# 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
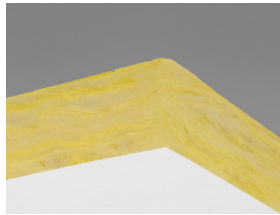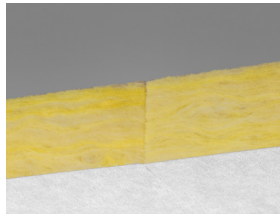

SYSTEM RANGE
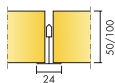
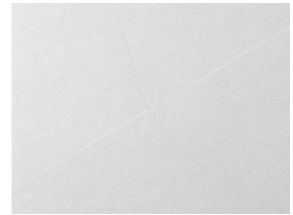| Size, mm	1200x600	1200x1200	1200x1200
Direct	•	•	•
T24	•	•	•
Thickness	50	50	100
Inst. Diagr.	M22, M23, M44, M444	M22, M23, M44, M444	M22, M23, M44, M444

Industry Modus tile.

Section of Industry Modus system.

Section of Industry Modus TAL system.
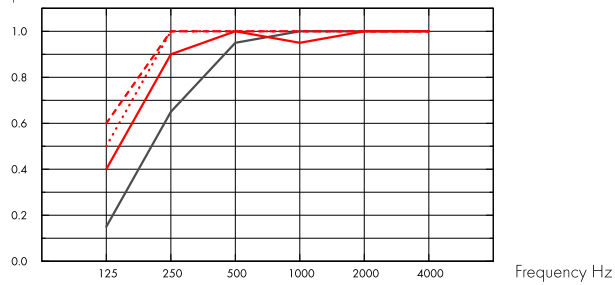

Section of Industry Modus S system.

Acoustic

Sound Absorption:

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

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 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_2 equiv/m²
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	Fire standard	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

	kg/m²
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.
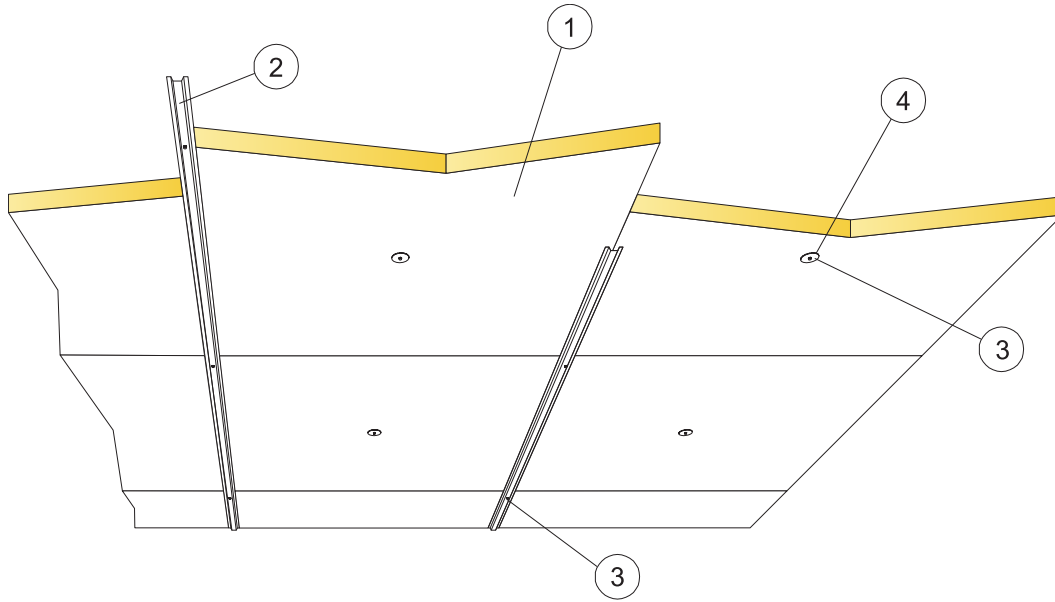
Mechanical properties

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

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.

