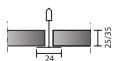


# Ecophon Saga™ A

Ecophon Saga™ A has either an exposed grid system with easily demountable tiles or is directly fixed using screws. Mineral wool is used for a system with optimised sound absorption. Used in interior design of public and residential buildings, for a natural and warm look.



## SYSTEM RANGE



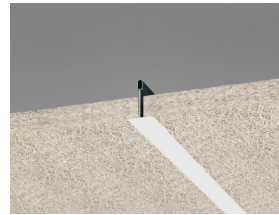
Size, mm	600x600	600x600	1200x600	1200x600
T24	•	•	•	•
Thickness	25	35	25	35
Inst. Diag.	M573, M579	M573, M579	M573, M579	M573, M579



Saga A panel



Saga A System



Saga A Section

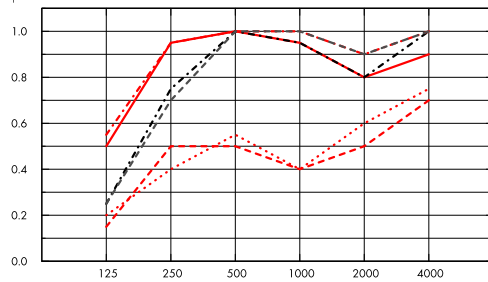
## Acoustic



### 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

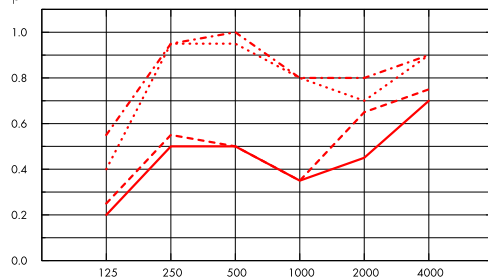


Frequency Hz

- Saga A 25mm Elegant, 200 mm o.d.s.
- Saga A 25mm Elegant + Saga Acoustic, 200 mm o.d.s.
- - - Saga A 25mm Elegant + Mineral wool, 65 mm o.d.s.
- ..... Saga A 35mm Elegant, 200 mm o.d.s.
- - - Saga A 35mm Elegant + Mineral wool, 200 mm o.d.s.
- Saga A 35mm Elegant + Mineral wool, 75 mm o.d.s.

o.d.s = overall depth of system

$\alpha_p$ , Practical sound absorption coefficient



Frequency Hz

- Saga A 25mm Normal, 200 mm o.d.s.
- ..... Saga A 25mm Normal + Mineral wool, 200 mm o.d.s.
- Saga A 35mm Normal, 200 mm o.d.s.
- - - Saga A 35mm Normal + Mineral wool, 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		
1.0 Elegant	25	200	0.15	0.50	0.50	0.40	0.50	0.70	0.50	D
1.0 Elegant	25	25	0.05	0.10	0.20	0.45	0.75	0.55	0.30	D
+ Saga Acoustic	65	200	0.50	0.95	1.00	0.95	0.80	0.90	0.90	A
1.0 Elegant + Mineral wool	65	200	0.50	0.90	1.00	1.00	0.80	0.95	0.90	A
1.0 Elegant + Mineral wool	65	65	0.25	0.75	1.00	0.95	0.80	1.00	0.90	A
1.0 Elegant	35	200	0.20	0.40	0.55	0.40	0.60	0.75	0.50	D
1.0 Elegant	35	35	0.10	0.15	0.30	0.55	0.70	0.70	0.35	D
1.0 Elegant + Mineral wool	75	200	0.55	0.95	1.00	1.00	0.90	1.00	1.00	A
1.0 Elegant + Mineral wool	75	75	0.25	0.70	1.00	1.00	0.90	1.00	0.95	A

1.5 Discreet	25	200	0.15	0.45	0.45	0.35	0.45	0.70	0.45	D
1.5 Discreet	25	25	0.05	0.10	0.20	0.50	0.70	0.60	0.30	D
1.5 Discreet + Saga Acoustic	65	200	0.45	0.95	0.95	0.85	0.65	0.85	0.75	C
1.5 Discreet + Mineral wool	65	200	0.40	0.95	0.95	0.80	0.65	0.85	0.75	C
1.5 Discreet + Mineral wool	65	65	0.25	0.75	1.00	0.80	0.65	0.85	0.75	C
1.5 Discreet	35	200	0.25	0.50	0.55	0.40	0.60	0.80	0.50	D
1.5 Discreet	35	35	0.10	0.15	0.35	0.75	0.65	0.75	0.40	D
1.5 Discreet + Mineral wool	75	200	0.55	0.95	1.00	0.80	0.80	0.90	0.85	B
1.5 Discreet + Mineral wool	75	75	0.25	0.80	1.00	0.85	0.85	1.00	0.90	A
2.5 Normal	25	200	0.20	0.50	0.50	0.35	0.45	0.70	0.45	D
2.5 Normal	25	25	0.05	0.10	0.30	0.50	0.65	0.60	0.35	D
2.5 Normal + Mineral wool	65	200	0.40	0.95	0.95	0.80	0.70	0.90	0.80	B
2.5 Normal + Saga Acoustic	65	200	0.35	0.95	0.95	0.80	0.70	0.90	0.80	B
2.5 Normal	35	200	0.25	0.55	0.50	0.35	0.65	0.75	0.45	D
2.5 Normal	35	35	0.05	0.15	0.35	0.75	0.60	0.80	0.40	D
2.5 Normal + Mineral wool	75	200	0.55	0.95	1.00	0.80	0.80	0.90	0.85	B
2.5 Normal	50	50	0.15	0.30	0.85	0.80	0.75	0.90	0.60	C

	THK mm	o.d.s. mm	NRC	SAA
1.0 Elegant	25	200	0.50	0.48
1.0 Elegant	25	25	0.40	0.37
+ Saga Acoustic	65	200	0.95	0.92



### Indoor Air Quality

Certificate / Label	
Eurofins Indoor Air Comfort®	IAC Gold
French VOC	A+
Finnish M1	•



### Carbon footprint

kg CO <sub>2</sub> equiv/m <sup>2</sup>	25 mm	35 mm	50 mm
Saga (white cement)	6,41	8,97	12,81
Saga (grey cement)	4,80	6,72	9,60
Saga (white cement) + Saga Acoustic	10,05	12,61	16,45
Saga (grey cement) + Saga Acoustic	8,44	10,36	13,24

Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804



## Circularity



Products are made with FSC certified wood.



## Fire safety

Country	Fire standard	Class
Europe	EN 13501-1	B-s1,d0



## Humidity Resistance

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



## Thermal Properties

Thermal conductivity  $\lambda = 0,1$  W/m-K according to EN 12664.



## Visual appearance

The visible surface with shredded wood gives a natural aesthetic available in three different textures. Light reflectance and nearest NCS colour sample for all the different colours can be found at Ecophon Colours and surfaces. Choosing the perfect colour for your wood wool panels is an important step. Our unpainted Ecophon Saga™ panels feature the natural variations found in real wood, which are part of its character and make it distinctive. Keep in mind that wood is a living material, so ensure that aesthetic meet your needs. Our Saga range also offers a wide selection of painted colours in any custom NCS or RAL colour code as well as a wide range of standard colours.



