

Ecophon Industry™ Modus

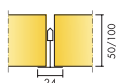
A functional ceiling for optimal sound absorption in all types of industrial premises, where different sizes and installation methods are required. Ecophon Industry™ Modus can be installed in exposed grid systems or directly to the soffit with screw and washer. Industry™ Modus is available in three colors: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

occur. These deviations do not have any impact on the functionality of the system.

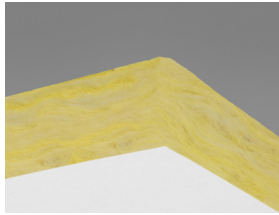
Smaller aesthetical deviations between the tiles may



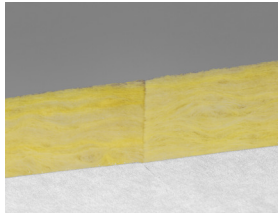
SYSTEM RANGE



Size, mm	1200x600	1200x1200	1200x1200
Direct	•	•	•
T24	•	•	•
Thickness	50	50	100
Inst. Diag.	M22, M23, M44, M444	M22, M23, M44, M444	M22, M23, M44, M444



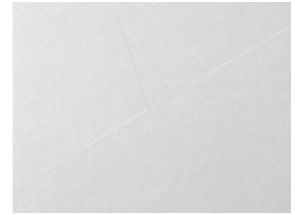
Industry Modus tile.



Section of Industry Modus system.



Section of Industry Modus TAL system.



Section of Industry Modus S system.

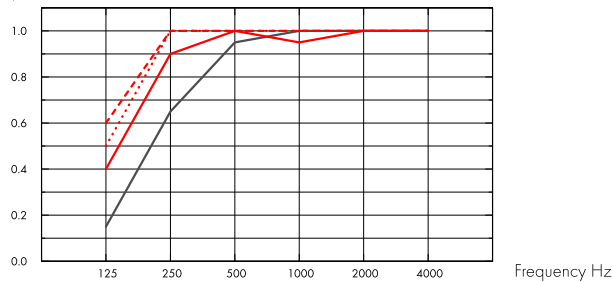
Acoustic



Sound Absorption:

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

α_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	α_p , Practical sound absorption coefficient						α_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
French VOC	A
Finnish M1	•



Environmental Footprint



	kg CO ₂ equiv/m ²
Industry Modus S 50mm	2,35
Industry Modus S 100mm	4,44

Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804



Circularity

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



Fire safety

Country	Class
Europe	EN 13501-1 A2-s1,d0

The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182.



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

The weight of the system (including suspension grid) should be approximately 3-5 kg/m².



Mechanical properties

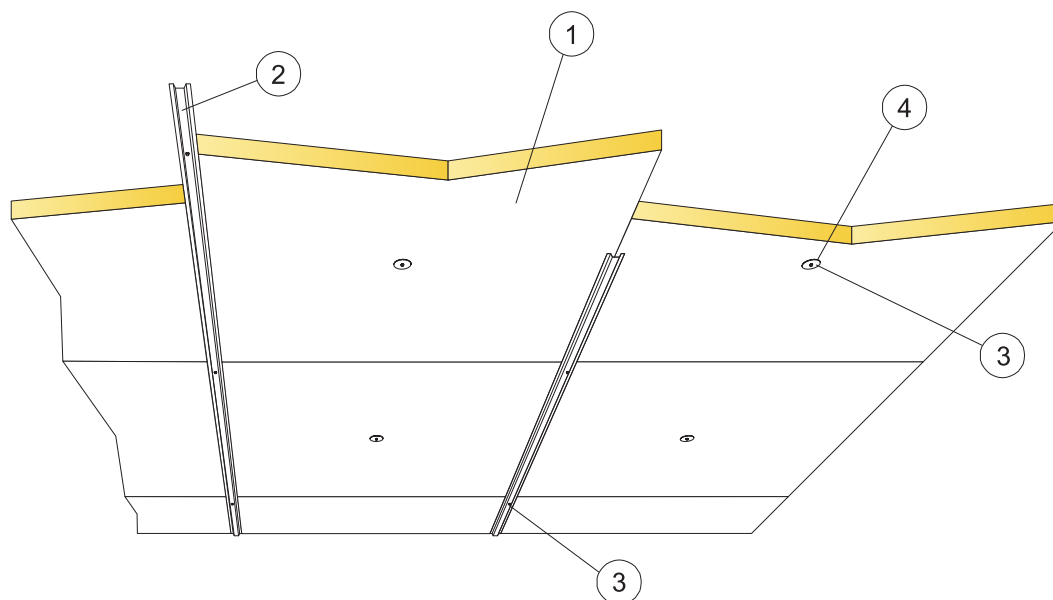
See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at www.ecophon.com.