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QUANTITY SPECIFICATION (EXCL. WASTAGE)

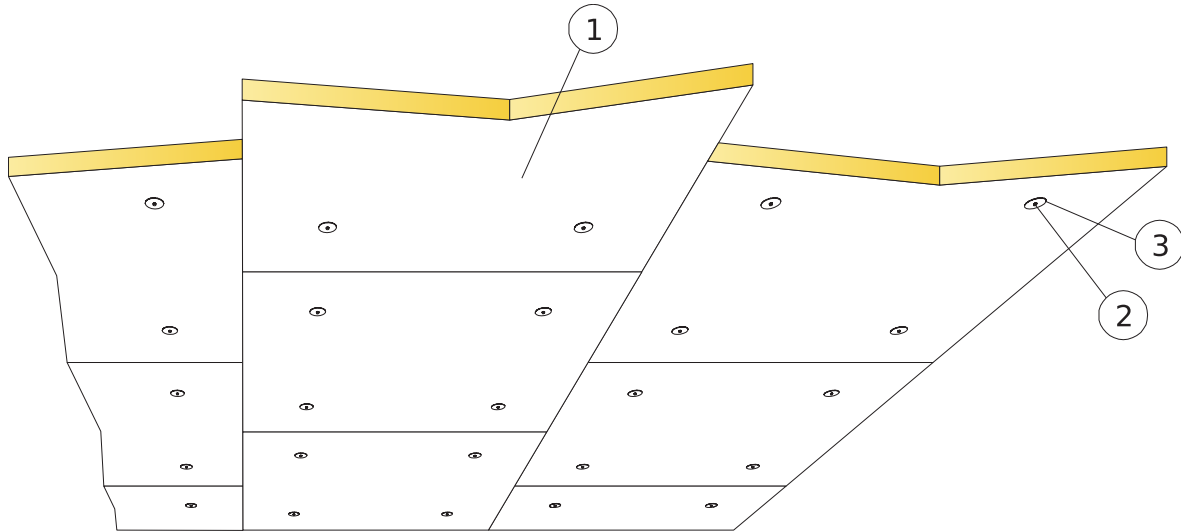|		Size, mm	
		1200x600	**1200x1200**
1	Industry Modus	1,4/m²	0,7/m²
2	Connect Inline carrier, installed at 1200 mm centres	0,9m/m²	0,9m/m²
3	Connect Screw (for light weight concrete, concrete or metal)	2,3/m²	1,6/m²
4	Connect Washer	1,4/m²	0,7/m²
	Δ Min. overall depth of system: 50 or 100 mm	-	-
	δ Min. demounting depth: The system is non-demountable	-	-
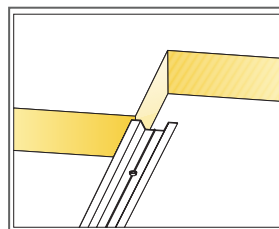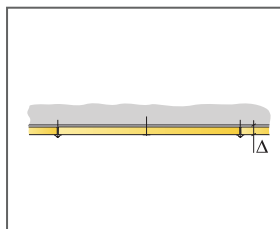
Profiles support tiles in one direction
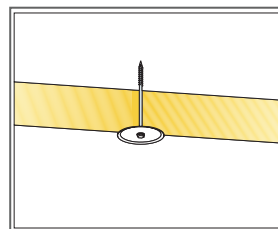
Screw and washer in centre of tiles

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

Live load/load bearing capacity

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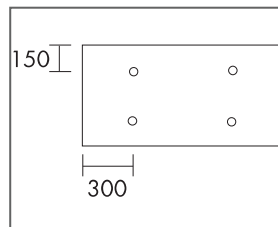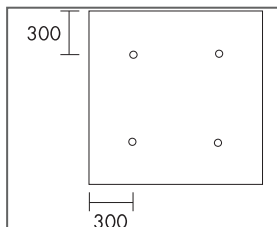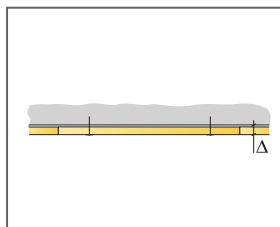
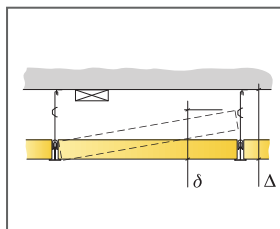| Size, mm	Max live load (N)	Min load bearing capacity (N)
1200x600x50	-	-
1200x1200x50	-	-
1200x1200x100	-	-

