

# Ecophon Combison™ Uno Ds

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 Ds is installed in a suspended grid system, creating a ceiling with a smooth appearance. The bevelled edges create a narrow groove between each tile. The tiles are demountable.

The system consists of Ecophon Combison Uno Ds tiles and Ecophon Connect grid systems, with an approximate weight of 11 kg/m<sup>2</sup>. The tiles are manufactured from high density, 3rd generation glass wool, with a bonded gypsum board (9 mm) on the back of the tile. The visible surface has an

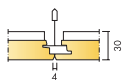
Akutex™ FT coating and the edges are primed.

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

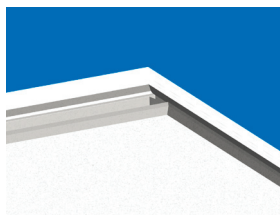


Atherton Leisure, London, United Kingdom

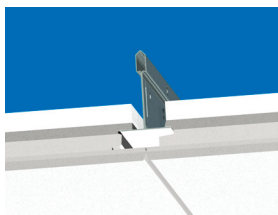
## SYSTEM RANGE



Size, mm	600x600
T24	•
Thickness	30
Inst. Diag.	M241



Combison Uno Ds tile.



Section of Combison Uno Ds system.

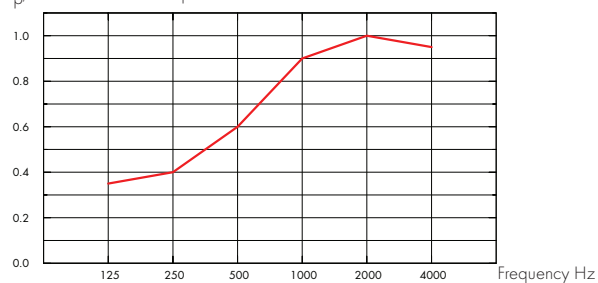


## Acoustic

### 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 Ds 30 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		
30	200	0,35	0,40	0,60	0,90	1,00	0,95	0,65	C

THK mm	$D_{nfw}$ Weighted normalized flanking level difference, ISO 10848-2
30	41



## 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/(m<sup>2</sup>lx). 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

Europe

EN  
13501-1



## Environmental influence

### Certificate / Label

Europe

EN  
13501-1



Fully recyclable.



## Fire safety

### Country

Europe

### Standard

EN 13501-1

### Class

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).



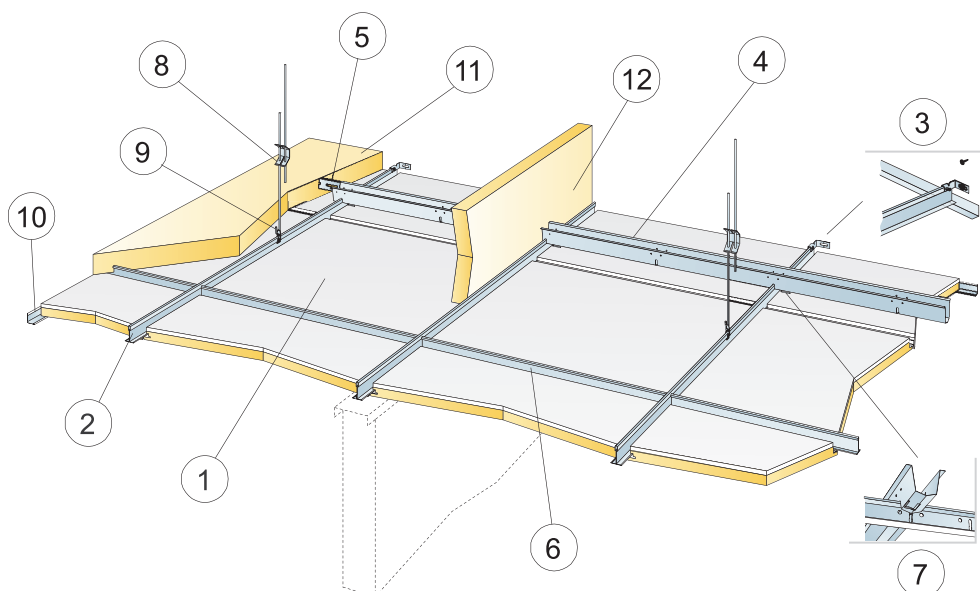
## Installation

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



## CE

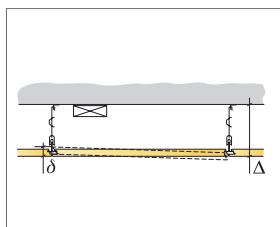
The CE marking confirms important product performance such as sound absorption, emissions, fire safety and load bearing capacity. All Ecophon ceiling products are CE marked according to European standard EN13964, and individual product performance is declared in Declaration of Performance (DoP) documents.



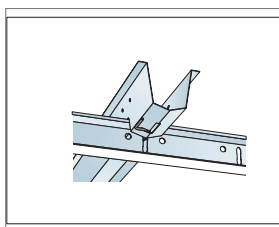
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## QUANTITY SPECIFICATION (EXCL. WASTAGE)

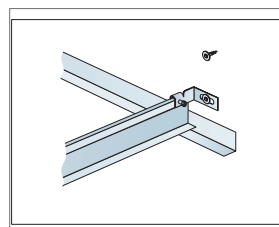
Size, mm		
600x600		
1	Combison Uno Ds	2,8/m <sup>2</sup>
2	Connect T24 Main runner HD, installed at 600 mm centres	1,7m/m <sup>2</sup>
3	Connect Wall bracket for T-profiles	1/row of suspended Main runner HD
4	Connect Space bar, installed at 1500 mm centres (max. distance from wall 300 mm)	0,7m/m <sup>2</sup>
5	Connect Wall bracket, L=700 mm, for 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 Main runner/Space bar	1,4/m <sup>2</sup>
8	Connect Adjustable hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m <sup>2</sup>
9	Connect Hanger clip (not to be used in swimming hall environments)	0,7/m <sup>2</sup>
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: 105 mm		
δ Min. demounting depth: 40 mm		



See Quantity specification



Connection between profiles with space bar winch



Connect Wall bracket for T-profiles

Size, mm	Max live load [N]	Min load bearing capacity [N]
600x600	0	220

Live load/load bearing capacity