## Cleanability

Weekly dusting and vacuum cleaning.



## Mould and Bacterial Resistance

Standard/Method	
ISO 846 A	0
ISO 846 C	0



## Accessibility

Tiles suspended on T24 grids are demountable. Tiles directly mounted to the soffit are not demountable.



## System weight

kg/m <sup>2</sup>	25 mm	35 mm	50 mm
Elegant	14.5	16.5	-
Discreet	14.0	16.0	-
Normal	13.5	15.5	19.0

Weight information is indicative and subject to variation.



### Mechanical properties

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See table regarding the min- and max- load bearing capacities and functional demands. Additional live load has to be fixed to the soffit.



### Impact Resistance

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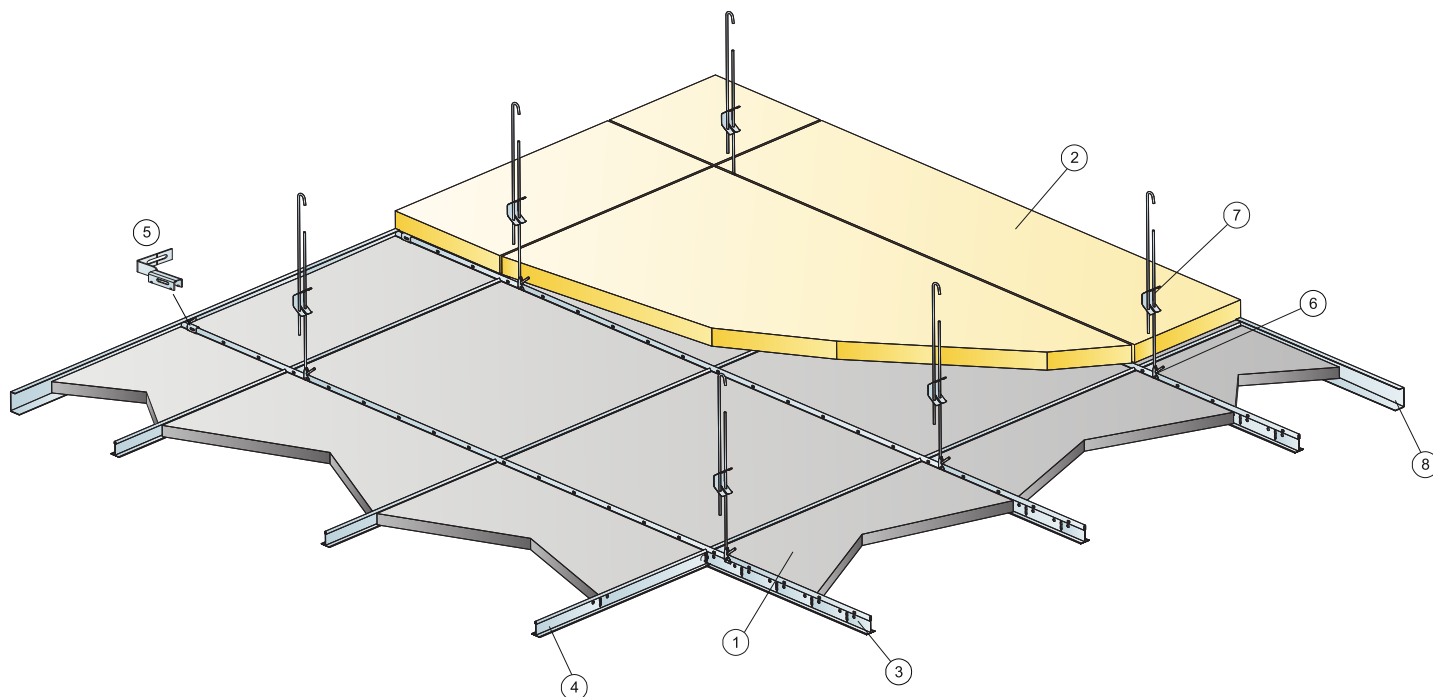
Thickness	M-skech	Classification	Tested and classified according to EN 13964 annex D.
25	M579	2A	



### CE

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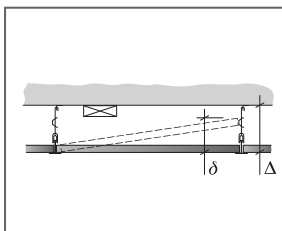
Ecophon Saga products are CE-marked according to the European harmonized standard EN 13964:2014 (suspended ceilings). CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European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



© Saint-Gobain Ecophon AB

### QUANTITY SPECIFICATION (EXCL. WASTAGE)

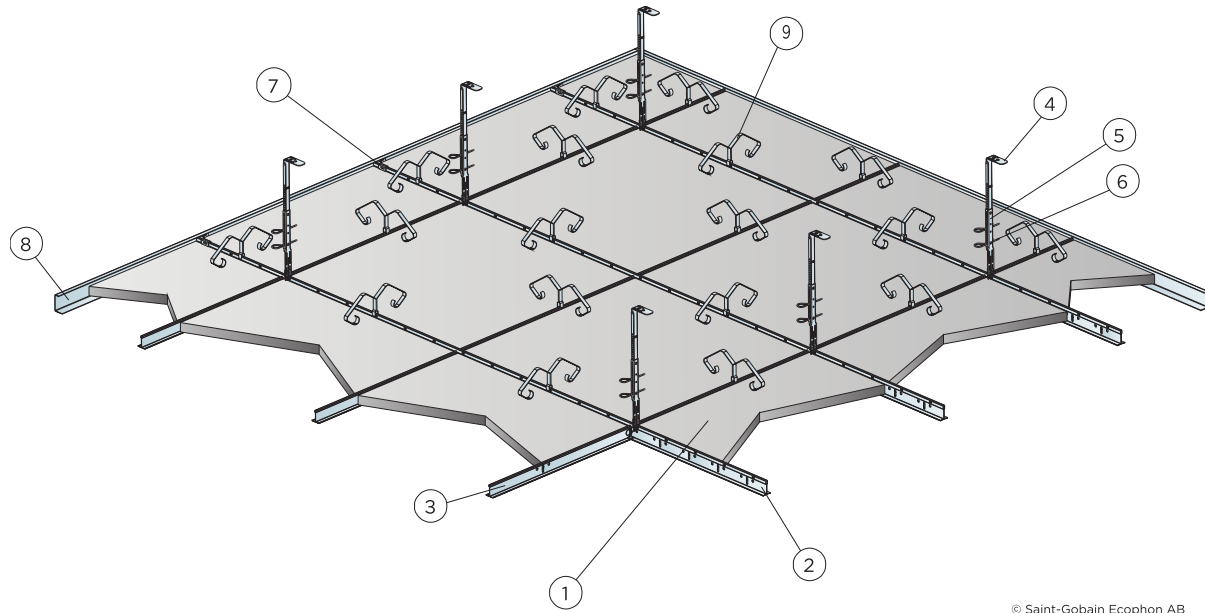
	Size, mm	
	600x600	1200x600
1 Saga A	2,8/m <sup>2</sup>	1,4/m <sup>2</sup>
2 Saga Acoustic or mineral wool (if required)	as required	as required
3 Connect T24 Main runner HD, installed at 600 mm centres (max. distance from wall 600 mm).	1,7m/m <sup>2</sup>	1,7m/m <sup>2</sup>
4 Connect T24 Cross tee, l=600 mm	1,7m/m <sup>2</sup>	0,9m/m <sup>2</sup>
5 Connect Wall Bracket, fixed at Main runner	2/suspended row of Main runner	
6 Connect Hanger Clip	1,4/m <sup>2</sup>	1,4/m <sup>2</sup>
7 Connect Adjustable hanger, installed at 1200 mm centres	1,4/m <sup>2</sup>	1,4/m <sup>2</sup>
8 Connect Channel trim, fixed at 300 mm centres.	as required	as required
Δ Min. overall depth of system, with adjustable hanger: 100 mm	-	-
δ Min. demounting depth: 170 mm	-	-