CE

Ecophon ceiling systems are CE marked according to the European harmonized standard EN 13964:2014. 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.

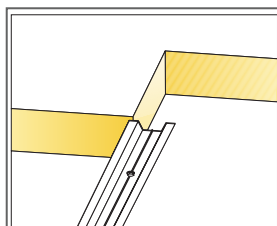
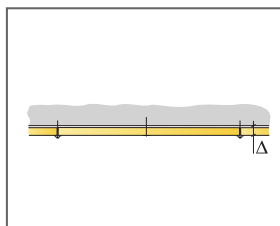
INSTALLATION DIAGRAM (M22) FOR ECOPHON MODUS WITH INLINE CARRIER



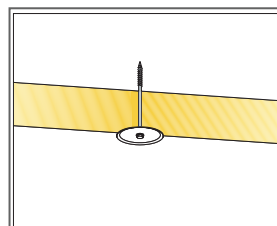
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QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm	
		1200x600	1200x1200
1	Industry Modus	1,4/m ²	0,7/m ²
2	Connect Inline carrier, installed at 1200 mm centres	0,9m/m ²	0,9m/m ²
3	Connect Screw (for light weight concrete, concrete or metal)	2,3/m ²	1,6/m ²
4	Connect Washer	1,4/m ²	0,7/m ²
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

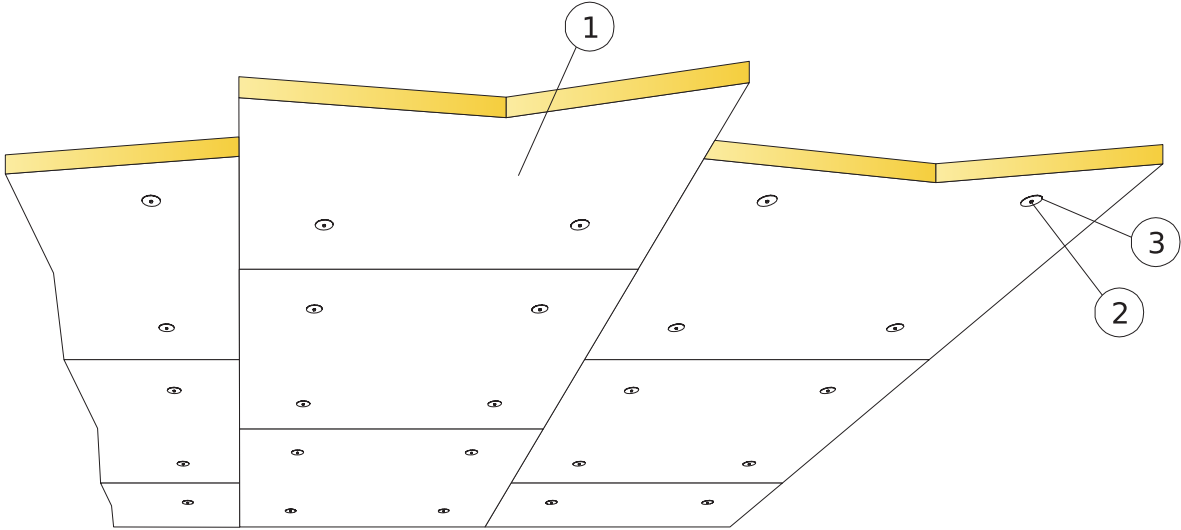


Screw and washer in centre of tiles

Size, mm	Max live load (N)	Min load bearing capacity (N)
1200x600x50	-	-
1200x1200x50	-	-
1200x1200x100	-	-

Live load/load bearing capacity

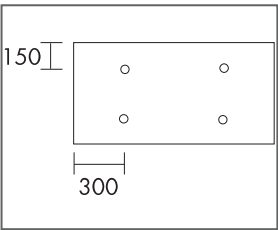
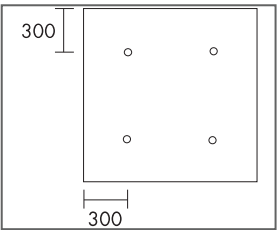
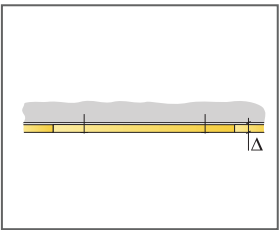
INSTALLATION DIAGRAM (M23) FOR ECOPHON MODUS WITH SCREW AND WASHER