Live load/load bearing capacity

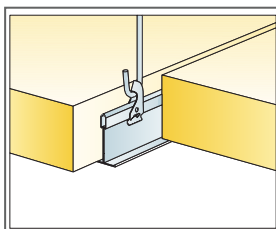INSTALLATION DIAGRAM (M44) FOR ECOPHON INDUSTRY MODUS, 2- OR 4- SIDED SUPPORT

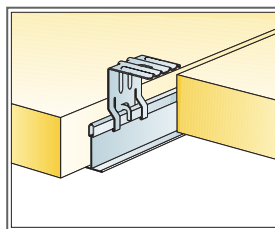© Ecophon Group

QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm	
		1200x600	**1200x1200**
1	Industry Modus	1,4/m²	0,7/m²
2	Connect Adjustable hanger, installed at 1200 mm centres (only 4-sided support)	0,7/m²	0,7/m²
3	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²
4	Connect T24 Cross tee, L=1200, installed at 1200 or 600 mm centres (only 4-sided support)	1,7m/m²	0,9m/m²
5	Connect T24 Main runner, installed at 1200 mm centres (only 4-sided support)	0,9m/m²	0,9m/m²
6	For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m²	0,7/m²
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
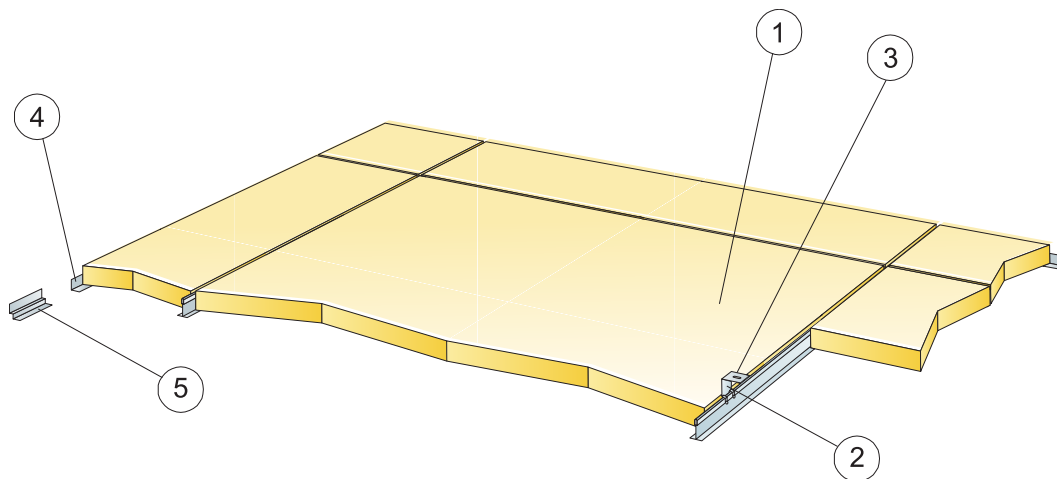

Suspension with adjustable hanger and clip

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

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QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm	
		1200x600	**1200x1200**
1	Industry Modus	1,4/m²	0,7/m²
2	Connect T24 Main runner, installed at 1195 mm centres (only 2-sided support)	0,9m/m²	0,9m/m²
3	For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m²	0,7/m²
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	-	-
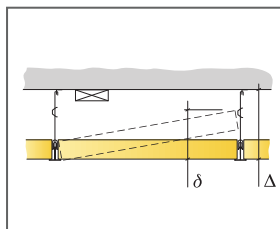
See Quantity Specification
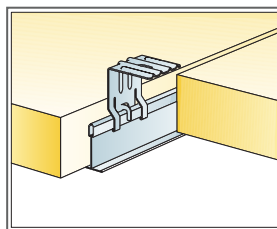
Suspension with direct bracket

