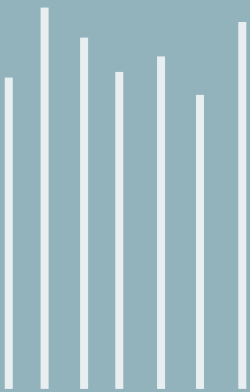


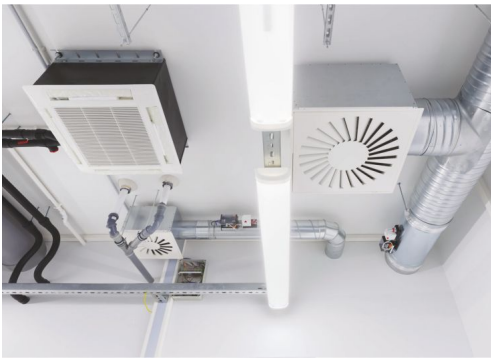


DWELL VENTILATOREN

You Deserve Fresh Air...



VENTILATION SYSTEM



Need for ventilation

We are surrounded with air and breathe in and out 20000 litres of air every day. How healthy is the air we breathe in? There are a range of aspects to determine air quality. Ventilation systems help us get a better living experience in many ways.



Air motion: Ventilation systems are important for houses because they help to improve indoor air quality by circulating fresh air and removing stale, contaminated air.



O₂ CO₂ concentration: Ventilation system decreases stuffiness created by CO₂ from the air and increases O₂ flow.



Reducing Concentration of Dust and Pollutants: Ventilation system helps to reduce the concentration of indoor pollutants such as dust, mold, and volatile organic compounds (VOCs), which causes various lung and skin diseases.



Odours: Ventilation systems help reduce odours which increase occupants' living experience.



Regulation of Air humidity & Temperature: Ventilation systems help not only to regulate the temperature but also help to reduce the risk of moisture and mold growth, which can cause structural damage to the house and create health hazards.

How to choose the right fan?

Effective ventilation depends on fan or ventilation system selection with suitable air capacity that meets your requirements. Factors to be considered

1. Ventilated area volume
2. Air exchange by the hour
3. Static pressure/length of Duct

How to calculate ventilated area volume?

Calculate the total volume of the premise in a Use a simple formula:

$$\text{Length} \times \text{Width} \times \text{Height} = \text{Volume of the premises m}^3$$

$$A \times B \times H = V \text{ (m}^3\text{)}$$

Air exchange calculation.

Ventilated air amount is calculated on an individual basis for each premise. Measured air exchange is calculated with the formula

$$L = V \times K \text{ (m}^3\text{/h)}.$$

where V-ventilated area volume [m³/h]; K-minimum air exchange per hour, refer to the air exchange table below.

Premise Type	Air Exchange Rate	Fan Air Capacity (m ³ /h)	Spigot size of the fan (mm)
Bed Room	1 - 2	42 - 84	100 - 125 - 150
Bathroom	6 - 10	90 - 300	100 - 125 - 150
WC	6 - 8	90 - 190	100 - 125 - 150
Kitchen	18 - 30	100 - 320	150 - 200 - 315
Store room cellar	6 - 8	90 - 190	100 - 125

Example: A Kitchen with 5 m length, 3 width and 2.8 m height.

