

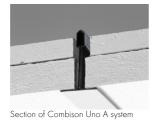
Ecophon Combison[™] Uno A

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.



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







Combison Uno A tile

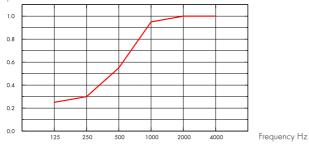
Acoustic



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.

 $lpha_{_{D'}}$ Practical sound absorption coefficient



– Combison Uno A 35 mm, 200 mm o.d.s.

o.d.s = overall depth of system

THK mm	o.d.s. mm		$lpha_{p'}$ Pr	actical so	und absorption	coefficient		α_w Sound absorption cla	Sound absorption class
mm	0.0.5. 11111	125 Hz	250 Hz	500 Hz	: 1000 Hz	2000 Hz	4000 Hz	u.w	Sound absorption class
35	200	0.25	0.30	0.55	0.95	1.00	1.00	0.55	D
TH	K								

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

тнк	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		SOR NR COMP	
Eurofins Indoor Air Comfort®	IAC Gold	CRATIFIED PRODUCT	
French VOC	A+		



Circularity

		*this value does not take into account the plasterboard
Minimum post-consumer recycled content	56%*	
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 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	

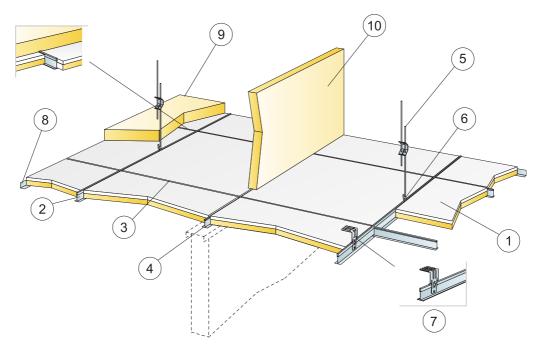


Mechanical properties

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

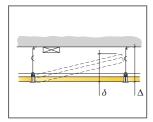


CE

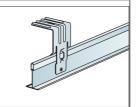


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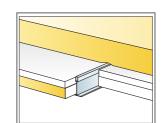
		Size, mm	
		600×600	1200×600
1	Combison Uno A	2,8/m²	1,4/m²
2	Connect T24 Main runner, installed at 1200 mm centres (max distance from wall 300 mm)	0,9m/m²	0,9m/m²
3	Connect T24 Cross tee, L=1200 mm, installed at 600 mm centres	1,7m/m²	1,7m/m²
4	Connect T24 Cross tee, L=600 mm	0,9m/m²	-
5	Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²
5	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
3	Connect Angle trim, fixed at 200 mm centres	as required	as required
7	Combison XR (if required)	as required	as required
10	Combison Barrier (if required)	as required	as required
	Δ Min. overall depth of system, with adjustable hanger: 100 mm, with direct bracket: 50 mm		-
	δ Min, demounting depth: 200 mm	-	-



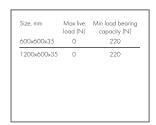
QUANTITY SPECIFICATION (EXCL. WASTAGE)



Direct bracket is secured with pop rivet or screw



Additional absorber on top of ceiling



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.



R	Size, mm	600x600
	T24	•
	Thickness	35
	Inst. Diagr.	M629



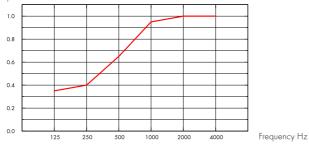
Acoustic



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.

 $lpha_{_{D'}}$ Practical sound absorption coefficient



- Combison Uno Ds 35 mm, 200 mm o.d.s.

o.d.s = overall depth of system

ТНК	o.d.s. mr			$lpha_{p'}$ Pr	actical se	ound	d absorption a	coefficient		α	Sound absorption class
mm	0.0.5. 111	125 Hz	25	0 Hz	500 H	lz	1000 Hz	2000 Hz	4000 Hz	u.w	
35	200	0.35	0	.40	0.65		0.95	1.00	1.00	0.65	С
-		-	-					-		-	-
TH mr		o.d.s. mm		N	IRC		SAA				
35	5	200		0.	.75		0.75				

ТНК	D _{nfw}	R _w
mm	Weighted normalized flanking level difference, ISO 10848-2	Weighted sound reduction index, ISO 10140-2
30	41	28



Indoor Air Quality

Certificate / Label		Soon AIR COME	
Eurofins Indoor Air Comfort®	IAC Gold	R COLD E	
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	



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
Combison Uno Ds	11,4	
Combison Uno Ds + Connect Grid System	12,4	

Weight information is indicative and subject to variation.