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

Ecophon Industry™ Ambit

Suitable for noise reduction in industrial premises, where no visible suspension details are required. The tiles are not demountable. The narrow groove between the tiles generates a smooth design.
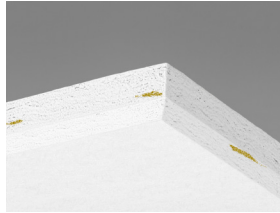
The Ecophon Industry™ Ambit system consists of Ecophon Industry™ Ambit tiles and Connect Ambit fixing, with an approximate weight of 3 kg/m². The edges are primed.
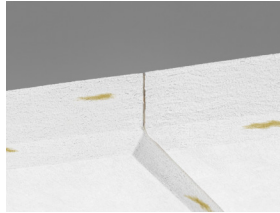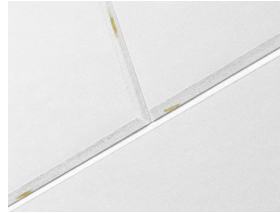

The Print shop, ,
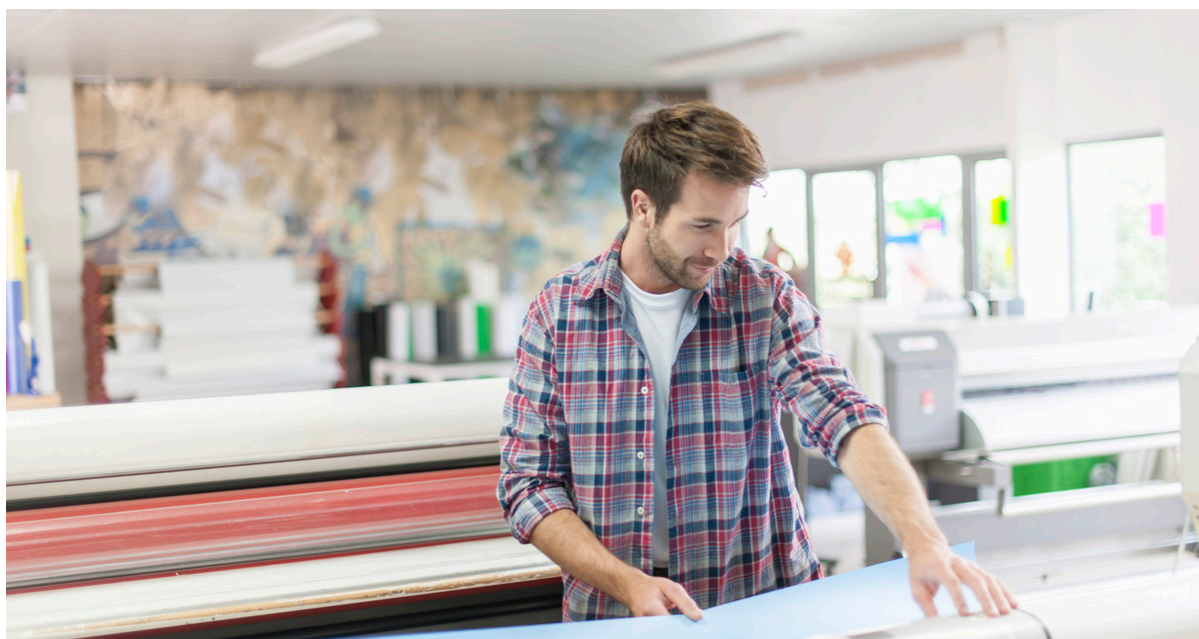
SYSTEM RANGE
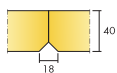
Size, mm	1200x600
Direct	•
Thickness	40
Inst. Diagr.	M40

Industry Ambit tile.