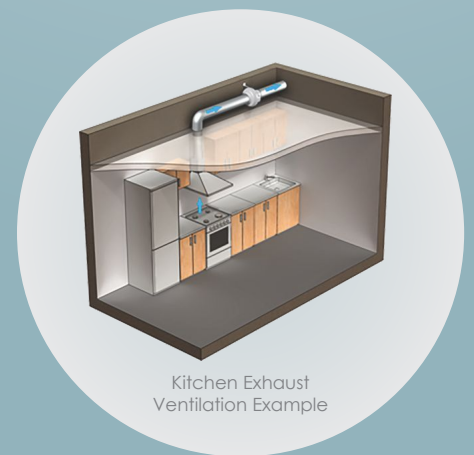
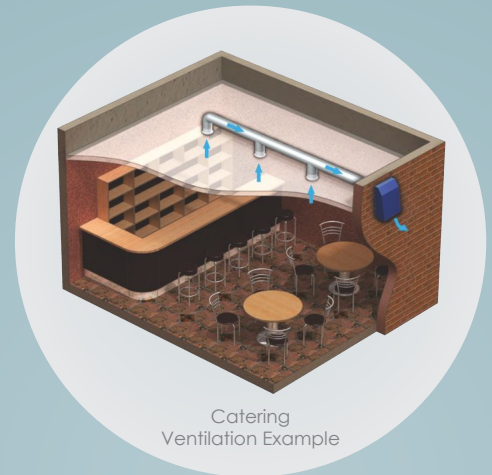
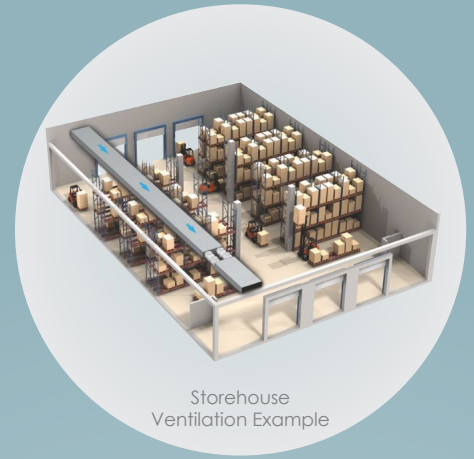
1. Required air volume is $5 \times 3 \times 2.8 = 42 \text{ m}^3$

2. Air exchange rate for kitchen is 18-30 times/hour

So, minimum required fan air capacity = $42\text{m}^3 \times 18 = 756\text{m}^3\text{/h}$

Static Pressure/ Length of Duct

Length of Duct	Fan Type
0 ft	Wall Axial Fan
Upto 10 ft	Axial Inline Fan
Upto 30 ft	Mixed Flow Fan
Upto 250 ft	Centrifugal Fan



SHORT RANGE FANS

I. WALL AXIAL FANS

Combined supply and extract ventilation systems for various premises where high air capacity at relatively low system resistance is required. Fans can be used for the direct exhaust of air and can be mounted onto the external walls.



Kitchen ventilation example



A100



A150



MASTER100

II. INLINE AXIAL FANS

Combined supply and extract ventilation systems for various premises where high air capacity at relatively low system resistance is required. Fans can be used for the direct exhaust of air and is installed into the duct by means of clamps or directly inside the wall.



DAIF100



DAIF125



DAIF150



SUPERQUIET100



SUPERQUIET150



fan flat ventilation example

Features:



Low Noise upto 34 db at 3m



Ball Bearing Motor life upto 40,000 hours



Static Pressure: Pipe length upto 10 ft



Air Flow: upto 265m³/h

MID RANGE FANS

I. INLINE MIXED FLOW FANS

The fans are featured with wide capabilities and high performance of axial and centrifugal fans and are specifically designed for supply and exhaust ventilation of premises requiring high pressure, powerful air flow and low noise level.

The fans are compatible with round air ducts from \varnothing 100 to 315 mm. Exhaust ventilation systems based on these fans are the best solution for ventilation of bathrooms and kitchens and other humid premises as well for ventilation of flats, cottages, shops, cafes, etc.



MIX100



MIX125



MIX150



MIX100PRO



MIX150PRO

Features:



Low Noise upto 40 db at 3m



Ball Bearing Motor life upto 40,000 hours



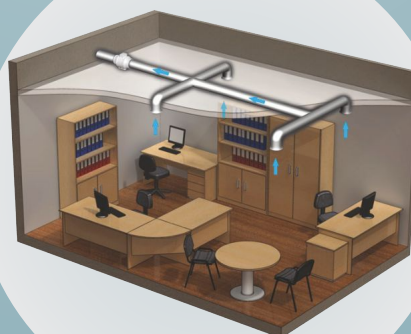
Static Pressure: Pipe length upto 30 ft



Air Flow: upto 520 m³/h



Bathroom Ventilation Example



Office Ventilation Example

LONG RANGE FANS

CENTRIFUGAL FANS:

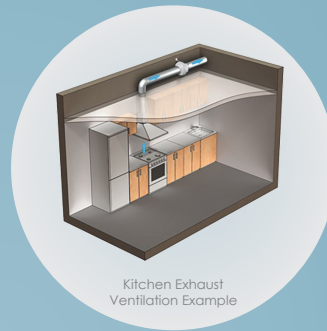
Fans are applied for supply and exhaust ventilation systems of commercial, office and other premises. DCIF & DCEF series fans (corrosion-resistant durable plastic casing) are the perfect solution for the installation of exhaust ventilation systems in humid premises such as bathrooms, kitchens etc. DCIF & DCEF series fans provide reliable operation in case of outdoor installation due to steel casing.

