

# Ecophon Combison<sup>TM</sup> Uno A

Ecophon Combison™ Uno A has an exposed grid system with demountable tiles. For use as a sound absorbing ceiling and for sound insulation between rooms if the partitions does not extend all the way up to the soffit. Also suitable for sound reduction of vertical noise.





Size, mm	600x600	1200x600
T24	•	•
Thickness (THK)	35	35
Inst. Diagr.	M188	M188





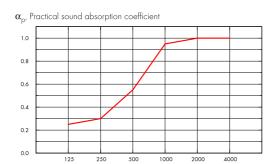


Section of Combison Uno A system

Combison Uno A system

#### **Sound Absorption:**

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.



- Combison Uno A 35 mm, 200 mm o.d.s. o.d.s = overall depth of system

Frequency Hz

THK	o.d.s. mm		$lpha_{p'}$ Pr	actical sound	d absorption c	oefficient		$\alpha_{_{\scriptscriptstyle{ ext{W}}}}$	Sound absorption class	
mm	O.d.s. IIIIII	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	o.w	Sound absorption class	
35	200	0.25	0.30	0.55	0.95	1.00	1.00	0.55	D	

THK mm	o.d.s. mm	NRC	SAA
35	200	0.70	0.73

THK	$D_{nfw}$	$R_{w}$	CAC dB
mm	Weighted normalized flanking level difference, ISO 10848-2	Weighted sound reduction index, ISO 10140-2	Ceiling Attenuation Class, ASTM 1414, ASTM E413
35	43	27	44



#### **Indoor Air Quality**

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







#### Circularity

Minimum post-consumer recycled content	56%*
Recyclability	Fully recyclable

 $^{\star}$ this value does not take into account the plasterboard



#### 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	non-composible decorating to ET4 100 TT02.



#### **Humidity Resistance**

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



#### Visual appearance

White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.



#### Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



#### 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	Weight information is indicative and subject to variation.
Combison Uno A	11,0	
Combison Uno A + Connect Grid System	12,0	



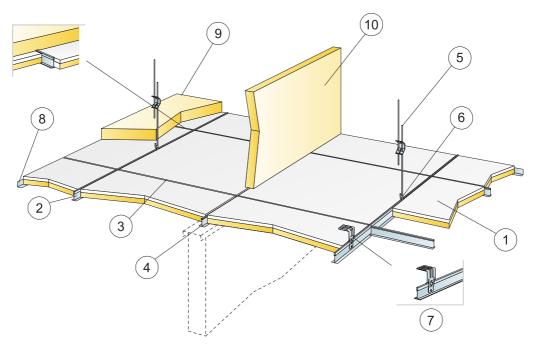
#### **Mechanical properties**

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



#### CE

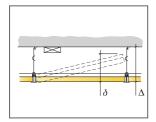
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

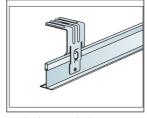


### © Ecophon Group

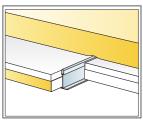
#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm	
		600×600	1200×600
1	Combison Uno A	2,8/m²	1,4/m²
2	Connect T24 Main runner, installed at 1200 mm centres (max distance from wall 300 mm)	0,9m/m²	0,9m/m²
3	Connect T24 Cross tee, L=1200 mm, installed at 600 mm centres	1,7m/m²	1,7m/m²
4	Connect T24 Cross tee, L=600 mm	0,9m/m²	-
5	Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²
6	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²
7	For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m²	0,7/m²
8	Connect Angle trim, fixed at 200 mm centres	as required	as required
9	Combison XR (if required)	as required	as required
10	Combison Barrier (if required)	as required	as required
	$\Delta$ Min. overall depth of system, with adjustable hanger: 100 mm, with direct bracket: 50 mm	-	-
	$\delta$ Min. demounting depth: 200 mm	-	-





Direct bracket is secured with pop rivet or screw



Additional absorber on top of ceiling

Max live load (N) 0	Min load bearing capacity [N] 220
0	220
	load (N) 0

Live load/load bearing capacity



### Ecophon Combison™ Uno Ds

Ecophon Combison™ Uno Ds has a concealed grid, installed in a suspended grid system with demountable tiles. For use as a sound absorbing ceiling and for sound insulation between rooms if the partitions do not extend all the way up to the soffit. Also suitable for sound reduction of vertical noise.





Size, mm	600x600
T24	•
Thickness (THK)	35
Inst. Diagr.	M629



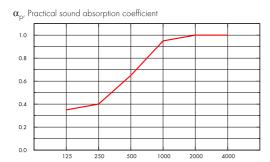




with Connect T24

#### **Sound Absorption:**

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.