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QUANTITY SPECIFICATION (EXCL. WASTAGE)

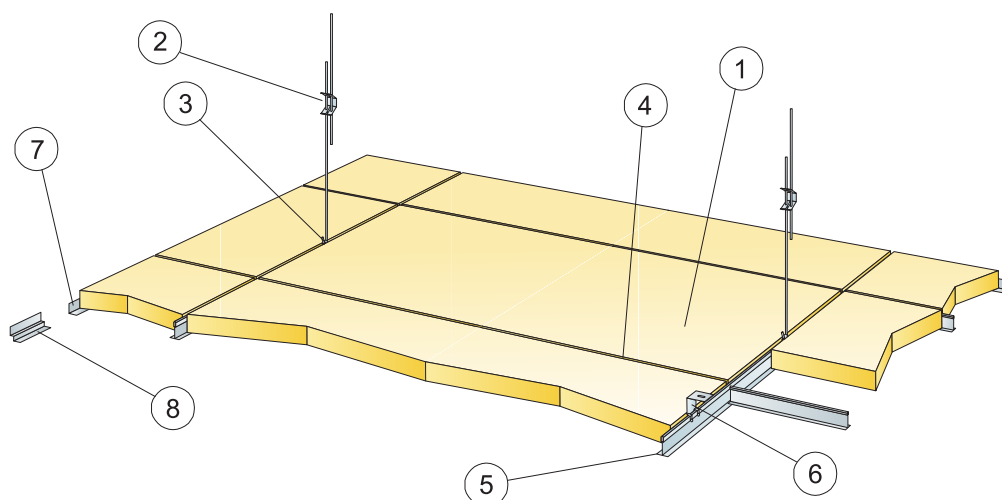
		Size, mm	
		1200x600	1200x1200
1	Industry Modus	1,4/m²	0,7/m²
2	Connect Screw (for light weight concrete, concrete or metal)	5,6/m²	2,8/m²
3	Connect Washer	5,6/m²	2,8/m²
Δ Min. overall depth of system: 50 or 100 mm		-	-
δ Min. demounting depth: The system is non-demountable		-	-



Size, mm	Max live load (N)	Min load bearing capacity (N)
1200x600x50	-	-
1200x1200x50	-	-
1200x1200x100	-	-

Live load/load bearing capacity

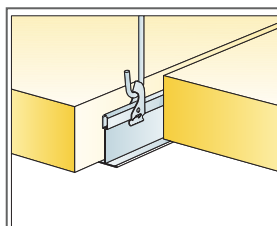
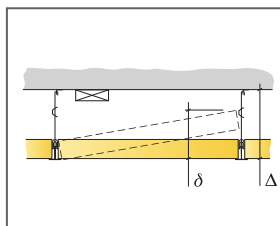
INSTALLATION DIAGRAM (M44) FOR ECOPHON INDUSTRY MODUS, 2- OR 4- SIDED SUPPORT



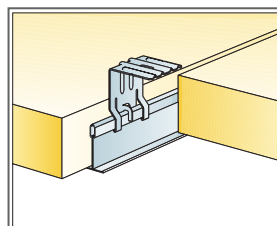
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QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm	
	1200x600	1200x1200
1 Industry Modus	1,4/m ²	0,7/m ²
2 Connect Adjustable hanger, installed at 1200 mm centres (only 4-sided support)	0,7/m ²	0,7/m ²
3 Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m ²	0,7/m ²
4 Connect T24 Cross tee, l=1200, installed at 1200 or 600 mm centres (only 4-sided support)	1,7m/m ²	0,9m/m ²
5 Connect T24 Main runner, installed at 1200 mm centres (only 4-sided support)	0,9m/m ²	0,9m/m ²
6 For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m ²	0,7/m ²
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.	-	-