Size, mm	Max live load [N]	Min load bearing capacity [N]
600x600x25	0	160
600x600x35	0	160
1200x600x25	0	160
1200x600x35	0	160

Live load/load bearing capacity

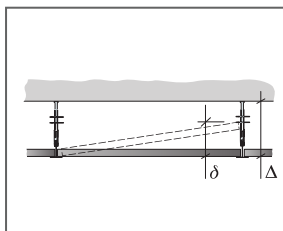
## INSTALLATION DIAGRAM (M579) FOR ECOPHON SAGA A, IMPACT RESISTANT



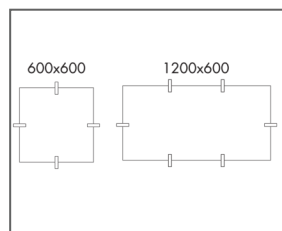
© Saint-Gobain Ecophon AB

### QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm	
	600x600	1200x600
1 Saga A	2,8/m <sup>2</sup>	1,4/m <sup>2</sup>
2 Connect T24 Main runner HD , installed at 600 mm centres [max. distance from wall 600 mm].	1,7m/m <sup>2</sup>	1,7m/m <sup>2</sup>
3 Connect T24 Cross tee, L=600 mm	1,7m/m <sup>2</sup>	0,9m/m <sup>2</sup>
4 Connect Nonius hanger upper, installed at 1200 mm centres	1,4/m <sup>2</sup>	1,4/m <sup>2</sup>
5 Connect Nonius Hanger Lower, installed with spacing 1200 mm	1,4/m <sup>2</sup>	1,4/m <sup>2</sup>
6 Connect Split pin 0078 [2/hanger]	1,4/m <sup>2</sup>	1,4/m <sup>2</sup>
7 Connect Wall Bracket, fixed at Main runner	2/suspended row of Main runner	
8 Connect Channel trim, fixed at 300 mm centres.	as required	as required
9 Euroclip	5,6/m <sup>2</sup>	4,2/m <sup>2</sup>
Δ Min. overall depth of system: Δ 230 mm	-	-
δ Min. demounting depth: 170 mm	-	-



See Quantity Specification



Arrangement of clips

Size, mm	Max live load [N]	Min load bearing capacity [N]
600x600x25	40	160
600x600x35	40	160
1200x600x25	40	160
1200x600x35	40	160

Live load/load bearing capacity



# Ecophon Saga™ B

Ecophon Saga™ B is bonded edge-to-edge and directly fixed using screws. The bevelled edge creates a narrow groove between the tiles. For applications where the minimum possible overall depth of system is required.



## SYSTEM RANGE



Size, mm	600x600	600x600	600x600	1200x600	1200x600	1200x600	2400x600	2400x600	2400x600
Direct	•	•	•	•	•	•	•	•	•
Direct to grid, mechanically	•	•		•	•		•	•	
Suspended	•	•		•	•		•	•	
Wall	•	•	•	•	•	•	•	•	•
Thickness	25	35	50	25	35	50	25	35	50
Inst. Diagr.	M575, M576, M578	M575, M576, M578	M576, M578	M575, M576, M578	M575, M576, M578	M576, M578	M575, M576, M578	M575, M576, M578	M576, M578





Saga B panel



Saga B System



Saga B Section

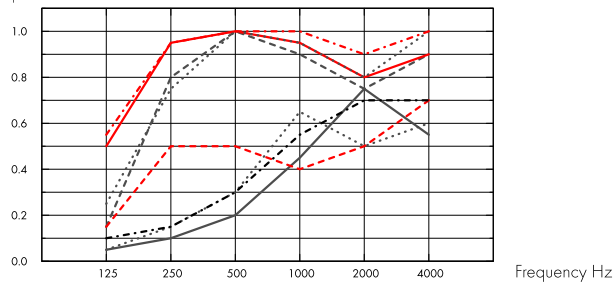
## Acoustic



### Sound Absorption:

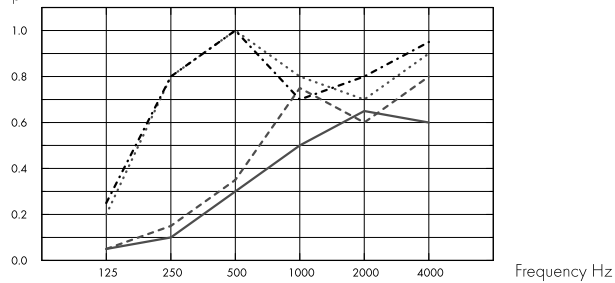
Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.

$\alpha_p$ , Practical sound absorption coefficient



- Saga B 25mm Elegant, 25 mm o.d.s.
  - Saga B 25mm Elegant, 50 mm o.d.s.
  - Saga B 25mm Elegant + Saga Acoustic, 70 mm o.d.s.
  - - - Saga B 25mm Elegant, 200 mm o.d.s.
  - - - Saga B 25mm Elegant + Saga Acoustic, 200 mm o.d.s.
  - Saga B 25mm Elegant + Mineral wool, 65 mm o.d.s.
  - Saga B 35mm Elegant, 35 mm o.d.s.
  - - - Saga B 35mm Elegant + Mineral wool, 200 mm o.d.s.
- o.d.s = overall depth of system

$\alpha_p$ , Practical sound absorption coefficient



- Saga B 25mm Normal, 25 mm o.d.s.
  - Saga B 25mm Normal + Mineral wool, 65 mm o.d.s.
  - Saga B 35mm Normal, 35 mm o.d.s.
  - Saga B 35mm Normal + Mineral wool, 75 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		
1.0 Elegant	25	25	0.05	0.10	0.20	0.45	0.75	0.55	0.30	D
1.0 Elegant	25	50	0.05	0.15	0.30	0.65	0.50	0.60	0.35	D
1.0 Elegant + Saga Acoustic	65	70	0.15	0.80	1.00	0.90	0.75	0.90	0.85	B
1.0 Elegant	25	200	0.15	0.50	0.50	0.40	0.50	0.70	0.50	D
1.0 Elegant + Saga Acoustic	65	200	0.50	0.95	1.00	0.95	0.80	0.90	0.90	A
1.0 Elegant + Mineral wool	65	200	0.50	0.90	1.00	1.00	0.80	0.95	0.90	A
1.0 Elegant + Mineral wool	65	65	0.25	0.75	1.00	0.95	0.80	1.00	0.90	A