- Combison Uno Ds 35 mm, 200 mm o.d.s. o.d.s = overall depth of system

Frequency Hz

THK	o.d.s. mm		$lpha_{p'}$ Pr	actical sound	d absorption c	oefficient		$\alpha_{_{\scriptscriptstyle{ ext{W}}}}$	Sound absorption class	
mm	0.0.5. 111111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	o.w	Sound absorption class	
35	200	0.35	0.40	0.65	0.95	1.00	1.00	0.65	С	

THK mm	o.d.s. mm	NRC	SAA	
35	200	0.75	0.75	

THK	D <sub>nfw</sub>	R <sub>w</sub>
mm	Weighted normalized flanking level difference, ISO 10848-2	Weighted sound reduction index, ISO 10140-2
30	41	28



#### **Indoor Air Quality**

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







### Circularity

Minimum post-consumer recycled content	56%*	*this value does not take into account the plasterboard
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	Holl composible decording to ETV100 TT02.



#### **Humidity Resistance**

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



#### **Humidity Resistance**

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



#### Visual appearance

White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.



#### Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



#### 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	Weight information is indicative and subject to variation.
Combison Uno Ds	11,4	
Combison Uno Ds + Connect Grid System	12,4	



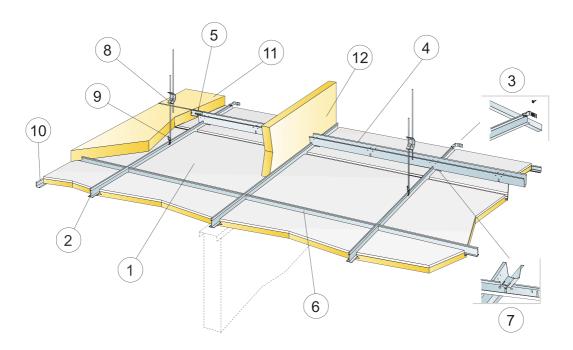
#### **Mechanical properties**

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



#### CE

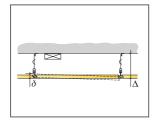
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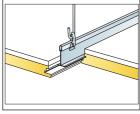
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### QUANTITY SPECIFICATION (EXCL. WASTAGE)

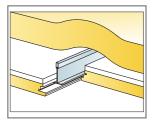
		Size, mm
		600×600
1	Combison Uno Ds	2,8/m²
2	Connect T24 Main Runner PL, installed at 600 mm centres	1,7m/m²
3	Connect Wall Bracket for T-profiles	1/suspended row of Main runner
4	Connect Space Bar, installed at 900 mm centres (max. distance from wall 300 mm)	1,15m/m²
5	Connect Wall Bracket, L=700 mm, for Connect Space Bar	1/row of Space bar
6	Connect T24 Cross Tee, L=600 mm	2/row of Main runner
7	Connect Space Bar Winch, installed one per joint Connect Main Runner/Connect Space Bar	1,9/m²
8	Connect Adjustable Hanger, installed at 1200x900 mm (max. distance from wall 600 mm). Main Runners resting on partition walls don't need hangers.	0,95/m²
9	Connect Hanger Clip (not to be used in swimming hall environments)	0,95/m²
10	Connect Angle trim, fixed at 200 mm centres	as required
11	Combison XR [if required]	as required
12	Combison Barrier (if required)	as required
	$\Delta$ Min. overall depth of system: 120 mm	-
	$\delta$ Min. demounting depth: 40 mm	-



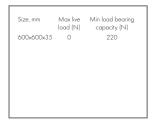
See Quantity Specification



Suspension with adjustable hanger and clip



Additional absorber on top of ceiling



Live load/load bearing capacity



## Ecophon Combison<sup>TM</sup> Duo A

Ecophon Combison™ Duo A has an exposed grid system with demountable tiles. For use as a suspended ceiling with high sound absorption and for sound insulation between rooms if the partitions do not extend all the way up to the soffit. Also suitable for sound reduction of vertical noise.





Size, mm	600x600
T24	•
Thickness (THK)	55
Inst. Diagr.	M85







Combison Duo A tile

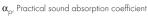
Section of Combison Duo A system

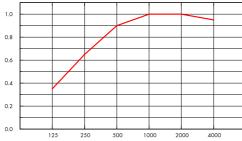
Combison Duo A system



#### **Sound Absorption:**

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.





