### **Catalogue**

# VENTILATION SYSTEMS 2025



### **GREEN VENTILATION**







# HOME OF OXYGEN

DUCO Ventilation & Sun Control provides every building with a healthy supply of oxygen. With a comprehensive range of innovative natural and mechanical ventilation systems, either combined with external solar shading or otherwise, DUCO offers the ultimate guarantee of a healthy and comfortable indoor climate. The occupant's health is,

therefore, central to DUCO. A well-thought-out combination of basic ventilation, mechanical extraction, purge ventilation and solar shading ensures optimum air quality.

DUCO provides an innovative solution for residential buildings, offices, schools or care centres where everyone feels at home.

DUCO, Home of Oxygen



### **PRODUCTS**

VENTILATION SYSTEMS	12
DucoBox Reno Duco Reno System	
DucoBox Silent Connect	20
Duco Silent Connect System	
DucoBox Focus  Duco Focus System	
DucoBox Energy Comfort (Plus)  Duco Energy Comfort (Plus) System 1-zone (no humidity measurement)  Duco Energy Comfort (Plus) System 1-zone (central humidity measurement)  Duco Energy Comfort (Plus) System 1-zone (local humidity measurement)  Duco Energy Comfort (Plus) System 2-zone (no humidity measurement)  Duco Energy Comfort (Plus) System 2-zone (central humidity measurement)  Duco Energy Comfort (Plus) System 2-zone (local humidity measurement)	36 nt)38 40 42 nt)44
DucoBox Energy Sky	
Duco Energy Sky System 1-zone (no humidity measurement)	
Duco Energy Sky System 1-zone (central humidity measurement)  Duco Energy Sky System 1-zone (local humidity measurement)	
Duco Energy Sky System 2-zone (no humidity measurement)	
Duco Energy Sky System 2-zone (central humidity measurement)	
Duco Energy Sky System 2-zone (local humidity measurement)	62
DucoBox Energy Premium	
Duco Energy Premium System 1-zone (no humidity measurement)	
Duco Energy Premium System 1-zone (central humidity measurement)  Duco Energy Premium System 1-zone (local humidity measurement)	
Duco Energy Premium System 2-zone (no humidity measurement)	
Duco Energy Premium System 2-zone (central humidity measurement)	
CONTROL COMPONENTS	80
AIR DUCT SYSTEM	84
VENTS	90
AIR FLOW	94
MISCELLANEOUS	
Part F	100
Service	
Notes	103
Installation tips	106



DISCLAIMER

Illustrations in this catalogue may differ from the actual product. Printing errors and/or changes excepted regarding prices and text.

DUCO reserves the right to amend this information at any time. The statutory information stated may be subject to changes in legislation. All prices are recommended prices excluding VAT.

### THE NATURAL FAMILY

### Priority to Fresh Air



DucoBox Reno

DucoBox Silent Connect

DucoBox Focus

### **SCAN & DISCOVER**



Discover our MEV systems, **The Natural Family!** 

### Natural supply of fresh air

Our ventilation boxes for natural ventilation (MEV system) combine **comfort and efficiency**. Fresh air flows in naturally through smart grilles in walls or windows and is mechanically extracted in wet rooms, for a **healthy and comfortable indoor climate**.





### Smart zonal control

Our intelligent demand control based on humidity and CO<sub>2</sub> ventilates only where and when necessary. This is done fully automatically, making the system quieter (30% less noise) and more energy-efficient (up to 40% savings) compared to traditional ventilation systems. Enjoy a quieter, more economical and healthier indoor climate.

### Ideal for renovation

Our **compact MEV systems** are perfect for **renovations**. They are easy to install in small spaces and meet strict renovation standards. Enjoy **natural supply, easy maintenance and quick installation** with minimal disruption.



### THE ENERGY FAMILY

Priority to Energy Savings



DucoBox Comfort D325/D400 DucoBox Comfort Plus D350/D450/D550

DucoBox Premium D325/D400 DucoBox Sky D275

**SCAN & DISCOVER** 



Discover our MVHR systems, **The Energy Family!** 

### Quiet

The freshest air without distracting background noise? With the DucoBox Energy Comfort Plus and Energy Premium, it becomes a reality, thanks to the excellent **sound-absorbing sleeve** (additional attenuation 10 dB). Our innovative units are equipped with the **quietest fans on the market**, making them virtually silent.





### Smart 2-zone control

All MVHR units are available with smart 2-zone control. A dynamic valve optimally distributes the air flows between two zones based on  $\rm CO_2$  and humidity measurement. The 2-zone control provides **better acoustics and energy savings**. With the DucoBox Energy Premium, internal control offers additional convenience thanks to the plug & play concept: only basic wiring for power supply is required.

### Install in no time

The automatic calibration of our units speeds up installation and saves installers up to 50% calibration time, a cost saving of at least 25 pounds! The copy function in the DucoBox Energy Comfort (Plus) and Energy Sky makes it easy to copy settings in serial construction, which saves a lot of time and also money (at least 15 pounds/unit). These units are also 100% by software L/R exchangeable.



### WHY DUCO?

### → One-stop-shop for your end-to-end ventilation solution Complete range of MEV and MVHR ventilation units, air ducts & accessories.

### Smart demand control

The room is **only ventilated when necessary** and in the correct amount.  $CO_2$  concentration and air humidity are used as indicators. This helps avoiding unnecessary heat loss while guaranteeing an optimal indoor climate.

### → High energy conversion efficiency

The combination of dynamic air distribution filters and **high performance heat exchangers** results in very high efficiency ratios.

### The quietest systems

A comfortable indoor climate is created by whisper-quiet ventilation systems. DUCO excels in acoustics, especially where it matters most: the living areas and bedrooms.

### → Connectivity

The optional Duco Connectivity Board 2.0 offers the possibility of integrating the DUCO ventilation systems with home automation and building management systems through **REST API** (local or via the cloud) or **Modbus TCP** (local). Both are possible via Ethernet or Wi-Fi

### → Automatic calibration

The automatic calibration, whereby the measuring and adjustment technology is based on the principles of calibration under constant pressure, always offers a 100 % guarantee of a qualitative end result and translates into a 50 % saving in set-up time for the installer.



### **DUCO** introduces

### **DEMAND-CONTROLLED VENTILATION**

Historically, MVHR-units used to run **continuously**: 24 hours a day, 7 days a week. This was deemed to be "ok" as there was "heat recovery" anyway, and so the energy losses were deemed to be small.

DUCO feels that this "old school"-way-of-thinking is a thing of the past and decided to go a step beyond the "normal" operation mode of a "traditional" MVHR system.

So next to offering user control options on the display or via a remote control; next to offering the possibility to make the unit function on a time-schedule, DUCO also offers true "on demand" solutions which result in true energetically optimised ventilation-solutions: only ventilate when necessary, where it is necessary and as long as it is necessary!





### → How does it work?

Sensors permanently measure the indoor air quality in a room (or centrally, depending on the case): if the indoor air quality ( $CO_2$  or humidity) is found to be OK, the **ventilation** is **put to a strict minimum** (minimum energy consumption and minimum heat losses).

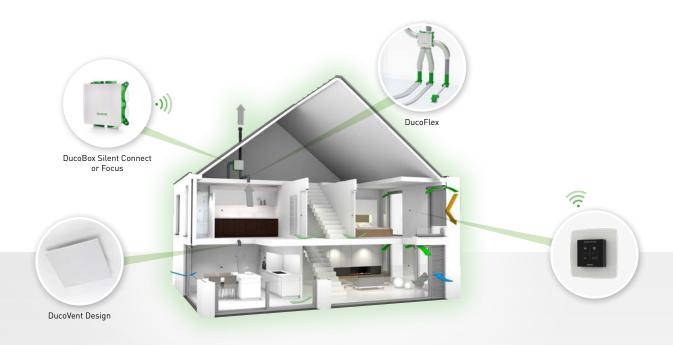
On the other hand, if the indoor air quality is found to be or become worry-some, the ventilation is triggered immediately in a modular way, i.e. more or less intense according to **intelligent algorithms** (energy is only used when needed to reach healthy indoor air).

With an "on demand" DUCO-system, the occupant can always be assured to breathe the best possible indoor air, whilst also using the least amount of energy! DUCO brings you the SMARTEST ventilation solutions!

Check out our various control components from page 80 onward.

### UNIQUE AT DUCO MEV SYSTEM

Unlike a ventilation system that extracts air from the entire house, including healthy air, the **DucoBox Focus** is a ventilation unit that applies **zonal ventilation**. The internal control valves of the DucoBox Focus extract polluted and/or moist air zonally. This means that you only ventilate where necessary, when necessary and in the right amount, to remove the polluted air as quickly as possible.

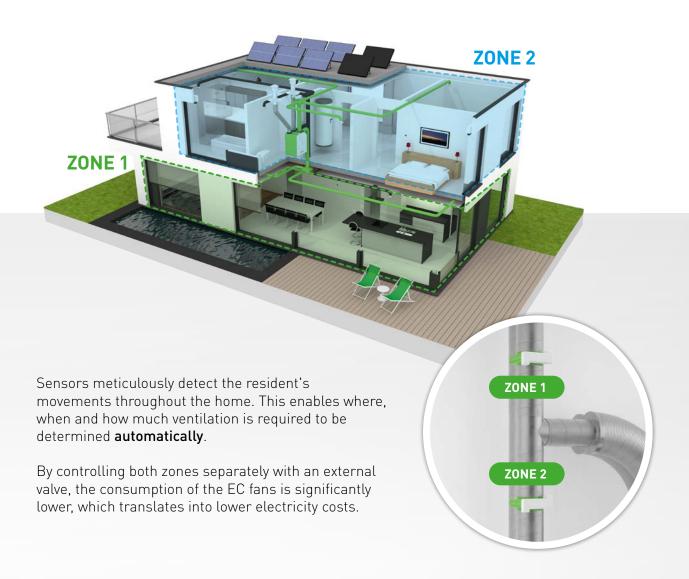


- 100% automatic **Demand-controlled ventilation** based on  $CO_2$ , Humidity and temperature.
- Optimal indoor climate The Duco Focus System ventilates only where and when needed, and in the right amount.
- Acoustic comfort The QUIETEST and SMARTEST ventilation boxes on the market.
- Aesthetic & minimalist DucoVent Design: Aesthetic and functional aluminium vents.
- Highest energy gain Controlled supply and extraction = 100% controlled ventilation.

### UNIQUE AT DUCO MVHR SYSTEM

With the DucoBox Energy Comfort (Plus) and the DucoBox Energy Comfort Premium DUCO offers a unique ventilation system where 2-zone control can be realised on the supply.

If the air quality in a specific zone is found to be ok, ventilation in that zone is set to a minimum. Cost savings for heating, lower consumption and acoustic comfort are the logical consequences. But always with guaranteed indoor air quality!



- Low energy consumption
- The quietest MVHR system in the market!
- Automatic calibration!

# Discover the magic of zonal ventilation

Bring fresh air into your life, at the right time, in the right room



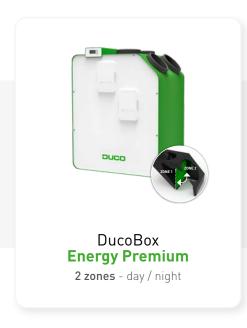
### **MEV SYSTEM**

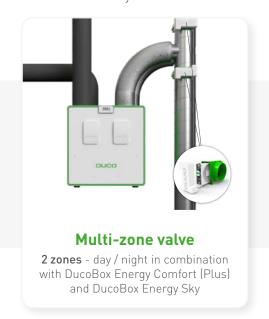
Mechanical extract ventilation



### **MVHR SYSTEM**

Mechanical ventilation with heath recovery







### START YOUR JOURNEY TO ZONAL VENTILATION!

Discover the magic at duco.eu/zonal-ventilation



### **MEV SYSTEM**

### The QUIETEST and SMARTEST MEV system!







### DucoBox **Reno**



### Optimal ventilation performance

Centralized built-in humidity detection



### Copy functionnality for serial housing

Ideal for social housing and student flats



### **Certified Quality**

SAP/Appendix Q listed and BRE approved

# DucoBox Silent Connect



### Multiple room connections

Equiped with 7 spigots



### Carefree night's sleep

Minimum sound power (< 27 dB(A) in occupied zones)



### Easy to install

User-friendly Installation App with wizard and Part F-compliant report

## DucoBox **Focus**



### Intelligent demand control

Control valve system based on CO<sub>2</sub> and humidity measurement



### Smart zonal control

Up to 7 zones, expandable to 11 zones with duplicator



#### **Automatic calibration**

Guaranteed flow at each vent



With DucoFlex, DUCO offers a **complete air duct system**. If you use this **installation-friendly** air-duct system you will enjoy the **energy-efficient and quiet operation** of the ventilation system.



### **MVHR SYSTEM**

### The QUIETEST and SMARTEST MVHR system!







### DucoBox Energy Comfort (Plus)







### A solution for every situation

Flow rate up to  $550 \text{ m}^3/\text{h}$  (at 200 Pa)



#### Easy to install

Via head-up display or via the Duco Installation App



### **Smart 2-zone control**

Saving up to 40 % through smart zone control



### Left/right exchangeable

Exchange between left and right variant is carried out 100% by software



#### Save time = save money

AUTO calibration, COPY function, 100% exchangeable via display



### **Quietest MVHR on the market**

Enjoy a good night's sleep!



#### **Automatic calibration**

Calibration at constant pressure saves up to 50 % on the configuration time



### **Priority to energy savings**

Smart demand control



#### **Automatic calibration**

Calibration at constant pressure saves up to 50 % on the configuration time



With DucoFlex, DUCO offers a **complete air duct system**. If you use this **installation-friendly** air-duct system you will enjoy the **energy-efficient and quiet operation** of the ventilation system.



### **DucoBox Reno**

The **NUMBER 1** ventilation box for Social Housing and Flats





Centralized built-in humidity detection



Copy functionnality for serial housing

Ideal for social housing and student flats



**Certified Quality** 

SAP/Appendix Q listed and BRE approved





Please refer to page 106 for essential installation tips!

### DucoBox Reno

MEV system

Up to **325 m³/h** (90 l/s) at 150 Pa

The DucoBox Reno UK is a Central Mechanical Extract Ventilation (CMEV) system, designed for houses and apartment buildings. With its continuous operation, it ensures **optimal indoor air quality** while delivering exceptional energy efficiency and silent performance.

Whether you are developing social housing projects or modern apartments, the DucoBox Reno UK provides a **reliable**, **cost-effective solution** for achieving excellent ventilation standards. By integrating cutting-edge technology, this system meets the diverse demands of today's housing market, combining user comfort, sustainability, and straightforward compliance with UK building regulations.

#### **FEATURES**

Width x Height x Depth: 381 x 366 x 204 mm Weight: 3,1 kg Extraction capacity at 150 Pa: 325 m³/h [90 l/s] Power suppty: 230 VAC Energy label: class B in a system with at least two sensors Communication: RF Peak power: 47 W
Air duct connections:
Extraction areas:
4 x ∅ 125 mm
1 x rear connection
Extraction to the outside: 1 X ∅ 125 mm

### **VENTILATION UNIT**



DucoBox Reno (UK) 0000-4948



### CONTROL COMPONENTS DucoBox Reno

DucoBox Reno is equipped with a RH measurement in the scroll as standard.



### → CO<sub>2</sub> BOX SENSOR

The optional  $\mathrm{CO}_2$  Box Sensor can be installed very easily and quickly and provides  $\mathrm{CO}_2$  measurement in an air duct. The sensor is wired directly to the printed circuit board. This means that no wiring for room sensors needs to be provided. A DucoBox Reno contains a maximum of one box sensor – which can be clicked into a specific duct opening.

Peak power: < 1 W	Stand-by power: < 1 W	Power supply: From the DucoBox
CO <sub>2</sub> Box sensor DucoBox Reno 0000-4743		0000-4743

### → EXTERNAL CONTROL COMPONENTS

The DucoBox Reno can be connected to the following external control components.

User controls and room sensors	see page 80
Switch sensor (for switch detection)	see page 82



### **OPTIONS & ACCESSORIES** DucoBox Reno



Reducer 160/125 0000-4543

Reducer from  $\varnothing$  125 mm (DucoBox spigot) to  $\varnothing$  160 mm (air duct).



### Duct flange ∅ 125 mm

0000-4728

The duct flange is a handy tool for quickly connecting flexible ducts or silencers to a  $\varnothing$  125mm spigot of a DucoBox. Thanks to the smart and patented self-clamping 'Push & Go' fastening principle, the installer saves a lot of time when mounting pipes.





