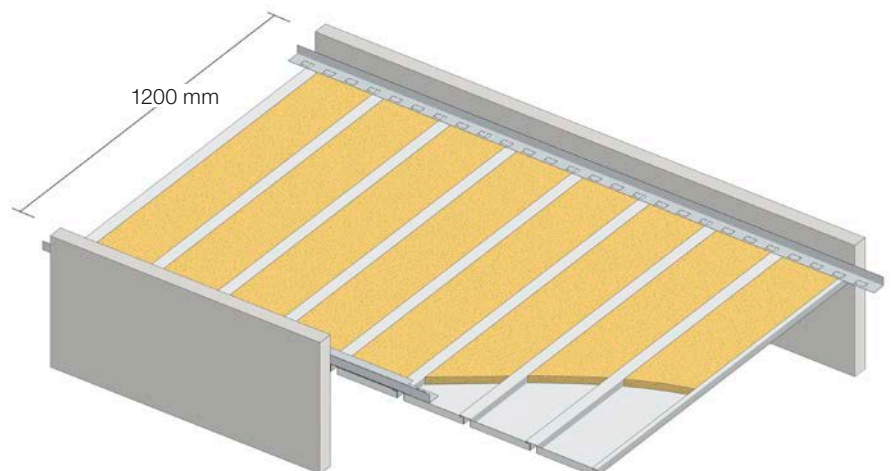
The maximum distance from wall to first carrier can hereby be increased from 300 mm to 1200 mm.

Otherwise, the Basic Principle applies.

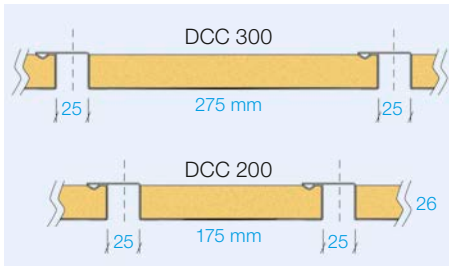


Corridor Ceilings without Hangers

Possible in areas with widths less than 1250 mm, by using Angle Runner No. 29 (illustrated), or alternatively Modular Carrier No. 45 secured to DAMPA Top Profiles.



Ceiling Panels



DCC 200/300

DAMPA® DCC 200/300 System is a Fire Rated, Suspended Marine Ceiling System consisting of linear ceiling panels in two modular widths, 300 mm, also available in width 200 mm upon request.

The same carrier type is used for both widths.

Fast and efficient installation is assured, as ceiling panels are supplied 'pre-cut' in accordance with customer drawings and specifications.

By use of only a few basic components a functional and aesthetically pleasing ceiling can be designed to suit all types of areas.

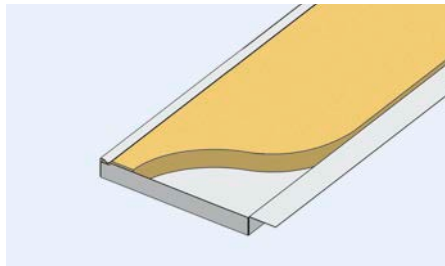
Fast and reliable delivery is a trademark of DAMPA's modern and flexible production facilities.

DAMPA® DCC 200/300 are made from stove-enamelled 0.6 mm galvanised steel respectively.

The panels can be supplied perforated or plain, and in any specified length, from 600 to 5000 mm as standard.

Lengths less than 600, and up to 6000 mm can be made to order.

All panels are 26 mm deep and are supplied with end closings and 25 mm mineral wool inlay as standard.



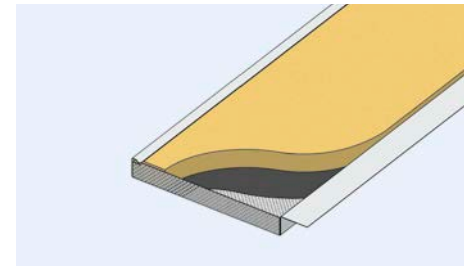
Type 308

Plain surface.
Inlay of 25 mm mineral wool.

Weight: 6.7 kg/sq.m.
Fire classification: B-0, A-15.

