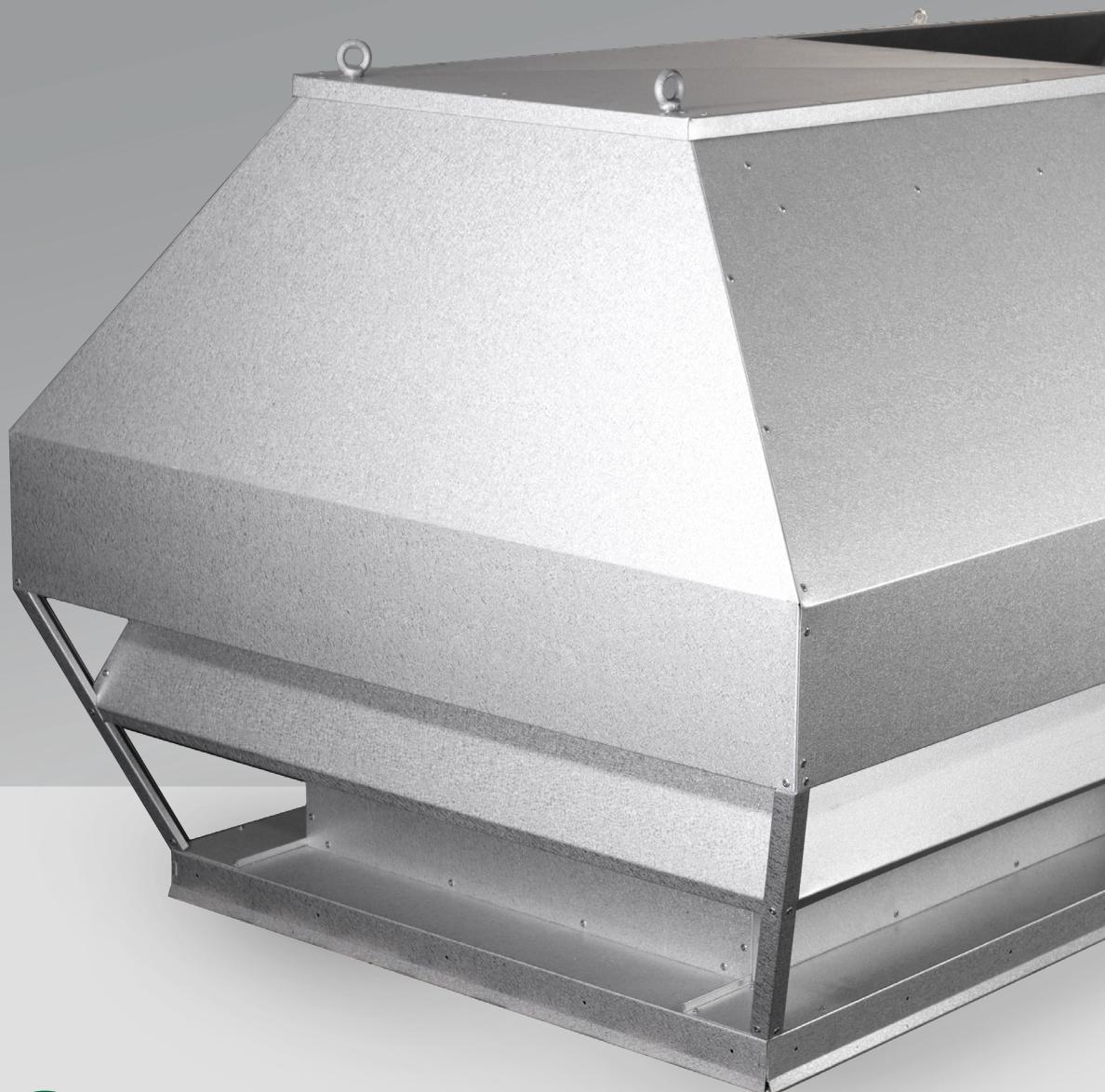


EKOVENT®



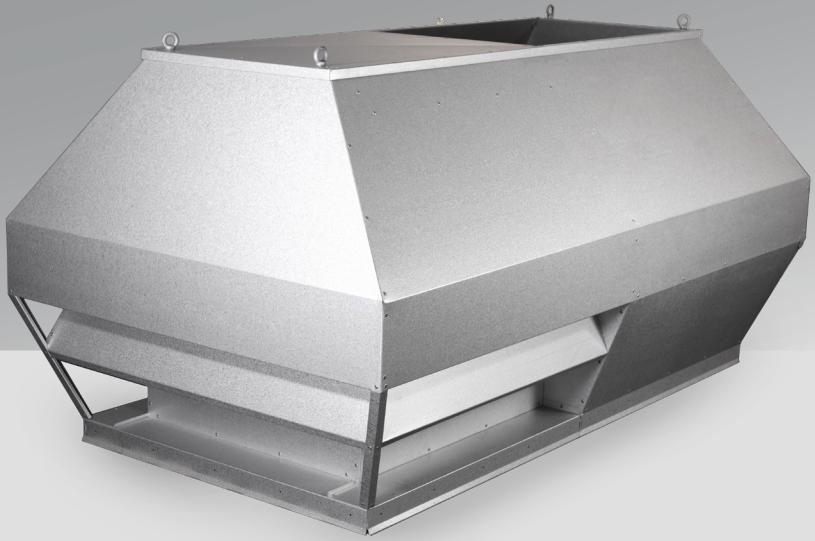
EKO-HKE

Combination Roof Hood



COMBINATION ROOF HOOD

EKO-HKE



Quick facts

EKO e-Line Roof Hoods are a new series of roof hoods designed for very low pressure drops and has a unique construction to on one very effective way to prevent water penetration.

- Low pressure drop
- Very low weights
- Sound and pressure drop tested according to ISO 5135
- Water separation class B according to EN 13030 (97% at 2 m/s)
- Sizes for flows from 200 l/s to 15 000 l/s
- Adjustable air outlet available as an accessory
- New developed mounting frame that provides major flexibility when mounting the roof hood on the roof inlet
- Corrosivity class C4 as standard
- All roof hoods calculated in CFD (Ansys)
- Available in MagiCAD

Design

EKO-HKE is a combination air roof hood for use in comfort and industry facilities. Through the unique design the combination air roof hood is adapted for very low pressure drops and good water separation. EKO-HKE is most suitably mounted on the roof inlet EKO-TD.

Adjustable air outlet

As an accessory, the roof hood can be delivered with an adjustable outlet for setting the optimal air velocity.