1.0 Elegant	35	200	0.20	0.40	0.55	0.40	0.60	0.75	0.50	D
1.0 Elegant	35	35	0.10	0.15	0.30	0.55	0.70	0.70	0.35	D
1.0 Elegant + Mineral wool	75	200	0.55	0.95	1.00	1.00	0.90	1.00	1.00	A
1.0 Elegant + Mineral wool	75	75	0.25	0.70	1.00	1.00	0.90	1.00	0.95	A
1.5 Discreet	25	200	0.15	0.45	0.45	0.35	0.45	0.70	0.45	D
1.5 Discreet	25	25	0.05	0.10	0.20	0.50	0.70	0.60	0.30	D
1.5 Discreet + Mineral wool	65	200	0.40	0.95	0.95	0.80	0.65	0.85	0.75	C
1.5 Discreet + Mineral wool	65	65	0.25	0.75	1.00	0.80	0.65	0.85	0.80	B
1.5 Discreet + Saga Acoustic	65	200	0.45	0.95	0.95	0.85	0.65	0.85	0.75	C
1.5 Discreet + Saga Acoustic	65	70	0.20	0.85	1.00	0.80	0.70	0.85	0.80	B
1.5 Discreet	35	200	0.25	0.50	0.55	0.40	0.60	0.80	0.50	D
1.5 Discreet	35	35	0.10	0.15	0.35	0.75	0.65	0.75	0.40	D
1.5 Discreet + Mineral wool	75	200	0.55	0.95	1.00	0.80	0.80	0.90	0.85	B
1.5 Discreet + Mineral wool	75	75	0.25	0.80	1.00	0.85	0.85	1.00	0.90	A
2.5 Normal	25	200	0.20	0.50	0.50	0.35	0.45	0.70	0.45	D
2.5 Normal	25	25	0.05	0.10	0.30	0.50	0.65	0.60	0.35	D
2.5 Normal + Mineral wool	65	200	0.40	0.95	0.95	0.80	0.70	0.90	0.80	B
2.5 Normal + Mineral wool	65	65	0.20	0.80	1.00	0.80	0.70	0.90	0.80	B
2.5 Normal + Saga Acoustic	65	200	0.35	0.95	0.95	0.80	0.70	0.90	0.80	B
2.5 Normal + Saga Acoustic	65	70	0.20	0.80	1.00	0.80	0.65	0.90	0.75	C
2.5 Normal	35	200	0.25	0.55	0.50	0.35	0.65	0.75	0.45	D
2.5 Normal	35	35	0.05	0.15	0.35	0.75	0.60	0.80	0.40	D
2.5 Normal + Mineral wool	75	200	0.55	0.95	1.00	0.80	0.80	0.90	0.85	B
2.5 Normal + Mineral wool	75	75	0.25	0.80	1.00	0.70	0.80	0.95	0.80	B
2.5 Normal	50	50	0.15	0.30	0.85	0.80	0.75	0.90	0.60	C

	THK mm	o.d.s. mm	NRC	SAA
1.0 Elegant	25	25	0.40	0.37
1.0 Elegant	25	50	0.40	0.41
1.0 Elegant + Saga Acoustic	65	70	0.85	0.89
1.0 Elegant	25	200	0.50	0.48
1.0 Elegant + Saga Acoustic	65	200	0.95	0.92



## Indoor Air Quality

Certificate / Label	
Eurofins Indoor Air Comfort®	IAC Gold
French VOC	A+
Finnish M1	•



## Carbon footprint

kg CO <sub>2</sub> equiv/m <sup>2</sup>	25 mm	35 mm	50 mm
Saga (white cement)	6,41	8,97	12,81
Saga (grey cement)	4,80	6,72	9,60
Saga (white cement) + Saga Acoustic	10,05	12,61	16,45
Saga (grey cement) + Saga Acoustic	8,44	10,36	13,24

Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804



## Circularity



Products are made with FSC certified wood.



## Fire safety

Country	Fire standard	Class
Europe	EN 13501-1	B-s1,d0



## Thermal Properties

Thermal conductivity  $\lambda = 0,1$  W/m-K according to EN 12664.



## Humidity Resistance

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



## Visual appearance

The visible surface with shredded wood gives a natural aesthetic available in three different textures. Light reflectance and nearest NCS colour sample for all the different colours can be found at Ecophon Colours and surfaces. Choosing the perfect colour for your wood wool panels is an important step. Our unpainted Ecophon Saga™ panels feature the natural variations found in real wood, which are part of its character and make it distinctive. Keep in mind that wood is a living material, so ensure that aesthetic meet your needs. Our Saga range also offers a wide selection of painted colours in any custom NCS or RAL colour code as well as a wide range of standard colours.



## Cleanability

Weekly dusting and vacuum cleaning.



## Mould and Bacterial Resistance

Standard/Method	
ISO 846 A	0
ISO 846 C	0



## Accessibility

The tiles are non-demountable.



## System weight

kg/m <sup>2</sup>	25 mm	35 mm	50 mm
Elegant	14.5	16.5	-
Discreet	14.0	16.0	-
Normal	13.5	15.5	19.0

Weight information is indicative and subject to variation.



## Mechanical properties

See table regarding the min- and max- load bearing capacities and functional demands. Additional live load has to be fixed to the soffit.



## Impact Resistance

Thickness	M-scratch	Classification
25	M575	1A

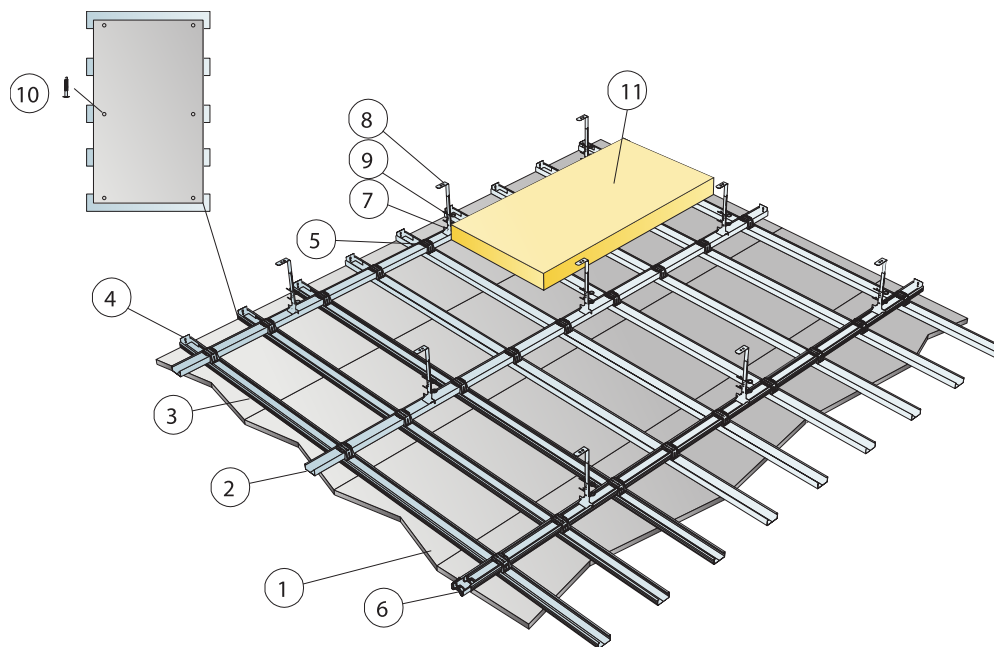
Tested and classified according to EN 13964 annex D.