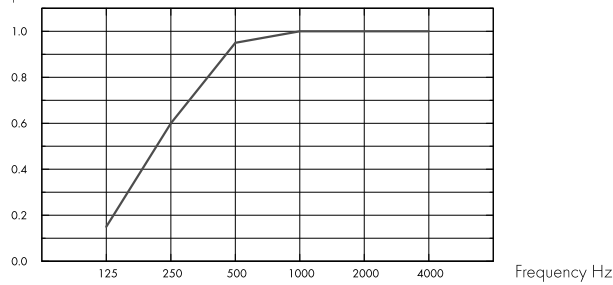Section of Industry Ambit system.

Industry Ambit system.

Acoustic

Sound Absorption:
Test results according to EN ISO 354. Classification according to EN ISO 11654.

α_p, Practical sound absorption coefficient

— Industry Ambit 40 mm, 40 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		
40	40	0.15	0.60	0.95	1.00	1.00	1.00	0.90	A

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_2 equiv/m²
Industry Ambit	4,81

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

Circularity

Minimum post-consumer recycled content	62%
Recyclability	Fully recyclable

Fire safety

Country	Fire standard	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

White 190, nearest NCS colour sample S 1000-N, 80% light reflectance. Since the product has a coloured glassfelt as a surface, it can appear mottled, specially with indirect lighting. Slight colour differences can occur.

Cleanability

Weekly dusting and vacuum cleaning.

Accessibility

The tiles are non-demountable.

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/m²
Industry Modus Ambit	2,4

Weight information is indicative and subject to variation.

Mechanical properties

Additional live load has to be fixed to the soffit.

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.
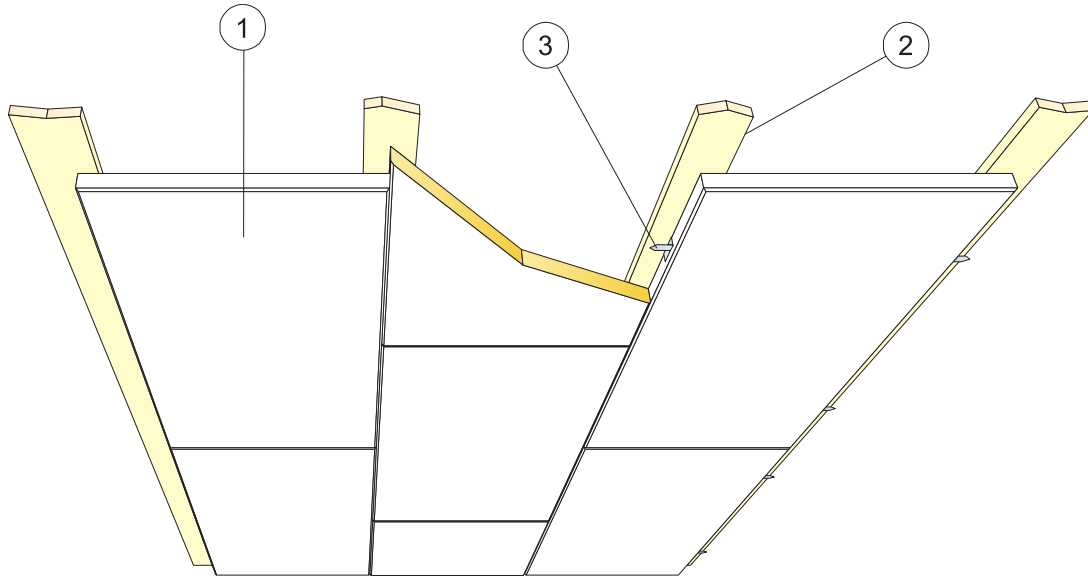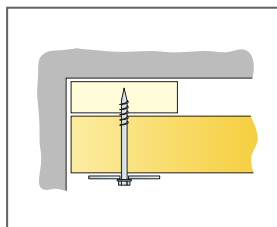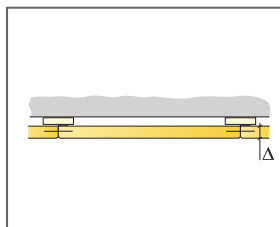
© Ecophon Group

QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm
		1200x600
1	Industry Ambit	1,4/m²
2	Timber batten	as required
3	Connect Ambit fixing	2,8/m²
	Δ Min. overall depth of system: 40 mm	-
	δ Min. demounting depth: The system is non-demountable	-