With additional insulation overlay

Weight: Approx. 8.9/8.4 kg/sq.m.
Fire classification: B-15, A-30



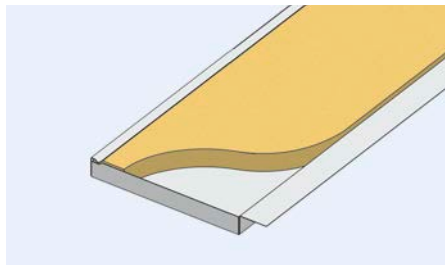
Type 315

Perforated with 1.8 mm holes at 3.5 mm centres (20.5%), and with black acoustic left bonded to the reverse side.
Inlay of 25 mm mineral wool.

Weight: 5.8 kg/sq.m.
Fire classification: B-0, A-15.

With additional insulation overlay

Weight: Approx. 8.0/7.8 kg/sq.m.
Fire classification: B-15

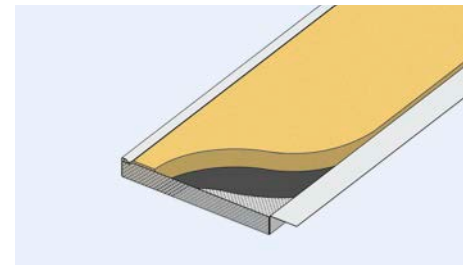


Type 310

Plain with air injection slots.
As type 308, plus 2 rows of 3 x 7 mm air injection slots at 15 mm centres (air inlet area equal to 0.0028 sq.m./lin.m ceiling panel).

Inlay of 25 mm mineral wool in PE-sleeves

Weight: 6.7 kg/sq.m.
Fire classification: C.



Type 313

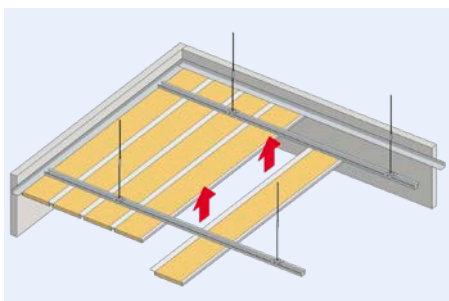
Perforated with air injection slots.
As type 315. Air injection slots as type 310.

Inlay of 25 mm mineral wool in PE-sleeves

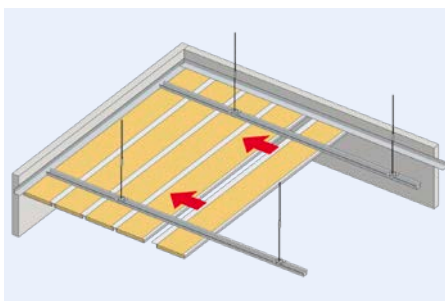
Weight: 5.7 kg/sq.m.
Fire classification: C.

Note: The suspension system, based on average consumption rate, weighs 1.5 kg/sq.m.

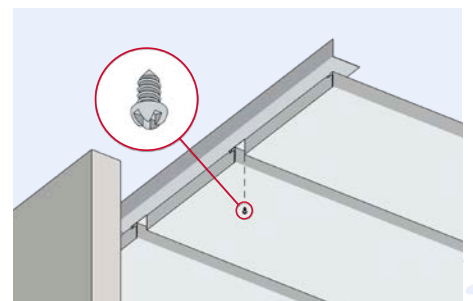
Installation of Ceiling Panels



The DAMPA® DCC 300/200 Ceiling Panels are normally installed progressively, starting at either end of the room. However, panels can be left out at any position to be installed later.



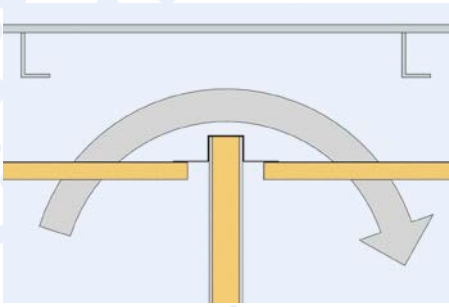
After aligning the leading and returned flanges with the clips of the modular carriers, the panels are engaged starting at one end.