How to order EKO-HKE

Combination Roof Hood EKO-HKE-A-B-C

A – Size

See size table

B – Material

- 1 = Zinc Magnesium ZM120 (C4) - Standard
- 2 = Aluminium
- 3 = Copper
- 4 = Stainless EN 1.4404
- 5 = Zinc Magnesium ZM310 (C5) *
- 7 = Zinc Magnesium ZM310 (C5) RRP *

*) See under the heading: Material, surface treatment

C – Surface treatment

- 1 = Unfinished
- 2 = Powder coated (State RAL-colour)

Example: Combined Roof hood EKO-HKE-40-1-1

Accessories:

Roof inlet EKO-TD

Protection for exhaust opening EKO-SAÖ (Protection mesh 60x60)

Adjustable air outlet EKO-ESU

EKO RRP

EKO e-LINE RRP

EKO e-Line RRP (Recycled and Renewably Produced) represents a series of roof hoods manufactured using CO₂ reduced and recycled steel for a much lower climate impact.

Features

- The steel is based on a minimum of 75% recycled steel and iron ore pellets melted in electric arc furnaces (EAF).
- 100% renewable energy is used.
- The roof hoods are manufactured in Zinc Magnesium ZM310 (C5) for a optimum corrosion protection and a long product life.

EKO e-LINE EPD

Environmental Production Declaration is a detailed, third-party verified, document showing the product's environmental impact that allows comparison between products.