Combison Duo A 54 mm, 200 mm o.d.s.o.d.s = overall depth of system

Frequency Hz

THK	o.d.s. mm		$lpha_{p'}$ Pr	actical sound	d absorption c	oefficient		$\alpha_{_{ ext{W}}}$	Sound absorption class
mm	0.u.s. IIIIII	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	o.w	Sound absorption class
54	200	0.35	0.65	0.90	1.00	1.00	0.95	0.90	А

THK mm	o.d.s. mm	NRC	SAA
54	200	0.90	0.91
54	400	0.90	0.90

THK	AC(1.5)	$D_{nfw}$	$R_{\rm w}$	CAC dB
mm	Articulation Class, ASTM E1111, ASTM E1110	Weighted normalized flanking level difference, ISO 10848-2	Weighted sound reduction index, ISO 10140-2	Ceiling Attenuation Class, ASTM 1414, ASTM E413
55	190	43	32	44

### Indoor Air Quality











#### Circularity

Minimum post-consumer recycled content	62%*
Recyclability	Fully recyclable

 $^{\star}$ this value does not take into account the plasterboard



#### 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	Holl composible decorating to ETV100 TT02.



#### **Humidity Resistance**

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



#### **Humidity Resistance**

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



#### Visual appearance

White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.



#### Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



#### 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	Weight information is indicative and subject to variation.
Combison Duo A	12,5	
Combison Duo A + Connect Grid System	13,5	•



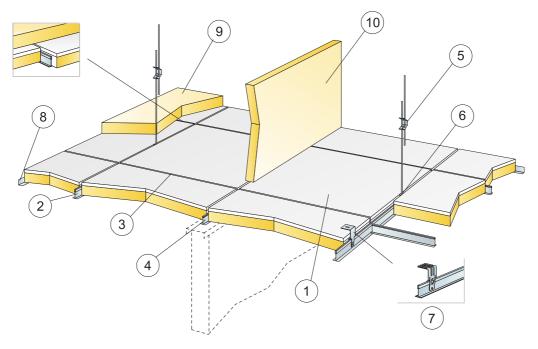
#### **Mechanical properties**

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



#### CE

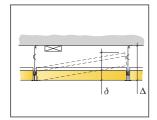
Ecophon ceiling systems are CE marked according to the European harmonized standard EN 13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

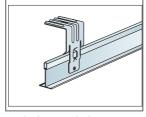


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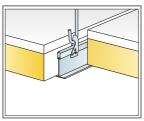
#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm
		600×600
1	Combison Duo A	2,8/m²
2	Connect T24 Main runner, installed at 1200 mm centres (max distance from wall 300 mm)	0,9m/m²
3	Connect T24 Cross tee, L=1200 mm, installed at 600 mm centres	1,7m/m²
4	Connect T24 Cross tee, L=600 mm	0,9m/m²
5	Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²
6	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²
7	For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m²
8	Connect Angle trim, fixed at 200 mm centres	as required
9	Combison XR (if required)	as required
10	Combison Barrier (if required)	as required
	$\Delta$ Min. overall depth of system, with Adjustable hanger: 100 mm, with Direct bracket: 80 mm	-
	$\delta$ Min. demounting depth: 220 mm	-

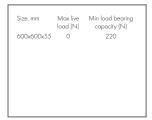




Direct bracket is secured with pop rivet or screw



Suspension with adjustable hanger and clip



Live load/load bearing capacity



# Ecophon Combison<sup>TM</sup> Duo E

Ecophon Combison™ Duo E has a recessed visible grid and a tegular edge design, creating a ceiling with a shadow effect. For use as a suspended ceiling with high sound absorption and for sound insulation between rooms if the partitions do not extend all the way up to the soffit.





Size, mm	600x600
T24	•
Thickness (THK)	55
Inst. Diagr.	M86







Combison Duo E tile

Section of Combison Duo E system

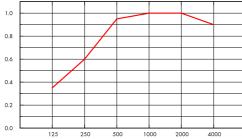
Combison Duo E system



#### **Sound Absorption:**

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.





- Combison Duo E 54 mm, 200 mm o.d.s. o.d.s = overall depth of system

Frequency Hz

THK	o.d.s. mm	$lpha_{ m p}$ , Practical sound absorption coefficient						$lpha_{_{ m W}}$ Sound absorption class		
mm O.C	O.d.s. IIIIII	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	o.w	Sound absorption class	
54	200	0.35	0.60	0.95	1.00	1.00	0.90	0.90	А	

THK mm	o.d.s. mm	NRC	SAA
54	200	0.90	0.89
54	400	0.90	0.89

THK	AC(1.5)	$D_{nfw}$	$R_{w}$
mm	Articulation Class, ASTM E1111, ASTM E1110	Weighted normalized flanking level difference, ISO 10848-2	Weighted sound reduction index, ISO 10140-2
55	190	39	33

#### **Indoor Air Quality**









#### Circularity

Minimum post-consumer recycled content	61%*
Recyclability	Fully recyclable

\*this value does not take into account the plasterboard



#### 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	non-compostible according to 21 1100 1102.



#### **Humidity Resistance**

Class A, relative humidity 70% and 25  $^{\circ}$ C, according to EN 13964:2014



#### **Humidity Resistance**

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



#### Visual appearance

White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.



#### Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



#### 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	Weight information is indicative and subject to variation.
Combison Duo E	12,6	
Combison Duo E + Connect Grid System	13,6	•



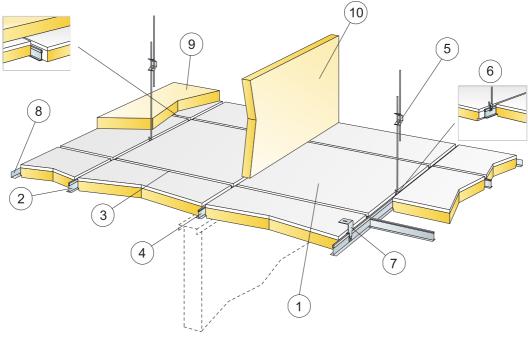
#### **Mechanical properties**

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



#### CE

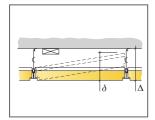
Ecophon ceiling systems are CE marked according to the European harmonized standard EN 13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

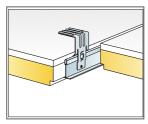


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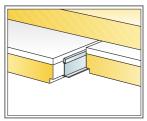
#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm
		600×600
1	Combison Duo E	2,8/m²
2	Connect T24 Main runner, installed at 1200 mm centres (max distance from wall 300 mm)	0,9m/m²
3	Connect T24 Cross tee, L=1200 mm, installed at 600 mm centres	1,7m/m²
4	Connect T24 Cross tee, L=600 mm	0,9m/m²
5	Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²
6	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²
7	For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m²
8	Connect Angle trim, fixed at 200 mm centres	as required
9	Combison XR (if required)	as required
10	Combison Barrier (if required)	as required
	$\Delta$ Min. overall depth of system, with Adjustable hanger: 110 mm, with Direct bracket: 90 mm	-
	$\delta$ Min. demounting depth: 230 mm	-

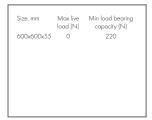




Direct bracket is secured with pop rivet or screw



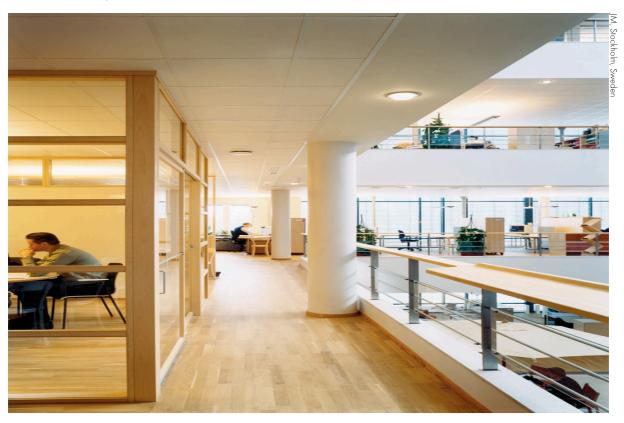
Additional absorber on top of ceiling



Live load/load bearing capacity

# Ecophon Combison™ XR

Ecophon Combison™ XR is a complementary product that is installed horisontally on top of the Combison ceiling tiles, to increase the sound reduction level between rooms. The product should cover as much of the ceiling surface as possible for the best acoustic performance.



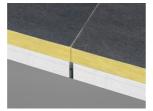
#### **SYSTEM RANGE**



Size, mm	1200x600
T24	•
Thickness (THK)	50
Inst. Diagr.	M440

© Saint-Gobain Ecophon AB Ecophon Combison™ XR, 2024-09-11





Combison XR system

### ~\\\\\\\

#### **Acoustic**

Addition of Combison XR on top of Ecophon Combison ceiling systems will give increased insulation properties. For detailed information please see corresponding systems for Combison.

Product	D <sub>nfw</sub> Weighted normalized flanking level difference, ISO 10848-2
+ 2 x 1200 XR	+ 3
+ 100% XR	+6



#### Circularity

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	Holl combositor decorating to El vilo en 1702.



#### **Humidity Resistance**

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



#### Visual appearance

Not applicable.



#### Cleanability

Not applicable.



### Accessibility

The tiles are demountable.



#### Installation

Installed according to installation diagrams, installation guides and drawing aid.