Suspension with adjustable hanger and clip

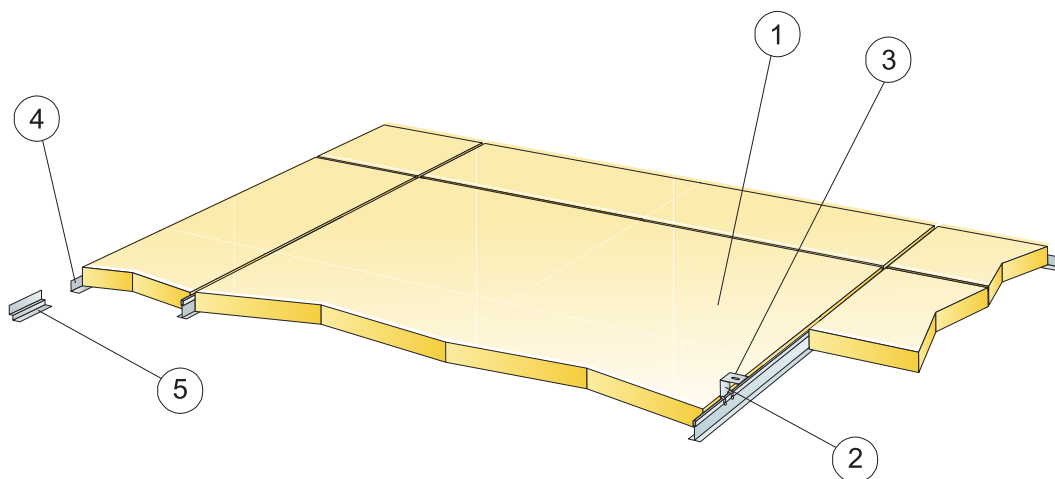


Suspension with direct bracket

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

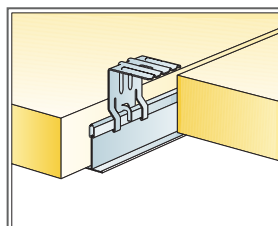
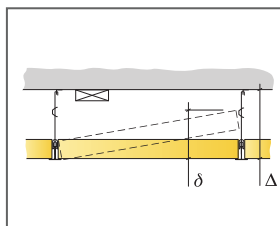
INSTALLATION DIAGRAM (M444) FOR ECOPHON INDUSTRY MODUS, 2-SIDED SUPPORT



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QUANTITY SPECIFICATION (EXCL. WASTAGE)

Size, mm		
	1200x600	1200x1200
1 Industry Modus	1,4/m ²	0,7/m ²
2 Connect T24 Main runner, installed at 1195 mm centres (only 2-sided support)	0,9m/m ²	0,9m/m ²
3 For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m ²	0,7/m ²
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		



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

Ecophon Industry™ Baffle

Ecophon Industry™ Baffle ist ein funktionelles, einfach zu montierendes, schallabsorbierendes System mit vertikalen Baffeln für den Einsatz in Industriegebäuden.



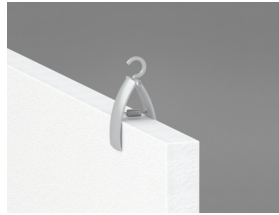
FORMATE



Abmessung, mm	1200x600
Connect T24	•
Direktmontage	•
Spezialbefestigung	•
Stärke (d)	40
Montageskizze	M554, M555



Industry Baffle



Industry Baffle mit Connect Baffle Gripper



Industry Baffle Montage mit Baffle Clips an T24 Konstruktion



Industry Baffle Montage mit Befestigungsmittel mit Öse

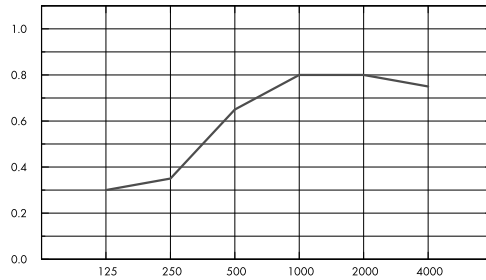


Akustik

Schallabsorption:

Testergebnisse gemäß DIN EN ISO 354:2003 Achtung: Gezeigte Testergebnisse sind nicht vergleichbar mit denen älterer Versionen dieser Norm aufgrund von unterschiedlichen Prüfverfahren. Bewertung gemäß DIN EN ISO 11654, Einzahlbewertung NRC (Noise Reduction Coefficient) und SAA (Sound Absorption Average) gemäß ASTM C 423.