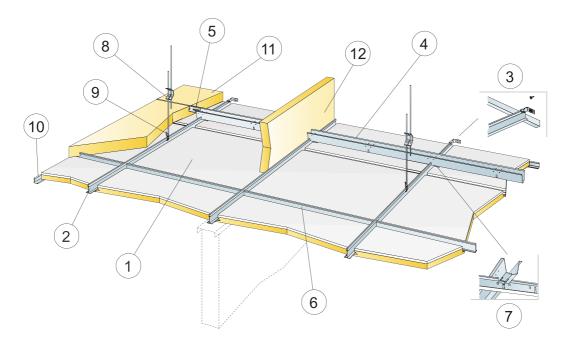
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k	g	
_	_	^

Mechanical properties

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

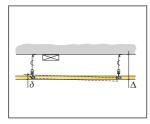
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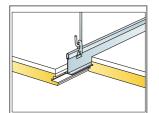
CE



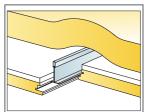
© Ecophon Group

	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
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
Δ Min. overall depth of system: 120 mm	-
δ Min. demounting depth: 40 mm	-





Suspension with adjustable hanger and clip



Additional absorber on top of ceiling

Size, mm | 600x600x35

Live load/load bearing capacity

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



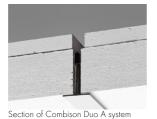
Ecophon Combison[™] Duo A

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.



р S	Size, mm	600x600
24	Т24	•
	Thickness	55
	Inst. Diagr.	M85







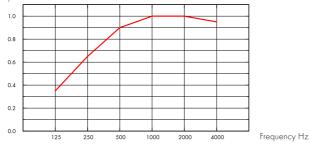
Acoustic



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.

 $lpha_{_{D'}}$ Practical sound absorption coefficient



– Combison Duo A 55 mm, 200 mm o.d.s.

o.d.s = overall depth of system

THK	o.d.s. mm		$lpha_{ m p'}$ Pr	actical sound	d absorption c	oefficient		$lpha_{w}$ Sound absorption class		
mm	0.0.3. 11111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	u.w	Sound absorption class	
55	200	0.35	0.65	0.90	1.00	1.00	0.95	0.90	А	

THK mm	o.d.s. mm	NRC	SAA
55	200	0.90	0.91
54	400	0.90	0.90

ТНК	AC(1.5)	D _{nfw}	R _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

Certificate / Label		SOR ANR COMPORT	
Eurofins Indoor Air Comfort®	IAC Gold	CRA COLD AS	
French VOC	A+		



Circularity

Minimum post-consumer recycled content 62%*		*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	non composible according 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	V
Combison Duo A	12,5	
Combison Duo A + Connect Grid System	13,5	

Weight information is indicative and subject to variation.

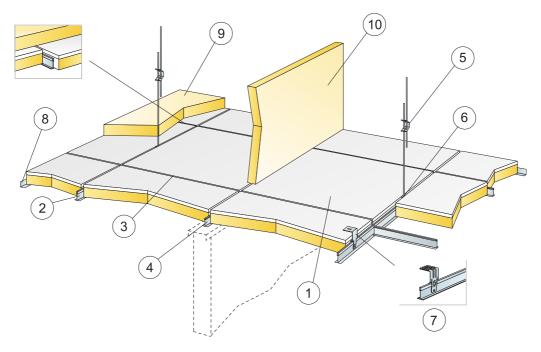


Mechanical properties

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

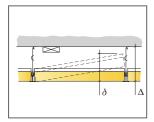
CE

CE

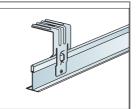


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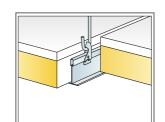
		Size, mm
		600×600
1	Combison Duo A	2,8/m²
2	Connect T24 Main runner, installed at 1200 mm centres (max distance from wall 300 mm)	0,9m/m²
3	Connect T24 Cross tee, L=1200 mm, installed at 600 mm centres	1,7m/m²
4	Connect T24 Cross tee, L=600 mm	0,9m/m²
5	Connect Adjustable Hanger, installed at 1200 mm 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
	Δ Min. overall depth of system, with Adjustable hanger: 100 mm, with Direct bracket: 80 mm	
	δ Min. demounting depth: 220 mm	-