## CE

Ecophon Saga products are CE-marked according to the European harmonized standard EN13964:2014 (suspended ceilings). 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.

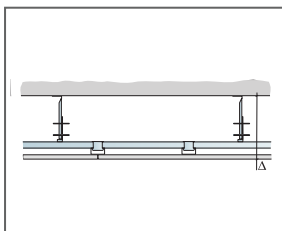
## INSTALLATION DIAGRAM (M575) FOR ECOPHON SAGA B, IMPACT RESISTANT SYSTEM WITH GRIDS.



©Saint Gobain Ecophon AB

### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm		
		600x600	1200x600	2400x600
1	Saga B	2,8/m <sup>2</sup>	1,4/m <sup>2</sup>	-
2	Connect C-profile Plus, L=3100 mm, installed 900 mm centres	1,2m/m <sup>2</sup>	1,2m/m <sup>2</sup>	-
3	Connect C-profile Plus, L=3100 mm, installed 300 mm centres	3,4m/m <sup>2</sup>	3,4m/m <sup>2</sup>	-
4	Connect Wall bracket Plus	as required	as required	-
5	Connect X-connector Plus	7,4/m <sup>2</sup>	7,4/m <sup>2</sup>	-
6	Connect Splice connector Plus	1,2/m <sup>2</sup>	1,2/m <sup>2</sup>	-
7	Connect Nonius hanger lower, installed at 900 mm centres	1,2/m <sup>2</sup>	1,2/m <sup>2</sup>	-
8	Connect Nonius hanger upper, installed at 900 mm centres	1,2/m <sup>2</sup>	1,2/m <sup>2</sup>	-
9	Connect Split pin (2/hanger)	2,3/m <sup>2</sup>	2,3/m <sup>2</sup>	-
10	Connect Saga Fixation	9pcs/panel	15pcs/panel	-
11	Saga Acoustic or mineral wool (if required)	as required	as required	-
Δ Min. overall depth of system: 310 mm		-	-	-
δ Min. demounting depth: The system is non-demountable		-	-	-

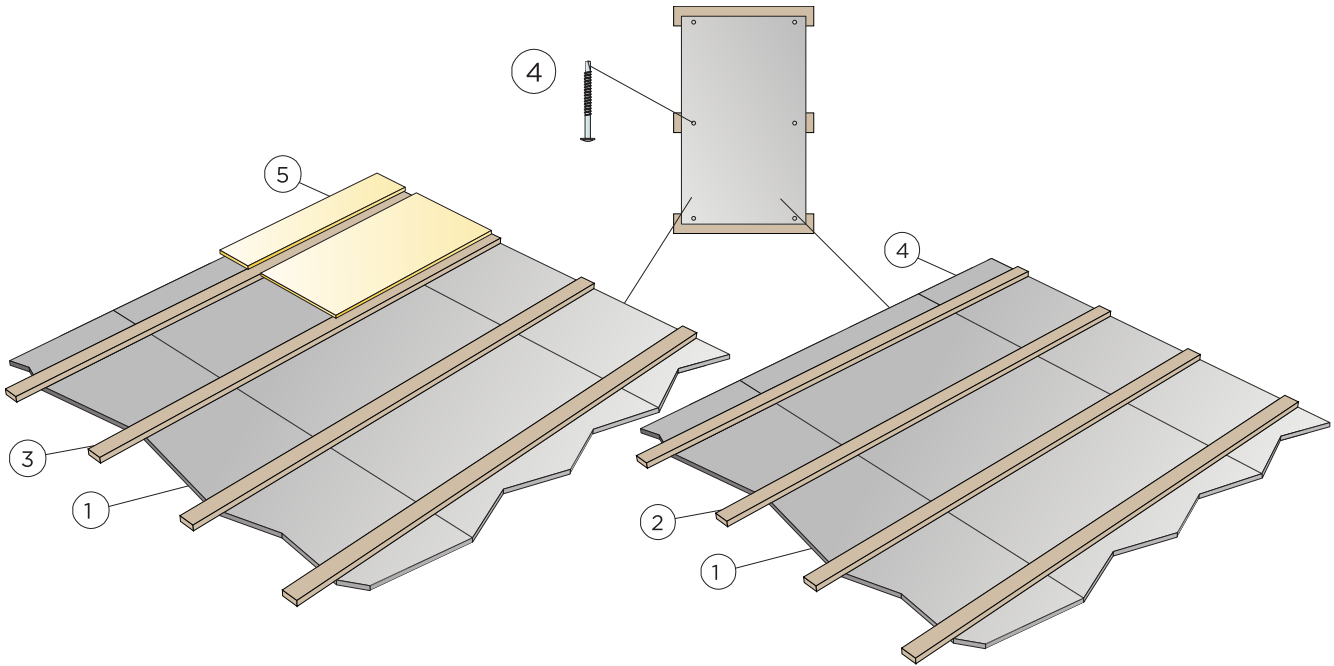


See Quantity Specification

Size, mm	Max live load [N]	Min load bearing capacity [N]
600x600x25	0	160
600x600x35	0	160
1200x600x25	0	160
1200x600x35	0	160
2400x600x25	-	-
2400x600x35	-	-

Live load/load bearing capacity

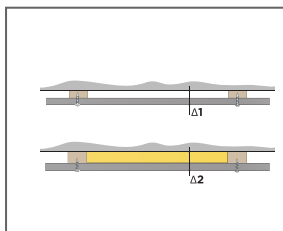
## INSTALLATION DIAGRAM (M576) FOR ECOPHON SAGA B, DIRECT FIXING SYSTEM (CEILING).



© Saint-Gobain Ecophon AB

### QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm		
	600x600	1200x600	2400x600
1 Saga B	2,8/m <sup>2</sup>	1,4/m <sup>2</sup>	-
2 Mounting wood laths 28x70, installed 600 mm centres	1,7/m <sup>2</sup>	1,7/m <sup>2</sup>	-
3 All Mounting wood laths 45x70, installed 600 mm centres for Saga Acoustic	1,7/m <sup>2</sup>	1,7/m <sup>2</sup>	-
4 Connect Saga Fixation	4pcs/panel	6pcs/panel	-
5 Saga Acoustic or mineral wool (if required)	as required	as required	-
Δ Min. overall depth of system: Δ1 50 mm / Δ2 70 mm The system is not demountable	-	-	-
	-	-	-