I. INLINE CENTRIFUGAL FANS



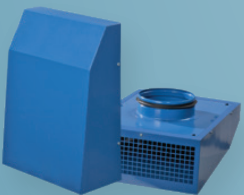
DCIF200

Other Products in series:
DCIF100, DCIF150, DCIF250



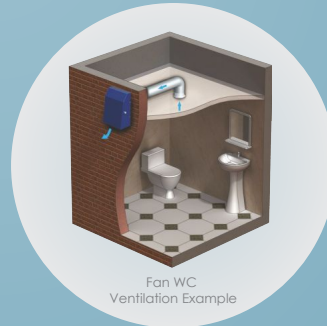
Kitchen Exhaust
Ventilation Example

II. EXTERNAL CENTRIFUGAL FANS



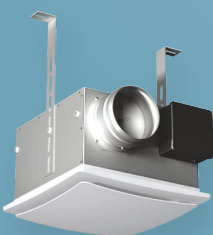
DCEF200

Other Products in series:
DCEF100, DCEF125, DCEF150



Fan WC
Ventilation Example

III. CASSETTE TYPE CENTRIFUGAL FANS



DCCF100

Other Products in series:
DCCF150



Office
Ventilation Example

Features:



Low Noise upto
50 db at 3m



Ball Bearing Motor life
upto 40,000 hours



Static Pressure: Pipe
length upto 250 ft



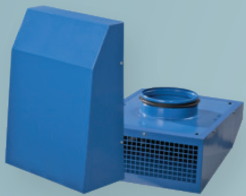
Air Flow: upto
1540 m³/h

KITCHEN SPLIT CHIMNEY FANS

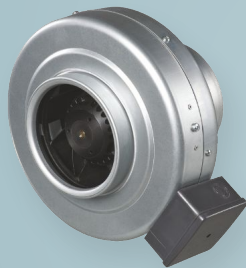
The fan is designed for ventilation of contaminated, grease-laden (using grease filters), humid and hot air with temperature up to 120 °C in conditions of high air resistance in the system.

This fan model fits for the following applications:

- i. kitchen exhaust ventilation systems
- ii. exhaust ventilation systems for removal of post welding gases
- iii. industrial bakery ventilation systems.



DCEF 150



DCIF 200



DKHF150

Other Products in series:
DCEF200, DKHF200, DKHF200

Features:



Low Noise upto
50 db at 3m



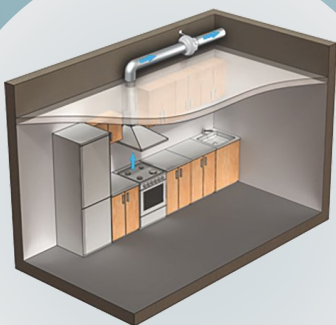
Ball Bearing Motor life
upto 40,000 hours



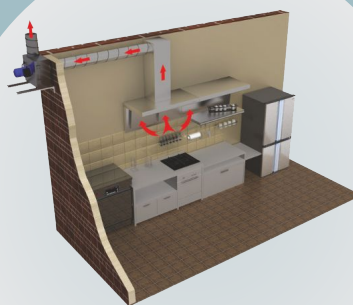
Static Pressure: Pipe
length upto 250 ft



Air Flow: upto
1540 m3/h



Kitchen Chimney
Ventilation Example



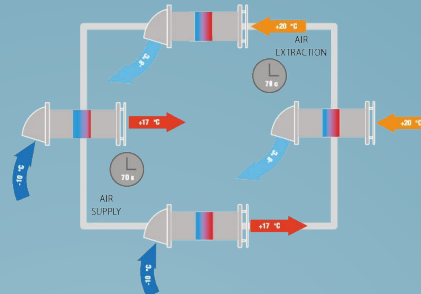
Kitchen Chimney
Ventilation Example

BEDROOM AND OFFICE VENTILATION FAN

The single room ventilators are the best cost-saving solution for creating energy saving ventilation of separate rooms in apartments, cottages, social and commercial premises.

