

# AEC

Grille



# Grille

# AEC



## Description

AEC is an eggcrate grille for extract air with eggcrate grid 0° or 45° inclination, made of aluminum and specifically designed for installation in modular ceilings, with particular thin frame that becomes invisible, once installed.

AEC grille is available with G3 filter as accessory.

Available in various standard dimensions.

## Min. - max. dimensions

AEC is available in 3 different standard sizes.

L x H in mm :

- 595 x 295
- 595 x 595
- 670 x 670

## LindQST

Use the advanced Lindab web tool LindQST to calculate the full range of grilles and to find the suitable grille type and dimension for all applications.

Product selection, room dimensioning and documentation search are easy available directly on web and mobile devices.

Find this and much more on [www.lindqst.com](http://www.lindqst.com).

## Maintenance

Remove the grille to gain access to the plenum box or duct. External parts should be wiped with a damp cloth.

## Accessories

Filter: Rigid filter G3

## Order code

Product	AEC	1	a	-	b	ccc x ddd	eeee
<b>Type</b>	AEC						
<b>Frame</b>		1 - Frame with no flange					
<b>Grid</b>			1 - Eggcrate 0° 2 - Eggcrate 45°				
<b>Installation</b>							
-							
<b>Accessories</b>							
-							
F							
<b>Size</b>							
L x H:						595x295 , 595x595 , 670x670	
<b>Grilles standard finish:</b>							
9010						RAL 9010, gloss 30	
9003						RAL 9003, gloss 30	
xxxx						On request, other RAL colour	

Example 1: AEC-11-F-595-595-9010

Example 2: AEC-12-670-670

## Materials and finish

Grille eggcrate: Aluminium  
Grille frame: Galvanized steel

### Grilles standard finish:

- RAL 9010 gloss 30
- RAL 9003 gloss 30

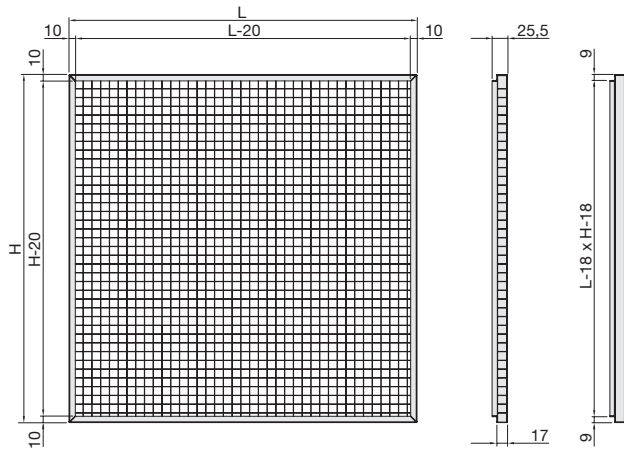
The grille is available in other colours. Please contact Lindab's sales department for further information.

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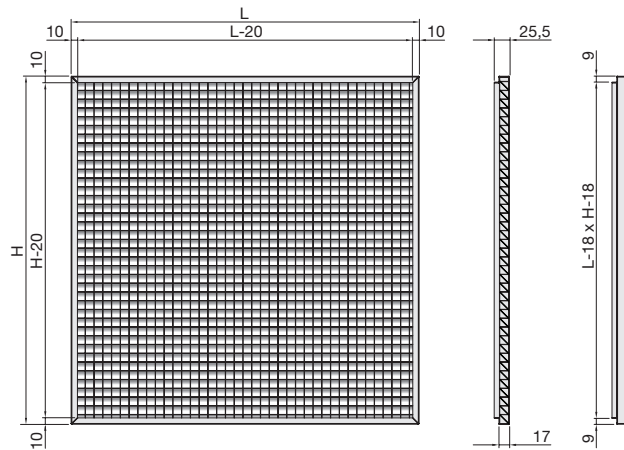
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## Frame and grid