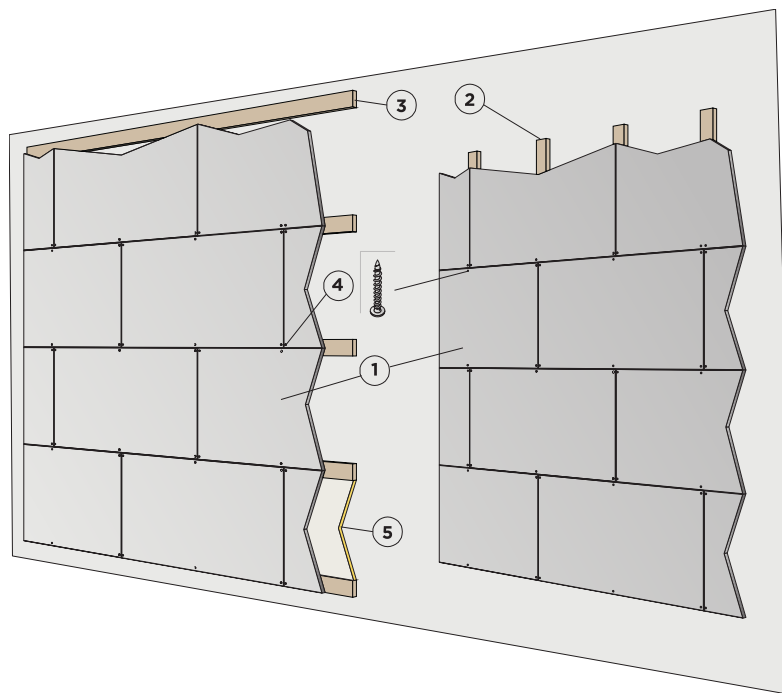


Size, mm	Max live load [N]	Min load bearing capacity [N]
600x600x25	-	-
600x600x35	-	-
600x600x50	-	-
1200x600x25	-	-
1200x600x35	-	-
1200x600x50	-	-

Live load/load bearing capacity



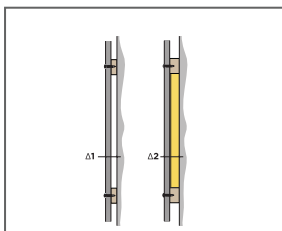
## INSTALLATION DIAGRAM (M578) FOR ECOPHON SAGA B, LATHING WALL SYSTEM.



© Saint-Gobain Ecophon AB

### QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm		
	600x600	1200x600	2400x600
1 Saga B	2,8/m <sup>2</sup>	1,4/m <sup>2</sup>	-
2 Mounting wood laths 28x70, installed 600 mm centres	1,7/m <sup>2</sup>	1,7/m <sup>2</sup>	-
3 All Mounting wood laths 45x70, installed 600 mm centres for Saga Acoustic	1,7/m <sup>2</sup>	1,7/m <sup>2</sup>	-
4 Connect Saga Fixation	4pcs/panel	6pcs/panel	-
5 Saga Acoustic or mineral wool (if required)	as required	as required	-
Δ Min. overall depth of system: Δ1 50 mm / Δ2 70 mm The system is not demountable	-	-	-
	-	-	-



Size, mm	Max live load [N]	Min load bearing capacity [N]
600x600x25	-	-
600x600x35	-	-
600x600x50	-	-
1200x600x25	-	-
1200x600x35	-	-
1200x600x50	-	-

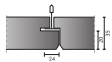
Live load/load bearing capacity

# Ecophon Saga™ D

Ecophon Saga D has a concealed grid and bevelled edges with a narrow groove between each tile. For applications with high demand on both acoustics and design, and where individual tiles must be easily demountable.



## SYSTEM RANGE



Size, mm	600x600	1200x600
T24	•	•
Thickness	35	35
Inst. Diagr.	M684	M684



Saga D panel



Saga D System



Saga D Section

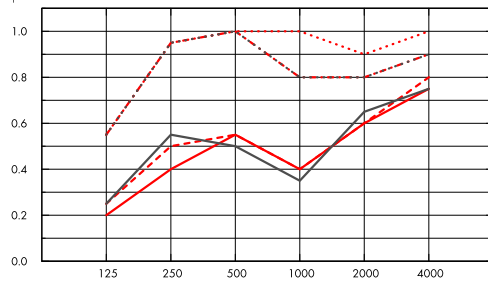
## Acoustic



### Sound Absorption:

Test results according to EN ISO 354. Classification according to EN ISO 11654.

$\alpha_p$ , Practical sound absorption coefficient



- Saga D 35mm Elegant, 200 mm o.d.s.
- Saga D 35mm Elegant + Mineral wool, 200 mm o.d.s.
- - - Saga D 35mm Discreet, 200 mm o.d.s.
- · - · Saga D 35mm Discreet + Mineral wool, 200 mm o.d.s.
- Saga D 35mm Normal, 200 mm o.d.s.
- Saga D 35mm Normal + Mineral wool, 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		
1.0 Elegant	35	200	0.20	0.40	0.55	0.40	0.60	0.75	0.50	D
1.0 Elegant + Mineral wool	75	200	0.55	0.95	1.00	1.00	0.90	1.00	1.00	A
1.5 Discreet	35	200	0.25	0.50	0.55	0.40	0.60	0.80	0.50	D
1.5 Discreet + Mineral wool	75	200	0.55	0.95	1.00	0.80	0.80	0.90	0.85	B
2.5 Normal	35	200	0.25	0.55	0.50	0.35	0.65	0.75	0.45	D
2.5 Normal + Mineral wool	75	200	0.55	0.95	1.00	0.80	0.80	0.90	0.85	B

## Indoor Air Quality



Certificate / Label

Eurofins Indoor Air Comfort®

IAC Gold

French VOC

A+

Finnish M1

•





## Carbon footprint

	kg CO <sub>2</sub> equiv/m <sup>2</sup>
Saga (white cement)	8,97
Saga (grey cement)	6,72
Saga (white cement) + Saga Acoustic	12,61
Saga (grey cement) + Saga Acoustic	10,36

Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804



## Circularity



Products are made with FSC certified wood.



## Fire safety

Country	Fire standard	Class
Europe	EN 13501-1	B-s1,d0



## Humidity Resistance

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



## Thermal Properties

Thermal conductivity  $\lambda = 0,1$  W/m-K according to EN 12664.



## Cleanability

Weekly dusting and vacuum cleaning.



## Mould and Bacterial Resistance

Standard/Method	
ISO 846 A	0
ISO 846 C	0



## Accessibility

The tiles are demountable.



## System weight

kg/m <sup>2</sup>	35 mm
Elegant	16.5
Discreet	16.0
Normal	15.5

Weight information is indicative and subject to variation.



### **Mechanical properties**

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See table regarding the min- and max- load bearing capacities and functional demands. Additional live load has to be fixed to the soffit.