Renovation

### Duco Reno System

MEV system | Central ventilation (1 zone) | Up to 325 m³/h (90 l/s) at 150 Pa With CO $_2$  Box sensor

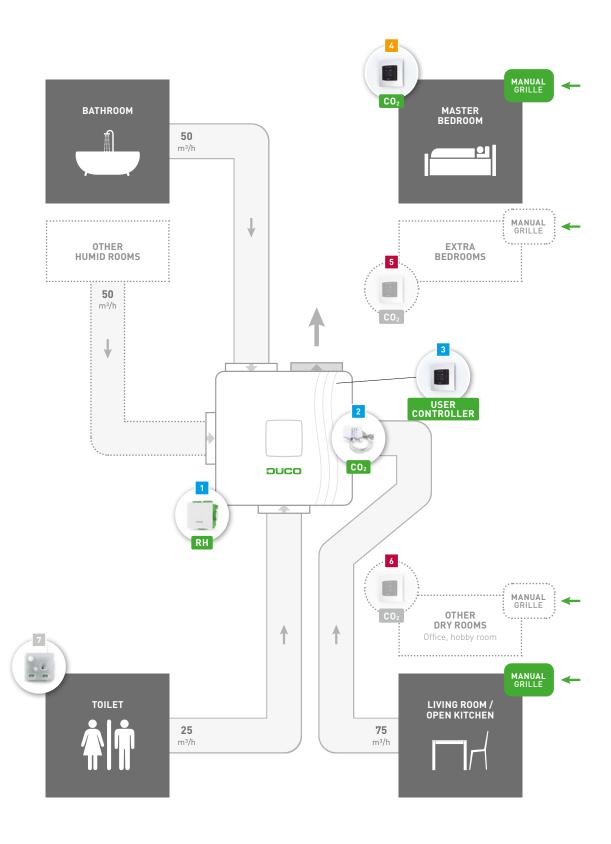




 COMPONENTS			Component on diagram
 DucoBox Reno (UK)	0000	-4948	1
CO <sub>2</sub> Box sensor DucoBox Reno		-4743	2
Remote control RF/Wired	Black 0000-4601	White 0000-4602	
Remote control RF/Battery	0000-4001	0000-4600	3
· · · · · · · · · · · · · · · · · · ·			
 CO <sub>2</sub> Room sensor with control RF/Wired	0000-4603	0000-4604	4
CO <sub>2</sub> Room sensor without control RF/Wired	0000-4636	0000-4637	5 6
Humidity Room sensor with control RF/Wired	0000-4605	0000-4606	
Surface-mounted box DUCO controllers / sensors available 02/2025	-	0000-5009	
 Switch sensor RF/230 VAC *	0000	-4174	7

<sup>ightarrow</sup> See chapter 'Vents' from page 90 for more information on all types of vents.





Energy label	Extraction	Detection	Required components	Optional components
В	Central	High-humidity rooms		
В	Central	Damp areas + master bedroom	+	
В	Central	Damp rooms + all bedrooms	+ + +	

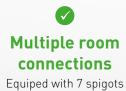




### **DucoBox Silent Connect**

The **QUIETEST** MEV system!





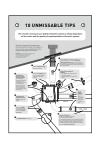


Minimum sound power (< 27 dB(A) in occupied zones)



User-friendly Installation App with wizard and Part F-compliant report





Please refer to page 106 for essential installation tips!

### **DucoBox Silent Connect**

Up to 400 m3/h (111 l/s) at 150 Pa

The DucoBox Silent Connect is an extraction fan that provides central extraction within DUCO's Demand-Controlled Natural Ventilation Systems (DCNVS). The DucoBox Silent Connect is both the system's motor and the master unit to which control components can be paired.

This quiet, compact, durable and highly energy-efficient extractor fan removes moist and/or polluted air when needed and in the right quantity. Simple design and an efficient DC motor ensure long service life.

#### **FEATURES**

Width x Height x Depth: 480 x 480 x 194 mm Weight: 4,3 kg Extraction capacity at 150 Pa: 400 m³/h (111 l/s)

Power supply: 230 VAC

Energy label: class B in a system with at

least two sensors

Communication:

RF and Wired. Expandable with Duco Connectivity Board 2.0 (see 'Options & accessories') for REST API (local or cloud) and Modbus TCP (local), both via Ethernet / Wi-Fi

Peak power: 84 W Air duct connections: Extraction areas: 7 x Ø 125 mm Extraction to the outside: 1 X Ø 125 mm

### **VENTILATION UNIT**



Туре	Plug	
DucoBox Silent Connect (UK)	G	Only possible in All-in-one kit

### ALL-IN-ONE KITS DucoBox Silent

DUCO All-in-one kits include both an extractor fan and associated control components.

All-in-one DucoBox Silent Connect (UK) + RH

1 x DucoBox Silent Connect (UK) 1 x Humidity Box sensor

0000-4808



### CONTROL COMPONENTS DucoBox Silent Connect



### → BOX SENSORS

Box sensors can be installed very easily and quickly and provide  ${\bf CO_2}$  and/or moisture measurement in an air duct. They are wired directly to the circuit board. This means that no wiring for room sensors needs to be provided.

A DucoBox Silent Connect contains **a maximum of two box sensors** – one  $CO_2$  Box sensor and/or one Humidity Box Sensor – each of which can be clicked separately into a specific duct opening or together into one duct opening of the DucoBox.

Peak power: < 1 W	Stand-by power: < 1 W Power supply: From the DucoBox		
CO <sub>2</sub> Box sensor	0000-4216		
Humidity Box sensor	0000-4218		

### → EXTERNAL CONTROL COMPONENTS

The DucoBox Silent Connect can be connected to the following external control components.

User controls and room sensors	see page 80
Switch sensor (for switch detection)	see page 82



### **OPTIONS & ACCESSORIES** DucoBox Silent Connect



#### Silent Plus Kit

0000-4182

The Silent Plus Kit provides additional acoustic damping of up to 3 dB(A)! Three composite foam pads per box, placed as close to the extraction as possible, are sufficient.



#### Duco Connectivity Board 2.0

0000-4945

The optional Duco Connectivity Board 2.0 can be applied within the DucoBox Silent Connect, DucoBox Focus and DucoBox Energy. This PCB enables interfacing towards home automation and building management systems via REST API (locally or via the cloud) or Modbus TCP (locally). Both are possible via Ethernet or Wi-Fi. The Duco Connectivity Board 2.0 also enables the Duco Installation App to be used.



#### Breech Y-piece 2 x 125 to 1 x 160

0000-4334

This piece allows a duct of  $\varnothing$  160 mm to be connected to two spigots of the DucoBox Silent Connect  $\varnothing$  125 mm). Splitting the flow between two ducts reduces resistance, resulting in quieter and more energy-efficient operation.



#### Reducer 160/125

0000-4543

Reducer from  $\varnothing$  125 mm (DucoBox spigot) to  $\varnothing$  160 mm (air duct).



#### EasySwitch

0000-5134

This 'universal' plate allows you to replace an outdated ventilation box in a renovation project without cutting and breaking with the DucoBox Silent Connect or Focus. After fitting against the wall, the unit can easily be clicked onto the plate, resulting in vibration-free operation during air extraction.



#### Coaxial cable set 8 m

0000-4418

The set comprises an 8 m long coaxial cable with pre-fitted connectors at both ends. Using this set, the antenna of the DucoBox Silent Connect, DucoBox Focus or DucoBox Energy devices can be moved, if necessary, to a place where the RF range is optimal.



#### Duco Power supply 230VAC-24VDC/20W + casing

0000-4763

The Duco Power Supply 230VAC-24VDC/20W is the best solution to power Duco Wired components from a central 230V connection. The component comes with a surface-mounted junction box as standard. The sum of the peak power of all connected DUCO components can be 20W at most when using one Power Supply.



### Flow regulator 15-50 m³/h ∅125

0000-4836

### Flow regulator 50-100 m³/h ∅125

0000-4837

The adjustable flow regulator is an element that is placed in a duct to obtain a constant flow in a pressure range between 50 and 250 Pascal. It is used for both supply and extraction.



Renovation





### **Duco Silent Connect System**

MEV system | Central ventilation (1 zone) | Up to 400 m³/h (111 l/s) at 150 Pa



### **ALL-IN-ONE KIT**

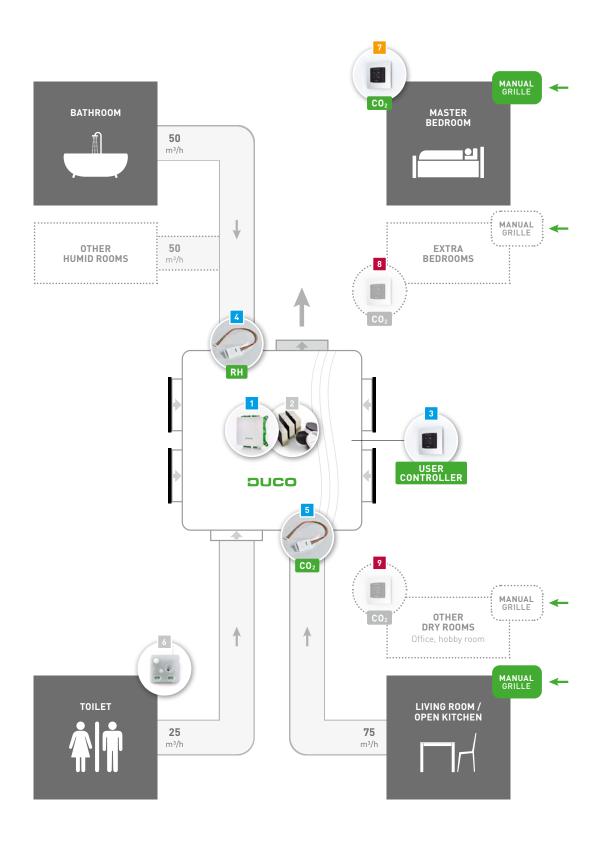
All-in-one DucoBox Silent Connect (UK) + RH 0000-4808

The bullet next to the item numbers below indicates which and how many components the basic kit contains.

COMPONENTS				Compon on diagr
DucoBox Silent Connect (UK)	1 on	ly in All-ii	n-one	1
Silent Plus Kit (3 damping pads + 3 caps)		0000-418	82	2
CO <sub>2</sub> Box sensor		0000-42	16	5
Humidity Box sensor	1	0000-42	18	4
	Blac	<	White	
Remote control RF/Wired	0000-4	601 (	0000-4602	3
Remote control RF / Battery	0000-4	175 (	0000-4600	
CO <sub>2</sub> Room sensor with control RF/Wired	0000-4	603 (	0000-4604	
${\rm CO_2}$ Room sensor without control RF/Wired	0000-4	636 (	0000-4637	7 8
Humidity Room sensor with control RF/Wired	0000-4	605 (	0000-4606	
Surface-mounted box DUCO controllers / sensors available 02/2025	-	(	0000-5009	
Switch sensor RF/230 VAC *		0000-41	7/.	6
SWITCH SELISOF RF/230 VAC		0000-41	74	
Duco Connectivity Board 2.0		0000-494	45	
Breech Y-piece 2 x 125 to 1 x 160		0000-43	2/	

 $<sup>\</sup>boldsymbol{\rightarrow}$  See chapter 'Vents' from page 90 for more information on all types of vents.





Energy label	Extraction	Detection	Required components	Optional components
В	Central	High-humidity rooms		
В	Central	Damp areas + master bedroom	+	
В	Central	Damp rooms + all bedrooms	+ + +	





### **DucoBox Focus**

The **SMARTEST** MEV system!





Control valve system based on CO<sub>2</sub> and humidity measurement



### Smart zonal control

Up to 7 zones, expandable to 11 zones with duplicator



### Automatic calibration

Guaranteed flow at each vent





Please refer to page 106 for essential installation tips!

### **DucoBox Focus**

MEV system

Up to 400 m3/h (111 l/s) at 150 Pa

The DucoBox Focus is an extraction fan that provides **zonal extraction** within DUCO's Demand-Controlled Natural Ventilation Systems (DCNVS). The DucoBox Focus is both the motor of the system, and the master unit to which control components can be paired.

This quiet, compact, durable and highly energy-efficient extractor fan removes moist and/ or polluted air when needed and in the right quantity. Integrated control valves (to be ordered separately) also ensure that air is exhausted only where necessary, providing even quieter and more energy-efficient operation. Simple design and an efficient DC motor ensure long service life.

#### **FEATURES**

Width x Height x Depth: 480 x 480 x 194 mm Weight: 4,3 kg Extraction capacity at 150 Pa: 400 m³/h (111 l/s) Power supply: 230 VAC Peak power: 84 W Air duct connections:
Extraction areas:
7 x Ø 125 mm
Extraction to the outside
1 x Ø 125 mm
Energy label: class B in a syste

Energy label: class B in a system with at least two sensors, and provided with valve

#### Communication:

RF and Wired. Expandable with Duco Connectivity Board 2.0 (see 'Options & accessories') for REST API (local or cloud) and Modbus TCP (local), both via Ethernet /Wi-Fi



### **VENTILATION UNIT**

Туре	Plug	
DucoBox Focus (UK) (control valves not included!)	G	0000-4448

At least two control valves should always be provided in the DucoBox Focus.

### BASIC KITS DucoBox Focus

DUCO basic kits contain a selection of control components at economical prices.

Basic kit Duco Focus System	1 x CO <sub>2</sub> Control valve <b>75</b> m³/h living room / open kitchen 1 x Humidity /CO <sub>2</sub> Control valve <b>50</b> m³/h bathroom + WC 1 x CO <sub>2</sub> Control valve <b>25</b> m³/h toilet 1 x Remote control <b>RF/Wired Black</b> 1 x Silent Plus Kit (3 damping pads + 3 caps)	0000-4646
Basic kit Duco Focus System with extraction in the bedroom(s)	1 x CO <sub>2</sub> Control valve <b>75</b> m³/h living room / open kitchen 1 x Humidity /CO <sub>2</sub> Control valve <b>50</b> m³/h bathroom + WC 2 x CO <sub>2</sub> Control valve <b>30</b> m³/h bedroom(s) 1 x CO <sub>2</sub> Control valve <b>25</b> m³/h toilet 1 x Remote control <b>RF/Wired Black</b>	0000-4645



### CONTROL COMPONENTS DucoBox Focus



### CONTROL VALVES

The control valves, optionally equipped with a sensor for  $CO_2$  or moisture measurement, can be integrated into the extractor fan. These valves ensure that only polluted and/or humid air is exhausted, where and when needed and in the right quantity.

The default set flow rate of the control valves can be manually changed during or after installation via the display menu, the Duco Network Tool or Duco Installation App.

<b>Width x Height x Depth:</b> 141 x 167 x 46.5 mm <b>Weight:</b> 0.220 kg	Peak power: 2.04 W Standby power: 0.24W	Power supply: From the DucoBox
1		



A  $CO_2$  Control valve commands the ventilation system based on continuous measurement of both  $CO_2$  (indoor climate indicator) and temperature.

CO <sub>2</sub> Control valve <b>75 m³/h</b> living room / open kitchen	0000-4163	
CO <sub>2</sub> Control valve <b>30 m³/h</b> bedroom(s)	0000-4164	



#### For toilet

Based on  $CO_2$  measurement, this valve detects **presence** in a toilet, after which the ventilation system will extract the polluted air. Note: a  $CO_2$  Control Valve for toilet works in a different mode than for living room / open kitchen / bedroom. This is necessary for correct operation of the system.

CO <sub>2</sub> Control valve <b>25 m³/h</b>	toilet	0000-4208
--	--------	-----------



#### For sanitary / damp areas (+ WC)

The Humidity Control valve commands the ventilation system based on continuous measurement of relative humidity (RH) and temperature. With the Control valve for bathrooms with WC, presence in the toilet is detected based on CO<sub>2</sub> measurement.

Humidity Control valve 50 m³/h bathroom/ laundry room	0000-4162
Moisture/CO <sub>2</sub> Control valve <b>50 m³/h</b> bathroom + WC	0000-4644



### Various applications

For efficient extraction in areas such as a storage room, you can also opt for a Sensorless Control valve. This control valve can be combined with control components in the room, such as a switch sensor or room sensor.