HOW DOES THIS WORK?

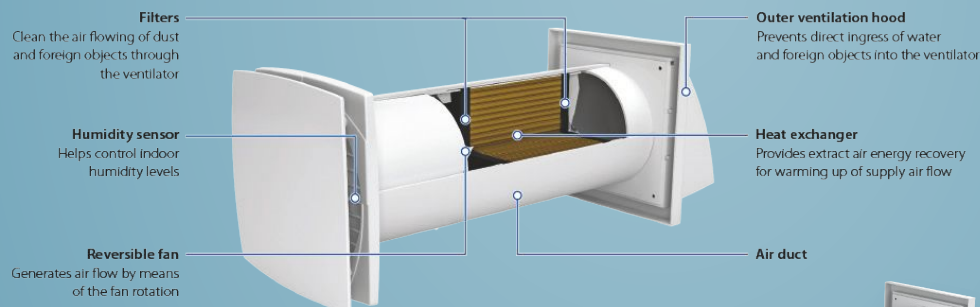
In this type of fan, Energy is recovered due to reversing operation of the ventilator, which consists of two cycles:



CYCLE I. As warm stale extract air flows through the ceramic heat exchanger, it heats up and moisturises the heat exchanger. In 70 seconds as the ceramic heat exchanger gets warmed the ventilator automatically switches to Air Supply mode.

CYCLE II. Fresh, cold intake air from outside flows through the ceramic heat exchanger, absorbs accumulated moisture and is heated to room temperature. In 70 seconds as the heat exchanger gets cooled down, the ventilator switches to Air Extract mode and the cycle is renewed.

The Air Supply and the Air Extract modes are switched every 70 seconds.



FAN

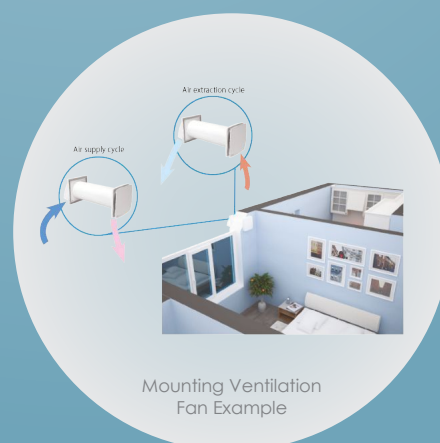
- Air is supplied or extracted by a reversible axial fan with EC motor.
- Due to EC technology the fan is distinguished with low energy demand.
- The motor has overheating protection and ball bearings for longer service life.

AIR FILTERS

- Two built-in filters with total filter class G3 are used to clean supply and extract air flows.
- The filters ensure fresh air cleaning of dust and insects and prevent the ventilator parts from soiling.
- The filters are cleaned either with a vacuum cleaner or flushed with water.



FRESH 100



Features:



Low Noise upto 32 db at 3m



Ball Bearing Motor life upto 40,000 hours



Low Static Pressure: Pipe length upto 1.5 ft



Air Flow: upto 46 m3/h

AIR HANDLING UNITS WITH HEAT RECOVERY

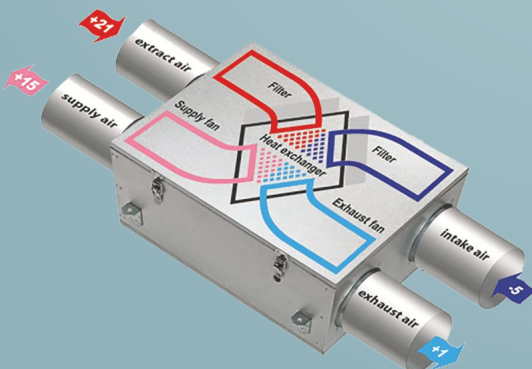
- Compact air supply and exhaust ventilation unit is a simple and effective energy-saving solution for ventilation of apartments, cottages, single-family houses, workshops and trade premises.
- The unit is a fully-featured ventilation unit that provides air cleaning, fresh air supply to the premise and removal of extract air from the premise.
- Extract air thermal energy is transferred to the cross-flow heat exchanger and is used to warm up the supply air flow.
- Built-in heat exchanger prevents heat losses and saves operating costs for heating in winter and air conditioning in summer.