Installation on timber batten with screw and washer
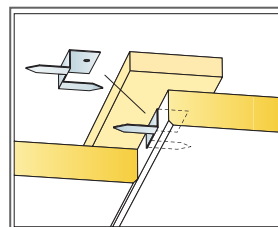
Installation with Connect Ambit fixing

| Size, mm	Max live load (N)	Min load bearing capacity (N)
1200x600x40	-	-

Live load/load bearing capacity

Ecophon Industry™ RTP

Suitable for noise reduction in industrial premises, where an impact resistant ceiling is needed. The panels have a glass wool core with a black surface. The visible surface is a perforated sheet metal facing (Ø3 mm hole diameter, 15% perforated area). The metal facing is bent around the long edges of the panels and overlaps the back surface. The perforated sheet metal facing is galvanized.

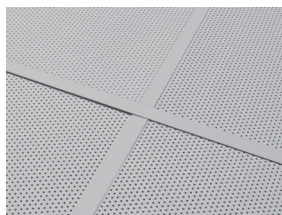For best performance and system quality, use
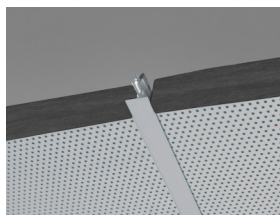Connect™ grid and accessories. The grid is

, Finland

SYSTEM RANGE
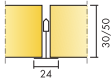
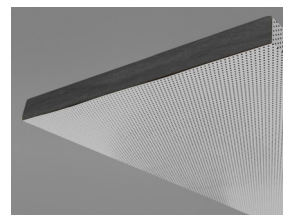|	Size, mm
	Thickness
	Inst. Diagr.

30/50

24

Industry RTP system.

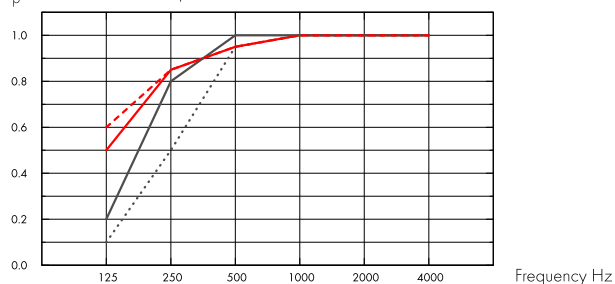Section of Industry RTP system.

Industry RTP panel.

Acoustic

Sound Absorption:
Test results according to EN ISO 354. Classification according to EN ISO 11654.

α_p, Practical sound absorption coefficient

···· Industry RTP 30 mm, 50 mm o.d.s.

— Industry RTP 30 mm, 200 mm o.d.s.

— Industry RTP 50 mm, 50 mm o.d.s.

--- Industry RTP 50 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		
30	50	0.10	0.50	0.95	1.00	1.00	1.00	0.80	B
30	200	0.50	0.85	0.95	1.00	1.00	1.00	1.00	A
50	50	0.20	0.80	1.00	1.00	1.00	1.00	1.00	A
50	200	0.60	0.85	0.95	1.00	1.00	1.00	1.00	A

THK mm	o.d.s. mm	NRC	SAA
30	50	0.85	0.89
30	200	0.95	0.96
50	50	0.95	0.99
50	200	0.95	0.99

Indoor Air Quality

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

Circularity

Minimum post-consumer recycled content (30 mm)	65%
Minimum post-consumer recycled content (50 mm)	67%
Recyclability	Fully recyclable

Fire safety

Country	Fire standard	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 A, relative humidity 70% and 25°C, according to EN 13964:2014

Visual appearance

Galvanized 189, 55% light reflectance, 65% light reflectance.

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/m²
Industry Modus RTP 30 mm	6,9
Industry Modus RTP 30 mm + Connect Grid System	7,8
Industry Modus RTP 50 mm	8,2
Industry Modus RTP 50 mm + Connect System Grid	9,1

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.

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compare performance of products available on the European market.