Sensorless Control valve 25 m³/h various applications	0000-4165	



### → EXTERNAL CONTROL COMPONENTS

The DucoBox Focus can be paired with the following external control components.

User controls and room sensors	see page 80
Switch sensor (for switch detection)	see page 82



### **OPTIONS & ACCESSORIES** DucoBox Focus



#### Silent Plus Kit

0000-4182

The Silent Plus Kit provides additional acoustic damping of up to 3 dB(A)! Three composite foam pads per box, placed as close to the extraction as possible, are sufficient.



#### Duco Connectivity Board 2.0

0000-4945

The optional Duco Connectivity Board 2.0 can be applied within the DucoBox Silent Connect, DucoBox Focus and DucoBox Energy. This PCB enables interfacing towards home automation and building management systems via REST API (locally or via the cloud) or Modbus TCP (locally). Both are possible via Ethernet or Wi-Fi. The Duco Connectivity Board 2.0 also enables the Duco Installation App to be used.



Reducer 160/125

0000-4543

Reducer from  $\varnothing$  125 mm (DucoBox spigot) to  $\varnothing$  160 mm (air duct).



#### EasySwitch

0000-5134

This 'universal' plate allows you to replace an outdated ventilation box in a renovation project without drilling or channelling with the DucoBox Silent Connect or Focus. After fitting against the wall, the unit can easily be clicked onto the plate, resulting in vibration-free operation during air extraction.



#### Coaxial cable set 8 m

0000-441

The set comprises an 8 m long coaxial cable with pre-fitted connectors at both ends. Using this set, the antenna of the DucoBox Silent Connect, DucoBox Focus or DucoBox Energy devices can be moved, if necessary, to a place where the RF range is optimal.



### Duplicator control valves

0000-4454

The Duplicator control valves offers the possibility of duplicating spigots on the DucoBox Focus. This allows a zonal ventilation system to be built up with up to 11 connections (of which a maximum of 7 connections with a  $\rm CO_2$  control valve). The connector supplied allows the wiring of these control valves to be easily looped through to the DucoBox Focus. And this, as always within DUCO systems, invisible and behind the lid!







Duco Power supply 230VAC-24VDC/20W + casing

0000-4763

The Duco Power Supply 230VAC-24VDC/20W is the best solution to power Duco Wired components from a central 230V connection. The component comes with a surface-mounted junction box as standard. The sum of the peak power of all connected DUCO components can be 20W at most when using one Power Supply.



Renovation

# €\*\* NIGHTBOOST



### **Duco Focus System**

MEV system | Local ventilation | Up to 400 m $^3$ /h (111 l/s) at 150 Pa



### **BASIC KIT**

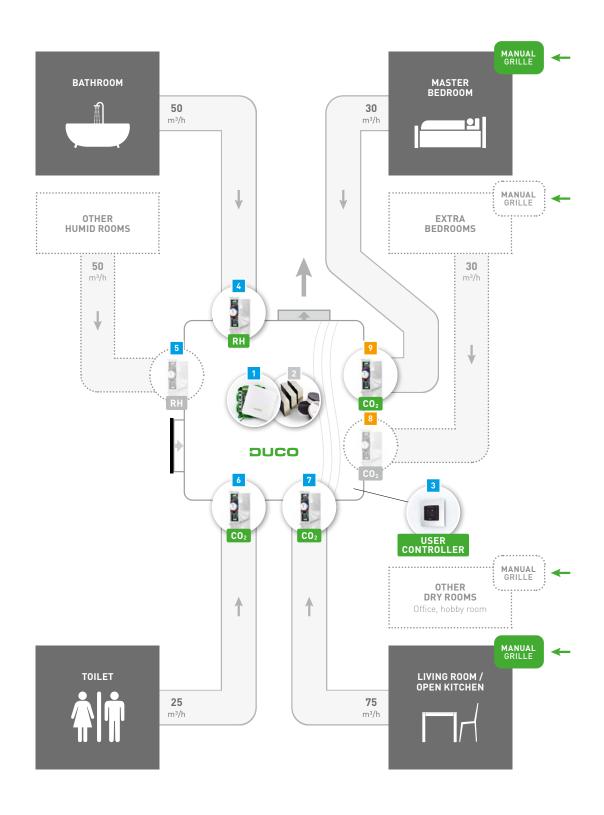
Basic kit Duco Focus System	0000-4646
Basic kit Duco Focus System with extraction in the bedroom(s)	0000-4645

The bullet next to the item numbers below indicates which and how many components the basic kit contains.

(	COMPONENTS				Con on o
	DucoBox Focus (UK)		0000	0-4448	
	Silent Plus Kit (3 damping pads + 3 caps)	0	0000	0-4182	
	CO <sub>2</sub> Control valve (75 m <sup>3</sup> /h) (living room / open kitchen)	00		0-4163 0-4164	
	CO <sub>2</sub> Control valve 30 m³/h (bedroom(s))  CO <sub>2</sub> Control valve 25 m³/h (toilet)	00		0-4164	_
	Humidity Control valve 50 m³/h (bathroom / laundry room)			0-4162	
	CO <sub>2</sub> /Humidity Control valve 50 m³/h (bathroom + WC)	00	0000	0-4644	
	Sensorless Control valve 25 m³/h (various applications)		0000	0-4165	
	Remote control RF/Wired 10	Blac		White 0000-4602	
	Remote control RF/Battery	0000-4		0000-4600	
	CO <sub>2</sub> Room sensor with control RF/Wired	0000-4	603	0000-4604	
	CO <sub>2</sub> Room sensor without control RF/Wired	0000-4	636	0000-4637	
	Humidity Room sensor with control RF/Wired	0000-4	605	0000-4606	
	Surface-mounted box DUCO controllers / sensors available 02/2025	-		0000-5009	
	Switch sensor RF/230 VAC *		0000	0-4174	
	Duco Connectivity Board 2.0			0-4945	

 $<sup>\</sup>boldsymbol{\rightarrow}$  See chapter 'Vents' from page 90 for more information on all types of vents.





Energy label	Energy label Extraction Detection  B Local High-humidity rooms		Required components	Optional components
В				
B Local Damp rooms + bedrooms		+		





### **DucoBox Energy Comfort (Plus)**

The **SMARTEST** MVHR system!

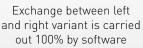


D325 D400 Plus D350 Plus D450 Plus D550











Calibration at constant pressure saves up to 50 % on the configuration time





Please refer to page 107 for essential installation tips!

### **DucoBox Energy Comfort (Plus)**

Up to 550 m3/h (153 l/s) at 200 Pa

The DucoBox Energy Comfort is a compact and light mechanical ventilation unit with heat recovery. With a capacity of up to 400 m<sup>3</sup>/h, this is the basic ventilation solution for apartments and serial housing construction. In addition, the D325 variant weighs only 21 kg. In other words: easy to install by one person.

DucoBox Energy Comfort Plus was developed with the aim of quaranteeing an even quieter operation and to be able to offer higher flow rates (up to 550 m<sup>3</sup>/h).

Within the DucoBox Energy Comfort (Plus) range, the left/right exchange is 100% software-driven thanks to the patented principle of the double by-pass.

The demand control of the DucoBox Energy Comfort (Plus) results in intelligent and energy-efficient operation. Together with the smart demand control based on CO2 and humidity, the dynamic air distribution filters ensure exceptional efficiency within this compact unit.

The compact and quick-to-install 2-zone valves provide the most energy-efficient result that can be achieved with an MVHR system. Please note that the zone control reduces the noise considerably! Comfort guaranteed!

#### **FEATURES**

#### General features Comfort D325 Comfort Plus D350 / D450 / D550 Width x Height x Depth: 700 x 705 x 525 mm Width x Height x Depth: 760 x 803 x 584 mm Connection type 1 x extraction to outside (EHA) Weight: 21 kg Weight: 47 kg 1 x supply from outside (ODA) Flow rate / pressure: Flow rate / pressure: 1 x extraction from inside (ETA) 325 m³/h (90 l/s) / 150 Pa D350: 350 m³/h (97 l/s) / 200 Pa 1 x supply to inside (SUP) Number of air ducts: $4\times\varnothing$ 160 D450: 450 m3/h (125 l/s) / 200 Pa D550: 550 m3/h [153 J/s] / 200 Pa Energy label: A+ Peak power: 2 x 59 W Number of air ducts: 4 x Ø 180 Communication: RF and Wired. Expandable with Duco Comfort D400 Max. power per motor: Connectivity Board 2.0 (see 'Options & Width x Height x Depth: 756 x 800 x 584 mm D350: approx. 59 W accessories') for REST API (local or cloud) Weight: 31 kg D450: approx. 98 W and Modbus TCP (local), both via Ethernet Flow rate / pressure: D550: approx. 135 W / Wi-Fi 400 m<sup>3</sup>/h (111 l/s) / 200 Pa Number of air ducts: 4 x Ø 180 Peak power: 2 x 72,5 W

### VENTILATION UNIT



Type of DucoBox	Passive House Certified Component	Plug		
Energy Comfort D325 (UK)	х	G	0000-4658	
Energy Comfort D400 (UK)	х	G	0000-4757	
Energy Comfort Plus D350 (UK)	<u>→</u> + + + + + + + + + + + + + + + + + + +	G	0000-4758	
Energy Comfort Plus D450 (UK)	<del>→</del> <del>*</del>	G	0000-4759	
Energy Comfort Plus D550 (UK)	х	(_"_ G	0000-4923	



### CONTROL COMPONENTS DucoBox Energy Comfort (Plus)

### → HUMIDITY SENSOR

This sensor is placed in the extract air duct (ETA) of the DucoBox Energy Comfort (Plus) and centrally measures the humidity of the air extracted from the house. A maximum of one Humidity Sensor (ETA) per unit.

Peak power: < 1 W	Communication: via supplied cable	Power supply: From the DucoBox
-------------------	-----------------------------------	--------------------------------

Humidity Sensor DucoBox Energy Comfort (Plus) / Sky

0000-4723

The Humidity Sensor is installed in a borehole (Ø 10mm) in an extraction duct with diameter of your choice.

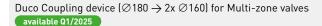
### → EXTERNAL 2-ZONE

The 2-zone control for the supply to the home is done quickly and discreetly by the compact multizone valves. A valve is provided for each branch to the various zones.



reak power: / w	Communication: when connection to Ducobox	Fower Supply: 24 VDC (to be provided externally)
Multi-zone valve DucoBox Energy (Sensorless) ∅125		0000-4761
Multi-zone valve DucoBox Energy (Sensorless) ∅160		0000-4760

The Duco Coupling device ( $\emptyset180 \rightarrow 2x \ \emptyset160$ ) has been developed to allow multi-zone valves to be quickly fitted to DucoBox Energy Comfort (Plus) / Sky. Thanks to the well-thought-out design, the pressure build-up is evenly distributed over both zones. This improves the acoustics of the overall system! By using the connection pieces with joint, the coupling device can be fitted to any type of DUCO ventilation system. The multi-zone valves D160 can also be mounted airtight without additional material. Save time = save money!



0000-4995



The DucoBox Energy Comfort (Plus) can be linked with the following external control components.

User controls and room sensors	see page 80
Switch sensor (for switch detection)	see page 82

### → BASIC KITS

Basic kit Multizone D160 DucoBox Energy Comfort (Plus) / Sky Black

- 2 x Multi-zone valve DucoBox Energy (Sensorless) Ø160
- 1 x CO<sub>2</sub> Room sensor with control RF/Wired Black
- 1 x CO<sub>2</sub> Room sensor without control **RF/Wired Black**
- 1 x Duco Power supply 230VAC-24VDC/20W + casing

0000-4802

### OPTIONS & ACCESSORIES DucoBox Energy Comfort (Plus)



Mounting Chair Standing (Energy Comfort D325)

Mounting chair Standing (Energy Comfort D400/Plus/Premium)

0000-4740

In situations where wall mounting of the DucoBox Energy Comfort (Plus) is not possible, this support frame enables floor mounting. Use of a flat siphon is required.

Width x Height x Depth (incl. DucoBox Energy Comfort D325):  $700 \times 828 \times 525$  mm Width x Height x Depth (incl. DucoBox Energy Comfort D400):  $700 \times 933 \times 525$  mm Width x Height x Depth (incl. DucoBox Energy Comfort Plus):  $700 \times 936 \times 525$  mm



#### Siphon flat (Energy) 0000-4376

This flat diaphragm siphon with a height of 64 mm saves space and has less of a risk of air leaks. The siphon can be installed 'dry' and does not dry out on warm days.

0000-4945





Filter set 2 x Coarse 65 % (Energy Comfort)	0000-4547
Filter set Coarse 65% / ePM1 55% (Energy Comfort D325)	0000-4661
Filter set 2 x Coarse 65% (Energy Comfort D400 / Comfort Plus)	0000-4741
Filter set Coarse 65% / ePM1 55% (Energy Comfort D400 / Comfort Plus)	0000-4742

The filter sets for the DucoBox Energy Comfort (Plus) include the following filters: For supply air (SUP): choice between Coarse 65% ( $\approx$  G4) or ePM1 55% filter ( $\approx$  F7). The ePM1 55% filter lets fewer fine particles through, which has a positive influence on air quality (e.g. for people who have allergies). For extract air (ETA): Coarse 65% filter ( $\approx$  G4)



#### Coaxial cable set 8 m 0000-441

The set comprises an 8 m long coaxial cable with pre-fitted connectors at both ends. This set can be used to relocate the DucoBox Silent Connect, DucoBox Focus or DucoBox Energy Comfort (Plus) / Sky / Premium antenna, if necessary, to a spot where the RF range is optimal.



### Duco Connectivity Board 2.0

The optional Duco Connectivity Board 2.0 can be applied within the DucoBox Silent Connect, DucoBox Focus and DucoBox Energy Comfort (Plus) / Sky / Premium. This PCB enables interfacing towards home automation and building management systems via REST API (locally or via the cloud) or Modbus TCP (locally). Both are possible via Ethernet or Wi-Fi. The Duco Connectivity Board 2.0 also enables the Duco Installation App to be used.



Connection piece with joint D160/D160 [M/M]	0000-4724
Connection piece with joint D180/D160 (M/M)	0000-4725
Connection piece with joint D180/D180 (M/M)	0000-4726
Connection piece with joint D200/D180 (M/M)	0000-4727
Connection piece 45° with joint D160/D160 (M/M)  available Q1/2025	0000-4949

The connection pieces with joint are used to make a quick and good connection between ducts (extraction and/or supply) or between a duct and a DucoBox. Thanks to the pre-fitted rubber seal, an airtightness class of up to D can be guaranteed at the connection!



Pre-Heater DucoBox Energy Comfort (Plus) / Sky (UK) 1150 w available 02/2025	0000-7003
Pre-Heater DucoBox Energy Comfort (Plus) (UK) 1425w	0000-4825

The Pre-heater is a frost protection based on an electrical resistance of up to 1150W or 1425W that can optionally be applied in the ODA connection of DucoBox Energy Comfort (Plus) and DucoBox Energy Sky. The resistance is modulatively controlled based on various temperature readings in the ventilation unit.

The heater is attached between the unit and the air duct via connectors. The connectors depend on the type of unit and the flow rate. Refer to the table below for the right combination.

Type of unit	Flow rate	<b>1</b> Connector	<b>2</b> Heater	<b>3</b> Connector
Daar	Up to 250 m³/h (69 l/s)	D160/D160 0000-4724	Pre-Heater	D160/D160 0000-4724
D325	Up to 325 m³/h (90 l/s)	D180/D160 0000-4725	0000-7003	D160/D160 0000-4724
D400 Plus D350 Plus D450 Plus D550	Up to 250 m³/h (69 l/s)	D160/D160 0000-4724	Pre-Heater 1150 W 0000-7003	D180/D160 0000-4725
	Up to 325 m³/h (90 l/s)	D180/D160 0000-4725		D180/D160 0000-4725
	Up to 350 m³/h (97 l/s)	D180/D180 0000-4726	Pre-Heater	D180/D180 0000-4726
	Up to 550 m³/h (153 l/s)	D180/D200 0000-4727	0000-4825	D180/D180 0000-4726



0000-4763



#### Duco Power supply 230VAC-24VDC/20W + casing

The Duco Power Supply 230VAC-24VDC/20W is the best solution to power Duco Wired components from a central 230V connection. The component comes with a surface-mounted junction box as standard. The sum of the peak power of all connected DUCO components can be 20W at most when using one Power Supply.



