

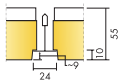
# Ecophon Combison™ Duo E

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.

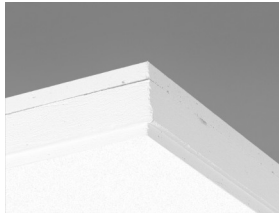


Statens Kulturråd, Stockholm, Sweden

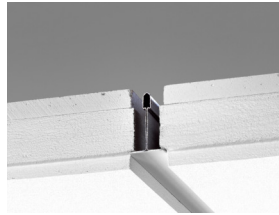
## SYSTEM RANGE



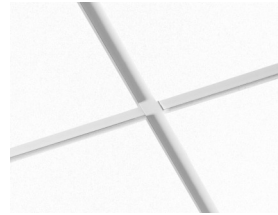
Size, mm	600x600
T24	•
Thickness (THK)	55
Inst. Diag.	M86



Combison Duo E tile



Section of Combison Duo E system



Combison Duo E system

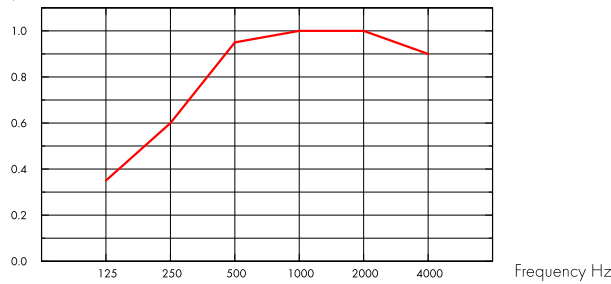
## Acoustic



### 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 Duo E 54 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		
54	200	0.35	0.60	0.95	1.00	1.00	0.90	0.90	A

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

THK mm	AC(1.5)		$D_{nfw}$		$R_w$	
	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	
French VOC	A
Finnish M1	•



## Circularity



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

\*this value does not take into account the plasterboard



## Fire safety

Country	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

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

The weight of the system (including suspension grid) should be approximately 14 kg/m<sup>2</sup>.



## Mechanical properties

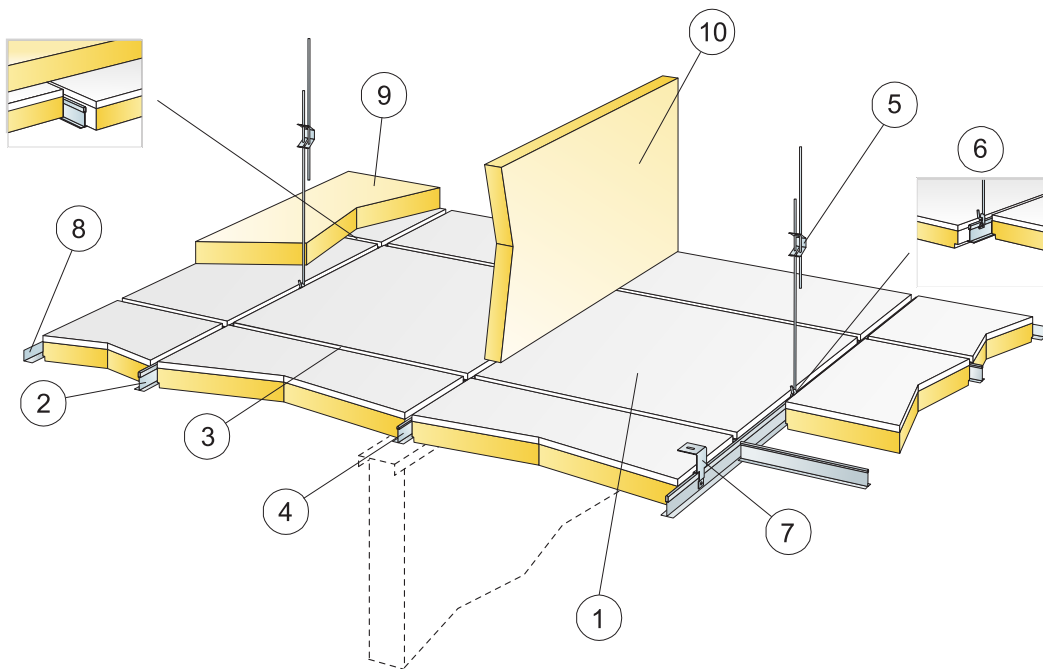
See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at [www.ecophon.com](http://www.ecophon.com).



## 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.

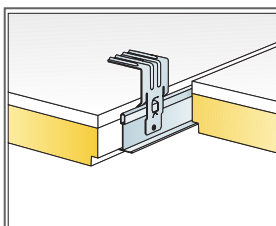
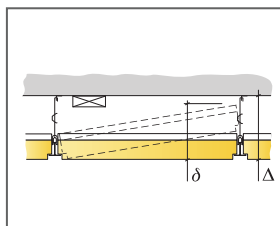
INSTALLATION DIAGRAM (M86) FOR ECOPHON COMBISON DUO E



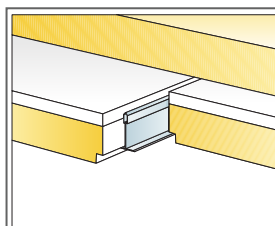
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QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm
		<b>600x600</b>
1	Combison Duo E	2,8/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>
3	Connect T24 Cross tee, L=1200 mm, installed at 600 mm centres	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>
6	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m <sup>2</sup>
7	For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m <sup>2</sup>
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: 110 mm, with Direct bracket: 90 mm		-
δ Min. demounting depth: 230 mm		-



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