GWP Fossil (kg CO₂e) = 3,72

GWP Recycled (kg CO₂e) = 1,27

A 66% reduction in climate impact.

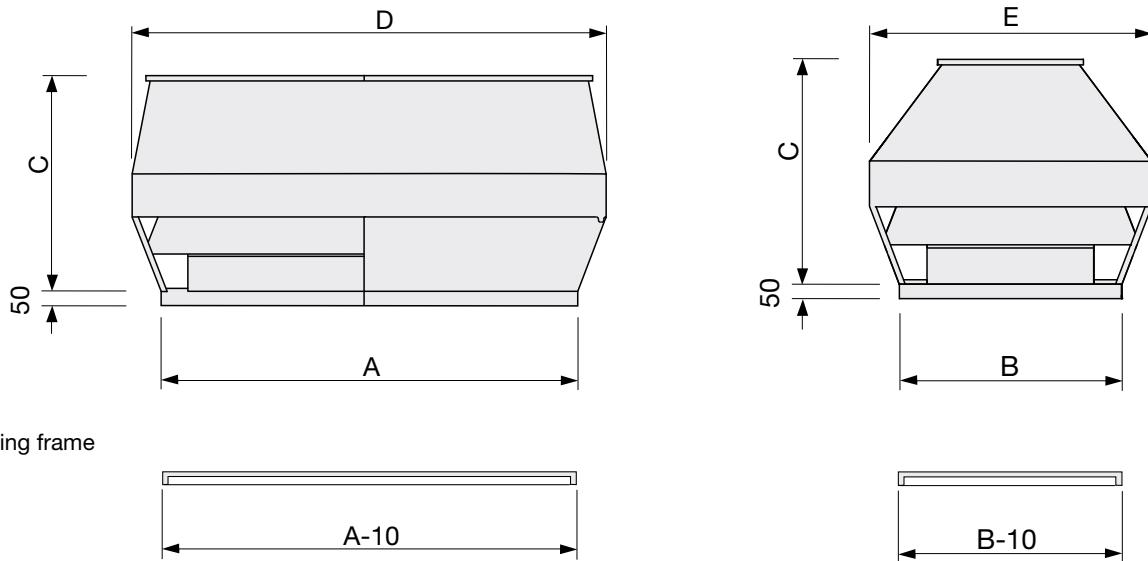
Material, surface treatment

The roof hood is standardly made of ZincMagnesium ZM120, with a corrosivity class of C4, and ZincMagnesium ZM310, used unpainted, with a corrosivity class of up to C5.

The roof hood can also be delivered in ZM310 RRP, with the same corrosivity class as above, as well as in stainless steel EN 1.4404, with a corrosivity class of C5, and in copper.