Flow regulator 15-50 m³/h ∅80	0000-4722
Flow regulator 15-50 m³/h ∅125	0000-4836
Flow regulator 50-100 m³/h ∅125	0000-4837

The adjustable flow regulator is an element that is placed in a duct to obtain a constant flow in a pressure range between 50 and 250 Pascal. It is used for both supply and extraction.









### Duco Energy Comfort (Plus) System

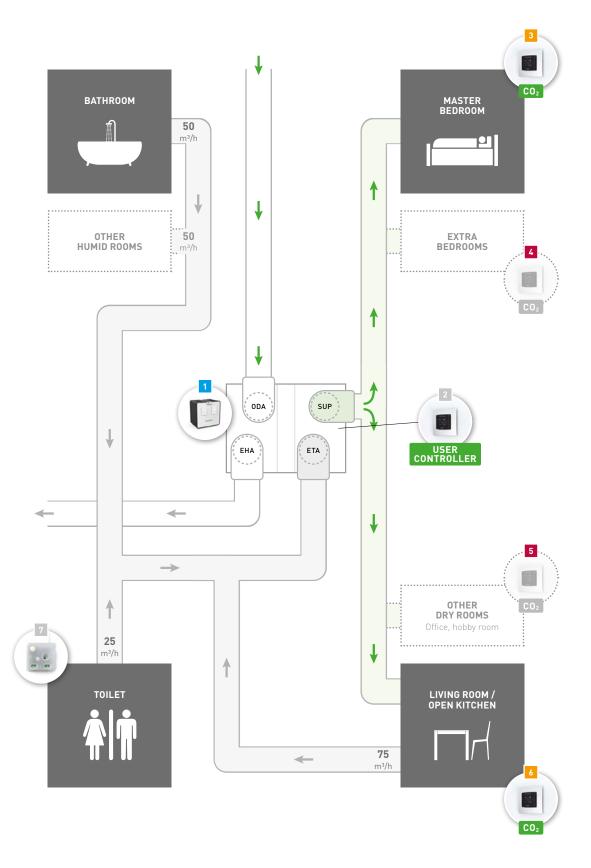
MVHR | Central ventilation (1-zone) | Up to 550 m $^3$ /h (153 l/s) at 200 Pa



DucoBox Energy Comfort D325 (UK)		COMPONENTS			Component on diagram
DucoBox Energy Comfort Plus D350 (UK)   DucoBox Energy Comfort Plus D450 (UK)   DucoBox Energy Comfort Plus D550 (UK)   Duco		DucoBox Energy Comfort D325 (UK)	0000	-4658	
DucoBox Energy Comfort Plus D450 (UK)   0000-4759		DucoBox Energy Comfort D400 (UK)	0000	-4757	
DucoBox Energy Comfort Plus D550 (UK)   0000-4923		DucoBox Energy Comfort Plus D350 (UK)	oBox Energy Comfort Plus D450 (UK) 🔠 0000-4759		1
Remote control RF/Wired   0000-4601   0000-4602		DucoBox Energy Comfort Plus D450 (UK)			
Remote control RF/Wired   0000-4601   0000-4602     Remote control RF/Battery   0000-4175   0000-4600     CO2 Room sensor with control RF/Wired   0000-4603   0000-4604   3 6   CO2 Room sensor without control RF/Wired   0000-4636   0000-4637   4 5   5   Surface-mounted box DUCO controllers / sensors   available 02/2025   Switch sensor RF/230 VAC   0000-4174   7     7		DucoBox Energy Comfort Plus D550 (UK)			
Remote control RF/Battery			Black	White	
Remote control RF/Battery 0000-4470 0000-4600  CO <sub>2</sub> Room sensor with control RF/Wired 0000-4603 0000-4604  CO <sub>2</sub> Room sensor without control RF/Wired 0000-4636 0000-4637  Surface-mounted box DUCO controllers / sensors  available 02/2025  Switch sensor RF/230 VAC 0000-4174  Pre-Heater DucoBox Energy Comfort (Plus) / Sky (UK) 1150W  available 02/2025		Remote control RF/Wired	0000-4601	0000-4602	2
CO <sub>2</sub> Room sensor without control RF/Wired 0000-4636 0000-4637  Surface-mounted box DUCO controllers / sensors available 02/2025  Switch sensor RF/230 VAC 0000-4174  T  Duco Connectivity Board 2.0 0000-4945  Pre-Heater DucoBox Energy Comfort (Plus) / Sky (UK) 1150W available 02/2025		Remote control RF/Battery	0000-4175	0000-4600	
Surface-mounted box DUCO controllers / sensors  available 02/2025  Switch sensor RF/230 VAC  Duco Connectivity Board 2.0  Duco Connectivity Board 2.0  Pre-Heater DucoBox Energy Comfort (Plus) / Sky (UK) 1150W  available 02/2025		CO <sub>2</sub> Room sensor with control RF/Wired	0000-4603	0000-4604	3 6
Switch sensor RF/230 VAC  Duco Connectivity Board 2.0  Duco Connectivity Board 2.0  Pre-Heater DucoBox Energy Comfort (Plus) / Sky (UK) 1150W available 02/2025		CO <sub>2</sub> Room sensor without control RF/Wired	0000-4636	0000-4637	4 5
Duco Connectivity Board 2.0  O000-4945  Pre-Heater DucoBox Energy Comfort (Plus) / Sky (UK) 1150W  available 02/2025			-	0000-5009	
Pre-Heater DucoBox Energy Comfort (Plus) / Sky (UK) 1150W 0000-7003		Switch sensor RF/230 VAC	0000	-4174	7
available Q2/2025		Duco Connectivity Board 2.0	0000	-4945	
Pre-Heater DucoBox Energy Comfort (Plus) (UK) 1425w 0000-4825	PAGE -		() 1150W <sub>0000</sub>	-7003	
		Pre-Heater DucoBox Energy Comfort (Plus) (UK) 1425	5W 0000	-4825	

- → See chapter 'Vents' from page 90 for more information on all types of vents.
- Passive House Institute certificate only for DucoBox Energy Comfort Plus D350/D450 units with pre-heater and a maximum flow rate between: 160 m³/h and 238 m³/h for the D350 variant and 155 m³/h and 308 m³/h for the D450 variant.





Dei	ection	Required	Optional	
Humidity	CO <sub>2</sub>	components	components	
×	x			
×	Main rooms	+		
×	All rooms	+ + +		









# **Duco Energy Comfort (Plus) System**

MVHR | Central ventilation (1-zone) | Up to 550  $m^3/h$  (153 l/s) at 200 Pa

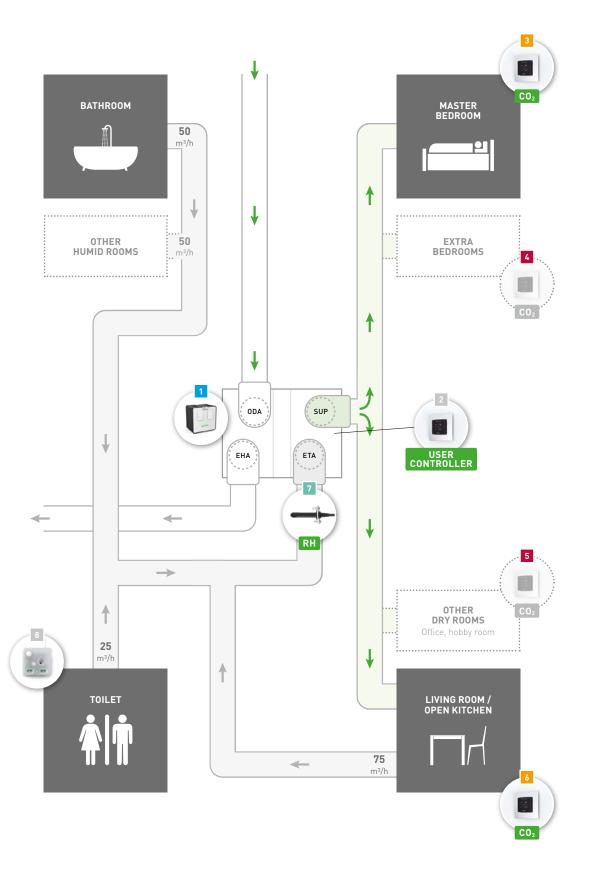


	COMPONENTS			Component on diagram
	DucoBox Energy Comfort D325 (UK)	0000	0-4658	
	DucoBox Energy Comfort D400 (UK)		)-4757	
	DucoBox Energy Comfort Plus D350 (UK)		)-4758	1
	DucoBox Energy Comfort Plus D450 (UK)	0000	)-4759	
	DucoBox Energy Comfort Plus D550 (UK)	0000	)-4923	
( † )	Humidity Sensor DucoBox Energy Comfort (Plus) / Sky	0000	)-4723	7
		Black	White	
	Remote control RF/Wired	0000-4601	0000-4602	
	Remote control RF/Battery	0000-4175	0000-4600	2
	CO <sub>2</sub> Room sensor with control RF/Wired	0000-4603	0000-4604	3 6
	CO <sub>2</sub> Room sensor without control RF/Wired	0000-4636	0000-4637	4 5
	Surface-mounted box DUCO controllers / sensors available Q2/2025	-	0000-5009	
9.0	Switch sensor RF/230 VAC	0000	D-4174	8
	Duco Connectivity Board 2.0	0000	0-4945	
	,			
	Pre-Heater DucoBox Energy Comfort (Plus) / Sky (UK) available 02/2025	1150W 0000	)-7003	
	Pre-Heater DucoBox Energy Comfort (Plus) (UK) 1425V	v 0000	)-4825	

<sup>ightarrow</sup> See chapter 'Vents' from page 90 for more information on all types of vents.

Passive House Institute certificate only for DucoBox Energy Comfort Plus D350/D450 units with pre-heater and a maximum flow rate between: 160 m³/h and 238 m³/h for the D350 variant and 155 m³/h and 308 m³/h for the D450 variant.





Det	Detection		Optional
Humidity	CO <sub>2</sub>	Required components	components
Central	×	+	
Central	Main rooms	+   +	
Central	All rooms	+   +   +	













MVHR | Central ventilation (1-zone) | Up to 550 m<sup>3</sup>/h (153 l/s) at 200 Pa

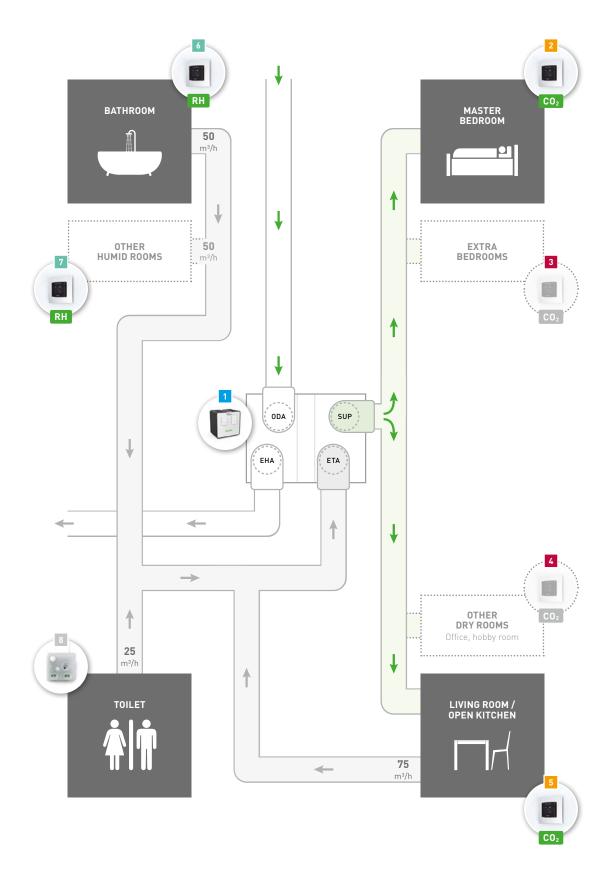


	COMPONENTS			Component on diagram
	DucoBox Energy Comfort D325 (UK)	-4658		
	DucoBox Energy Comfort D400 (UK)	0000-	-4757	
	DucoBox Energy Comfort Plus D350 (UK)	0000-	0000-4758	
	DucoBox Energy Comfort Plus D450 (UK)	0000-	-4759	
	DucoBox Energy Comfort Plus D550 (UK)	0000-	-4923	
		Black	White	
	Remote control RF/Wired	0000-4601	0000-4602	
	Remote control RF/Battery	0000-4175	0000-4600	
	CO <sub>2</sub> Room sensor with control RF/Wired	0000-4603	0000-4604	2 5
	CO <sub>2</sub> Room sensor without control RF/Wired	0000-4636	0000-4637	3 4
	Humidity Room sensor with control RF/Wired	0000-4605	0000-4606	6 7
	Surface-mounted box DUCO controllers / sensors available 02/2025	-	0000-5009	
	Switch sensor RF/230 VAC	0000-	-4174	8
A.B.	Duco Connectivity Board 2.0	0000-	-4945	
	Pre-Heater DucoBox Energy Comfort (Plus) / Sky (UK available 02/2025	() 1150W <sub>0000</sub>	-7003	
	Pre-Heater DucoBox Energy Comfort (Plus) (UK) 1425	5W 0000-	-4825	

 $<sup>\</sup>boldsymbol{\rightarrow}$  See chapter 'Vents' from page 90 for more information on all types of vents.

Passive House Institute certificate only for DucoBox Energy Comfort Plus D350/D450 units with pre-heater and a maximum flow rate between:  $160 \, \text{m}^3\text{/h}$  and  $238 \, \text{m}^3\text{/h}$  for the D350 variant and  $155 \, \text{m}^3\text{/h}$  and  $308 \, \text{m}^3\text{/h}$  for the D450 variant.





Dete	Detection		Optional
Humidity	CO <sub>2</sub>	Required components	components
Local	×	+	
Local	Main rooms	+   +	
Local	All rooms	+ + + +	









# **Duco Energy Comfort (Plus) System**

MVHR | Zonal ventilation (2-zone) | Up to 550  $\rm m^3/h$  (153  $\rm l/s$ ) at 200 Pa



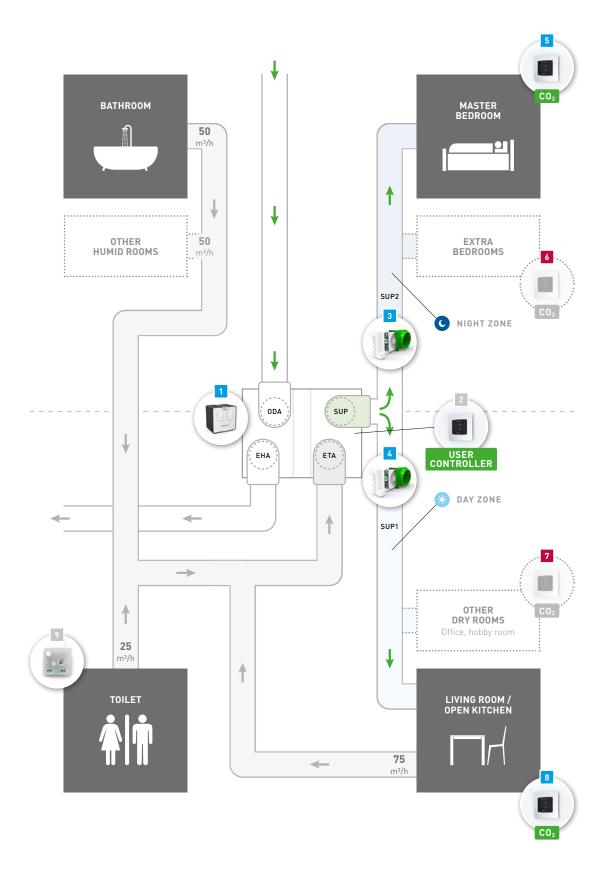
#### **BASIC KIT**

Basic kit Multizone D160 DucoBox Energy Comfort (Plus) / Sky Black	0000-4802	
---	-----------	--

	COMPONENTS			Component on diagram
	DucoBox Energy Comfort D325 (UK)	00	00-4658	
	DucoBox Energy Comfort D400 (UK)	00	00-4757	
	DucoBox Energy Comfort Plus D350 (UK)	00	00-4758	1
	DucoBox Energy Comfort Plus D450 (UK)	00	00-4759	
	DucoBox Energy Comfort Plus D550 (UK)	00	00-4923	
	Multi-zone valve DucoBox Energy (Sensorless) Ø125	00	00-4761	
2 8 1	Multi-zone valve DucoBox Energy (Sensorless) ∅160	2 00	00-4760	3 4
	Duco Coupling device ( $\emptyset$ 180 $\rightarrow$ 2x $\emptyset$ 160) for Multi-zone valves available 01/2025	00	00-4995	
		Black	White	
	Remote control RF/Wired	0000-4601	0000-4602	2
	Remote control RF/Battery	0000-4175	0000-4600	
	CO <sub>2</sub> Room sensor with control RF/Wired	0000-4603		5 8
	CO <sub>2</sub> Room sensor without control RF/Wired	0000-4636	0000-4637	6 7
	Surface-mounted box DUCO controllers / sensors available 02/2025	-	0000-5009	
	Switch sensor RF/230 VAC	nn	00-4174	9
	Switch School Rey230 FAC		00-4174	
	Duca Canastivity Board 2.0	00	00-4945	
	Duco Connectivity Board 2.0	- 00	00-4743	
	Pre-Heater DucoBox Energy Comfort (Plus) / Sky (UK)	1150W <sub>00</sub>	00-7003	
	Pre-Heater DucoBox Energy Comfort (Plus) (UK) 1425V	<b>v</b> 00	00-4825	
	Duco Power supply 230VAC-24VDC/20W + casing	1 00	00-4763	

- ightarrow See chapter 'Vents' from page 90 for more information on all types of vents.
- \* Passive House Institute certificate only for DucoBox Energy Comfort Plus D350/D450 units with pre-heater and a maximum flow rate between:  $160 \text{ m}^3\text{/h}$  and  $238 \text{ m}^3\text{/h}$  for the D350 variant and  $155 \text{ m}^3\text{/h}$  and  $308 \text{ m}^3\text{/h}$  for the D450 variant.