QUANTITY SPECIFICATION (EXCL. WASTAGE)



Direct bracket is secured with pop rivet or screw



Suspension with adjustable hanger and clip

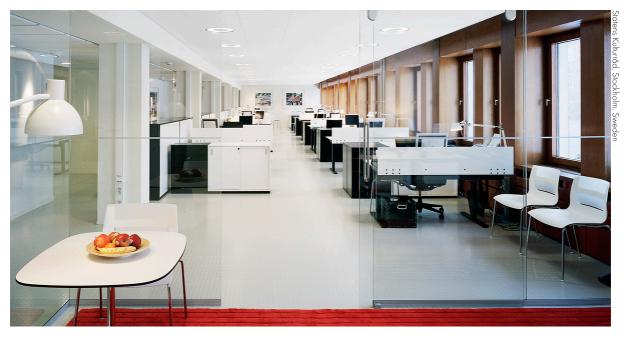
Size, mm Max live Min load bearing load (N) capacity (N) 600x600x55 0 220

Live load/load bearing capacity



Ecophon Combison[™] 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
7 T24	•
Thickness	55
Inst. Diagr.	M86





Combison Duo E tile

Acoustic

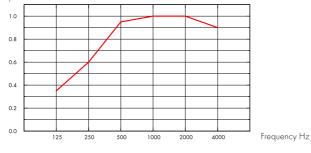


Sound Absorption:

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 Duo E system

 $lpha_{_{D'}}$ Practical sound absorption coefficient



– Combison Duo E 55 mm, 200 mm o.d.s.

o.d.s = overall depth of system

THK mm	o.d.s. mm	$lpha_{ m p}$, Practical sound absorption coefficient					α _w	Sound absorption class	
	mm	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	~~ _w	
55	200	0.35	0.60	0.95	1.00	1.00	0.90	0.90	А

THK mm	o.d.s. mm	NRC	SAA
55	200	0.90	0.89
55	400	0.90	0.89

тнк	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

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



Circularity

Minimum post-consumer recycled content	61%*	*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	



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 E	12,6	
Combison Duo E + Connect Grid System	13,6	

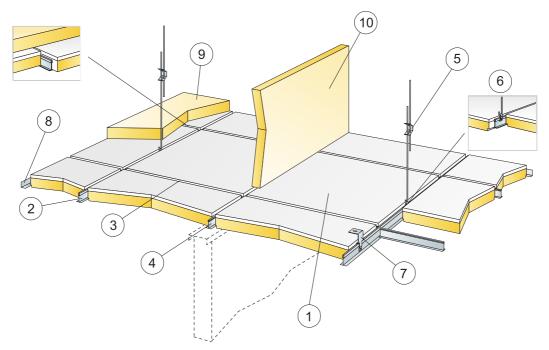
kg

Mechanical properties

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

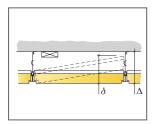
CE

CE

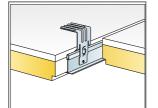


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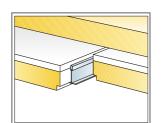
		Size, mm
		600×600
1	Combison Duo E	2,8/m²
2	Connect T24 Main runner, installed at 1200 mm centres (max distance from wall 300 mm)	0,9m/m²
3	Connect T24 Cross tee, L=1200 mm, installed at 600 mm centres	1,7m/m²
4	Connect T24 Cross tee, L=600 mm	0,9m/m²
5	Connect Adjustable Hanger, installed at 1200 mm centres [max. distance from wall 600 mm]	0,7/m²
5	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
3	Connect Angle trim, fixed at 200 mm centres	as required
7	Combison XR (if required)	as required
10	Combison Barrier (if required)	as required
	Δ Min. overall depth of system, with Adjustable hanger: 110 mm, with Direct bracket: 90 mm	-
	δ Min. demounting depth: 230 mm	



QUANTITY SPECIFICATION (EXCL. WASTAGE)



