

31-45

Linear grille with fixed blades 45°



Product description

KOOLAIR linear grille for supply or return air, model **31-45** with fixed blades (45° deflection), dimensions LxH. Anodised aluminium finish or painted in RAL colour of choice.

Suitable for return air on both ceilings and walls as the end slat angle hides the duct interior. As a supply grille it is especially suitable for ceiling-mounted perimeter grille designs as it ensures the air jet adheres to glass/walls.

In addition, when installed in walls at over 150 mm from the ceiling, the air jet can be oriented towards the ceiling to create a Coanda effect and increase the throw and risk of air draughts in the occupied area.

Note: Possibility of forming continuous strings (Maximum length per section 2000 mm).

Mounting

With pressure clips. Mounting frame needed (-MM). With screws (-T). The grille is provided with holes for screwing the mounting frame. Only available for frame of 24 mm.

Concealed fastening system for installation in ceilings or walls with a thickness of between x and x without the need for a metal mounting frame (-SFO-PT). With mounting bridge (-PM).

With plenum box made of galvanised steel sheet, with

side or top spigot connection (-PE21/20). (-A. Interior insulated).

Accessories

-O. Manual damper of opposing slats for flow regulation. Not applicable on model with no frame (-SB).

-G. Block of individually adjustable vertical blades for secondary deflection. Not applicable on model with no frame (-SB).

Other models

31-45-11. Linear grille with fixed blades (deflection 45°), with 11x6 mm frame. Does not apply for the -T fastening.

31-45-20. Linear grille with fixed blades (deflection 45°), with 20x1.5 mm flat frame.

31-45-E-PM. Linear grille with fixed blades (deflection 45°), with 8.7 mm narrow frame and mounting brackets.

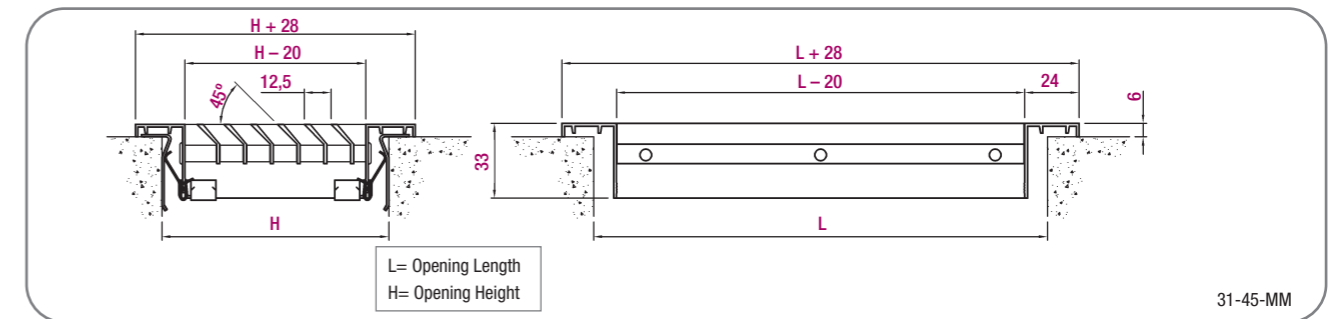
31-45-SB. Linear grille with fixed blades (deflection 45°) with no frame.

31-45-FL. Linear grille with straps for fastening G2, G3 or G4 filter mats.

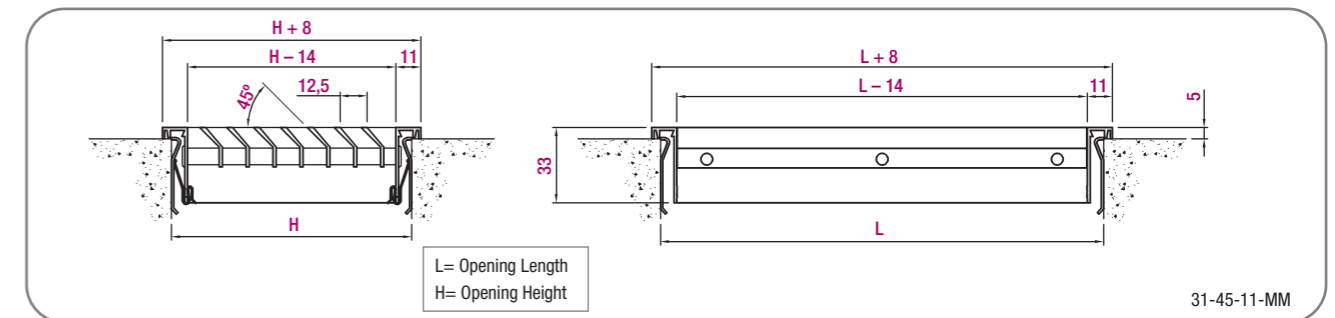
31-45-FA. Folding linear grille with handle, filter holder frame and G2, G3 or G4 filter.

31-45-RFF-PUSH. Linear grille, foldable using the "push" system, with filter holding frame and G2, G3 or G4 filter.

General dimensions



31-45-MM



31-45-11-MM

Selection table

(Flow rate per linear metre of grille)

Size	Q (m³/h)	Supply				Return	
		L _{wa} [dB(A)]	ΔP _t (Pa)	X (m)	V _k (m/s)	L _{wa} [dB(A)]	ΔP _t (Pa)
300 x 150	265	24	11	2,7	3,5	28	23
1000 x 50	340	32	18	3,5	4,4	36	39
500 x 100	435	40	29	4,5	5,7	44	63
600 x 125	355	24	8	3,0	3,0	28	17
1000 x 75	455	32	13	3,8	3,8	36	29
1500 x 50	585	40	22	4,9	4,9	44	47
300 x 300	435	24	7	3,1	2,7	28	14
1000 x 100	555	32	11	4,0	3,5	36	23
1400 x 75	710	40	18	5,1	4,4	44	38
600 x 200	505	24	6	3,2	2,5	28	12
1000 x 125	645	32	9	4,1	3,2	36	20
1300 x 100	830	40	15	5,3	4,1	44	33
600 x 250	600	24	5	3,4	2,3	28	10
1000 x 150	770	32	8	4,3	2,9	36	17
1300 x 125	980	40	13	5,5	3,7	44	27
400 x 400	660	24	4	3,4	2,2	28	9
1000 x 175	880	32	8	4,6	2,9	37	16
1500 x 125	1085	40	11	5,6	3,6	44	25
500 x 400	720	24	4	3,5	2,1	28	8
1000 x 200	925	32	6	4,5	2,7	36	14
1700 x 125	1185	40	10	5,8	3,4	44	23
600 x 500	985	24	3	3,8	1,8	28	6
1000 x 300	1260	32	5	4,9	2,3	36	10
1800 x 175	1610	40	8	6,2	2,9	47	17

The Selection Table shows a summary of dimensions. Other sizes available. Consult the Sales Department.

LEGEND

Q (m³/h): Air flow.
 L_{wa} [dB(A)]: Sound power level.
 ΔP_t (Pa): Total pressure loss.
 X (m): Throw for a maximum velocity of 0.25 m/s at the occupied zone
 ΔT = -10 °C (cold), installed at 2.7 m of height, with ceiling effect.
 V_k (m/s): Effective velocity.