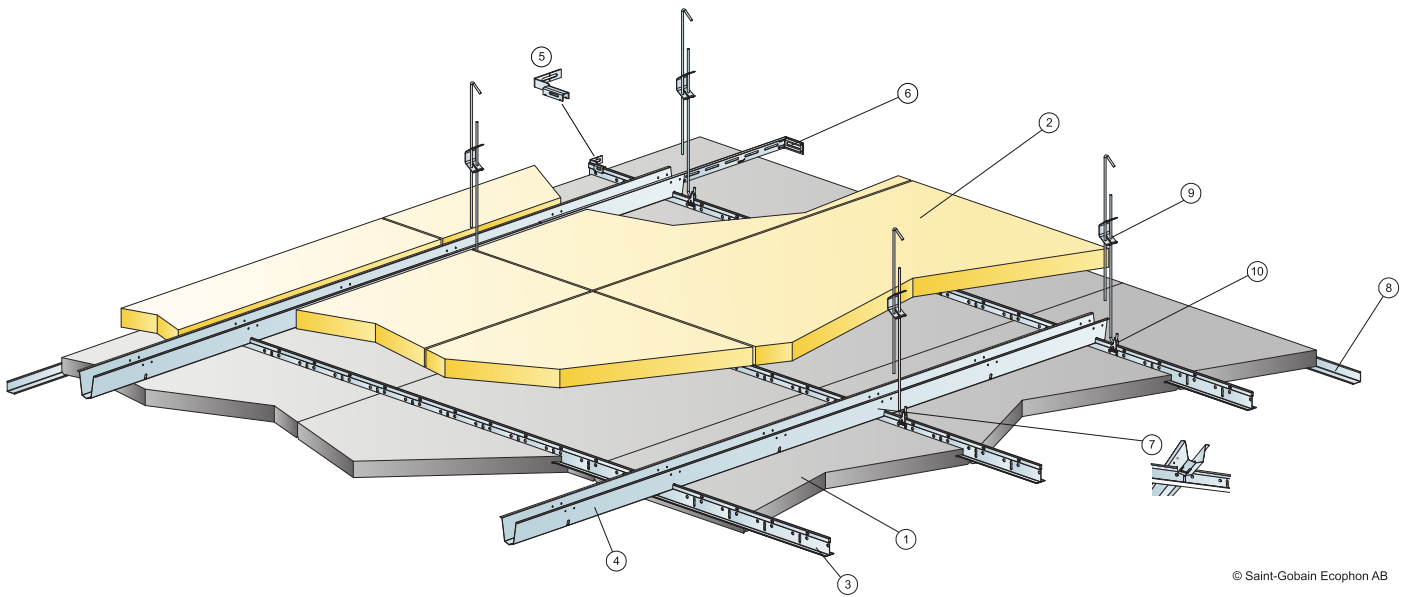


### **CE**

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Ecophon Saga products are CE-marked according to the European harmonized standard EN13964:2014 (suspended ceilings). 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.

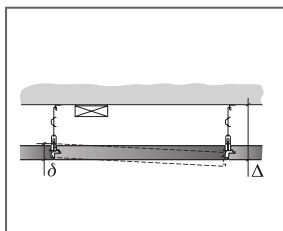
## INSTALLATION DIAGRAM (M684) FOR ECOPHON SAGA D



© Saint-Gobain Ecophon AB

### QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm	
	600x600	1200x600
1 Saga D	2,8/m <sup>2</sup>	1,4/m <sup>2</sup>
2 Saga Acoustic or mineral wool (if required)	as required	as required
3 Connect T24 Main runner HD, installed at 600 mm centres (max. distance from wall 600 mm).	1,7m/m <sup>2</sup>	1,7m/m <sup>2</sup>
4 Connect Space Bar, installed at 1500 mm centres (max. distance from wall 300 mm)	0,7m/m <sup>2</sup>	0,7m/m <sup>2</sup>
5 Connect Wall Bracket for T-profiles	1/suspended row of Main runner	
6 Connect Wall Bracket, L=700 mm, for Connect Space Bar	1/row of Space bar	
7 Connect Space Bar Winch, installed one per joint Connect Main Runner/Connect Space Bar	1,4/m <sup>2</sup>	1,4/m <sup>2</sup>
8 Connect Angle trim, fixed at 300 mm centres	as required	as required
9 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>
10 Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
Δ Min. overall depth of system: Δ 200 mm	-	-



See Quantity Specification

Size, mm	Max live load [N]	Min load bearing capacity [N]
600x600x35	35	160
1200x600x35	35	160

Live load/load bearing capacity

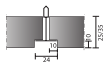


# Ecophon Saga™ E

Ecophon Saga™ E has a recessed visible grid and a regular edge, creating a ceiling with a shadow effect that accentuates each tile and partially conceals the grid. For applications where an attractive suspended ceiling is required and easy removal of individual tiles is essential.



## SYSTEM RANGE



Size, mm	600x600	600x600	1200x600	1200x600
T24	•	•	•	•
Thickness	25	35	25	35
Inst. Diag.	M683	M683	M683	M683



Saga E panel



Saga E System



Saga E Section

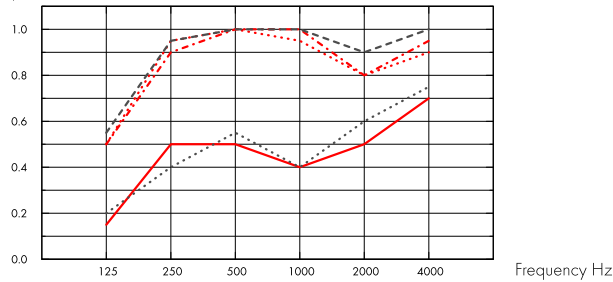
## Acoustic



### Sound Absorption:

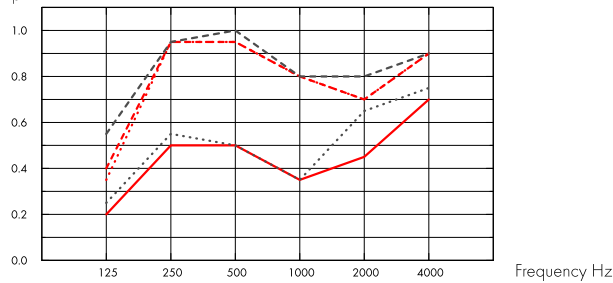
Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.

$\alpha_p$ , Practical sound absorption coefficient



- Saga E 25mm Elegant, 200 mm o.d.s.
  - ..... Saga E 25mm Elegant + Saga Acoustic, 200 mm o.d.s.
  - - - Saga E 25mm Elegant + Mineral wool, 200 mm o.d.s.
  - ..... Saga E 35mm Elegant, 200 mm o.d.s.
  - - - Saga E 35mm Elegant + Mineral wool, 200 mm o.d.s.
- o.d.s = overall depth of system

$\alpha_p$ , Practical sound absorption coefficient



- Saga E 25mm Normal, 200 mm o.d.s.
  - ..... Saga E 25mm Normal + Saga Acoustic, 200 mm o.d.s.
  - - - Saga E 25mm Normal + Mineral wool, 200 mm o.d.s.
  - ..... Saga E 35mm Normal, 200 mm o.d.s.
  - - - Saga E 35mm Normal + Mineral wool, 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		
1.0 Elegant	25	200	0.15	0.50	0.50	0.40	0.50	0.70	0.50	D
1.0 Elegant + Saga Acoustic	65	200	0.50	0.95	1.00	0.95	0.80	0.90	0.90	A
1.0 Elegant + Mineral wool	65	200	0.50	0.90	1.00	1.00	0.80	0.95	0.90	A
1.0 Elegant	35	200	0.20	0.40	0.55	0.40	0.60	0.75	0.50	D
1.0 Elegant + Mineral wool	75	200	0.55	0.95	1.00	1.00	0.90	1.00	1.00	A
1.5 Discreet	25	200	0.05	0.10	0.20	0.50	0.70	0.60	0.45	D
1.5 Discreet + Saga Acoustic	65	200	0.45	0.95	0.95	0.85	0.65	0.85	0.75	C
1.5 Discreet + Mineral wool	65	200	0.40	0.95	0.95	0.80	0.65	0.85	0.75	C
1.5 Discreet	35	200	0.25	0.50	0.55	0.40	0.60	0.80	0.50	D