α_p , Praktischer Absorptionsgrad

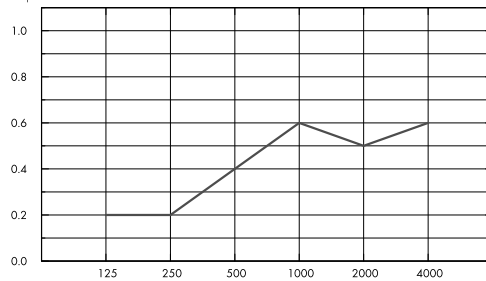


Frequenz Hz

– Industry Baffle 1200x600 Reihenabstand 600mm, Direktmontage

o.d.s = tKh = totale Konstruktionshöhe

A_{eq} , Äquivalente Absorptionsfläche pro Objekt (m² Sabine)



Frequenz Hz

– Industry Baffle 1200x600

o.d.s = tKh = totale Konstruktionshöhe

	d mm	tKh mm	α_p , Praktischer Absorptionsgrad						α_w	Absorptionsklasse
			125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
c600	40	600	0.30	0.35	0.65	0.80	0.80	0.75	0.65	C

	d mm	tKh mm	A_{eq} , Äquivalente Absorptionsfläche pro Objekt (m² Sabine)					
			125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
c600	40	600	0.2	0.2	0.4	0.6	0.5	0.6



Raumluftqualität

Zertifikat / Label	
Euofins Indoor Air Comfort®	IAC
Französisches VOC-Label	A
Finnische Emissionsklassifizierung M1	•





Circularity

Minimaler Gehalt an recycelten Inhalt	59%
Circularity	Vollständig recycelbar



Brandschutz

Land	Klasse
Europa	EN 13501-1 A2-s1,d0

Platten: Nicht brennbar nach DIN EN ISO 1182.



Feuchtigkeitsbeständigkeit

Klasse C, relative Luftfeuchtigkeit 95% und 30°C gemäß EN 13964:2014.



Visuelles Erscheinungsbild

Weiß 190, ähnlich RAL 9003, ähnlich NCS S 1000-N, Lichtreflexionsgrad 80%. Da die Oberfläche von Opta A mit einem eingefärbten Vlies versehen ist, kann sie bei indirekter Beleuchtung uneben erscheinen.



Reinigung

Wöchentlich Staubwischen und Staubsaugen möglich.



Demontierbarkeit

Die Elemente sind leicht demontierbar.



Montage

gemäß Montageskizze, Montageanleitung. Informationen zur minimalen totalen Konstruktionshöhe siehe Materialspezifikation.



Belastung

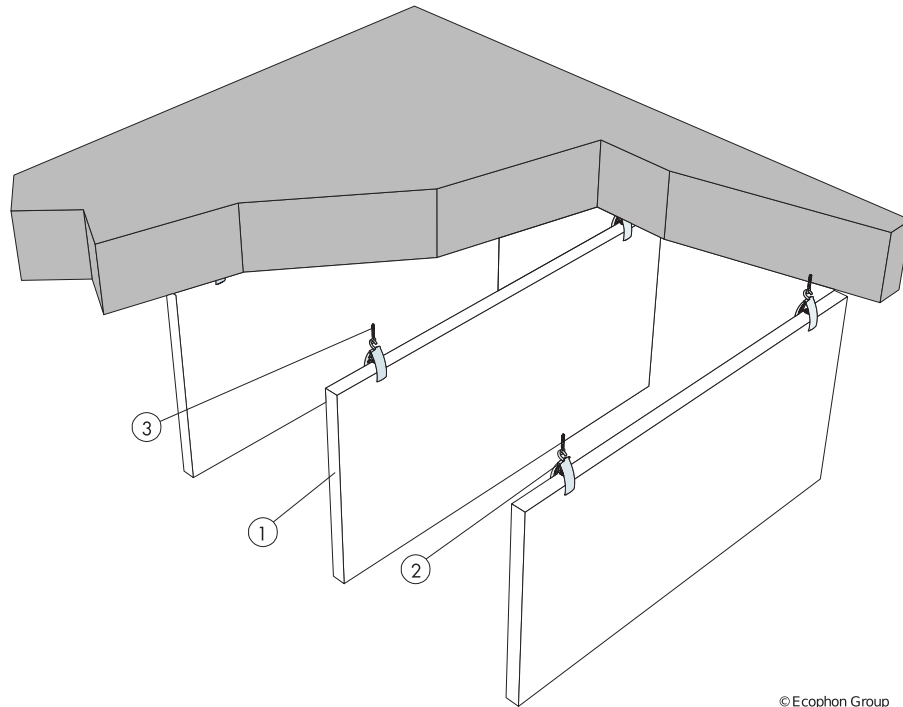
Vibrationen, Luftzug und andere mechanische Beanspruchungen können die mechanischen Eigenschaften der Befestigung beeinflussen.



