

# Ecophon Combison™ Uno A

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, generated by ventilation, foot steps etc. Ecophon Combison Uno A has an exposed grid system. Each tile is demountable.

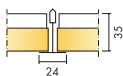
For best performance and system quality, use Ecophon Connect grid and accessories. The grid is manufactured from galvanized steel.

The system consists of Ecophon Combison Uno A tiles and Ecophon Connect grid systems, with an approximate weight of 13 kg/m<sup>2</sup>. The tiles are manufactured from high density, 3rd generation glass wool, with a bonded gypsum board (13 mm) on the back of the tile. The visible surface has an Akutex™ FT coating and the edges are primed.



Smeider Electrics, Moscow, Russia

## SYSTEM RANGE



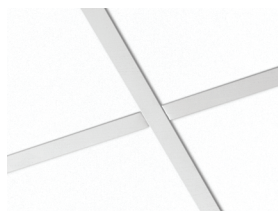
Size, mm	600x600	1200x600
T24	•	•
Thickness (THK)	35	35
Inst. Diagr.	M188	M188



Combison Uno A tile



Section of Combison Uno A system



Combison Uno A system

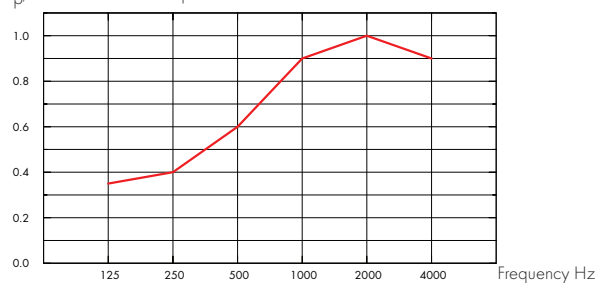


## Acoustic

### 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.

$\alpha_p$  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	$\alpha_p$ Practical sound absorption coefficient						$\alpha_w$	Sound absorption class
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
35	200	0,35	0,40	0,60	0,90	1,00	0,90	0,65	C

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



## Accessibility

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



## Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



## Visual appearance

White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance (of which more than 99% is diffuse reflection). Retro reflection coefficient 63 mcd/(m²lx). Gloss < 1.



## Influence of climate

The tiles withstand a permanent ambient RH up to 75% at 30°C without sagging, warping or delaminating (ISO 4611).



## Indoor Climate

### Certificate / Label

Finish M1	•
French VOC, A+	•
Swedish Asthma and Allergy Association	•
Danish Indoor Climate Label	•
California Emission Regulation, CDPH	•



## Environmental influence

### Certificate / Label

The Nordic Ecolabel	•
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Fully recyclable.



## CO<sub>2</sub>

Kg CO <sub>2</sub> equiv/m <sup>2</sup>	7,2
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From EPD in conformity with ISO 14040



## Fire safety

Country	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. The systems are classified as fire protective covering according to NT FIRE 003.



## Mechanical properties

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



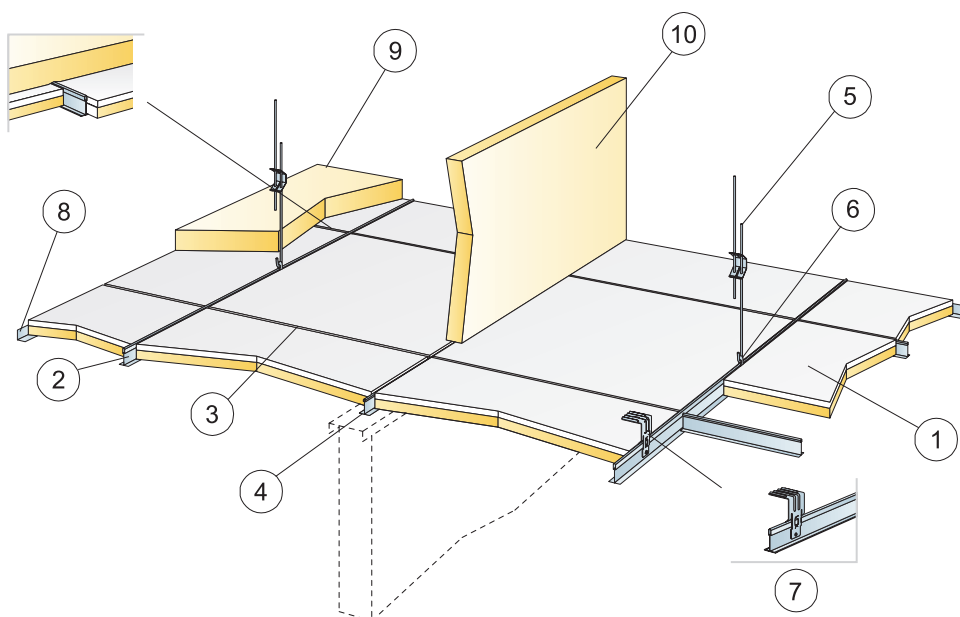
## Installation

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



## CE

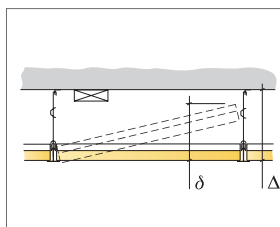
The CE marking confirms important product performance such as sound absorption, emissions, fire safety and load bearing capacity. All Ecophon ceiling products are CE marked according to European standard EN13964, and individual product performance is declared in Declaration of Performance (DoP) documents.



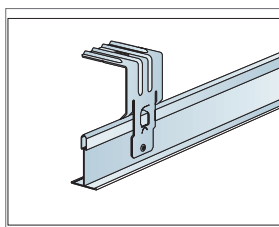
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## QUANTITY SPECIFICATION (EXCL. WASTAGE)

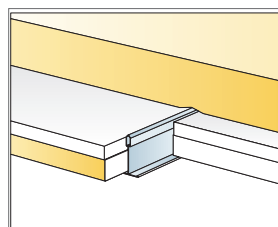
		Size, mm	
		600x600	1200x600
1	Combison Uno A	2,8/m <sup>2</sup>	1,4/m <sup>2</sup>
2	Connect T24 Main runner, installed at 1200 mm centres (max distance from wall 300 mm)	0,9m/m <sup>2</sup>	0,9m/m <sup>2</sup>
3	Connect T24 Cross tee, L=1200 mm, installed at 600 mm centres	1,7m/m <sup>2</sup>	1,7m/m <sup>2</sup>
4	Connect T24 Cross tee, L=600 mm	0,9m/m <sup>2</sup>	-
5	Connect Adjustable hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
6	Connect Hanger clip (not to be used in swimming hall environments)	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
7	For direct installation: Connect Direct bracket, installed at 1200 mm centres	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
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
Δ Min. overall depth of system, with Adjustable hanger: 100 mm, with Direct bracket: 50 mm		-	-
δ Min. demounting depth: 200 mm		-	-



See Quantity specification



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]
600x600	0	220
1200x600	0	220

Live load/load bearing capacity