

# Ecophon Industry™ Modus

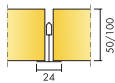
A functional ceiling for optimal sound absorption in all types of industrial premises, where different sizes and installation methods are required. Ecophon Industry™ Modus can be installed in exposed grid systems or directly to the soffit with screw and washer. Industry™ Modus is available in four colors: Natural, white, black and grey.

Smaller aesthetical deviations between the tiles may occur. These deviations do not have any impact on the functionality of the system.

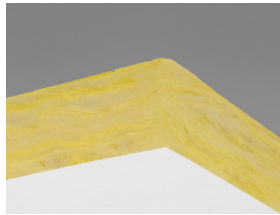


Sweden

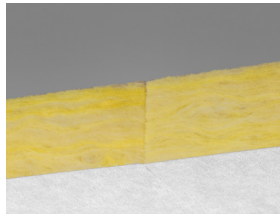
## SYSTEM RANGE



Size, mm	1200x600	1200x1200	1200x1200
Direct	•	•	•
T24	•	•	•
Thickness (THK)	50	50	100
Inst. Diagr.	M22, M23, M44, M444	M22, M23, M44, M444	M22, M23, M44, M444



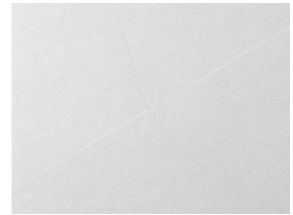
Industry Modus tile



Section of Industry Modus system



Section of Industry Modus TAL system.



Section of Industry Modus S system.

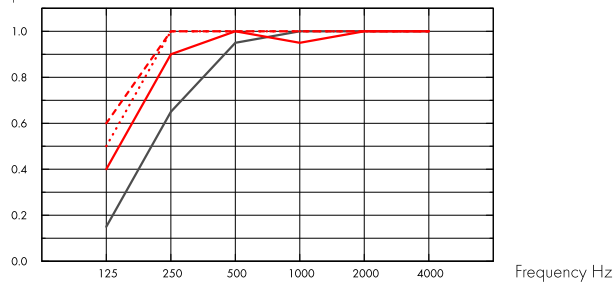
## Acoustic



### Sound Absorption:

Test results according to EN ISO 354. Classification according to EN ISO 11654.

$\alpha_p$ , Practical sound absorption coefficient



- Industry Modus S 50 mm, 50 mm o.d.s.
  - Industry Modus S 50 mm, 200 mm o.d.s.
  - Industry Modus S 100 mm, 100 mm o.d.s.
  - - - Industry Modus S 100 mm, 200 mm o.d.s.
- o.d.s. = overall depth of system

THK mm	o.d.s. mm	$\alpha_p$ , Practical sound absorption coefficient						$\alpha_w$	Sound absorption class
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
50	50	0.15	0.65	0.95	1.00	1.00	1.00	0.95	A
50	200	0.40	0.90	1.00	0.95	1.00	1.00	1.00	A
100	100	0.50	1.00	1.00	1.00	1.00	1.00	1.00	A
100	200	0.60	1.00	1.00	1.00	1.00	1.00	1.00	A

THK mm	o.d.s. mm	NRC	SAA
50	50	0.90	0.93
100	100	1.10	1.07
100	200	1.10	1.07
100	400	1.05	1.03

## Indoor Air Quality



Certificate / Label	
Eurofins Indoor Air Comfort®	IAC Gold
French VOC	A+



## Cradle to Cradle Certified®



This product is Cradle to Cradle Certified® at Bronze level (version 4.0).



## Material Health



This product has received a C2C Certified Material Health Certificate™ at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate™ is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.