CE

Ecophon Deckensysteme sind CE-gekennzeichnet gemäß der europäischen einheitlichen Norm EN13964:2014. CE-gekennzeichnete Bauprodukte unterliegen einer Leistungserklärung (DoP), die es Kunden und Anwendern ermöglicht, die Leistung von auf dem europäischen Markt erhältlichen Produkten leicht zu vergleichen.

MONTAGESKIZZE (M554) FÜR ECOPHON INDUSTRY BAFFLE



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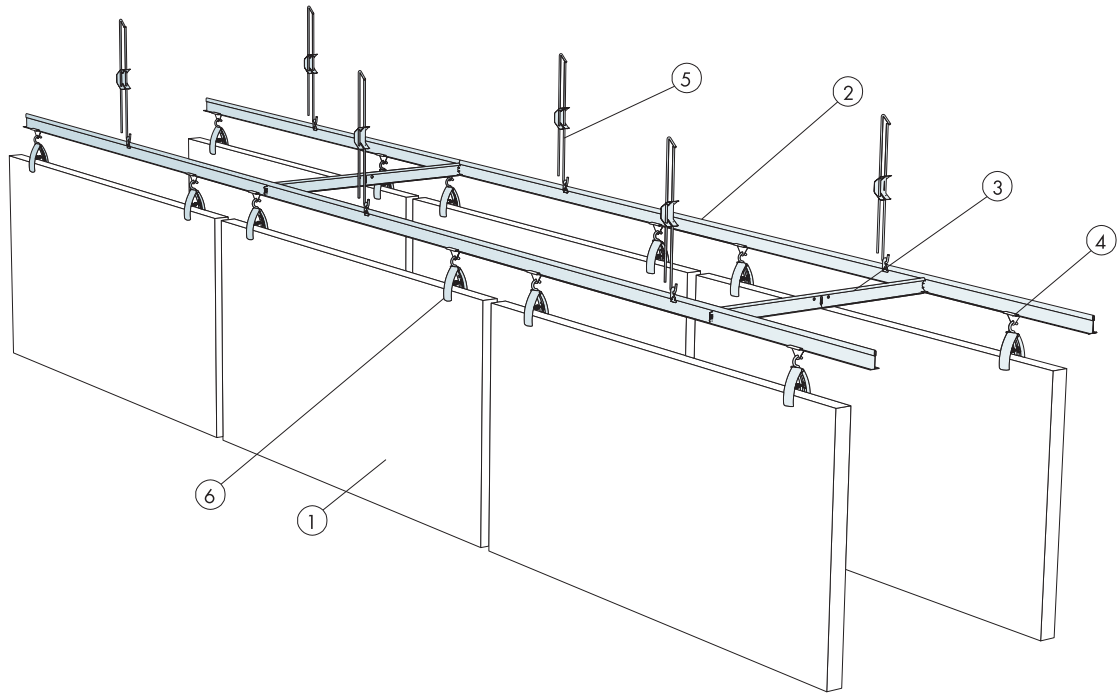
MATERIALSPEZIFIKATION (OHNE VERSCHNITT)

		Abmessung, mm
		1200x600
1	Industry Baffle, montiert im Abstand von 600 mm	1,4/m ²
2	Connect Baffle Gripper, montiert 150 mm von Baffle Kante	2/Paneel
3	Bauaufsichtlich zugelassenes Befestigungsmittel (nicht im Lieferumfang)	2/Paneel

Abmessung, mm	Max. Nutzlast [N]	Mindesttragkraft (N)
1200x600x40	0	0

Nutzlast/Tragkraft

MONTAGESKIZZE (M555) FÜR ECOPHON INDUSTRY BAFFLE AN ABGEHÄNGTER KONSTRUKTION



© Ecophon Group

MATERIALSPEZIFIKATION (OHNE VERSCHNITT)

Abmessung, mm		
1200x600		
1	Industry Baffle, montiert im Abstand von 600 mm	1,4/m ²
2	Connect T24 Haupttrageschiene, Reihenabstand 600mm	1,7m/m ²
3	Connect T24 Querschiene, L=600 mm, Abstand 1800mm	0,6m/m ²
4	Connect Abhänge-Clip	1,4/m ²
5	Connect Schnellspannabhänger, Abstand 1200mm	1,4/m ²
6	Connect Baffle Gripper, montiert 150 mm von Baffle Kante	2/Paneel

Abmessung, mm	Max. Nutzlast [N]	Mindesttragkraft (N)
1200x600x40	0	0

Nutzlast/Tragkraft