Technical Data

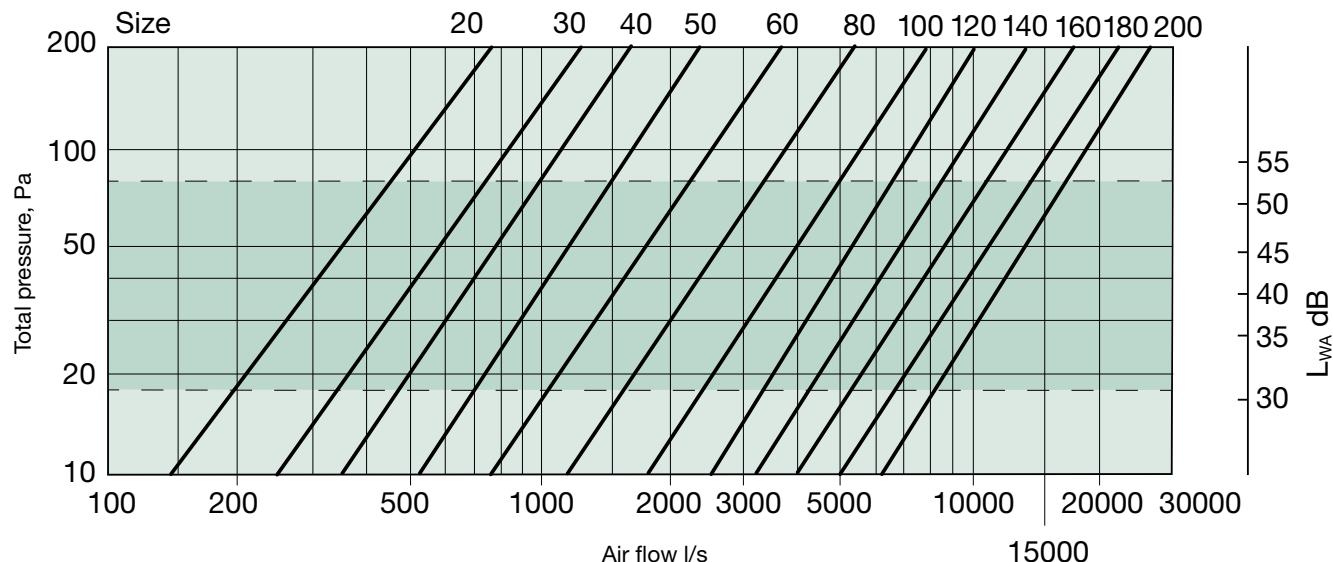
Dimensions



Standard sizes and selection of Roof Inlet EKO-TD

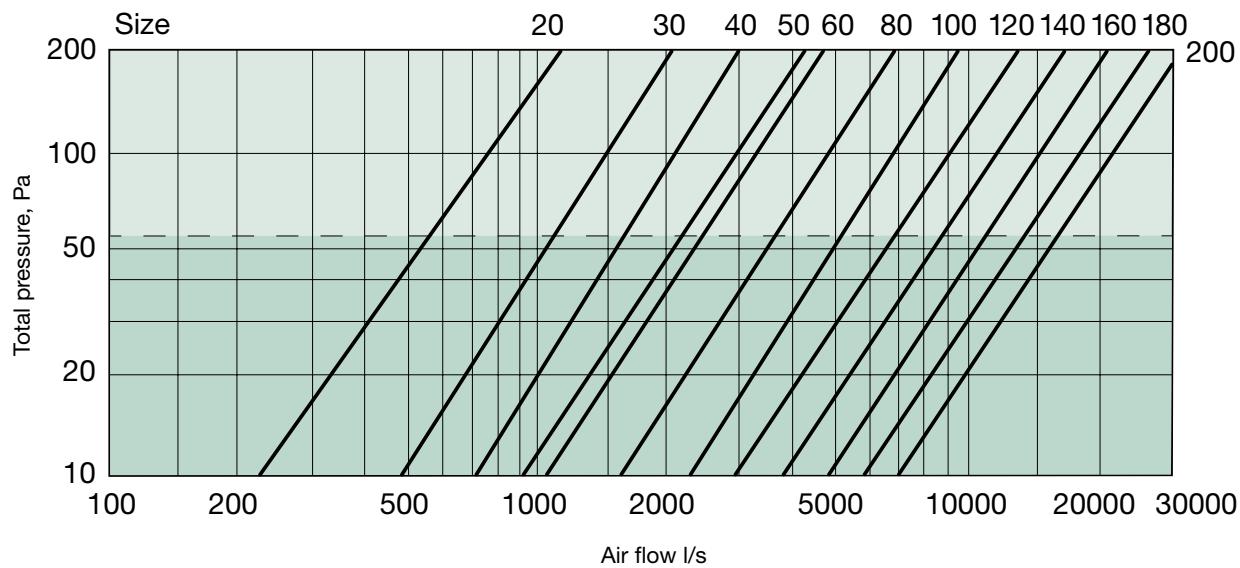
EKO-HKE	A	B	C	D	E	Selected EKO-TD	Weight (kg)
20	750	400	405	860	510	10	14
30	950	500	505	1085	635	13	21
40	1150	600	610	1310	760	16	29
50	1350	700	710	1540	890	20	38
60	1550	800	810	1765	1015	22	49
80	1950	1000	1010	2220	1270	28	94
100	2350	1200	1215	2680	1530	34	132
120	2750	1400	1420	3130	1780	40	162
140	3150	1600	1620	3585	2035	44	210
160	3550	1800	1820	4040	2290	46	267
180	3950	2000	2025	4495	2545	48	340
200	4350	2200	2225	4950	2800	50	420