Det	Detection		Optional	
Humidity	CO <sub>2</sub>	Required components	components	
x	Ж			
Х	Main rooms	+		
Х	All rooms	+ + +		









# **Duco Energy Comfort (Plus) System**

MVHR | Zonal ventilation (2-zone) | Up to 550  $\rm m^3/h$  (153  $\rm l/s$ ) at 200 Pa



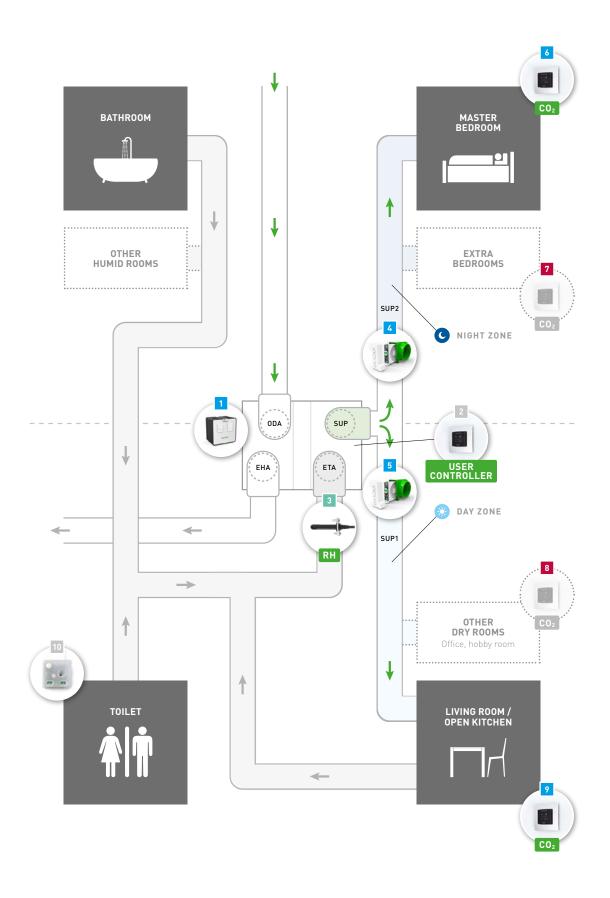
#### **BASIC KIT**

Basic kit Multizone D160 DucoBox Energy Comfort (Plus) / Sky Black	0000-4802	
---	-----------	--

	COMPONENTS				Component on diagram
	DucoBox Energy Comfort D325 (UK)		0000-4658		
	DucoBox Energy Comfort D400 (UK)	ı	0000-4757		
	DucoBox Energy Comfort Plus D350 (UK)		0000-4758		1
	DucoBox Energy Comfort Plus D450 (UK)	(	0000-4759		
	DucoBox Energy Comfort Plus D550 (UK)	-	0000-4923		
	Multi-zone valve DucoBox Energy (Sensorless) ∅125	-	0000-4761		7 6
2 8 1	Multi-zone valve DucoBox Energy (Sensorless) ∅160	2	0000-4760		4 5
	Duco Coupling device [ $\emptyset$ 180 $\rightarrow$ 2x $\emptyset$ 160] for Multi-zone valves available Q1/2025		0000-4995		
1					
	Humidity Sensor DucoBox Energy Comfort (Plus) / Sky	'	0000-4723		3
		Black	\	White	
	Remote control RF/Wired	0000-46	01 000	0-4602	2
	Remote control RF/Battery	0000-41	75 000	0-4600	-
	CO <sub>2</sub> Room sensor with control RF/Wired	0000-46	000	0-4604	6 9
	CO <sub>2</sub> Room sensor without control RF/Wired	0000-46	36 000	0-4637	7 8
	Surface-mounted box DUCO controllers / sensors available 02/2025	-	000	0-5009	
	Switch sensor RF/230 VAC	ı	0000-4174		10
	Duco Connectivity Board 2.0	I	0000-4945		
	Pre-Heater DucoBox Energy Comfort (Plus) / Sky (UK) available 02/2025	1150W	0000-7003		
	Pre-Heater DucoBox Energy Comfort (Plus) (UK) 1425V	<b>v</b>	0000-4825		
	Duco Power supply 230VAC-24VDC/20W + casing	0	0000-4763		

- $\rightarrow$  See chapter 'Vents' from page 90 for more information on all types of vents.
- Passive House Institute certificate only for DucoBox Energy Comfort Plus D350/D450 units with pre-heater and a maximum flow rate between: 160 m³/h and 238 m³/h for the D350 variant and 155 m³/h and 308 m³/h for the D450 variant.





Det	Detection		Optional	
Humidity	CO <sub>2</sub>	Required components	Optional components	
Central	Main rooms	+		
Central	All rooms	+    +		

$\rightarrow$
Extraction of stale air
$\rightarrow$
Supply of fresh air









# **Duco Energy Comfort (Plus) System**

MVHR | Zonal ventilation (2-zone) | Up to 550 m³/h (153 l/s) at 200 Pa



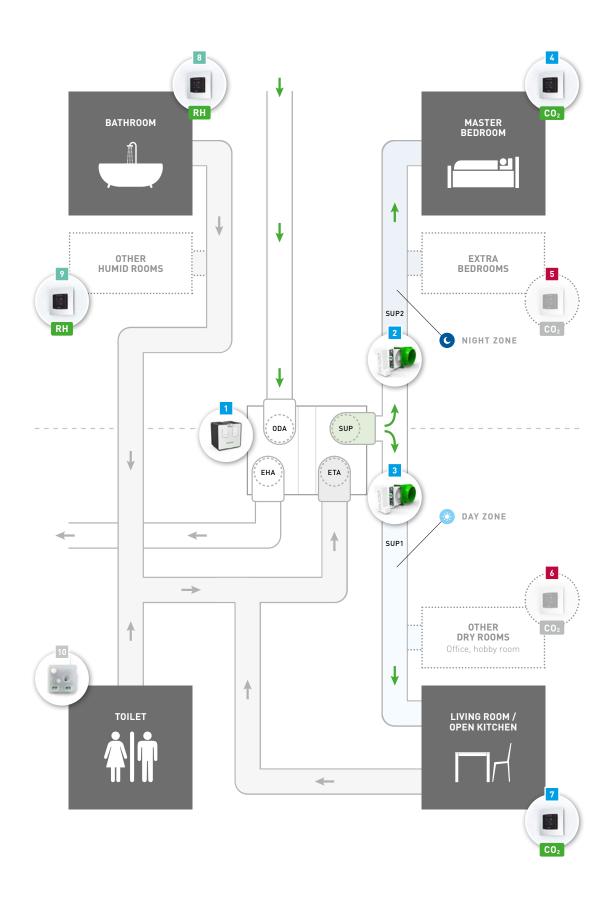
#### **BASIC KIT**

Basic kit Multizone D160 DucoBox Energy Comfort (Plus) / Sky Black	0000-4802	
--	-----------	--

CO <sub>2</sub> Room sensor <b>without</b> control <b>RF/Wired</b> 1 0000-4636 0000-4637 5 6		COMPONENTS				Component on diagram
DucoBox Energy Comfort Plus D350 (UK)       21       0000-4758       1         DucoBox Energy Comfort Plus D450 (UK)       0000-4759       0000-4759         DucoBox Energy Comfort Plus D550 (UK)       0000-4923         Multi-zone valve DucoBox Energy (Sensorless) Ø125       0000-4761       2         Multi-zone valve DucoBox Energy (Sensorless) Ø160       2       0000-4760         Duco Coupling device (Ø180 → 2x Ø160) for Multi-zone valves       0000-4995         Black White         Remote control RF/Wired       0000-4601       0000-4602         Remote control RF/Wired       0000-4603       0000-4604       4       7         CO₂ Room sensor with control RF/Wired       0000-4636       0000-4637       5       6         Humidity Room sensor with control RF/Wired       0000-4605       0000-4606       8       9         Surface-mounted box DUCO controllers / sensors         available 02/2025		DucoBox Energy Comfort D325 (UK)		0000-465	58	
DucoBox Energy Comfort Plus D450 (UK)       0000-4759         DucoBox Energy Comfort Plus D550 (UK)         Multi-zone valve DucoBox Energy (Sensorless) Ø125       0000-4761         Multi-zone valve DucoBox Energy (Sensorless) Ø160       2 0000-4760         Duco Coupling device (Ø180 → 2 x Ø160)         For Multi-zone valves available 01/2025         Black White         Remote control RF/Wired       0000-4601 0000-4602         Remote control RF/Battery       0000-4603 0000-4600         CO₂ Room sensor with control RF/Wired       1 0000-4603 0000-4604       4 7         CO₂ Room sensor without control RF/Wired       1 0000-4636 0000-4607       5 6         Humidity Room sensor with control RF/Wired       0 0000-4605 0000-4606       8 9         Surface-mounted box DUCO controllers / sensors       0 0000-5009		DucoBox Energy Comfort D400 (UK) 0000-4757				
DucoBox Energy Comfort Plus D550 (UK)         Multi-zone valve DucoBox Energy (Sensorless) Ø125       0000-4761         Multi-zone valve DucoBox Energy (Sensorless) Ø160       ② 0000-4760         Duco Coupling device (Ø180 → 2x Ø160)         Black White         Remote control RF/Wired       0000-4601       0000-4602         Remote control RF/Battery       0000-4601       0000-4600         CO₂ Room sensor with control RF/Wired       1 0000-4603       0000-4604       4 7         CO₂ Room sensor without control RF/Wired       1 0000-4605       0000-4607       5 6         Humidity Room sensor with control RF/Wired       0000-4605       0000-4606       8 9         Surface-mounted box DUCO controllers / sensors       0000-5009		DucoBox Energy Comfort Plus D350 (UK)		0000-475	58	1
Multi-zone valve DucoBox Energy (Sensorless) Ø125 0000-4761  Multi-zone valve DucoBox Energy (Sensorless) Ø160 2 0000-4760  Duco Coupling device (Ø180 → 2x Ø160) for Multi-zone valves available 01/2025  Black White  Remote control RF/Wired 0000-4601 0000-4602  Remote control RF/Battery 0000-4175 0000-4600  CO₂ Room sensor with control RF/Wired 1 0000-4603 0000-4604 4 7  CO₂ Room sensor without control RF/Wired 1 0000-4636 0000-4637 5 6  Humidity Room sensor with control RF/Wired 0000-4605 0000-4606 8 9  Surface-mounted box DUCO controllers / sensors available 02/2025		DucoBox Energy Comfort Plus D450 (UK)		0000-475	59	
Multi-zone valve DucoBox Energy (Sensorless) Ø160         Duco Coupling device (Ø180 → 2x Ø160)         Black       White         Remote control RF/Wired       0000-4601       0000-4602         Remote control RF/Wired       0000-4175       0000-4600         CO₂ Room sensor with control RF/Wired       1       0000-4604       4       7         Humidity Room sensor with control RF/Wired       0000-4605       0000-4606       8       9         Surface-mounted box DUCO controllers / sensors       -       0000-5009		DucoBox Energy Comfort Plus D550 (UK)		0000-492	23	
Multi-zone valve DucoBox Energy [Sensorless] $\oslash 160$ Duco Coupling device [ $\oslash 180 \rightarrow 2x \oslash 160$ ] for Multi-zone valves  Black  White  Remote control RF/Wired  0000-4601  CO <sub>2</sub> Room sensor with control RF/Wired  1 0000-4603  CO <sub>2</sub> Room sensor without control RF/Wired  1 0000-4603  0000-4604  4 7  CO <sub>2</sub> Room sensor without control RF/Wired  1 0000-4605  0000-4606  Surface-mounted box DUCO controllers / sensors  available 02/2025		Multi-zone valve DucoBox Energy (Sensorless) ∅125		0000-476	51	2 3
Black   White	8 3 4 7	Multi-zone valve DucoBox Energy (Sensorless) ∅160	2	0000-476	50	
Remote control RF/Wired   0000-4601   0000-4602				0000-499	25	
Remote control RF / Battery			Blaci	(	White	
CO <sub>2</sub> Room sensor with control RF/Wired 1 0000-4603 0000-4604 4 7 CO <sub>2</sub> Room sensor without control RF/Wired 1 0000-4636 0000-4637 5 6 Humidity Room sensor with control RF/Wired 0000-4605 0000-4606 8 9 Surface-mounted box DUCO controllers / sensors available 02/2025		Remote control RF/Wired	0000-4	601 0	0000-4602	
CO <sub>2</sub> Room sensor without control RF/Wired 1 0000-4636 0000-4637 5 6  Humidity Room sensor with control RF/Wired 0000-4605 0000-4606 8 9  Surface-mounted box DUCO controllers / sensors - 0000-5009		Remote control RF/Battery	0000-4	175 0	0000-4600	
Humidity Room sensor with control RF / Wired 0000-4605 0000-4606 8 9  Surface-mounted box DUCO controllers / sensors 0000-5009		CO <sub>2</sub> Room sensor with control RF/Wired	0000-4	603 0	0000-4604	4 7
Surface-mounted box DUCO controllers / sensors  available 02/2025  0000-5009		CO <sub>2</sub> Room sensor without control RF/Wired	0000-4	636 0	0000-4637	5 6
available 02/2025 - 0000-5009		Humidity Room sensor with control RF/Wired	0000-4	605 0	0000-4606	8 9
Switch sensor RF/230 VAC 0000-4174 10			-	C	0000-5009	
		Switch sensor RF/230 VAC		0000-417	14	10
Duco Connectivity Board 2.0 0000-4945		Duco Connectivity Board 2.0		0000-494	.5	
Pre-Heater DucoBox Energy Comfort (Plus) / Sky (UK) 1150W 0000-7003		available Q2/2025		0000-700	03	
Pre-Heater DucoBox Energy Comfort (Plus) (UK) 1425W 0000-4825		Pre-Heater DucoBox Energy Comfort (Plus) (UK) 1425V	V	0000-482	25	
Duco Power supply 230VAC-24VDC/20W + casing		Duco Power supply 230VAC-24VDC/20W + casing	0	0000-476	63	

- $\boldsymbol{\rightarrow}$  See chapter 'Vents' from page 90 for more information on all types of vents.
- \* Passive House Institute certificate only for DucoBox Energy Comfort Plus D350/D450 units with pre-heater and a maximum flow rate between: 160 m³/h and 238 m³/h for the D350 variant and 155 m³/h and 308 m³/h for the D450 variant.





Detection		Required	Optional
Humidity	CO <sub>2</sub>	components	Optional components
Local	Main rooms	+	
Local	All rooms	+   +	



NEW

# **DucoBox Energy Sky**

The ideal ventilation solution for **COMPACT SPACES!** 





Via head-up display or via the Duco Installation App



AUTO calibration, COPY function, 100% exchangeable via display







Please refer to page 107 for essential installation tips!

