

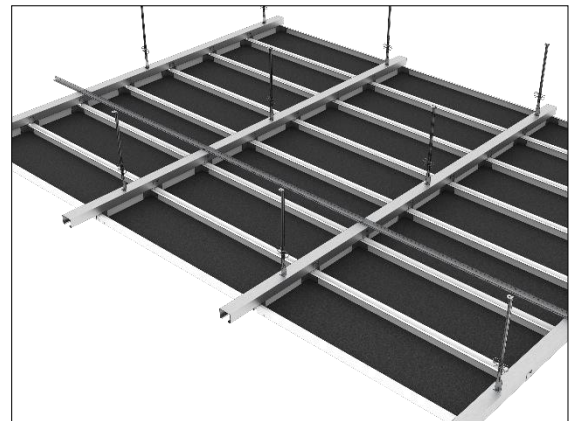
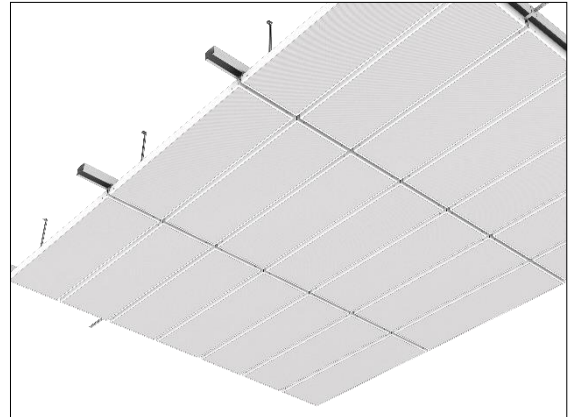


LMD-E 213 BWS

Hook-On ceiling, ball-impact resistant

This Hook-On ceiling is successfully tested for ball-impact resistance according to DIN EN 13964 annex D class 1A - 3A and is a safe choice for sports halls, swimming pools or similar. The system is visually characterised by accentuated joints in both directions along the ceiling panels and a concealed substructure. Different ceiling panels are available that can be removed or swung down and slid.

- hook-on ceiling with tested ball-impact resistance
- homogeneous ceiling surface due to concealed substructure
- ceiling layout with accentuated joints in both directions possible
- maintenance option due to ceiling panels that can be individually operated, swung down and slid
- perforations with max. 3 mm diameter and max. 30 % open area
- hygienic and easy to clean



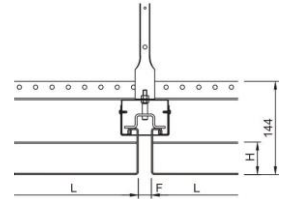


Ceiling elements

LMD-E 213 BWS Type 1

Hook-On, aluminium

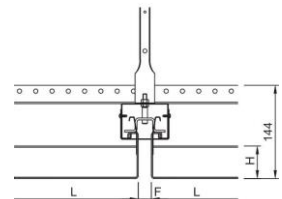
Length (L)	500 - 1,230 mm
Width (B)	200 - 1,230 mm
Height (H)	50 mm
Joint width (F)	20, 25, 30 mm



LMD-E 213 BWS Type 2

Hook-On, Swing-Down and slide option, aluminium

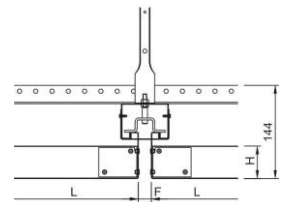
Length (L)	500 - 1,230 mm
Width (B)	200 - 1,230 mm
Height (H)	50 mm
Joint width (F)	20, 25, 30 mm



LMD-E 213 BWS Type 3

Hook-On, aluminium/steel

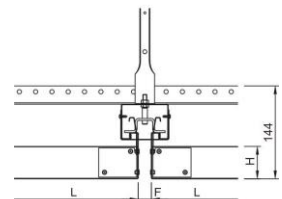
Length (L)	500 - 2,500 mm
Width (B)	200 - 500 mm
Height (H)	50 mm
Joint width (F)	20, 25, 30 mm



LMD-E 213 BWS Type 4

Hook-On, Swing-Down and slide option, aluminium/steel

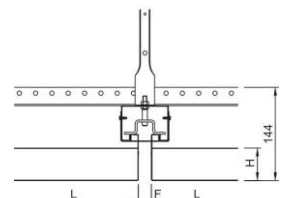
Length (L)	500 - 2,500 mm
Width (B)	200 - 500 mm
Height (H)	50 mm
Joint width (F)	20, 25, 30 mm