### kg

#### **Mechanical properties**

Not applicable



#### System weight

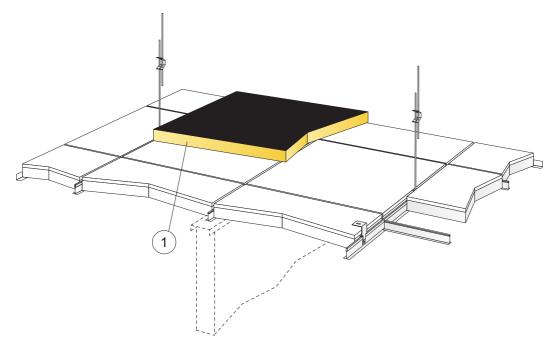
	kg/m²	Weight information is indicative and subject to variation.
Combison XR	1,5	



#### CE

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#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

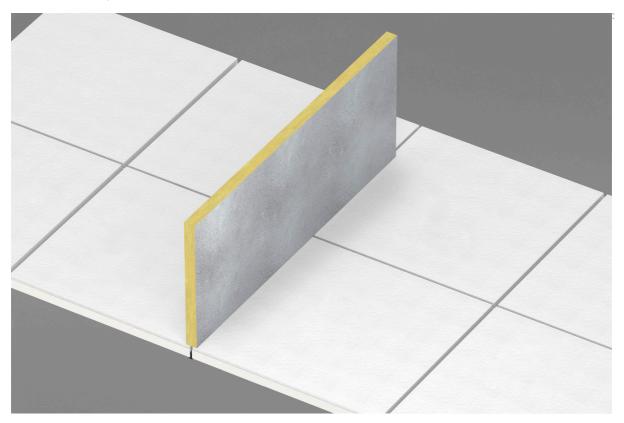
		Size, mm
		1200×600
1	Extra Bass (1200x600x50 mm)	as required

Size, mm Max live Min load bearing load (N) capacity (N) 1200x600x50 0 .

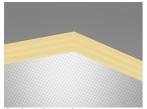
Live load/load bearing capacity

# Ecophon Combison<sup>TM</sup> Barrier

Ecophon Combison™ Barrier is an acoustic panel that is vertically installed above partitions in the plenum. Creates a sound barrier to improve the room to room sound insulation. Combison Barrier should be used together with other Ecophon systems for best acoustic performance.



Size, mm	1200x600
Direct	•
Thickness (THK)	40
Inst. Diagr.	M160







Combison Barrier tile Co

Section of Combison Barrier system



For use as acoustic barrier above partitions in plenum to improve the room to room sound insulation. The Combison Barrier should be used together with other Ecophon systems.



#### Circularity

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	— Horreombosible decording to ETV 100 TT02.



#### **Humidity Resistance**

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



#### Visual appearance

Not applicable. The panel has aluminium foil on one side.



#### Cleanability

Not applicable.



#### Accessibility

The tiles are demountable.



#### Installation

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



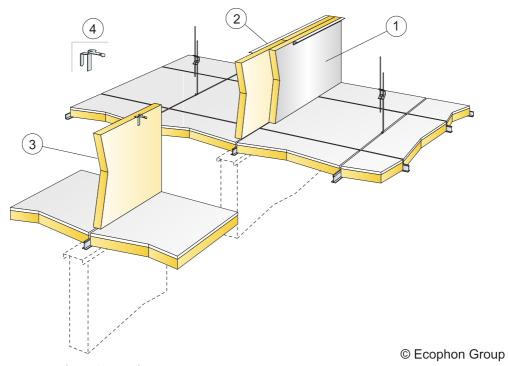
#### **Mechanical properties**

No additional live load is allowed.



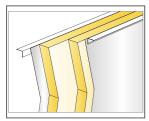
#### CE

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.



QUANTITY	SPECIFICATION	(EXCL.	Wastage)

		Size, mm
		1200×600
1	Combison Barrier in double layers with displaced joints and exposed alu-foil side	as required
2	Connect Angle trims position upper part of Barrier panels	as required
3	Combison Barrier in single layer	as required
4	Connect Frieze bracket, position upper part of Barrier panels	as required



Double layers of Combison Barrier with Connect Angle trim



Live load/load bearing capacity



## Ecophon Combison™ A, CAC 35

Ecophon Combison™ is the fastest and easiest way to combine features for both sound absorption and sound insulation between rooms. Ideal for installations where the partitions do not extend all the way up to the soffit. Combison can also help to reduce vertical noise from floor to floor. The panel is easy to handle, install and demount and it has a visible grid system. It is made from crimped glass fibre and has an Akutex FT surface on the front.