## **DucoBox Energy Sky**

MVHR

Up to 275 m3/h (76 l/s) at 200 Pa

Discover the DucoBox Energy Sky - **the ventilation solution for compact spaces** with a ventilation flow rate of 275 m<sup>3</sup>/h. With a height of just 30 cm and a light weight of 19 kg, the placement options are flexible. The system can be attached to the ceiling, as well as to the wall. It is also possible to neatly conceal this DucoBox in a false ceiling. Installation is easily done by one person.

The DucoBox Energy Sky automatically adjusts the ventilation to the actual need using the optional integrated 2-zone control. You thus automatically control the ventilation system based on  $CO_2$  and humidity, allowing you to ventilate even more efficiently.

The DucoBox Energy Sky is part of The Energy Family and offers balanced ventilation with heat recovery, without compromise on performance.

#### **FEATURES**

#### Connection type

- 1 x extraction to outside (EHA)
- 1 x supply from outside (ODA) 1 x extraction from inside (ETA)
- 1 x supply to inside (SUP)

## Energy label: A+ Communication:

RF and Wired. Expandable with Duco Connectivity Board 2.0 (see 'Options & accessories') for REST API (local or cloud) and Modbus TCP (local), both via Ethernet / Wi-Fi

#### Width x Height x Depth:

670 x 1180 x 295 mm

Weight: 19 kg

Flow rate / pressure:
275 m³/h (76 V/s) / 200 Pa

Number of air ducts: 4 x Ø 160

Max. power per motor: 65 W

#### **VENTILATION UNIT**



Type of DucoBox
Energy Sky D275 (UK)

0000-4940







## CONTROL COMPONENTS DucoBox Energy Sky

#### → HUMIDITY SENSOR

This sensor is placed in the extract air duct (ETA) of the DucoBox Energy Sky and centrally measures the humidity of the air extracted from the house. A maximum of one Humidity Sensor (ETA) per unit.

Peak power: < 1 W	Communication: via supplied cable	Power supply: From the DucoBox
-------------------	-----------------------------------	--------------------------------

Humidity Sensor DucoBox Energy Comfort (Plus) / Sky

0000-4723

The Humidity Sensor is installed in a borehole (Ø 10mm) in an extraction duct with diameter of your choice.

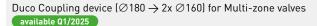
#### → EXTERNAL 2-ZONE

The 2-zone control for the supply to the home is done quickly and discreetly by the compact multizone valves. A valve is provided for each branch to the various zones.

ori I		A	١
Ti	9		,
7		V <sub>3</sub>	4
7 -	-		
41	~		

Peak power: 7 W Communication: Wired connection to DucoBox		Power supply: 24 VDC (to be provided externally)	
Multi-zone valve DucoBo	x Energy (Sensorless) ∅125	0000-4761	
Multi-zone valve DucoBo	x Energy (Sensorless) ⊘160	0000-4760	

The Duco Coupling device ( $\emptyset$ 180  $\rightarrow$  2x  $\emptyset$ 160) has been developed to allow multi-zone valves to be quickly fitted to DucoBox Energy Comfort (Plus) / Sky. Thanks to the well-thought-out design, the pressure build-up is evenly distributed over both zones. This improves the acoustics of the overall system! By using the connection pieces with joint, the coupling device can be fitted to any type of DUCO ventilation system. The multi-zone valves D160 can also be mounted airtight without additional material. Save time = save money!



0000-4995



The DucoBox Energy Sky can be linked with the following external control components.

User controls and room sensors	see page 80
Switch sensor (for switch detection)	see page 82

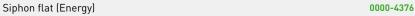
#### → BASIC KITS

0000-4802



## **OPTIONS & ACCESSORIES** DucoBox Energy Sky





This flat diaphragm siphon with a height of 64 mm saves space and has less of a risk of air leaks. The siphon can be installed 'dry' and does not dry out on warm days.



Filterset 2 x Coarse 65% [Energy Sky D275]	0000-4950
Filterset Coarse 65% / ePM1 55% (Energy Sky D275)	0000-4951

The filter sets for the DucoBox Energy Sky include the following filters: For supply air (SUP): choice between Coarse 65% ( $\approx$  G4) or ePM1 55% filter ( $\approx$  F7). The ePM1 55% filter allows less fine particles to pass through and thus has a beneficial effect on air quality (e.g. in case of possible allergic reactions). For extract air (ETA): Coarse 65% filter ( $\approx$  G4)



#### Coaxial cable set 8 m 0000-4418

The set comprises an 8 m long coaxial cable with pre-fitted connectors at both ends. This set can be used to relocate the DucoBox Silent Connect, DucoBox Focus or DucoBox Energy Comfort (Plus) / Sky / Premium antenna, if necessary, to a spot where the RF range is optimal.



#### Duco Connectivity Board 2.0

The optional Duco Connectivity Board 2.0 can be applied within the DucoBox Silent Connect, DucoBox Focus and DucoBox Energy Comfort (Plus) / Sky / Premium. This PCB enables interfacing towards home automation and building management systems via REST API (locally or via the cloud) or Modbus TCP (locally). Both are possible via Ethernet or Wi-Fi. The Duco Connectivity Board 2.0 also enables the Duco Installation App to be used.



Connection piece with joint D160/D160 (M/M)	0000-4724
Connection piece with joint D180/D160 (M/M)	0000-4725
Connection piece with joint D180/D180 (M/M)	0000-4726
Connection piece with joint D200/D180 (M/M)	0000-4727
Connection piece 45° with joint D160/D160 (M/M)	0000-4949

The connection pieces with joint are used to make a quick and good connection between ducts (extraction and/or supply) or between a duct and a DucoBox. Thanks to the pre-fitted rubber seal, an airtightness class of up to D can be guaranteed at the connection!



## Pre-Heater DucoBox Energy Comfort (Plus) / Sky (UK) 1150 w 0000-7003

The Pre-heater is a frost protection based on an electrical resistance of up to 1150W that can optionally be applied in the ODA connection of DucoBox Energy Sky. The resistance is modulatively controlled based on various temperature readings in the ventilation unit.

The heater is attached between the unit and the air duct via connectors. The connectors depend on the type of unit and the flow rate. Refer to the table below for the right combination.

Type of unit	Flow rate	<b>1</b> Connector	<b>2</b> Heater	<b>3</b> Connector
Sky D275	Up to 250 m³/h (69 l/s)	D160/D160 <b>0000-4724</b>	Pre-Heater	D160/D160 <b>0000-4724</b>
3ky D2/3	Up to 275 m³/h (76 l/s)	D180/D160 0000-4725	0000-7003	D160/D160 0000-4724





#### Duco Power supply 230VAC-24VDC/20W + casing

#### 0000-4763

0000-4945

The Duco Power Supply 230VAC-24VDC/20W is the best solution to power Duco Wired components from a central 230V connection. The component comes with a surface-mounted junction box as standard. The sum of the peak power of all connected DUCO components can be 20W at most when using one Power Supply.



Flow regulator 15-50 m³/h ∅80	0000-4722
Flow regulator 15-50 m³/h Ø125	0000-4836
Flow regulator 50-100 m³/h Ø125	0000-4837

The adjustable flow regulator is an element that is placed in a duct to obtain a constant flow in a pressure range between 50 and 250 Pascal. It is used for both supply and extraction.







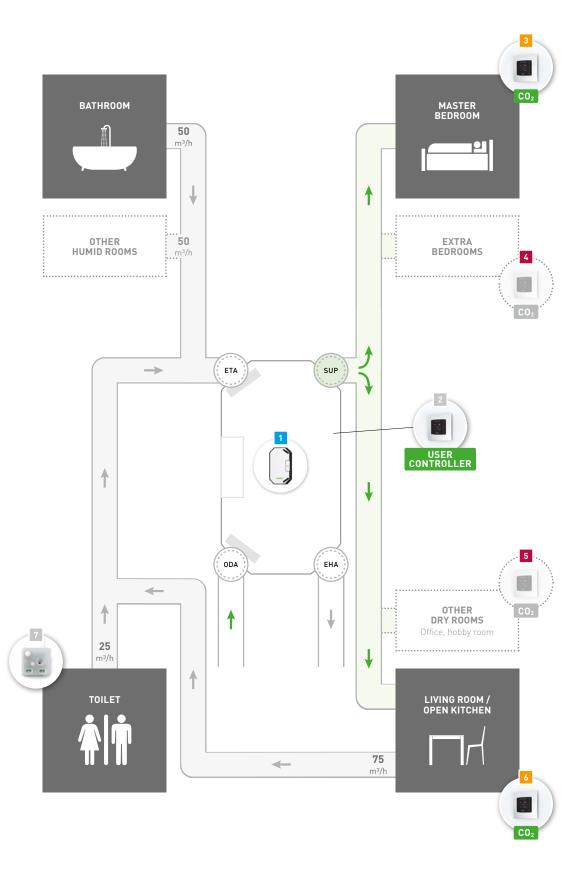
MVHR | Central ventilation (1-zone) | Up to 275 m³/h (76 l/s) at 200 Pa



COMPONENTS			Component on diagram
DucoBox Energy Sky D275 (UK)	0000	-4940	1
	Black	White	
Remote control RF/Wired	0000-4601	0000-4602	2
Remote control RF / Battery	0000-4175	0000-4600	2
CO <sub>2</sub> Room sensor with control RF/Wired	0000-4603	0000-4604	3 6
CO <sub>2</sub> Room sensor without control RF/Wired	0000-4636	0000-4637	4 5
Surface-mounted box DUCO controllers / sensors available 02/2025	-	0000-5009	
 Switch sensor RF/230 VAC	0000	-4174	7
Duco Connectivity Board 2.0	0000	-4945	
Pre-Heater DucoBox Energy Comfort (Plus) / Sky (Ulavailable 02/2025	K) 1150W <sub>0000</sub>	-7003	

 $<sup>\</sup>boldsymbol{\rightarrow}$  See chapter 'Vents' from page 90 for more information on all types of vents.





Det	ection	Required	Optional components	
Humidity	CO <sub>2</sub>	components		
x	Ж			
Х	Main rooms	+		
Х	All rooms	+ + +		









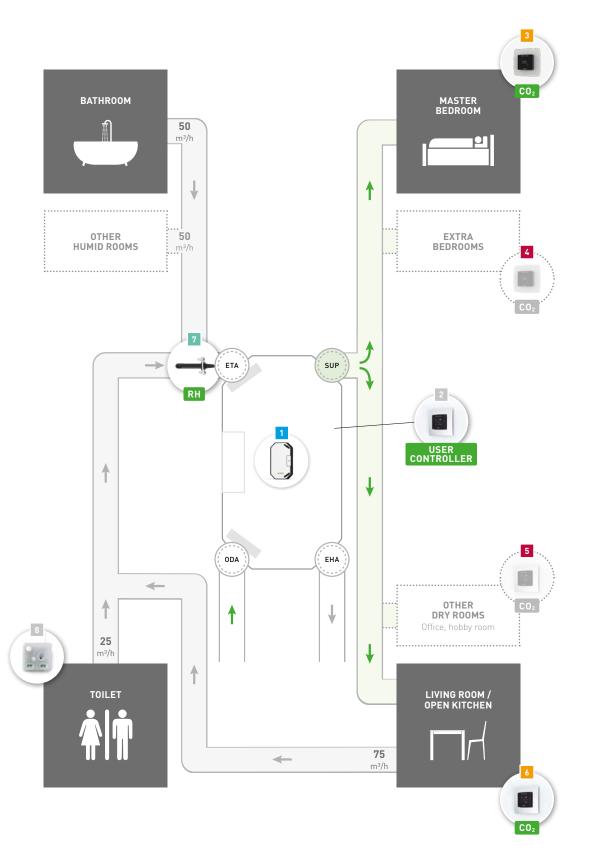
MVHR | Central ventilation (1-zone) | Up to 275 m³/h (76 l/s) at 200 Pa



COMPONENTS			Component on diagram
DucoBox Energy Sky D275 (UK)	0000	-4940	1
Humidity Sensor DucoBox Energy Comfort (Plus) / S	ky 0000	-4723	7
	Black	White	
Remote control RF/Wired	0000-4601	0000-4602	2
Remote control RF / Battery	0000-4175	0000-4600	
CO <sub>2</sub> Room sensor with control RF/Wired	0000-4603	0000-4604	3 6
CO <sub>2</sub> Room sensor without control RF/Wired	0000-4636	0000-4637	4 5
Surface-mounted box DUCO controllers / sensors available 02/2025	-	0000-5009	
Switch sensor RF/230 VAC	0000	-4174	8
Duco Connectivity Board 2.0	0000	-4945	
Pre-Heater DucoBox Energy Comfort (Plus) / Sky (Ulavailable 02/2025	K) 1150W <sub>0000</sub>	-7003	

<sup>ightarrow</sup> See chapter 'Vents' from page 90 for more information on all types of vents.





Dete	ection	Required	Optional
Humidity	CO <sub>2</sub>	components	components
Central	X	+	
Central	Main rooms	+   +	
Central	All rooms	+ + + +	











1-ZONE

# Duco Energy Sky System

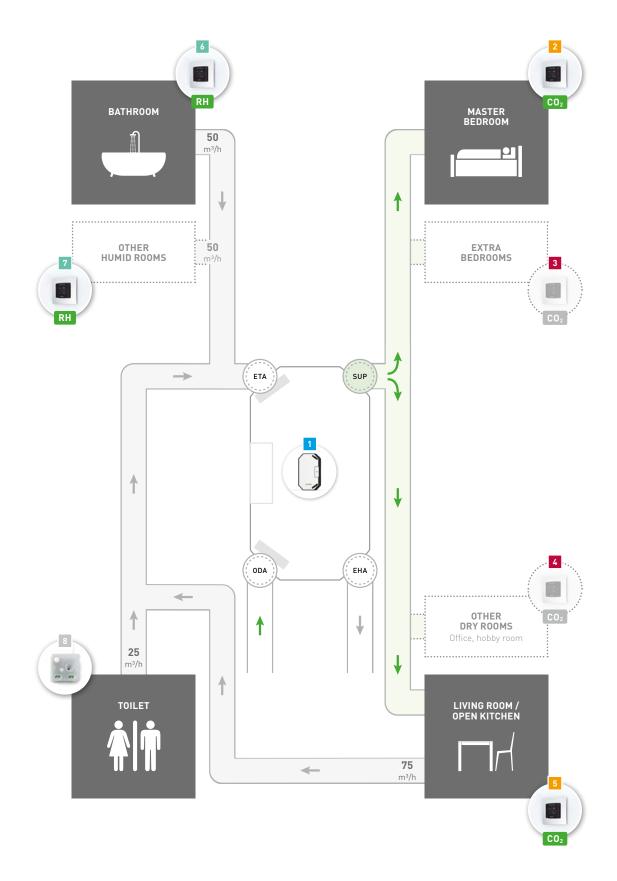
MVHR | Central ventilation (1-zone) | Up to 275 m³/h (76 l/s) at 200 Pa



COMPONENTS			Compor on diag
DucoBox Energy Sky D275 (UK)	0000	-4940	1
	Black	White	
Remote control RF/Wired	0000-4601	0000-4602	
Remote control RF/Battery	0000-4175	0000-4600	
CO <sub>2</sub> Room sensor with control RF/Wired	0000-4603	0000-4604	2
CO <sub>2</sub> Room sensor without control RF/Wired	0000-4636	0000-4637	3
Humidity Room sensor with control RF/Wired	0000-4605	0000-4606	6
Surface-mounted box DUCO controllers / sensors available 02/2025	-	0000-5009	
Switch sensor RF/230 VAC	0000	-4174	8
Duco Connectivity Board 2.0	0000	-4945	
Pre-Heater DucoBox Energy Comfort (Plus) / Sky (Uavailable 02/2025	K) 1150W 0000	-7003	

<sup>ightarrow</sup> See chapter 'Vents' from page 90 for more information on all types of vents.