Direct bracket is secured with pop rivet or screw



Additional absorber on top of ceiling

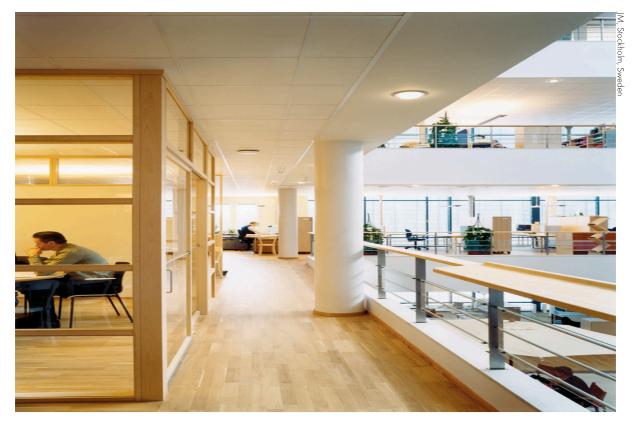
 Size, mm
 Max live load (N)
 Min load bearing capacity (N)

 600x600x55
 0
 220

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.



S 5	Size, mm	1200x600
6	Т24	•
24	Thickness	50
	Inst. Diagr.	M440





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 _{nfw} Weighted normalized flanking level difference, ISO 10848-2	
+ 2 × 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	



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.

Mechanical properties

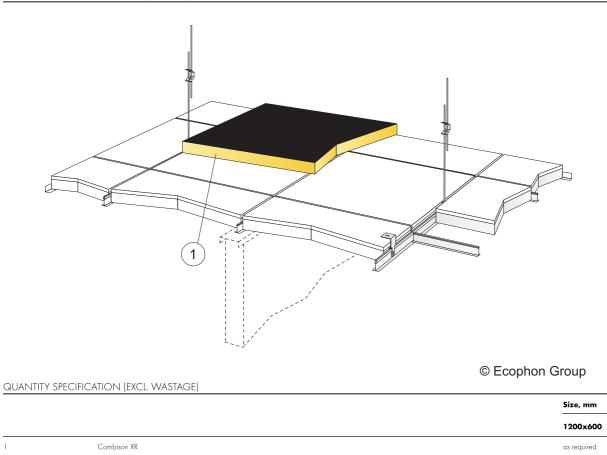
Not applicable.



System weight

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

INSTALLATION DIAGRAM (M440) FOR ECOPHON COMBISON XR

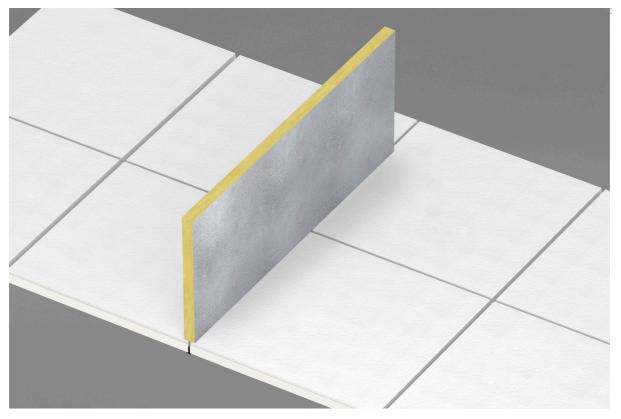


Size, mm Max live Min load bearing load (N) capacity (N) 1200x600x50 0 -

Live load/load bearing capacity

Ecophon Combison[™] 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	40
Inst. Diagr.	M160







Johnbison Damer nie

Acoustic

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	



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.



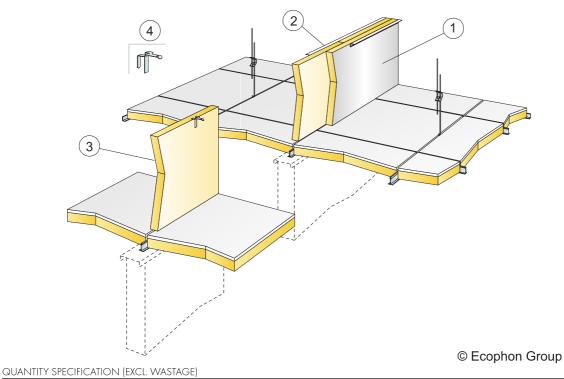
Mechanical properties

No additional live load is allowed.

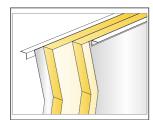


Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

CE



		Size, mm
		1200x600
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 0043 position upper part of Barrier panels	as required



Double layers of Combison Barrier with Connect Angle trim Size, mm Max live Min load bearing load (N) capacity (N) 1200x600x40 - -

Live load/load bearing capacity