Size, mm	600x600	625x625	1200x600	1250x625
T24	•	•	•	•
Thickness (THK)	25	25	25	25
Inst. Diagr.	M528	M528 DIN	M528	M528 DIN







Combison dB42 A tile

Section of Combison dB42 A system

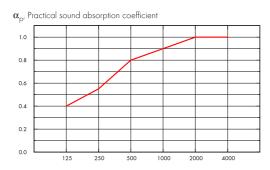
Combison dB A system

### -M/\-

#### Acoustic

#### **Sound Absorption:**

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.



Combison CAC35, 200 mm o.d.s.o.d.s = overall depth of system

Frequency Hz

THK	o.d.s. mm		$lpha_{p'}$ Pr	actical sound	d absorption c	coefficient	rient α <sub>w</sub> Sound absorp			
mm	O.G.S. IIIIII	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	o.w	Sound absorption class	
25	200	0.40	0.55	0.80	0.90	1.00	1.00	0.80	В	

THK mm	o.d.s. mm	NRC	SAA
25	200	0.80	0.82

THK	D <sub>nfw</sub> Weighted normalized flanking level difference, ISO 10848-2	CAC dB Ceiling Attenuation Class, ASTM 1414, ASTM E413
25	34	35



#### **Indoor Air Quality**

Certificate / Label	Standard
French VOC	А





#### Circularity

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	non-combosible according to £14 150 1162.



#### **Humidity Resistance**

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



#### Visual appearance

Akutex FT: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1. For more info see Colours and surfaces.



#### Cleanability

Akutex FT: Daily dusting and vacuum cleaning. Weekly wet wiping. For more info see Colours and surfaces.



#### 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  $7 \text{ kg/m}^2$ .



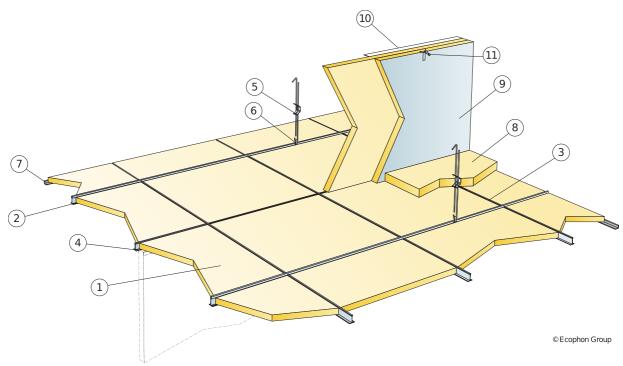
#### **Mechanical properties**

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

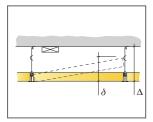


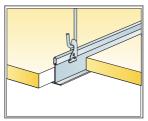
#### CE

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.



		Size, mm	Size, mm	
		600×600	1200×600	
ı	Combison A, CAC 35	2,8/m²	1,4/m²	
2	Connect T24 Main runner, installed at 1200 mm centres (max distance from wall 300 mm)	0,9m/m²	0,9m/m²	
3	Connect T24 Cross tee, L=1200 mm, installed at 600 mm centres	1,7m/m²	1,7m/m²	
4	Connect T24 Cross tee, L=600 mm	0,9m/m²	-	
5	Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²	
5	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²	
7	Connect Angle trim, fixed at 200 mm centres	as required	as required	
3	Combison XR (if required)	as required	as required	
)	Combison Barrier (if required)	as required	as required	
10	Connect Angle trims position upper part of Barrier panels (if required)	as required	as required	
11	Connect Frieze bracket, position upper part of Barrier panels (if required)	as required	as required	
	$\Delta$ Min. overall depth of system: 100 mm	-	-	
	$\delta$ Min. demounting depth: 210 mm	-	-	

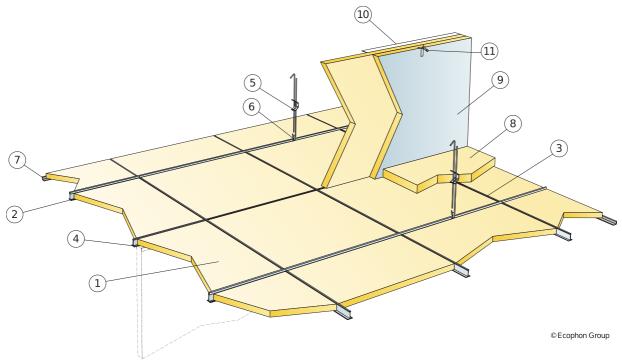




Suspension with adjustable hanger and clip

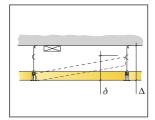
Size, mm	Max live load (N)	Min load bearing capacity [N]
600x600x25	15	160
1200x600x25	15	160