DHRV100

OPERATING LOGIC

- Warm extract air is moved by exhaust fan from the premise through the extract filter and heat exchanger, where it transfers thermal energy to its elements and then is exhausted outside.
- Cold intake air from outside is moved by the supply fan first to the supply filter where it is purified, then to the heat exchanger where it absorbs thermal energy from extract air and then supplied to the room.
- The heat exchanger reduces heat losses and saves operating costs for heating in winter and air conditioning in summer.



Mounting Ventilation Fan Example

AIR DISTRIBUTION ACCESSORIES



DDV 100



DDVSS 100



DSQ 100



DCO 100



DSS 100

Other
Products
in series

DDV 125
DDV 150
DDV 200

DDVSS 125
DDVSS 150

DSQ 125
DSQ 150
DSQ 200

DCO 125
DCO 150

DSS 150

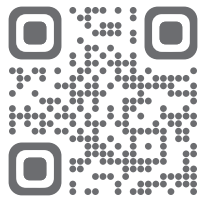
VENTILATION DUCTS AND FITTINGS

ALUMINIUM SEMI RIGID FLEXIBLE DUCT	
FLEXI ALUMINUM FOIL DUCT	
PLASTIVENT PVC PIPES	  <p style="text-align: center;">Flat Duct Round Duct</p>
SILENCERS	  
DAMPERS	 

TECHNICAL SPECIFICATIONS

Model No.	Power (W)	Current (Amp.)	Speed (RPM)	Noise (db)	Maximum Air Capacity (m3/h)
WALL AXIAL FANS					
A100	14	0.085	2300	33	88
A150	24	0.13	2400	37	265
MASTER100	7.5	0.05	2200	26	90
INLINE AXIAL FANS					
DAIF100	14	0.085	2300	36	107
DAIF125	16	0.1	2400	38	190
DAIF150	29	0.13	2400	40	305
SUPERQUIET100	7.5	0.049	2100	25	100
SUPERQUIET150	22	0.095	2250	39	335
INLINE MIXED FLOW FANS					
MIX100	21-33	0.11-0.21	2283	31	187
MIX125	23-37	0.18-0.027	2202	32	280
MIX150	30-60	0.17-0.27	2070	38	520
MIX100PRO	26	0.12	2200	31	250
MIX150PRO	54	0.22	2550	33	355
MIX200PRO	128	0.53	2450	49	1100
INLINE CENTRIFUGAL FANS					
DCIF100	72	0.32	2820	46	250
DCIF125	78	0.34	2820	46	330
DCIF150	75	0.34	2770	46	455
DCIF200	157	0.69	2740	50	1000
DCIF315	185	0.81	2730	53	1540
EXTERNAL CENTRIFUGAL FANS					
DCEF100	58	0.26	2500	54	280
DCEF125	60	0.27	2500	54	390
DCEF150	100	0.43	2600	58	650
DCEF200	104	0.45	2600	62	710
CASSETTE CENTRIFUGAL FANS					
DCCF100	61	0.26	2500	47	240
DCCF125	61	0.26	2500	48	310
KITCHEN SPLIT CHIMNEY FANS					
DCEF-K 150	100	0.43	2600	58	650
DCEF-K 200	104	0.45	2600	62	710
DKHF150	180	1.7	1450	41	700
DKHF200	550	3	1475	45	1600
DCIF200	157	0.69	2740	50	1000
HEAT RECOVERY VENTILATOR					
DHRV100	76.3	72-78	80	36	150-110
DHRV150	76.3	72-78	80	37	200-150
DHRV200	126.8	72-78	98	35	250-200-160
DHRV250	164.4	72-78	110	36	350-270-200

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