## Carbon footprint

	kg CO <sub>2</sub> equiv/m <sup>2</sup>	Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804
Industry Modus S 50mm	2,35	
Industry Modus S 100mm	4,44	



## Circularity

Minimum post-consumer recycled content (50 mm)	60%
Minimum post-consumer recycled content (100 mm)	63%
Recyclability	Fully recyclable



## Fire safety

Country	Fire standard	Class	The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182.
Europe	EN 13501-1	A2-s1,d0	



## Humidity Resistance

Class C, relative humidity 95% and 30°C, according to EN 13964:2014



## Visual appearance

S White 190, nearest NCS colour sample S 0500-N, 80% light reflectance. S Grey 981, nearest NCS colour sample S 2502-Y, 45% light reflectance. S Black 970, nearest NCS colour sample S 8502-Y, 4% light reflectance. S Nature, 60% light reflectance. Slight colour differences can occur.



## Cleanability

Weekly dusting and vacuum cleaning.



## Accessibility

The tiles are easily demountable. Minimum demounting depth according to installation diagrams.



## Installation

Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification.



## System weight

	kg/m <sup>2</sup>
Industry Modus S 50 mm	1,5
Industry Modus S 50 mm + Connect Grid System	2,5
Industry Modus S 100 mm	3,0
Industry Modus S 100 mm + Connect System Grid	4,0

Weight information is indicative and subject to variation.



## Mechanical properties

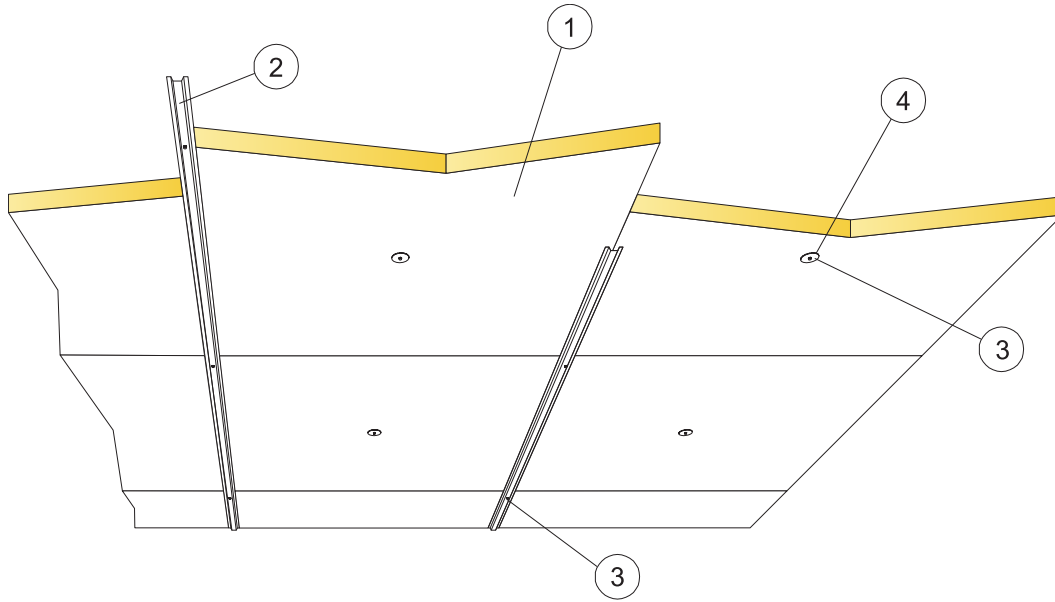
See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at [www.ecophon.com](http://www.ecophon.com).



## CE

Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

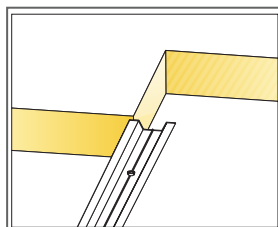
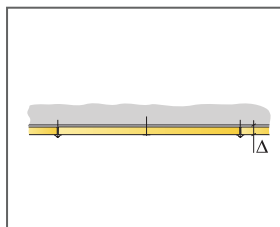
INSTALLATION DIAGRAM (M22) FOR ECOPHON MODUS WITH INLINE CARRIER