Det	ection	Required	Optional
Humidity	CO <sub>2</sub>	components	components
Local	×	+	
Local	Main rooms	+ + +	
Local	All rooms	+   + +	









MVHR | Zonal ventilation (2-zone) | Up to 275 m³/h (76 l/s) at 200 Pa



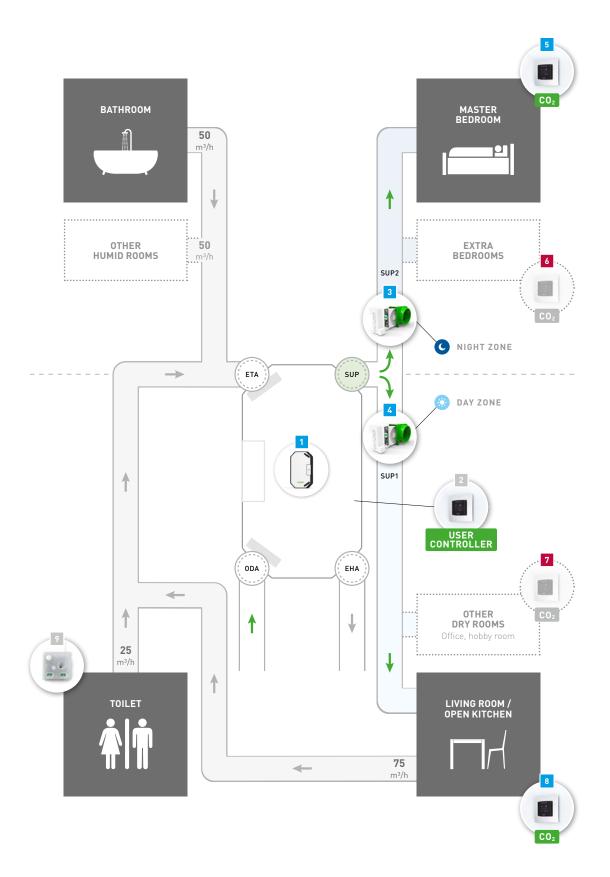
#### **BASIC KIT**

Basic kit Multizone D160
DucoBox Energy Comfort (Plus) / Sky Black

	COMPONENTS		Component on diagram
	DucoBox Energy Sky D275 (UK)	0000-4940	1
	Multi-zone valve DucoBox Energy (Sensorless) $\emptyset$ 125 Multi-zone valve DucoBox Energy (Sensorless) $\emptyset$ 160 Duco Coupling device ( $\emptyset$ 180 $\rightarrow$ 2x $\emptyset$ 160)	0000-4761	3 4
	for Multi-zone valves available 01/2025	0000-4995 Black White	
	Remote control RF/Wired  Remote control RF/Battery	0000-4601 0000-4602 0000-4175 0000-4600	2
- FI	CO <sub>2</sub> Room sensor with control RF/Wired	0000-4603 0000-4604	5 8
	CO <sub>2</sub> Room sensor <b>without</b> control <b>RF/Wired</b>	0000-4636 0000-4637	6 7
	Surface-mounted box DUCO controllers / sensors available 02/2025	- 0000-5009	
	Switch sensor RF/230 VAC	0000-4174	9
	Duco Connectivity Board 2.0	0000-4945	
	Pre-Heater DucoBox Energy Comfort (Plus) / Sky (UK) available 02/2025	1150W 0000-7003	
	Duco Power supply 230VAC-24VDC/20W + casing	0000-4763	

 $<sup>\</sup>boldsymbol{\rightarrow}$  See chapter 'Vents' from page 90 for more information on all types of vents.





Dete	Detection		Optional	
Humidity	CO <sub>2</sub>	Required components	Optional components	
×	×			
×	Main rooms	+		
×	All rooms	+ + +		









MVHR | Zonal ventilation (2-zone) | Up to 275 m³/h (76 l/s) at 200 Pa



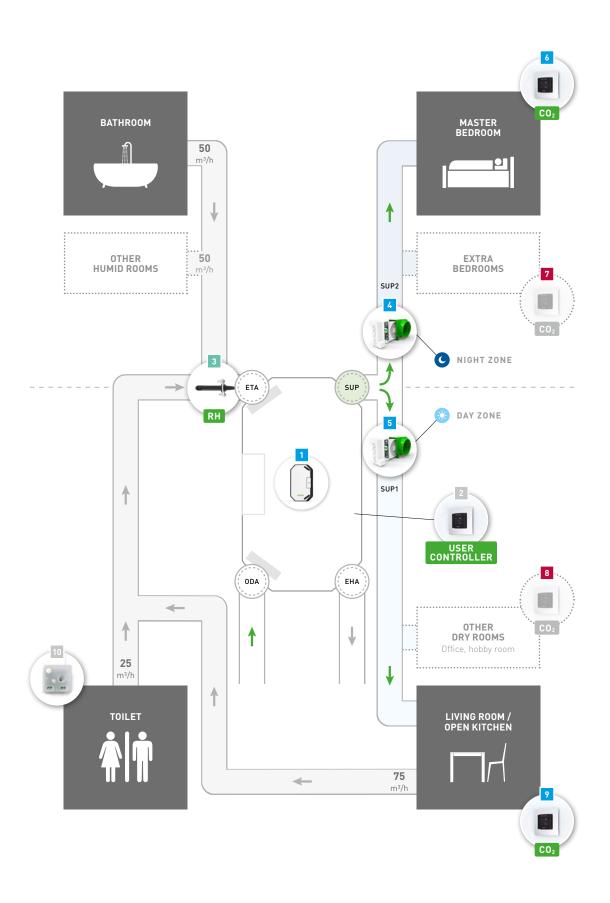
#### **BASIC KIT**

Basic kit Multizone D160
DucoBox Energy Comfort (Plus) / Sky Black

	COMPONENTS			Componen on diagran
	DucoBox Energy Sky D275 (UK)	000	0-4940	1
	Multi-zone valve DucoBox Energy (Sensorless) ⊘125 Multi-zone valve DucoBox Energy (Sensorless) ⊘160		D-4761 D-4760	4 5
	Duco Coupling device ( $\emptyset$ 180 $\rightarrow$ 2x $\emptyset$ 160) for Multi-zone valves available Q1/2025	000	0-4995	
	Humidity Sensor DucoBox Energy Comfort (Plus) / Sky	000	0-4723	3
		Black	White	
	Remote control RF/Wired	0000-4601	0000-4602	
	Remote control RF/Battery	0000-4175	0000-4600	2
	CO <sub>2</sub> Room sensor with control RF/Wired	0000-4603	0000-4604	6 9
"/	CO <sub>2</sub> Room sensor without control RF/Wired	0000-4636	0000-4637	7 8
	Surface-mounted box DUCO controllers / sensors available Q2/2025	-	0000-5009	
	Switch sensor RF/230 VAC	000	D-4174	10
	Duco Connectivity Board 2.0	000	0-4945	
	Pre-Heater DucoBox Energy Comfort (Plus) / Sky (UK) available 02/2025	1150W 0000	0-7003	
	Duco Power supply 230VAC-24VDC/20W + casing	1 000	0-4763	

 $<sup>\</sup>boldsymbol{\rightarrow}$  See chapter 'Vents' from page 90 for more information on all types of vents.





Detection		Required	Optional	
Humidity	CO <sub>2</sub>	components	Optional components	
Central	Main rooms	+		
Central	All rooms	+ + +		









MVHR | Zonal ventilation (2-zone) | Up to 275 m³/h (76 l/s) at 200 Pa



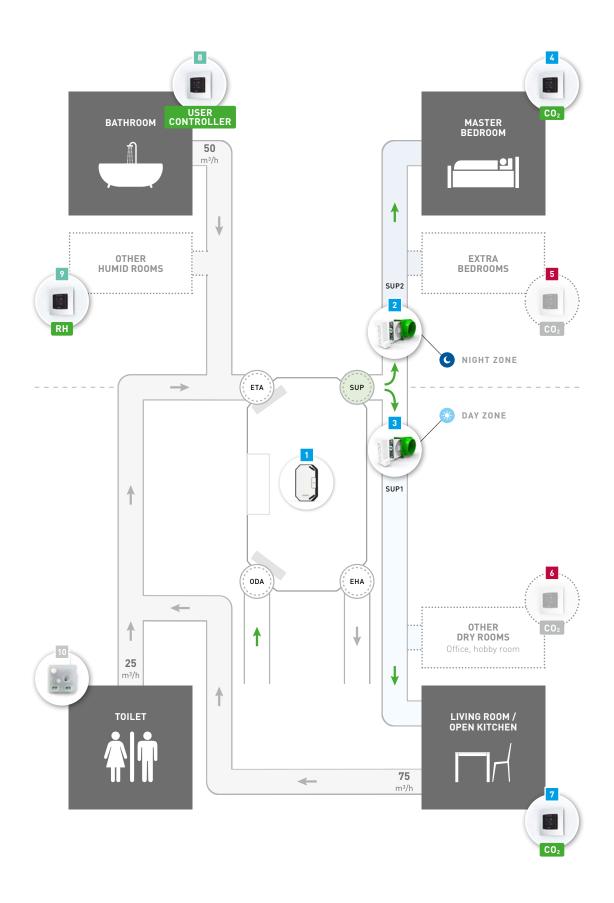
#### **BASIC KIT**

Basic kit Multizone D160
DucoBox Energy Comfort (Plus) / Sky Black

	COMPONENTS		Component on diagram
	DucoBox Energy Sky D275 (UK)	0000-4940	1
	Multi-zone valve DucoBox Energy (Sensorless) Ø125	0000-4761	
2 3 7	Multi-zone valve DucoBox Energy (Sensorless) ∅160	2 0000-4760	2 3
	Duco Coupling device [ $\emptyset$ 180 $\rightarrow$ 2x $\emptyset$ 160] for Multi-zone valves available 01/2025	0000-4995	
		Black White	
	Remote control RF/Wired	0000-4601 0000-4602	
	Remote control RF / Battery	0000-4175 0000-4600	
	CO <sub>2</sub> Room sensor with control <b>RF/Wired</b>	0000-4603	4 7
	CO <sub>2</sub> Room sensor without control RF/Wired	0000-4636 0000-4637	5 6
	Humidity Room sensor with control RF/Wired	0000-4605 0000-4606	8 9
	Surface-mounted box DUCO controllers / sensors available Q2/2025	- 0000-5009	
• • • • • • • • • • • • • • • • • • • •	Switch sensor RF/230 VAC	0000-4174	10
	Duco Connectivity Board 2.0	0000-4945	
	Pre-Heater DucoBox Energy Comfort (Plus) / Sky (UK) available 02/2025	1150W 0000-7003	
	Duco Power supply 230VAC-24VDC/20W + casing	0000-4763	

<sup>→</sup> See chapter 'Vents' from page 90 for more information on all types of vents.





Detection		Required	Optional	
Humidity	CO <sub>2</sub>	Required components	components	
Local	Main rooms	+		
Local	All rooms	+   +		





# **DucoBox Energy Premium**

The **QUIETEST** MVHR system!





Saving up to 40% through smart zone control



# Quietest MVHR on the market

Enjoy a good night's sleep!



# **Automatic** calibration

Calibration at constant pressure saves up to 50 % on the configuration time





Please refer to page 107 for essential installation tips!

## **DucoBox Energy Premium**

Up to 400 m3/h (111 l/s) at 150 Pa

An energy efficient operation becomes more and more important as "passive" and "energy neutral"houses become more and more widespread. The DucoBox Energy Premium fits perfectly within this evolution as a very high performance "balanced" ventilation unit, which raises MVHR (Mechanical Ventilation with Heat Recovery) to the next level.

The favourable positioning of the fan as well as high-grade absorbent material and a steel casing quarantee a whisper-quiet operation, especially in the living areas where this matters most (bedroom and living room)!

The DucoBox Enery Premium comes with an A+ energy label and is available in a 1-zone and a 2-zone version. The day and night-zone are being controlled separately by a valve which is integrated in the unit itself. This results in an extremely efficient operation: only ventilate when it is necessary and where it is necessary (e.g. minimal ventilation at night-time in the day-zone).

The automatic calibration, which is based on the principle of constant pressure, easily saves 50% of the set-up time. At the same time, it gives 100% peace of mind for a qualitative installation with the correct airflows.

#### **FEATURES**

Width x Height x Depth:

740 x 957 x 585 mm

Weight: 47 kg

Power supply: 230 VAC Peak power at 150 Pa:

2 x 60,5 W (325 m<sup>3</sup>/h / 460 m<sup>3</sup>/h) 2 x 91.5 W [400 m<sup>3</sup>/h / 570 m<sup>3</sup>/h]

Energy label: A+

Efficiency in accordance with EU 1253/2014:

Types 400: 88%

Extraction capacity at 150 Pa:

Types 325: 325 m<sup>3</sup>/h (90 l/s) Types 400: 400 m<sup>3</sup>/h (111 l/s)

Supply capacity at 150 Pa:

Types 325: 325 m³/h (90 l/s) Types 400: 400 m<sup>3</sup>/h [111 l/s]

Communication:

RF and Wired. Expandable with Duco Connectivity Board 2.0 (see 'Options & accessories') for REST API (local or cloud) and Modbus TCP (local), both via Ethernet / Wi-Fi

Number of air ducts:

1 x extraction to outside (EHA)

1 x supply from outside (ODA) 1 x extraction from inside (ETA)

2 x supply to inside (SUP)

Internal diameter Ø 160 mm External diameter Ø 190 mm



# puca

## **VENTILATION UNIT**

The DucoBox Energy Premium is available in a **left-hand variant** (= bevelled side left) and **right-hand variant** (= bevelled side right). On the bevelled side, an exhaust duct and supply duct are connected to the house (ETA and SUP).

The DucoBox Energy Premium is provided with frost protection through an imbalance method, which may be supplemented with an optional heater.

#### → 1-ZONE VARIANT

Type of DucoBox Energy	Passive House Certified Component	Max. air flow at 150 Pa	Heater	Plug	LEFT	RIGHT	
Premium <b>325-1ZS</b> (UK)	x	325 m³/h (90 l/s)	х	G	0000-4456	0000-4460	
Premium 325-1ZH (UK)	₩ ₩ ₩ ₩ ₩ ₩ ₩ ₩ ₩ ₩ ₩ ₩ ₩ ₩ ₩ ₩ ₩ ₩ ₩	325 m³/h (90 l/s)	yes	G	0000-4457	0000-4461	
Premium 400-1ZS (UK)	х	400 m³/h (111 l/s)	х	G	0000-4464	0000-4468	
Premium 400-1ZH (UK)	х	400 m³/h (111 l/s)	yes	_"_ G	0000-4465	0000-4469	

#### → 2-ZONE VARIANT

Type of DucoBox Energy	Passive House Certified Component	Max. air flow at 150 Pa	Heater	Plug	LEFT	RIGHT	
Premium 325-2ZS (UK)	х	325 m³/h (90 l/s)	х	G	0000-4458	0000-4462	
Premium 325-2ZH (UK)	<b>₩</b>	325 m³/h (90 l/s)	yes	_ G	0000-4459	0000-4463	
Premium 400-2ZS (UK)	х	400 m³/h (111 l/s)	×	_ G	0000-4466	0000-4470	
Premium 400-2ZH (UK)	ж	400 m³/h (111 l/s)	yes	_"_ G	0000-4467	0000-4471	

<sup>1</sup>Z = 1 zone | 2Z = 2 zones S = without heater heater | H = with heater

## CONTROL COMPONENTS DucoBox Energy Premium



#### → BOX SENSOR

This sensor is fitted **in the DucoBox Energy Premium** and it measures the **humidity content** of the air extracted from the dwelling. A maximum of one Humidity Box sensor per unit.

Peak power: < 1 W	Stand-by power: < 1 W Power supply: From the DucoBox	
Humidity Day assess (Francy Drawiy	1	0000 /27/
Humidity Box sensor (Energy Premiu	m)	0000-4374

#### → EXTERNAL CONTROL COMPONENTS

The DucoBox Energy Premium can be linked with the following external control components.

User controls and room sensors	see page 80
Switch sensor (for switch detection)	see page 82



## **OPTIONS & ACCESSORIES** DucoBox Energy Premium



#### Mounting chair standing (Energy Premium)

0000-4740

In situations where wall mounting of the DucoBox Energy Premium is not possible, this support frame makes floor mounting possible. Use of a flat siphon is required.

Width x Height x Depth (incl. DucoBox Energy Premium):  $740 \times 1110 \times 570 \text{ mm}$ 



#### Mounting chair hanging (Energy Premium)

0000-4422

In situations where it is not possible to mount the DucoBox to a wall, this support frame makes floor-mounting possible. Use of a standard siphon is possible.