1.5 Discreet + Mineral wool	75	200	0.55	0.95	1.00	0.80	0.80	0.90	0.85	B
2.5 Normal	25	200	0.20	0.50	0.50	0.35	0.45	0.70	0.45	D
2.5 Normal + Saga Acoustic	65	200	0.35	0.95	0.95	0.80	0.70	0.90	0.80	B
2.5 Normal + Mineral wool	65	200	0.40	0.95	0.95	0.80	0.70	0.90	0.80	B
2.5 Normal	35	200	0.25	0.55	0.50	0.35	0.65	0.75	0.45	D
2.5 Normal + Mineral wool	75	200	0.55	0.95	1.00	0.80	0.80	0.90	0.85	B

	THK mm	o.d.s. mm	NRC	SAA
1.0 Elegant	25	200	0.50	0.48
1.0 Elegant + Saga Acoustic	65	200	0.95	0.92



### Indoor Air Quality

Certificate / Label	
Eurofins Indoor Air Comfort®	IAC Gold
French VOC	A+
Finnish M1	•



### Carbon footprint

kg CO <sub>2</sub> equiv/m <sup>2</sup>	25 mm	35 mm
Saga (white cement)	6,41	8,97
Saga (grey cement)	4,80	6,72
Saga (white cement) + Saga Acoustic	10,05	12,61
Saga (grey cement) + Saga Acoustic	8,44	10,36

Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804



### Circularity



Products are made with FSC certified wood.



### Fire safety

Country	Fire standard	Class
Europe	EN 13501-1	B-s1,d0



### Humidity Resistance

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



### Thermal Properties

Thermal conductivity  $\lambda = 0,1$  W/m·K according to EN 12664.



### Cleanability

Weekly dusting and vacuum cleaning.



## Mould and Bacterial Resistance

Standard/Method	
ISO 846 A	0
ISO 846 C	0



## Accessibility

The tiles are demountable.



## System weight

kg/m <sup>2</sup>	25 mm	35 mm
Elegant	14.5	16.5
Discreet	14.0	16.0
Normal	13.5	15.5

Weight information is indicative and subject to variation.



## Mechanical properties

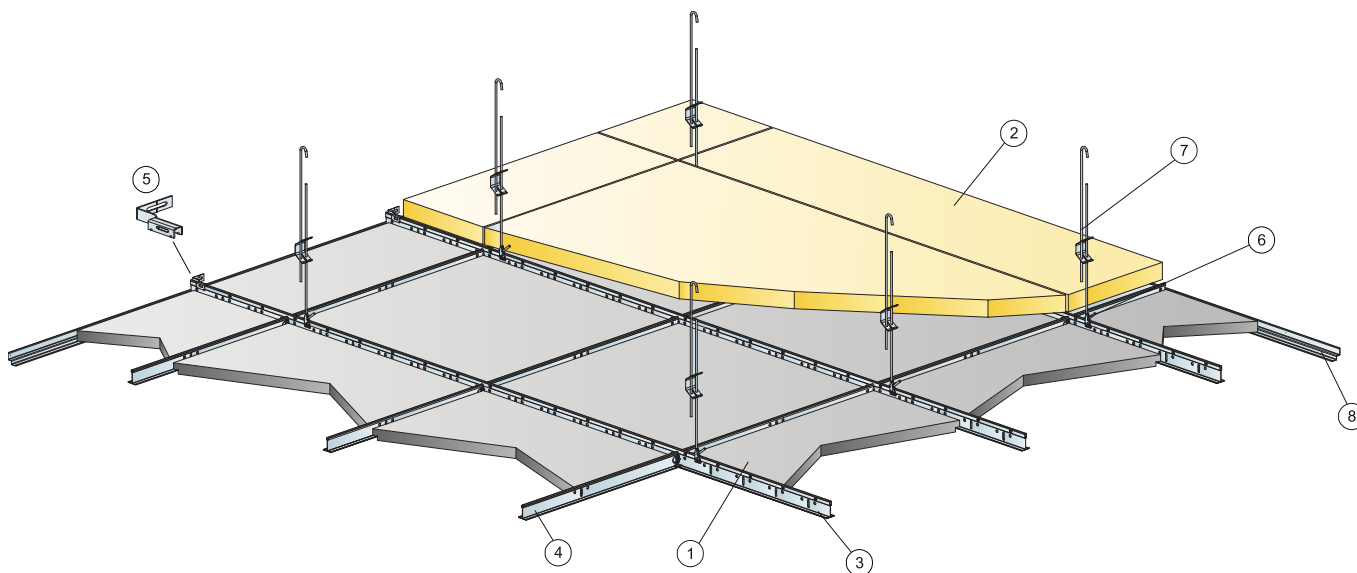
See table regarding the min- and max- load bearing capacities and functional demands. Additional live load has to be fixed to the soffit.



## CE

Ecophon Saga products are CE-marked according to the European harmonized standard EN13964:2014 (suspended ceilings). 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.

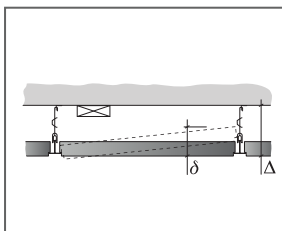
## INSTALLATION DIAGRAM (M683) FOR ECOPHON SAGA E



© Saint-Gobain Ecophon AB

### QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm	
	600x600	1200x600
1 Saga E	2,8/m <sup>2</sup>	1,4/m <sup>2</sup>
2 Saga Acoustic or mineral wool (if required)	as required	as required
3 Connect T24 Main runner HD, installed at 600 mm centres (max. distance from wall 600 mm).	1,7m/m <sup>2</sup>	1,7m/m <sup>2</sup>
4 Connect T24 Cross tee, l=600 mm	1,7m/m <sup>2</sup>	0,9m/m <sup>2</sup>
5 Connect Wall Bracket, fixed at Main runner	2/suspended row of Main runner	
6 Connect Hanger Clip	1,4/m <sup>2</sup>	1,4/m <sup>2</sup>
7 Connect Adjustable hanger, installed at 1200 mm centres	1,4/m <sup>2</sup>	1,4/m <sup>2</sup>
8 Connect Shadow-line trim, fixed at 200 mm centres	-	-
Δ Min. overall depth of system, with adjustable hanger: 100 mm	-	-
δ Min. demounting depth: 170 mm	-	-



Size, mm	Max live load [N]	Min load bearing capacity [N]
600x600x25	0	160
600x600x35	0	160
1200x600x25	0	160
1200x600x35	0	160

Live load/load bearing capacity