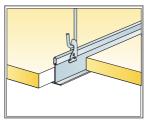
Live load/load bearing capacity



QUANTITY SPECIFICATION	I (EXCL. WASTAGE)
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		Size, mm	Size, mm	
		625×625	1250×625	
1	Combison A, CAC 35	2,6/m²	1,3/m²	
2	Connect T24 Main Runner, installed at 1250 mm centres	O,8m/m²	0,8m/m²	
3	Connect T24 Cross Tee, L=1250 mm, installed at 625 mm centres for DIN (only white profiles)	1,6m/m²	1,6m/m²	
4	Connect T24 Cross Tee, L=625 mm for DIN (only white profiles)	0,8m/m²	-	
5	Connect Adjustable Hanger, installed at 1250 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²	
6	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²	
7	Connect Angle trim, fixed at 200 mm centres	as required	as required	
В	Combison XR (if required)	as required	as required	
9	Combison Barrier (if required)	as required	as required	
10	Connect Angle trims position upper part of Barrier panels (if required)	as required	as required	
11	Connect Frieze bracket, position upper part of Barrier panels (if required)	as required	as required	
	$\Delta$ Min. overall depth of system: 100 mm	-	-	
	$\delta$ Min. demounting depth: 210 mm	-	-	





Suspension with adjustable hanger and clip

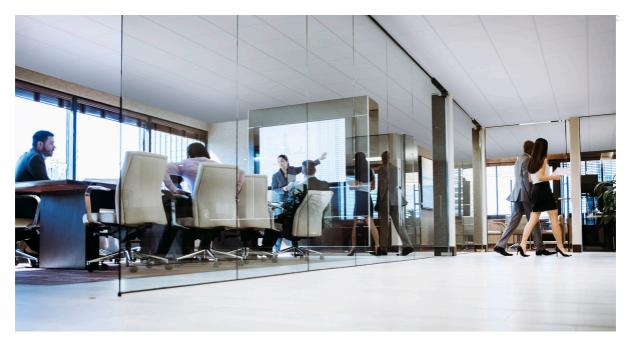
Size, mm	Max live load (N)	Min load bearing capacity (N)
625x625x25	-	
1250x625x25	-	

Live load/load bearing capacity



## Ecophon Combison™ E, CAC 35

Ecophon Combison™ is the fastest and easiest way to combine features for both sound absorption and sound insulation between rooms. Ideal for installations where the partitions do not extend all the way up to the soffit. Combison can also help to reduce vertical noise from floor to floor. The panel is easy to handle, install and demount and it has a visible grid system. It is made from crimped glass fibre and has an Akutex FT surface on the front.





Size, mm	600x600	625x625	1200×600	1250x625
T24	•	•	•	•
Thickness (THK)	25	25	25	25
Inst. Diagr.	M530	M530 DIN	M530	M530 DIN







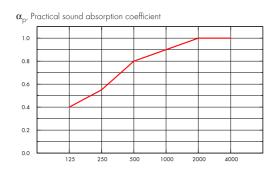
Combison dB42 A tile

Section of Combison dB42 A system

Combison dB A system

#### **Sound Absorption:**

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.



Combison CAC35, 200 mm o.d.s.o.d.s = overall depth of system

Frequency Hz

THK	o.d.s. mm	$lpha_{\sf p'}$ Practical sound absorption coefficient				$\alpha_{_{\!\scriptscriptstyle{ m W}}}$	Sound absorption class		
mm	0.0.5. 111111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	o.w	Sound absorption class
25	200	0.40	0.55	0.80	0.90	1.00	1.00	0.80	В

THK mm	o.d.s. mm	NRC	SAA
25	200	0.80	0.82

THK	$D_{nfw}$	CAC dB
mm	Weighted normalized flanking level difference, ISO 10848-2	Ceiling Attenuation Class, ASTM 1414, ASTM E413
25	34	35



#### **Indoor Air Quality**

Certificate / Label	Standard	ÉMI
French VOC	А	





#### Circularity

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	Horreombusible according to ETV 150-1102.



#### **Humidity Resistance**

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



#### Visual appearance

Akutex FT: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1. For more info see Colours and surfaces.



#### Cleanability

Akutex FT: Daily dusting and vacuum cleaning. Weekly wet wiping. For more info see Colours and surfaces.



