



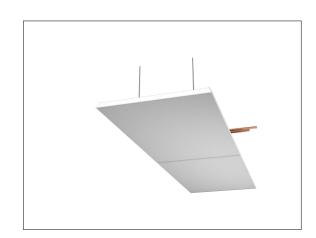
# Plafotherm® DS 320

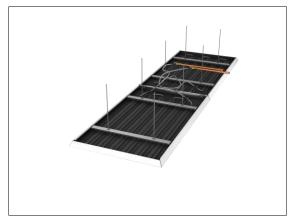
# Heated and Chilled Canopy Ceiling in filigree optics

#### **Product description**

The metal canopy ceiling in open construction provides for pleasant climate and good acoustics in your rooms. The large-sized ceiling panels can be designed with vertical or angled edge. They can individually be arranged in your rooms. The free space between the canopies offers you the possibility to independently fasten installations. The ceiling panels can quickly be installed. No tools are required to remove the ceiling panels. It is possible to combine thermally active and passive areas of this cost-effective system.

- heating/cooling by means of radiation and convection creates a pleasant room climate
- flexibility thanks to the combination of thermally active and passive areas
- high heating/cooling capacity and sound absorption due to the open construction
- design freedom thanks to an individual arrangement of canopies and an exposed concrete
- large-sized ceiling panels optionally with 90° or 65°-turn-up
- easy maintenance option due to ceiling panels that can be individually operated without tools
- independent installation of luminaires and fixtures possible between canopy ceilings
- · easy and quick installation
- cost-effective canopy ceiling as economic solution
- · hygienic and easy to clean

















# **Project solutions**

1|5

This product data sheet refers to the standard version of the product mentioned above. We would be happy to work with you to find the right solution for your project. Adapted to your building project, you will receive a perfectly matched system. Project-specific constructions and adaptations can be found in the offer documents.





## **Ceiling elements**

Plafotherm® DS 320	type 1		
90°-turn-up as indiv	idual/border or central panel		
Length (L)	500 - 3,500 mm		
Width (B)	400 - 1,250 mm		
Height (H)	50 mm		SB SB
Canopy length (SL)	depending on requirements		
Canopy width (SB)	400 - 1,250 mm		
Plafotherm® DS 320	type 2		
65°-turn-up as indiv	idual panel	_	
Length (L)	500 - 3,500 mm		
Width (B)	400 - 1,250 mm		
Height (H)	50 mm		SB ■
Canopy width (SB)	400 - 1,250 mm		
Plafotherm® DS 320	type 3		
65°-turn-up as borde	er panel for extension on short		
Length (L)	500 - 3,500 mm		
Width (B)	400 - 1,250 mm		
Height (H)	50 mm		SL
Canopy length (SL)	depending on requirements		
Canopy width (SB)	400 - 1,250 mm		
Plafotherm® DS 320	type 4		
65°-turn-up as centr side	al panel for extension on short		n n
Length (L)	500 - 3,500 mm		
Width (B)	400 - 1,250 mm		
Height (H)	50 mm		SL SL
Canopy length (SL)	depending on requirements		
Canopy width (SB)	400 - 1,250 mm		

2|5



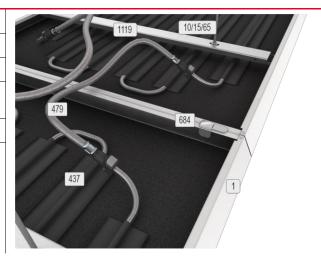


#### **Technical data**

Material ceiling panel	galvanised sheet steel
Weight	approx. 12 - 15 kg/m² (without fixtures/installations)
Serviceability	removable without tools

## **Component list**

1	metal ceiling panel
10/15/65	threaded rod suspension
437	heating and cooling coil
479	PlafoTube® connecting/connection hose
684	connection clamp
1119	hook-on profile 16/320



#### **Acoustics**

Room acoustics			
Equivalent sound absorption area per canopy	DIN EN ISO 354		
Rated sound absorption coefficient	DIN EN ISO 11654	α <sub>w</sub>	0.55 - 1.00
Sound absorption class	DIN EN ISO 11654		D - A
Noise Reduction Coefficient	ASTM C 423	NRC	0.55 - 1.00
Notice	The evaluation of α <sub>w</sub> and and therefore is only an		carried out in dependence

# Fire protection

Exposure class

Building material class		
Building material class	DIN EN 13501-1	A2 - s1, d0
Building material class	ASTM E 84	Class A

**DIN EN 13964** 





#### **HVAC**

HVAC		
Heating and cooling		
Heating and cooling technology	Plafotherm® V2A	Plafotherm <sup>®</sup> Cu
Nominal cooling capacity (10 K) according to EN 14240 in relation to the active area	135 W/m²	139 W/m²
Nominal heating capacity (15 K) according to EN 14037:2003 in relation to the active area	163 W/m²	167 W/m²
Combinable with		
Heated/Chilled ceilings	Plafotherm® DS Tabs 12	<u>25</u>
Sustainability		
Product self-declaration	Self-declaration accordi	ng to ISO 14021
Environmental product declaration	EPD according to EN 15804 / ISO 14025	
Circular Economy	Cradle to Cradle Certified® Silber	
French VOC Regulation	Emission class A+	
Surfaces		
Powder coatings	COLOURline – Powder coating MOODline – Powder coating, deep matt ARTline – Decorative powder coating GRAPHICline – Digital print	
Perforations	BASICline – Standard perforations REGULARline – Further perforations	
Statics		
Seismic safety	qualification according to AC 156/Eurocode/SIA 261	
Certification		
CE marking	The ceiling system is a harmonised construction product acc. to regulation (EU) No. 305/2011 (Construction Products Regulation) and EN 13964: Suspended ceilings – Requirements and test methods.	
TAIM e. V.	The ceiling system fulfils the requirements of the "Technical Manual Metal Ceilings" (TMMC) of TAIM e. V. (Association of Industrial Metal Ceiling Manufacturers).	

4|5





## **Additional equipment**

Acoustic inlays	Acustica – Acoustic fabric inlay Insula – Mineral wool inlay in acoustic foil
Ventilation components	AirBox S – Supply air elements AirBox E – Exhaust air elements
Hydraulic components	PlafoTube® MQC – Connecting/Connection hose with MultiQuickConnect Fittings – Distribution system
Luminaires	Lindner luminaires and luminaires from other manufacturers possible  IS 17 – Integrated Luminaire for general areas  IS 22 – Integrated Luminaire for monitor work stations  QZI – Integrated luminaire with cell louvres

## **Applications**









5|5