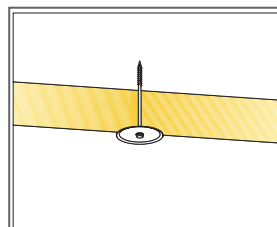
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QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm	
	1200x600	1200x1200
1 Industry Modus	1,4/m <sup>2</sup>	0,7/m <sup>2</sup>
2 Connect Inline carrier, installed at 1200 mm centres	0,9m/m <sup>2</sup>	0,9m/m <sup>2</sup>
3 Connect Screw (for light weight concrete, concrete or metal)	2,3/m <sup>2</sup>	1,6/m <sup>2</sup>
4 Connect Washer	1,4/m <sup>2</sup>	0,7/m <sup>2</sup>
Δ Min. overall depth of system: 50 or 100 mm	-	-
δ Min. demounting depth: The system is non-demountable	-	-



Profiles support tiles in one direction

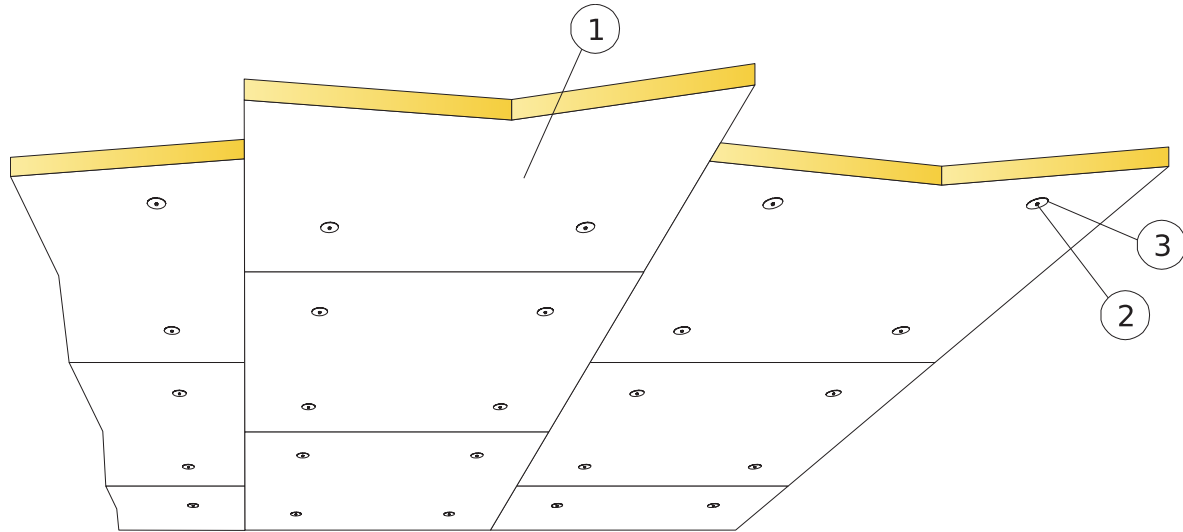


Screw and washer in centre of tiles

Size, mm	Max live load [N]	Min load bearing capacity [N]
1200x600x50	-	-
1200x1200x50	-	-
1200x1200x100	-	-

Live load/load bearing capacity

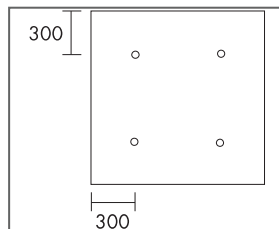
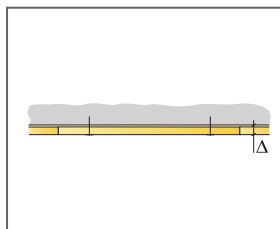
INSTALLATION DIAGRAM (M23) FOR ECOPHON MODUS WITH SCREW AND WASHER