Securing the Panels

Fire rated ceiling panels are installed with a self-tapping screw at each end.

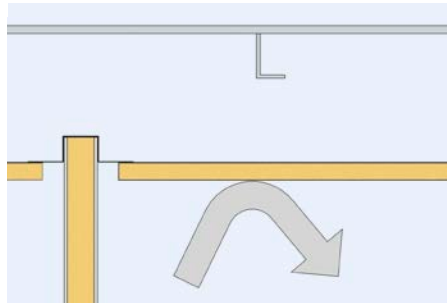
Long panels require an additional screw at every second modular carrier intersection (intervals of approx. 2400 mm).



Sound Insulation

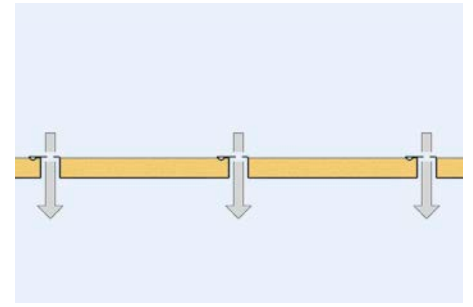
Room-to-room sound reduction of 41 dB - 44 dB depending on type of insulation inlay, and from 46 dB - 50 dB depending on type of additional insulation overlay.

These figures are the results of tests on DCC 200/300 Plain, by an independent test institute.



Supporting Principle

To reduce the general sound level and reverberation time within a room the perforated DCC Panels can be used effectively for sound absorption.



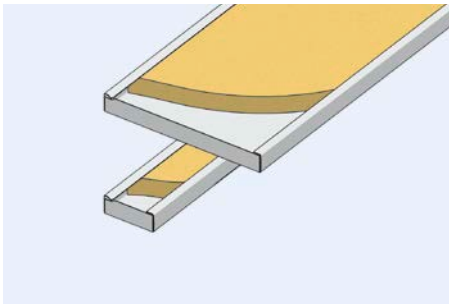
Air Injection

DCC Panels with air injection slots give an even distribution of air.

A ventilation solution which is both elegant and cost-effective in C-class areas where the ceiling void is used as an air supply chamber.

Factory Modified Panels

For projects with a large number of identical cabins, Factory Modified Adoption Panels further reduce installation time and cost



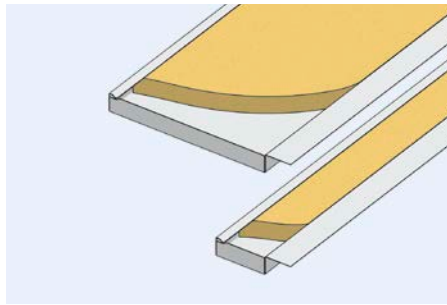
Modified Panels, Type WOF and WF

Start Panels are specially formed narrow ceiling panels without flanges.

They are identified by the code WOF.

End Panels are narrow versions of the standard shaped ceiling panel.

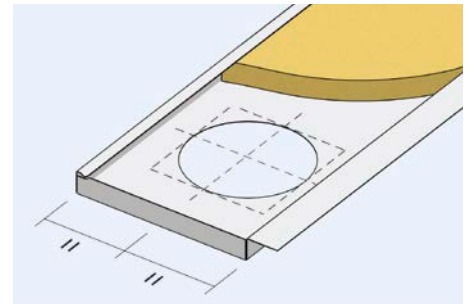
They are identified by the code WF.



Type WOF & WF Ceiling Panels are available in the following widths:

75, 100, 125, 150, 175, 200 and 225 mm.

Other widths can be made to order.

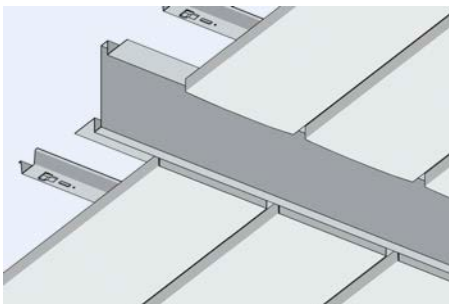


Cutouts

Panels with factory formed cutouts can be supplied to specification.

