

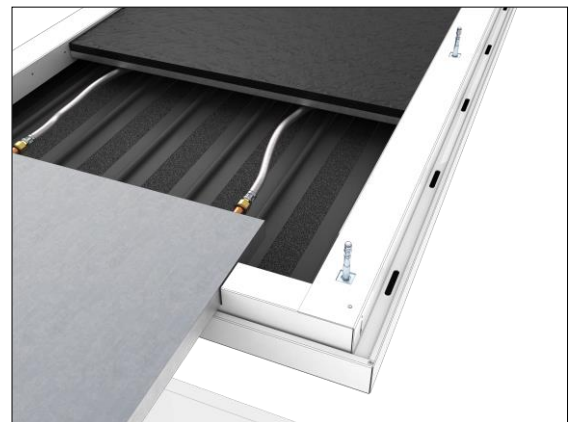
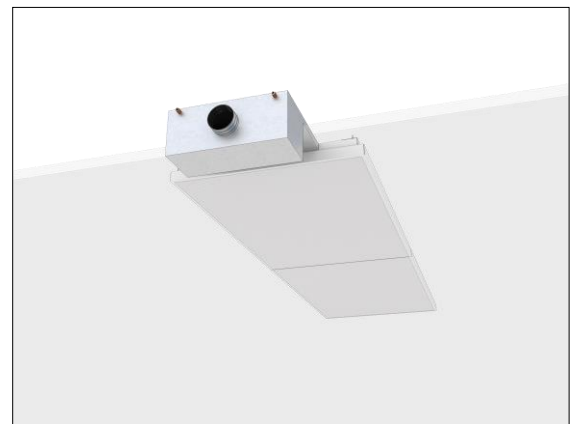


Plafotherm® DS TAS

Hybrid Heated and Chilled Canopy Ceiling


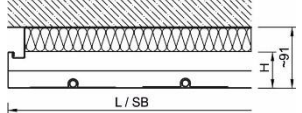

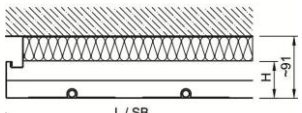

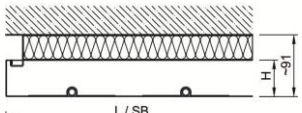
This hybrid heated/chilled canopy ceiling provides ideal climatic conditions in your rooms by means of radiation and convection. Plafotherm® DS TAS is extremely versatile thanks to the combination of cooling, heating and venting. Comfort according to DIN, ISO and SIA is guaranteed. Another advantage: As acoustically effective solution, it improves the room acoustics in buildings with subsequent concrete core working. The system is particularly efficient due to the use of free cooling at night and the low CO₂ emissions - the economic operation of refrigeration results in an improvement of the COP value (Coefficient of Performance).

- heating/cooling by means of radiation and convection creates a pleasant room climate
- acoustically effective solution to improve room acoustics for buildings with subsequent concrete core working
- comfort tested to DIN, ISO und SIA thanks to the combination of cooling, heating and venting
- low CO₂ emissions due to reduced energy consumption
- high level of energy efficiency by using the free cooling in night operation
- particularly economical due to improvement of the COP value
- hygienic and easy to clean





Ceiling elements

Plafotherm® DS TAS type 1			
border panel			
Length (L)	700 - 3,000 mm		
Width (B)	700 - 1,250 mm		
Height (H)	50 mm		
Canopy length (SL)	700 - 9,000 mm		
Canopy width (SB)	700 - 1,250 mm		
Plafotherm® DS TAS type 2			
central panel			
Length (L)	700 - 3,000 mm		
Width (B)	700 - 1,250 mm		
Height (H)	50 mm		
Canopy length (SL)	700 - 9,000 mm		
Canopy width (SB)	700 - 1,250 mm		
Plafotherm® DS TAS type 3			
individual panel			
Length (L)	700 - 3,000 mm		
Width (B)	700 - 1,250 mm		
Height (H)	50 mm		
Canopy length (SL)	700 - 9,000 mm		
Canopy width (SB)	700 - 1,250 mm		

Technical data

Material	galvanised sheet steel (ceiling element)
Weight	approx. 15 - 17 kg/m ² (without fixtures/installations)
Serviceability	Swing-Down option



Component list

1	metal ceiling panel	
554	frame	

Acoustics

Room acoustics

Equivalent sound absorption area per canopy	DIN EN ISO 354		
Rated sound absorption coefficient	DIN EN ISO 11654	α_w	0.65 (M) - 0.80
Sound absorption class	DIN EN ISO 11654		C - B
Noise Reduction Coefficient	ASTM C 423	NRC	0.75 - 0.90
Notice	The evaluation of α_w and NRC can only be carried out in dependence and therefore is only an orientation value.		

Fire protection

Building material class

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

Durability

Exposure class	DIN EN 13964	A
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HVAC

Heating and cooling

total hybrid cooling capacity (8 K) at 50 % room occupation, 26 °C room air temperature, supply air volume 7.5 m ³ /hm ² floor area and 18 °C supply air temperature	152 W/m ²
working of the concrete core depending on execution, control strategy and building dynamic	up to 40 W/m ²



Sustainability

Product self-declaration	Self-declaration according to ISO 14021 possible
Environmental product declaration	EPD according to EN 15804 / ISO 14025
Circular Economy	Cradle to Cradle Certified® Silver
French VOC Regulation	Emission class A+

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).

Surfaces

Powder coatings	<u>COLOURline – Powder coating</u> <u>MOODline – Powder coating, deep matt</u> <u>ARTline – Decorative powder coating</u> <u>GRAPHICline – Digital print</u>
Perforations	<u>BASICline – Standard perforations</u> <u>REGULARline – Further perforations</u>

Additional equipment

Acoustic inlays	<u>Acustica – Acoustic fabric inlay</u> <u>Insula – Mineral wool inlay in acoustic foil</u>
Hydraulic components	<u>Plafotube® – Connecting/Connection hose</u> <u>Fittings – Distribution system</u>

Project solutions

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.