## Hipharma HPL/CLBOX False Ceiling, T GRID type WALK ON

These types of WALK ON false ceilings consist of a T-grid bearing structure in aluminum profile which supports ceiling tiles, lighting and filtering equipment.

Ceiling tiles may be composed of two external skins made of high pressure laminate (HPL) or powder coated steel (ST) and insulation inside.

The result is a perfectly smooth, flat and very easy to clean false ceiling. T-grid panels are supported by tie rods with turnbuckles fixed to a support of 1200mm ( ${\simeq}47~1/4$ ") intervals.

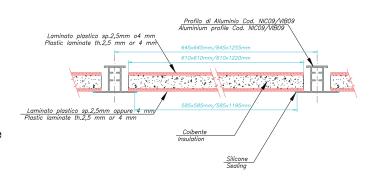
These ceilings are airtight, flexible, easy to assemble with sound proof and moisture-resistant.

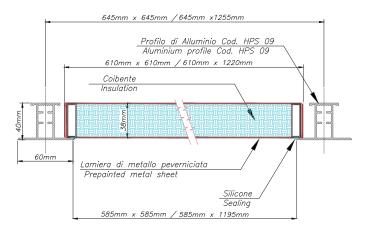
Designed according to the lay-out, these ceilings can be installed before or after the walls.

These false ceilings are designed to be walked on and support a singleload of 160kg. ( $\simeq$ 352 Lb) of meter ceiling framework, even if located in the most unfavorable static position.

All ceiling tiles are available with the following dimensions:

- 600x600mm (≃23 5/8" x 23 5/8")
- 600x1200mm.. (≃23 5/8" x 47 1/4")





			INSULATION MATERIALS AND THEIR TECHNICAL FEATURES					
FALSE CEILING CODES	THICKNESS	FRAMEWORK		TYRENE DP)	POLYURETHANE ROCKWO (PUR OR PIR) (RW)			
			Density:	35Kg./m³	Density:	35Kg./m³	Density:	130Kg./m³
							Vertical o	riented fibers
CTS45-RTT-09-PL/HDP/PL-WK	45mm/≃1 3/4"							
CTS45-RTT-09-PL/RW/PL-WK	45mm/≃1 3/4"	•						•
CTS40-RTT-09-ST/CLB0X/PIR-PUR/ST-WK	40mm/≃1 1/2"	•			(			
CTS40-RTT-09-ST/CLB0X/RW/ST-WK	40mm/≃1 1/2"	•						•
CTS25-RTT-09-PL/HPD/PL-WK	25mm/ ≃1"							

FALSE CEILING CODE	STANDARDS	CLASS
CTS45-RTT-09-PL/RW/PL-WK	ASTM E84-12a	Α
	UNI EN ISO 11925-2:2005	B-s2, d0
	UNI EN ISO 13501-1:2009	
	UNI EN ISO 13823:2010	
CTS45-RTT-09-PL/HDP/PL-WK	ASTM E84-12a	В
CTS25-RTT-09-PL/HPD/PL-WK		
CTS40-RTT-09-ST/CLB0X/RW/ST-WK	UNI EN 13501-1:2009	A2-s1,d0
CTS40-RTT-09-ST/CLBOX/PIR-PUR/ST-WK	UNI EN 13501-1:2009	B-s2,d0

THERMAL CONDUCTIVITY	STANDARDS	UNIT	VALUE
HPL plastic laminate	DIN 52612	W/m.°K	0,25
Polystyrene (HDP)	EN 12667	W/mK	0,033
Polyurethane (PUR or PIR)	ASTM C 518	Mw/m°K	22,8
Honeycomb (HC)	N.A.		
Rockwool (RW)	EN 12667	W/mK	0,040

POWDER COATED GALVANIZED ST	STANDARDS	
Galvanized Coating 3.55 ± 0.3 lb./1		
Finishing	Metallic coat MB	
Specular gloss	30 ± 5 gloss	ECCA T2
Pencil hardness	НВ-Н	ECCA T4
Resistance to salt spray fog	≥ 400 h	ECCA T7
Water immersion resistance	≥ 1000 h	ECCA T9
Resistance to atmospheric agents	8 Cielab	ASTM D 659
Resistance to cracking on bending	after bending at ≥1,5 T and ≥2,5 T the paint does not chip	ECCA T7







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PROPERTY	TEST METHOD (EN 438:2005)	PROPERTY or ATTRIBUTE	UNIT	VALUES		
Resistance to surface wear	EN 438-2.10	Wear resistance	revs	IP ≥ 150		
				A ≥ 350		
Resistance to immersion in boiling water	EN 438-2.12	Mass increase	%	CGS	CGF	
				2 ≤ t <5 ≤5	≤ 7	
				5 ≤ t ≤2	≤ 3	
		Thickness increase	%	2 ≤ t <5 ≤6	≤ 9	
				5 ≤ t ≤2	≤ 6	
		Appearance gloss finish	rating	≥ 3		
		Appearance other finishes		≥ 4		
Resistance to dry heat (180°C)	EN 438-2.16	Appearance gloss finish	rating	≥ 3		
		Appearance other finishes		≥	4	
Resistance to wet heat (100°C)	EN 12721	Appearance gloss finish	rating	≥ 3		
		Appearance other finishes		≥	4	
Stability at elevated temperature	EN 438-2.17	Cumulative dimensional	% long.	2 ≤ t <5 ≤		
		change 	% transv.	≤ 0,80		
			% long.	5 ≤ t ≤ 0,3		
			% transv.	≤ 0,60		
Resistance to impact by large diameter ball	EN 438-2.21	Drop height	mm	2 ≤ t <6	≥ 1.400	
				6 ≤ t	≥ 1.800	
		Indentation diameter	mm	≤ 10	mm	
Resistance to crazing (thick laminates)	EN 438-2.24	Appearance	rating	≥ 4		
Scratch resistance	EN 438-2.25	Force smooth finish	rating	≥ 2		
		Force textured finish		≥	3	
Stain resistance	EN 438-2.26	Appearance groups 1-2	rating	5 ≥ 4		
		Appearance group 3				
Lightfastness	EN 438-2.27	Contrast	grey scale rating	≥ 4		
Reistance to cigarette burns	EN 438-2.30	Appearance	rating	≥ 3		
Resistance to water vapour	EN 438-2.14	Appearance gloss finish	rating	≥ 3 ≥ 4		
		Appearance other finishes				
Electrical resistance	EN 61340-4-1	Rv (23°C / 50% RH)	Ohm	1x109 - 1x1011		
Coefficient of linear thermal expansion	ASTM D 696	-	° C -1	L= 1,6 x 10-5 ca.		
				T= 3,5 x 10-5 ca.		
FIRE PERFORMANCE	'	•				
TEST METHOD	STANDARD	CLASSIFICATION				
Reaction to fire	EN 13501-1	B-s2, d0				