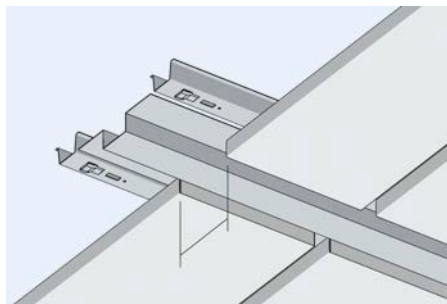
For example, circular cutouts to suit downlights, speaker grilles and smoke detectors, and rectangular cutouts to suit items such as non-modular luminaires.

Downstands and Jointing



Ceiling levels

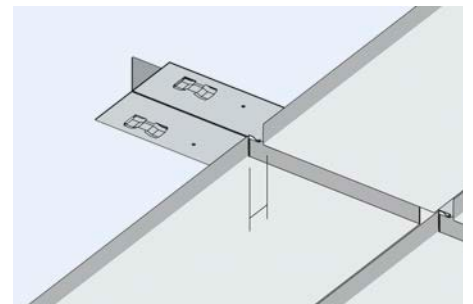
Changes in ceiling levels can be achieved in many ways depending on the height of the downstand and the desired visual appearance.



Joining Panel No. 2

Joining Panel No. 2 creates a 100 mm wide joint consisting of a 50 mm wide strip in the ceiling plane, with 25 mm recesses either side.

The distance from the ceiling panel ends to the first carrier either side of the joining panel must not exceed 36 mm. The distance between the two carriers are 172 mm.

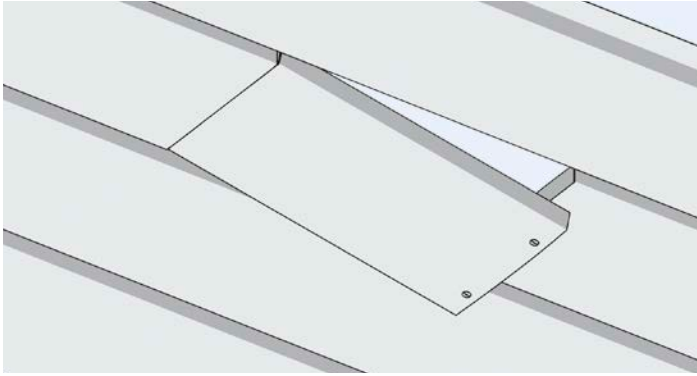


Angle Runners No. 29

This jointing method using Suspension No. 7 will also create a featured joint with a 25 mm recess between the ceiling panels.

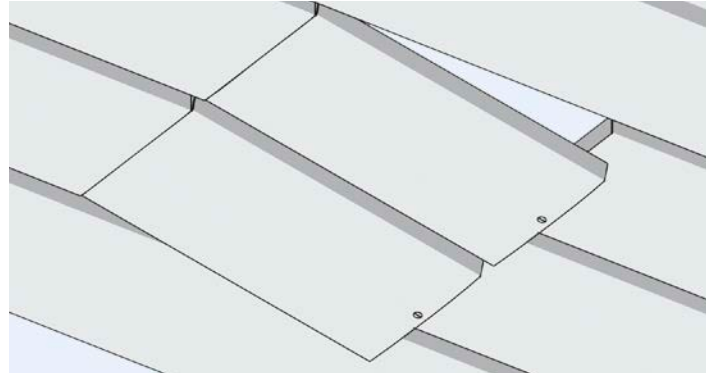
If desired, offset the back to back Angle Runners No. 29 to one side by 15 mm to prevent the centre joint being visible in the 25 mm recess.

Inspection / Access Panels



DAMPA Inspection Panels

DAMPA Inspection Panels provide small, easily accessible openings in the DCC 300 Ceiling Systems whereby a modified panel is hinged at 90° to the ceiling panel length. Inspection panels are available in lengths from 300 mm to 600 mm.



DAMPA Access Hatch

DAMPA Access Hatch provide large openings in the DCC 200/300 Ceiling Systems. They are hinged at right angles to the ceiling panel length.