#### 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  $7 \text{ kg/m}^2$ .



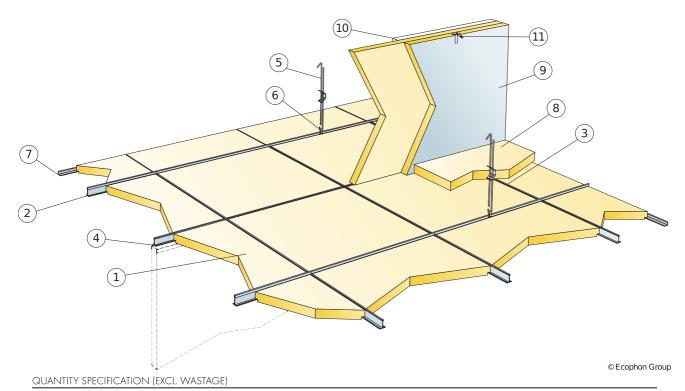
#### **Mechanical properties**

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

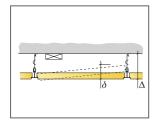


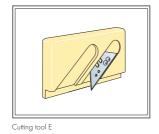
#### CE

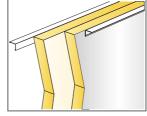
Ecophon ceiling systems are CE marked according to the European harmonized standard EN 13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



		Size, mm	Size, mm	
		600×600	1200×600	
1	Combison E, CAC 35	2,8/m²	1,4/m²	
2	Connect T24 Main runner, installed at 1200 mm centres (max distance from wall 300 mm)	0,9m/m²	0,9m/m²	
3	Connect T24 Cross tee, L=1200 mm, installed at 600 mm centres	1,7m/m²	1,7m/m²	
4	Connect T24 Cross tee, L=600 mm	0,9m/m²	-	
5	Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²	
5	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²	
7	Connect Angle trim, fixed at 200 mm centres	as required	as required	
3	Combison XR (if required)	as required	as required	
9	Combison Barrier (if required)	as required	as required	
10	Connect Angle trims position upper part of Barrier panels (if required)	as required	as required	
11	Connect Frieze bracket, position upper part of Barrier panels (if required)	as required	as required	
	$\Delta$ Min. overall depth of system: 100 mm	-	-	
	δ Min. demounting depth: 210 mm	-	-	

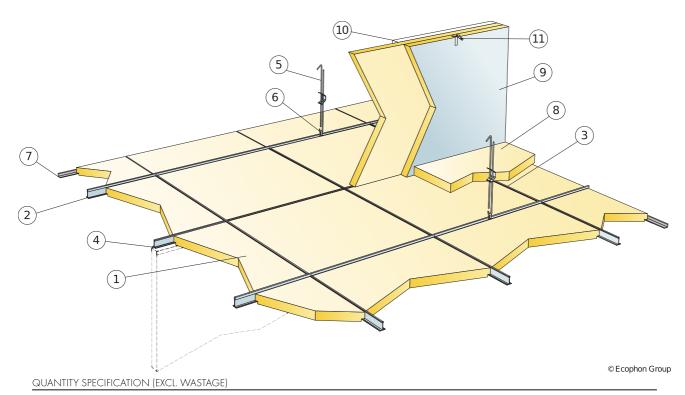




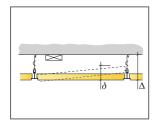


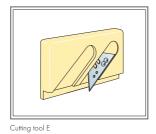
Si il y a deux barrières, la feuille alu doit être à l'extérieur

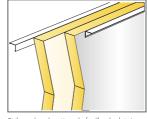
Live load/load bearing capacity



		Size, mm	Size, mm	
		625×625	1250×625	
1	Combison E, CAC 35	2,6/m²	1,3/m²	
2	Connect T24 Main Runner, installed at 1250 mm centres	0,8m/m²	0,8m/m²	
3	Connect T24 Cross Tee, L=1250 mm, installed at 625 mm centres for DIN (only white profiles)	1,6m/m²	1,6m/m²	
4	Connect T24 Cross Tee, L=625 mm for DIN (only white profiles)	0,8m/m²	-	
5	Connect Adjustable Hanger, installed at 1250 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²	
5	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²	
7	Connect Angle trim, fixed at 200 mm centres	as required	as required	
3	Combison XR (if required)	as required	as required	
7	Combison Barrier (if required)	as required	as required	
10	Connect Angle trims position upper part of Barrier panels (if required)	as required	as required	
11	Connect Frieze bracket, position upper part of Barrier panels (if required)	as required	as required	
	$\Delta$ Min. overall depth of system: 100 mm	-	-	
	$\delta$ Min. demounting depth: 210 mm	-	-	







Si il y a deux barrières, la feuille alu doit être à l'extérieur

Size, mm	Max live load (N)	Min load bearing capacity [N]
625x625x25	-	-
1250x625x25		

Live load/load bearing capacity