**AEC-11** - Frame without flange and 0° eggcrate grid.

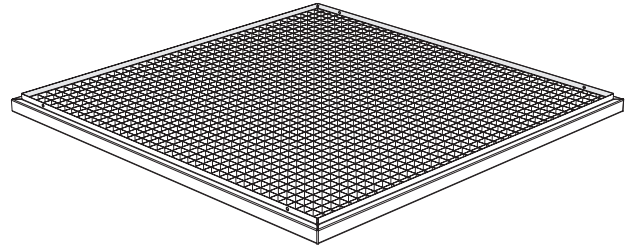


**AEC-12** - Frame without flange and 45° eggcrate grid.



## Installation

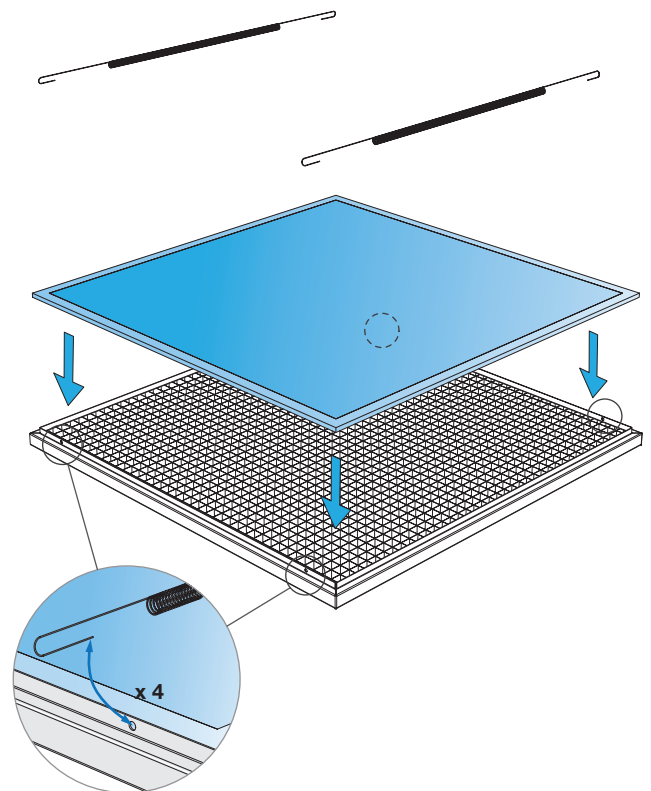
- Not prepared



## Accessories

- No accessories  
F 6 mm Rigid G3 filter

When ordering the grille with filter you can order the Rigid G3 filter kit too.



## Rigid G3 filter dimensions

Grille size [mm] L x H [mm]	Rigid G3 filter dimensions [mm]
595 x 295	572 x 272 x 6
595 x 595	572 x 572 x 6
670 x 670	647 x 647 x 6

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## Free area

AEC Grille size [mm]		Free area $A_k$ [m <sup>2</sup> ]	
L	H	0°	45°
595	295	0.151	0.137
595	595	0.319	0.290
670	670	0.406	0.369

## Quick selection, Extract air, AEC-11 and AEC-12

Grille size [mm]		Air flow rate																		
$A_k$ [m <sup>2</sup> ]	m <sup>3</sup> /h l/s	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	
		(222)	(278)	(333)	(389)	(444)	(500)	(556)	(611)	(667)	(722)	(778)	(833)	(889)	(944)	(1000)	(1056)	(1111)	(1167)	
0°	595x295 (0,151)	L <sub>WA</sub> [dB(A)]	<20	20	26	31	36	40	43	46	49									
		V <sub>k</sub> [m/s]	1,5	1,8	2,2	2,6	2,9	3,3	3,7	4,1	4,4									
		Δp <sub>t</sub> [Pa]	2	3	4	6	8	10	12	15	18									
	595x595 (0,319)	L <sub>WA</sub> [dB(A)]				<20	<20	<20	22	25	28	30	33	35	37	39	41	43	45	46
		V <sub>k</sub> [m/s]				1,2	1,4	1,6	1,7	1,9	2,1	2,3	2,4	2,6	2,8	3	3,1	3,3	3,5	3,7
		Δp <sub>t</sub> [Pa]				1	2	2	3	3	4	5	5	6	7	8	9	10	11	12
	670x670 (0,406)	L <sub>WA</sub> [dB(A)]						<20	<20	<20	21	24	26	28	30	32	34	36	38	39
		V <sub>k</sub> [m/s]						1,2	1,4	1,5	1,6	1,8	1,9	2,1	2,2	2,3	2,5	2,6	2,7	2,9
		Δp <sub>t</sub> [Pa]						1	2	2	2	3	3	4	4	5	5	6	7	7
45°	595x295 (0,137)	L <sub>WA</sub> [dB(A)]	<20	23	29	34	38	42	46	49										
		V <sub>k</sub> [m/s]	1,6	2	2,4	2,8	3,2	3,6	4,1	4,5										
		Δp <sub>t</sub> [Pa]	2	4	5	7	9	12	15	18										
	595x595 (0,29)	L <sub>WA</sub> [dB(A)]				<20	<20	21	24	28	30	33	36	38	40	42	44	46	47	49
		V <sub>k</sub> [m/s]				1,3	1,5	1,7	1,9	2,1	2,3	2,5	2,7	2,9	3,1	3,3	3,5	3,6	3,8	4
		Δp <sub>t</sub> [Pa]				2	2	3	3	4	5	6	6	7	8	10	11	12	13	15
	670x670 (0,369)	L <sub>WA</sub> [dB(A)]				<20	<20	<20	21	24	26	29	31	33	35	37	39	41	42	
		V <sub>k</sub> [m/s]				1,2	1,4	1,5	1,7	1,8	2	2,1	2,3	2,4	2,6	2,7	2,9	3	3,2	
		Δp <sub>t</sub> [Pa]				1	2	2	2	2	3	3	4	5	5	6	7	7	8	9