DAMPA Access Hatch are available in one standard size, i.e. 600 x 600 mm. For large quantities other sizes can be made to order.

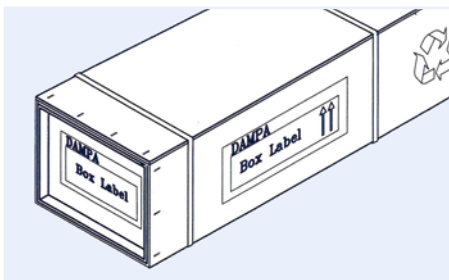
Packing and Delivery

Reliable Quality & Delivery

All components are manufactured to a high standard and within close tolerances to ensure a fast accurate installation, and the total fulfilment of the system's design criteria. Fast and reliable delivery is a trademark of DAMPA's modern and flexible production facilities.

Ceiling Panels

The DCC 300/200 Ceiling Panels are supplied in standardised, rigid non returnable cardboard boxes easy to stack for optimum handling and storage. Standard boxes, of varying lengths to suit ceiling panels, normally contain 8 pieces of DCC 300 or 11 pieces of DCC 200 panels.



Methods of packing may vary slightly between the different DAMPA production centres.

Accessories

Small suspension components such as Rod Clip No. 2, Suspension No. 1, etc. and stove-enamelled items such as edge trims are supplied in standard cardboard boxes.

Modular carriers, top and bottom profiles, threaded rods, etc. are supplied palletised in bundles.

Truck Delivery / Containerized Shipment

All materials are packed to suit both truck delivery and containerized shipment.

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

Marking & Labelling Concept

All information required for easy identification and efficient handling of ceiling panel boxes can be found on the large labels, which are glued to the box side and the box end cover.

The labels provide information such as deck and room numbers and box content.

DAMPA's new Computerised Marking and Labelling Concept can provide a variety of information to suit specific needs.

Engineering Expertise

DAMPA's expertise within Fire Rated Marine Ceilings, gained over more than 30 years, has been used to perfect the design of the DCC 200/300 Ceiling System, offering high flexibility and considerable savings in on-site costs.

With this experience DAMPA can confidently offer assistance also with ceiling layouts, designs and drawings.

References

The trust in DAMPA Products and expertise is proudly reflected in more than 3000 ship-building projects of all types, totalling more than 2 million sq.m..

Of these references more than 250 are related to the latest and more prestigious passenger vessels and cruise liners.

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®

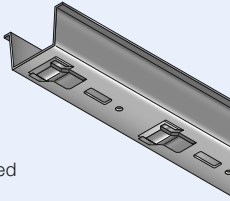
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Area	Product	Product (continued)	Colour			
DECK 0, FIRE ZONE 4 BB : SPT. 165-178	3777 DCC TYPE 308 0.6 MM STEEL UNPERFORATED	25 MM MINERAL WOOL PAINTED IN CATALOGUE COLOUR	RAL 9010 PURE WHITE MATT NO. 4747-2			
Room number:	Prod.	Pcs.	mm	Detailed Specification	Layer	
PHOTOLAB	M	1	2496	Module 275 WOF	1	
		1	2382	A-420, 530 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	
	*	2	840	Module 200 WF	2,2	
		2	840	A-420, ø170 Module 200 WOF	6,6	
		1	675	A-420, ø170	2	
		1	675	A-338, ø55 SPRINK A-338, ø55	6	
	3.6.03 13:06	Total:	13	17577	Total m²: 5.0	



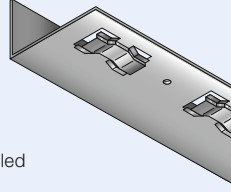
Modular Carrier No. 16

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



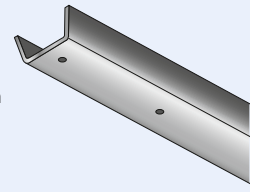
Angle Runner No. 29

Height: 42 mm
 Width: 64 mm
 Length: 4000 mm
 Weight : 1.05 kg/lin.m
 Material: 1.0 mm galvanised steel, stove-enamelled