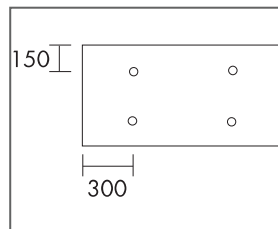
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QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm	
		1200x600	1200x1200
1	Industry Modus	1,4/m <sup>2</sup>	0,7/m <sup>2</sup>
2	Connect Screw (for light weight concrete, concrete or metal)	5,6/m <sup>2</sup>	2,8/m <sup>2</sup>
3	Connect Washer	5,6/m <sup>2</sup>	2,8/m <sup>2</sup>
Δ Min. overall depth of system: 50 or 100 mm		-	-
δ Min. demounting depth: The system is non-demountable		-	-



Position of screws size 1200x1200

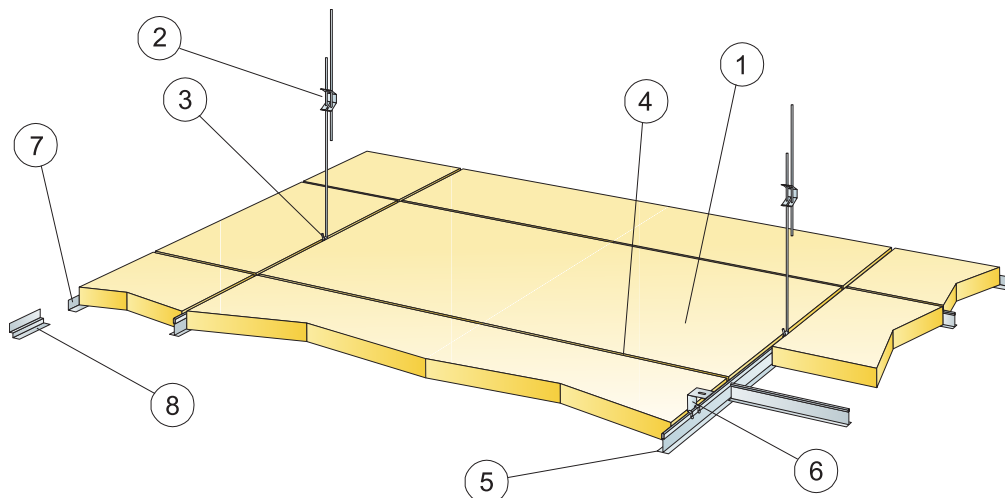


Position of screws size 1200x600

Size, mm	Max live load [N]	Min load bearing capacity [N]
1200x600x50	-	-
1200x1200x50	-	-
1200x1200x100	-	-

Live load/load bearing capacity

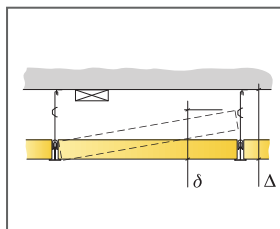
## INSTALLATION DIAGRAM (M44) FOR ECOPHON INDUSTRY MODUS, 2- OR 4- SIDED SUPPORT



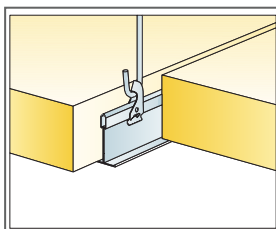
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### QUANTITY SPECIFICATION (EXCL. WASTAGE)

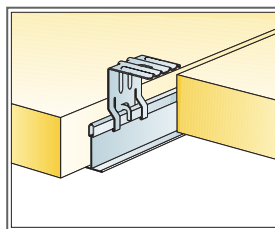
	Size, mm	
	1200x600	1200x1200
1 Industry Modus	1,4/m <sup>2</sup>	0,7/m <sup>2</sup>
2 Connect Adjustable hanger, installed at 1200 mm centres (only 4-sided support)	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
3 Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
4 Connect T24 Cross tee, L=1200, installed at 1200 or 600 mm centres (only 4-sided support)	1,7m/m <sup>2</sup>	0,9m/m <sup>2</sup>
5 Connect T24 Main runner, installed at 1200 mm centres (only 4-sided support)	0,9m/m <sup>2</sup>	0,9m/m <sup>2</sup>
6 For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
7 Connect Angle trim, fixed at 300 mm centres	as required	as required
8 Connect Shadow-line trim, fixed at 300 mm centres	as required	as required
Δ Min. overall depth of system: 50, 80 or 100 mm with Direct fixing bracket. 100 mm with Adjustable hanger.	-	-
δ Min. demounting depth: 150 mm for 50 mm thickness. 250 mm for 100 mm thickness.	-	-