10 ≤ LWA < 30      30 ≤ LWA < 40      40 ≤ LWA < 50

### Data valid for:

- Extract air (no filter)

### Terminology:

- $A_k$  = effective free area
- $v_k$  = effective face velocity
- $\Delta p_t$  = total pressure loss
- $L_{WA}$  = sound power level

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## Technical data

### Capacity

Air flow rate  $q_v$  [l/s] and [m<sup>3</sup>/h], total pressure loss  $\Delta p_t$  [Pa] and sound power level  $L_{WA}$  [dB(A)] can be seen in the diagrams.

### Sound power level $L_{WA}$

Sound power level  $L_{WA}$  [dB(A)] with eggcrate can be seen in the diagrams. The sound power levels apply for grilles without an opposed blade damper. See the table below for correction of sound power level on blade settings [dB].

### Frequency-related sound power level

The sound power level in the frequency band is defined as

$$L_{Wf} = L_{WA} + K_{ok}$$

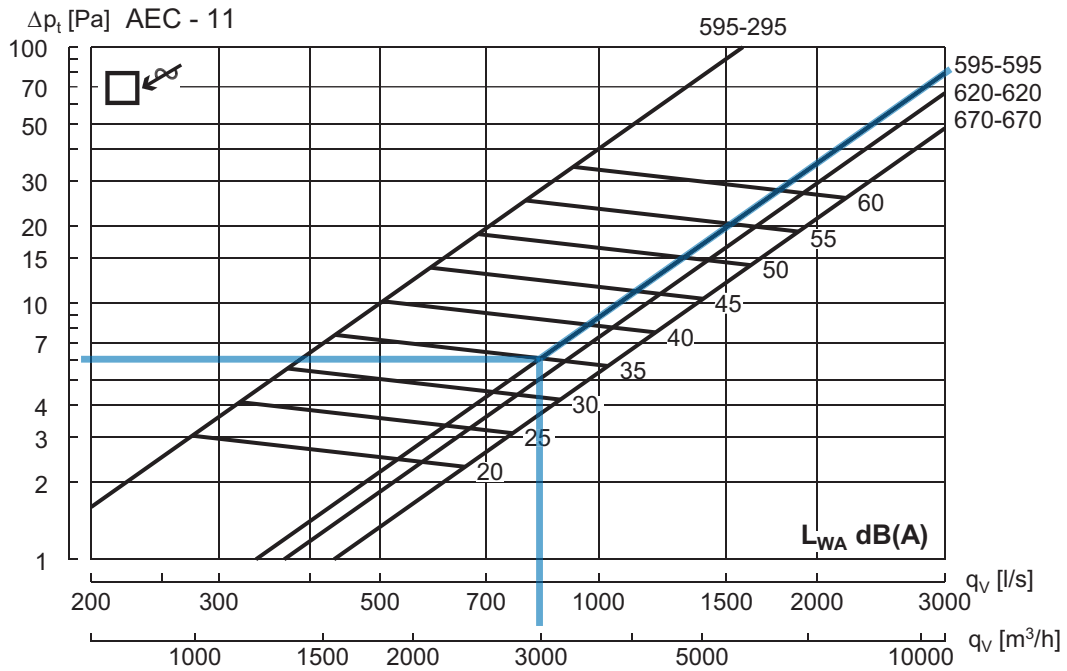
$K_{ok}$  values are given in the table below.

	Centre frequency Hz							
	63	125	250	500	1K	2K	4K	8K
Extract	2	11	1	-2	-7	-12	-21	-27

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## Technical data



**Example:**

Grille size: 595 x 595 mm  
 Free area  $A_k$ : 0.319 [m²]  
 Air flow rate  $q_v$ : 3000 m³/h (833 l/s)

**Result:**

Sound power level  $L_{WA}$ : ~35 dB(A)  
 Total pressure loss  $\Delta p_t$ : ~ 6 pa

**Data valid for:**

- Extract air

Grilles available also on the Lindabs online calculation too on [www.lindQST.com](http://www.lindQST.com).



Most of us spend the majority of our time indoors. Indoor climate is crucial to how we feel, how productive we are and if we stay healthy.

We at Lindab have therefore made it our most important objective to contribute to an indoor climate that improves people's lives. We do this by developing energy-efficient ventilation solutions and durable building products. We also aim to contribute to a better climate for our planet by working in a way that is sustainable for both people and the environment.

[Lindab](#) | For a better climate