Dimensioning diagram - Exhaust air



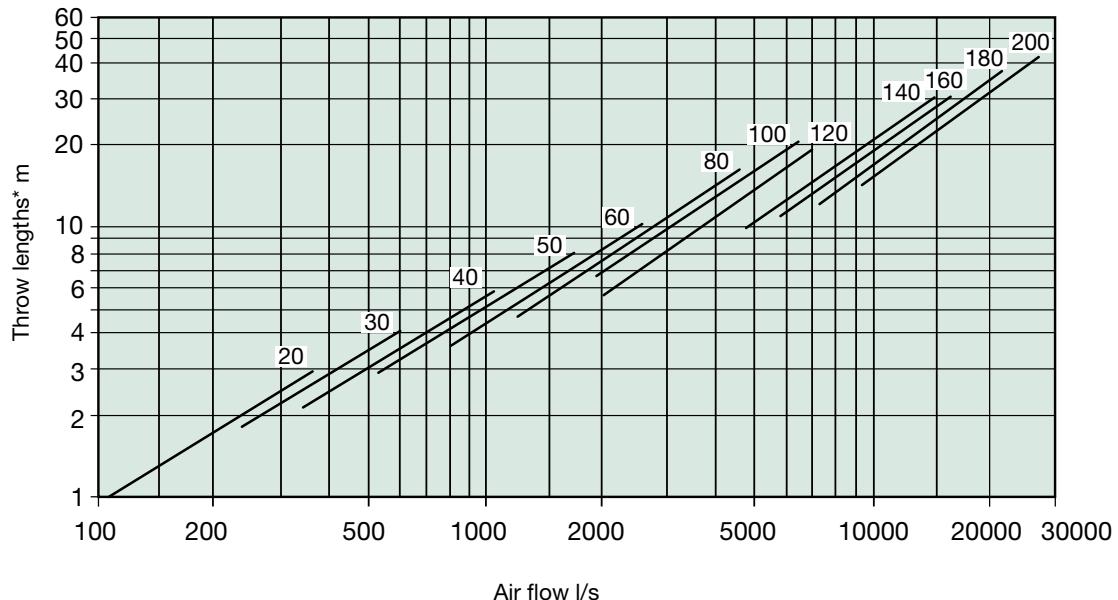
Darker toned field indicates rec. operation area.

Dimensioning diagram - Inlet air



Darker toned field indicates rec. operation area.

Throw lengths



* Throw lengths are simulated and applied in windless conditions. The dimensions are defined in meters as the distance from the outlet of the hood to the point where the velocity of the air plume has decreased to 2 m/s.

Correction of sound power level L_{WAKORR} for different sizes. $L_{WAKORR} = L_{Wt} + K_1$

Size	20	30	40	50	60	80	100	120	140	160	180	200
K_1	-4	-1	0	+2	+3	+5	+6	+8	+9	+10	+12	+12

Correction of sound power level L_{WAOK} in octave bands. $L_{WAOK} = L_{WAKORR} + K_{OK}$

Octave band	63	125	250	500	1K	2K	4K	8K
K_{OK}	+7,4	+4,6	+2,8	-1,4	-7,5	-13,5	-17,5	-16,6

Correction of sound power level applies to exhaust air.

Reduction in sound pressure level depending on distance from roof hood calculated on hemispherical distribution

Distance, m	5	25	50	500	100	150
Reduction, dB(A)	-22	-36	-42	-45	-48	-52