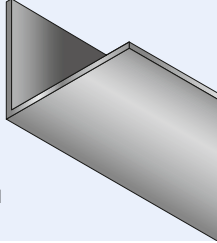
Runner Splice No. 12

for Modular Carrier No. 16
 Height: 20 mm
 Width: 36 mm
 Length: 321 mm
 Weight: 0.17 kg/each
 Material: Galvanised steel



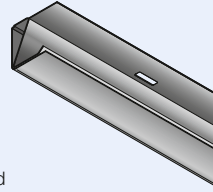
Edge Trim No. 13

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



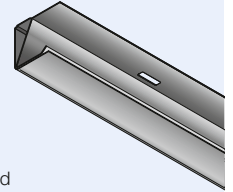
Edge Trim No. 26

Height: 27 mm
 Width: 25 mm
 Length: 4000 mm
 Weight: 0.80 kg/lin.m
 Material: 1.0 mm galvanised steel, stove-enamelled



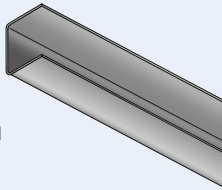
Edge Trim No. 27

Height: 27 mm
 Width: 25 mm
 Length: 4000 mm
 Weight: 0.65 kg/lin.m
 Material: 1.0 mm galvanised steel, stove-enamelled
 Colour to be stated



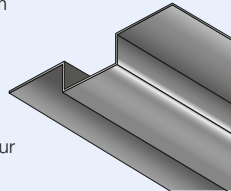
Clip Inlay No. 3

Height: 25.5 mm
 Width: 24.5 mm
 Length: 2000 mm
 Weight : 0.15 kg/lin.m
 Material: 0.3 mm galvanised steel



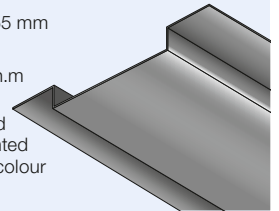
Joining Panel No. 2

Height: 29 mm
 Width: 43+50+43 mm
 Length: 3000 mm
 Weight : 1.05 kg/lin.m
 Material: 0.6 mm galvanised steel, painted in ceiling colour



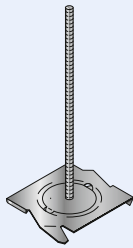
Joining Panel No. 3

Height: 29 mm
 Width: 55+150+55 mm
 Length: 3000 mm
 Weight : 1.45 kg/lin.m
 Material: 0.6 mm galvanised steel, painted in ceiling colour



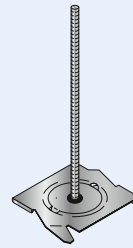
Suspension No. 1

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



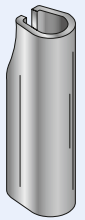
Suspension No. 3

Vibration absorbing rubber bush
 Total height: 150 mm
 Weight: 0.05 kg/each
 Material: Galvanised steel



Rod Clip No. 2

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



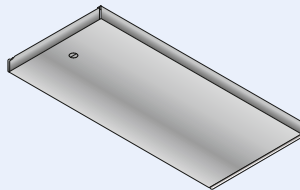
Threaded Rod M8

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



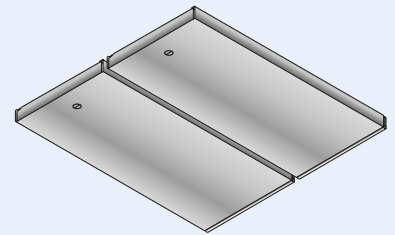
Inspection Panel

Module: 300 mm
 Length: 300 to 600 mm
 Material: Galvanised steel, stove-enamelled.
 Colour to be stated.



Access Hatch

Module: 2 x 300 mm
 Length: 600/600 mm
 Material: Galvanised steel, stove-enamelled.
 Colour to be stated



Additional insulation for B-15/A-60 class

Separately delivered in 600 x 1000 mm batts

Type:	Min. wool	Firebatts	Firebatts
Thickness:	50 mm	25 mm	35 mm
Weight/sq.m:	1.6 kg	2.7 kg	3.8 kg
Fire classification:	B-15/A-60	B-15/A-60	B-30

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



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