See Quantity Specification



Suspension with adjustable hanger and clip

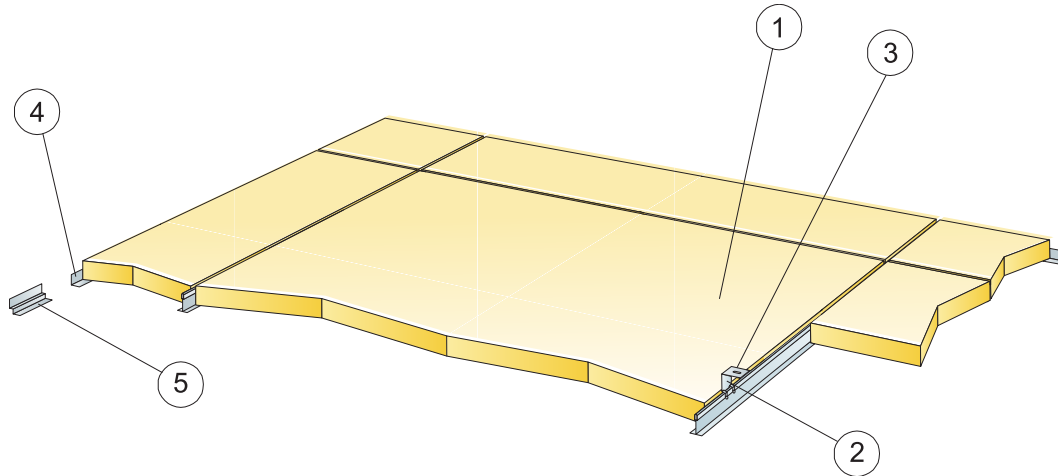


Suspension with direct bracket

Size, mm	Max live load [N]	Min load bearing capacity [N]
1200x600x50	40	160
1200x1200x50	40	160
1200x1200x100	40	160

Live load/load bearing capacity

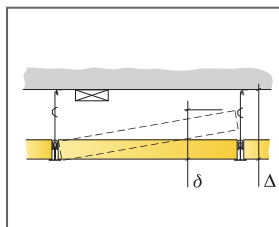
## INSTALLATION DIAGRAM (M444) FOR ECOPHON INDUSTRY MODUS, 2-SIDED SUPPORT



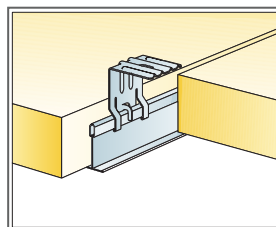
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### QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm	
	1200x600	1200x1200
1 Industry Modus	1,4/m <sup>2</sup>	0,7/m <sup>2</sup>
2 Connect T24 Main runner, installed at 1195 mm centres (only 2-sided support)	0,9m/m <sup>2</sup>	0,9m/m <sup>2</sup>
3 For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
4 Connect Angle trim, fixed at 300 mm centres	as required	as required
5 Connect Shadow-line trim, fixed at 300 mm centres	as required	as required
Δ Min. overall depth of system: 50, 80 or 100 mm with Direct fixing bracket.	-	-
δ Min. demounting depth: The system is non-demountable	-	-



See Quantity Specification



Suspension with direct bracket

Size, mm	Max live load [N]	Min load bearing capacity [N]
1200x600x50	40	160
1200x1200x50	40	160
1200x1200x100	40	160

Live load/load bearing capacity