LMD-E 213 BWS Type 5

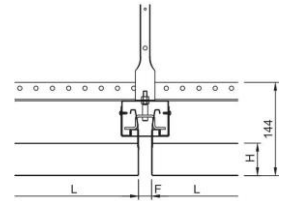
Hook-On, steel

Length (L)	500 - 3,000 mm
Width (B)	200 - 800 mm
Height (H)	50 mm
Joint width (F)	20, 25, 30 mm





LMD-E 213 BWS Type 6	
Hook-On, Swing-Down and slide option, steel	
Length (L)	500 - 3,000 mm
Width (B)	200 - 800 mm
Height (H)	50 mm
Joint width (F)	20, 25, 30 mm

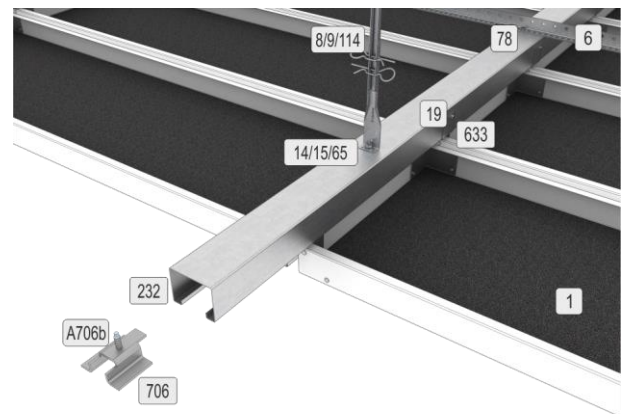


Technical data

Material	galvanised sheet steel
Weight	approx. 10 - 12 kg/m ² (without fixtures/installations)
Serviceability	swing-down and slide option or removable
Wall connection options	U-profile

Component list

1	ceiling panel
6	L-profile 28
8/9/114	vernier suspension
14/15/65	screwing
19	self-drilling screw fillister head
78	self-drilling screw hexagon head with flange
232	double hook-on profile 54/BWS
633	spacer for double hook-on profile 54/BWS
706	hold-down clip for double hook-on profile 54/BWS
A706b	set screw with hexagon socket



Acoustics

Room acoustics

Rated sound absorption coefficient	DIN EN ISO 11654	α_w	0.15 - 1.00
Sound absorber class	DIN EN ISO 11654		E - A
Noise Reduction Coefficient	ASTM C 423	NRC	0.15 - 0.95



Fire protection

Building material class

Building material class (COLOURline A1)	DIN EN 13501-1	A1
Building material class (COLOURline)	DIN EN 13501-1	A2 - s1, d0
Building material class	ASTM E 84	Class A

Fire stability

Fire stability	EN 13501-2	30 minutes
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Durability

Exposure class	DIN EN 13964	A
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Sustainability

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

Statics

Ball-Impact Resistance		
Ball-Impact Resistance LMD-E 213 BWS Type 1, aluminium	DIN EN 13964	class 1A
Ball-Impact Resistance LMD-E 213 BWS Type 2, aluminium	DIN EN 13964	class 1A
Ball-Impact Resistance LMD-E 213 BWS Type 3, aluminium	DIN EN 13964	class 2A
Ball-Impact Resistance LMD-E 213 BWS Type 3, steel	DIN EN 13964	class 1A
Ball-Impact Resistance LMD-E 213 BWS Type 4, aluminium	DIN EN 13964	class 2A
Ball-Impact Resistance LMD-E 213 BWS Type 4, steel	DIN EN 13964	class 1A
Ball-Impact Resistance LMD-E 213 BWS Type 5, steel	DIN EN 13964	class 3A
Ball-Impact Resistance LMD-E 213 BWS Type 6, steel	DIN EN 13964	class 3A
Seismic Safety		
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).

Surfaces

Powder coatings	<u>COLOURline - Powder coating</u> <u>COLOURline A1 - Powder coating non-combustible</u> <u>MOODline - Powder coating, deep matt</u> <u>ARTline - Decorative powder coating</u> <u>GRAPHICline - Digital print</u>
Perforation	<u>BASICline - Standard perforations</u> <u>REGULARline - Further perforations</u> <u>SPREADline - Scattered perforations</u>
Functional coatings	<u>Meteo - Corrosion protection coating</u>

Additional equipment

Acoustic inlays	<u>Acustica - Acoustic fabric inlay</u> <u>Insula - Mineral wool inlay in acoustic foil</u> <u>Calma - Glass yarn inlay in textile cover</u>
Luminaires	<u>SHL 298 - Recessed/Surface-Mounted Luminaire for sports halls</u> <u>SYS 298 - Recessed/Surface-Mounted Luminaire for sports halls</u>

Application examples



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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.