Width x Height x Depth (incl. DucoBox Energy Premium): 740 x 1290 x 640 mm



Filter set 2 x Coarse 65% (Energy Premium)

0000-4417

Filter set Coarse 65% / ePM1 55% (Energy Premium) 0000-4416

The filter sets for the DucoBox Energy Premium include the following filters. For supply air (SUP): choice between Coarse 65% ( $\approx 64$ ) or ePM1 55% filter ( $\approx F7$ ) (Energy Premium only). The ePM1 55% filter allows less fine particles to pass through and thus has a beneficial effect on air quality (e.g. in case of possible allergic reactions). For extract air (ETA): Coarse 65% filter ( $\approx 64$ )



#### Siphon flat (Energy)

0000-4376

This flat diaphragm siphon with a height of 64 mm saves space and has less of a risk of air leaks. The siphon can be installed 'dry' and does not dry out on warm days.



#### Duco Connectivity Board 2.0

0000-494

The optional Duco Connectivity Board 2.0 can be applied within the DucoBox Silent Connect, DucoBox Focus and DucoBox Energy. This PCB enables interfacing towards home automation and building management systems via REST API (locally or via the cloud) or Modbus TCP (locally). Both are possible via Ethernet or Wi-Fi. The Duco Connectivity Board 2.0 also enables the Duco Installation App to be used.



#### Coaxial cable set 8 m

0000-4418

The set comprises an 8 m long coaxial cable with pre-fitted connectors at both ends. This set can be used to relocate the DucoBox Silent Connect, DucoBox Focus or DucoBox Energy Comfort / Premium antenna, if necessary, to a spot where the RF range is optimal.



Conn	ection	piece	with	joi	int D160/D160 (M/M)
_			***		: . D400/D4/0 (14/14)

0000-4724

Connection piece with joint D180/D160 (M/M)

Connection piece with joint D180/D180 (M/M)

0000-4725

Connection piece with joint D200/D180 (M/M)

0000-4727

Connection piece 45° with joint D160/D160 (M/M) available Q1/2025

0000-4949

The connection pieces with joint are used to make a quick and good connection between ducts (extraction and/or supply) or between a duct and a DucoBox. Thanks to the pre-fitted rubber seal, an airtightness class of up to D can be guaranteed at the connection!



#### Duco Power supply 230VAC-24VDC/20W + casing

0000-4763

The Duco Power Supply 230VAC-24VDC/20W is the best solution to power Duco Wired components from a central 230V connection. The component comes with a surface-mounted junction box as standard. The sum of the peak power of all connected DUCO components can be 20W at most when using one Power Supply.



Flow regulator 15-50 m³/h Ø80	0000-4722
Flow regulator 15-50 m³/h Ø125	0000-4836
Flow regulator 50-100 m³/h Ø125	0000-4837

The adjustable flow regulator is an element that is placed in a duct to obtain a constant flow in a pressure range between 50 and 250 Pascal. It is used for both supply and extraction.









# **Duco Energy Premium System**

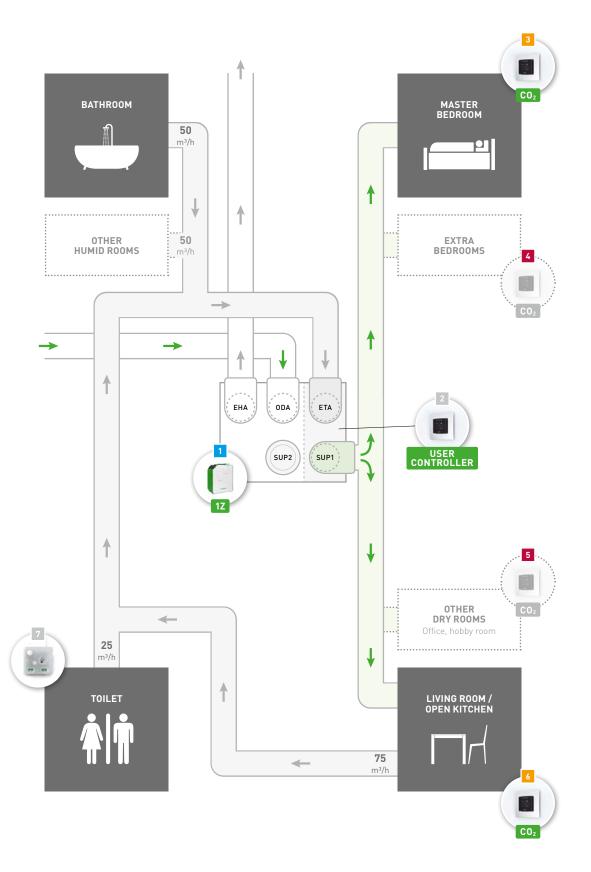
MVHR | Central ventilation (1-zone) | Up to 400 m<sup>3</sup>/h (111 l/s) at 150 Pa



	COMPONENTS			Component on diagram
		Left	Right	on diagram
	DucoBox Energy Premium 325-1ZS (UK)	0000-4456	0000-4460	
	DucoBox Energy Premium 325-1ZH (UK)	0000-4457	0000-4461	-
	DucoBox Energy Premium 400-1ZS (UK)	0000-4464	0000-4468	•
	DucoBox Energy Premium 400-1ZH (UK)	0000-4465	0000-4469	
	S = standard   H = with heater			
		Black	White	
	Remote control RF/Wired	0000-4601	0000-4602	2
	Remote control RF/Battery	0000-4175	0000-4600	2
	CO <sub>2</sub> Room sensor with control RF/Wired	0000-4603	0000-4604	3 6
	CO <sub>2</sub> Room sensor without control RF/Wired	0000-4636	0000-4637	4 5
	Surface-mounted box DUCO controllers / sensors available 02/2025	-	0000-5009	
	Switch sensor RF/230 VAC	0000-	-4174	7
	Duco Connectivity Board 2.0	0000-	-4945	

- → See chapter 'Vents' from page 90 for more information on all types of vents.
- \* Passive House Institute certificate only for DucoBox Energy Premium units with heater and a maximum flow rate between 119 m³/h and 239 m³/h.





Det	ection	Required	Optional	
Humidity	CO <sub>2</sub>	components	components	
×	×			
×	Main rooms	+		
×	All rooms	+ + +		

The illustration shows a right variant of the DucoBox Energy Premium.









# **Duco Energy Premium System**

MVHR | Central ventilation (1-zone) | Up to 400 m³/h (111 l/s) at 150 Pa

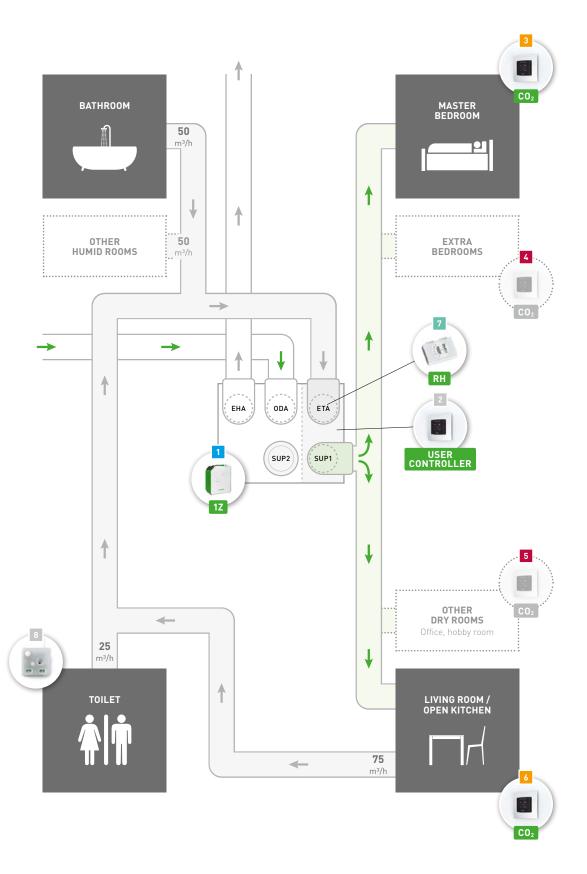


	COMPONENTS	Left	Right	Component on diagram
	DucoBox Energy Premium 325-1ZS (UK)	0000-4456	0000-4460	
	DucoBox Energy Premium <b>325-1ZH</b> (UK)	0000-4457	0000-4461	
	DucoBox Energy Premium <b>400-1ZS</b> (UK)	0000-4464	0000-4468	
	DucoBox Energy Premium 400-1ZH (UK)	0000-4465	0000-4469	
	S = standard   H = with heater			
	Humidity Box sensor (Energy Premium)	0000-	-4374	7
		Black	White	
	Remote control RF/Wired	0000-4601	0000-4602	2
	Remote control RF/Battery	0000-4175	0000-4600	2
121	CO <sub>2</sub> Room sensor with control RF/Wired	0000-4603	0000-4604	3 6
	CO <sub>2</sub> Room sensor without control RF/Wired	0000-4636	0000-4637	4 5
	Humidity Room sensor with control RF/Wired	0000-4605	0000-4606	
	Surface-mounted box DUCO controllers / sensors available 02/2025	-	0000-5009	
	Switch sensor RF/230 VAC	0000-	-4174	8
	D 0 11 10 10 0		/0/F	
	Duco Connectivity Board 2.0	0000-	-4740	

<sup>ightarrow</sup> See chapter 'Vents' from page 90 for more information on all types of vents.

<sup>\*</sup> Passive House Institute certificate only for DucoBox Energy Premium units with heater and a maximum flow rate between 119 m³/h and 239 m³/h.





Det	Detection		Optional	
Humidity	CO <sub>2</sub>	Required components	components	
Central	x	+		
Central	Main rooms	+   +		
Central	All rooms	+ + + +		

The illustration shows a right variant of the DucoBox Energy Premium.









# **Duco Energy Premium System**

MVHR | Zonal ventilation (1-zone) | Up to 400 m $^3$ /h (111 l/s) at 150 Pa

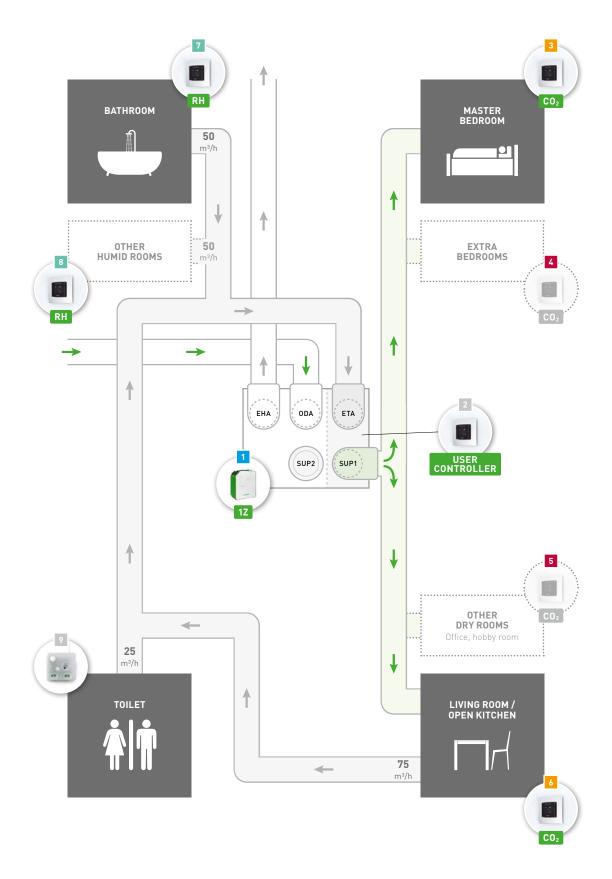


	COMPONENTS	Left	Right	Component on diagram
	DucoBox Energy Premium 325-1ZS (UK)	0000-4456	0000-4460	
	DucoBox Energy Premium 325-1ZH (UK)	0000-4457	0000-4461	
	DucoBox Energy Premium 400-1ZS (UK)	0000-4464	0000-4468	
	DucoBox Energy Premium 400-1ZH (UK)	0000-4465	0000-4469	
	S = standard   H = with heater			
	Humidity Box sensor (Energy Premium)	0000-	-4374	
		Black	White	
	Remote control RF/Wired	0000-4601	0000-4602	2
	Remote control RF / Battery	0000-4175	0000-4600	2
	CO <sub>2</sub> Room sensor with control RF/Wired	0000-4603	0000-4604	3 6
	CO <sub>2</sub> Room sensor without control RF/Wired	0000-4636	0000-4637	4 5
	Humidity Room sensor with control RF/Wired	0000-4605	0000-4606	7 8
	Surface-mounted box DUCO controllers / sensors available 02/2025	-	0000-5009	
	Switch sensor RF/230 VAC	0000-	-4174	9
.1	Duco Connectivity Board 2.0	0000-	-4945	

<sup>ightarrow</sup> See chapter 'Vents' from page 90 for more information on all types of vents.

<sup>\*</sup> Passive House Institute certificate only for DucoBox Energy Premium units with heater and a maximum flow rate between 119 m³/h and 239 m³/h.





Det	ection	Required	Optional	
Humidity	CO <sub>2</sub>	components	components	
Local	×	+		
Local	Main rooms	+   +		
Local	All rooms	+   +   +		

Extraction of stale air

Supply of fresh air

The illustration shows a right variant of the DucoBox Energy Premium.









# **Duco Energy Premium System**

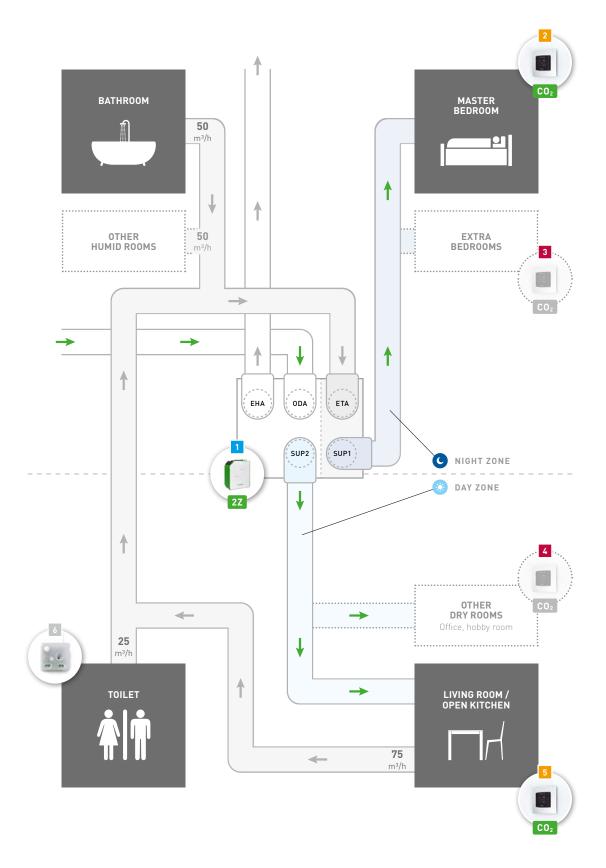
MVHR | Central ventilation (2-zone) | Up to 400 m<sup>3</sup>/h (111 l/s) at 150 Pa



	COMPONENTS			Component on diagram
		Left	Right	on diagram
	DucoBox Energy Premium 325-2ZS (UK)	0000-4458	0000-4462	
	DucoBox Energy Premium 325-2ZH (UK)	0000-4459	0000-4463	
	DucoBox Energy Premium 400-2ZS (UK)	0000-4466	0000-4470	•
	DucoBox Energy Premium 400-2ZH (UK)	0000-4467	0000-4471	
	S = standard   H = with heater			
		Black	White	
	Remote control RF/Wired	0000-4601	0000-4602	
	Remote control RF/Battery	0000-4175	0000-4600	
	CO <sub>2</sub> Room sensor with control RF/Wired	0000-4603	0000-4604	2 5
	CO <sub>2</sub> Room sensor without control RF/Wired	0000-4636	0000-4637	3 4
	Surface-mounted box DUCO controllers / sensors available 02/2025	-	0000-5009	
	Switch sensor RF/230 VAC	0000-	·4174	6
	Duco Connectivity Board 2.0	0000-	-4945	

- → See chapter 'Vents' from page 90 for more information on all types of vents.
- \* Passive House Institute certificate only for DucoBox Energy Premium units with heater and a maximum flow rate between 119 m³/h and 239 m³/h.





Det	ection	Required	Optional	
Humidity	CO <sub>2</sub>	Required components	components	
×	x			
×	Main rooms	+		
×	All rooms	+ + +		

Extraction of stale air

Supply of fresh air

The illustration shows a right variant of the DucoBox Energy Premium.









# **Duco Energy Premium System**

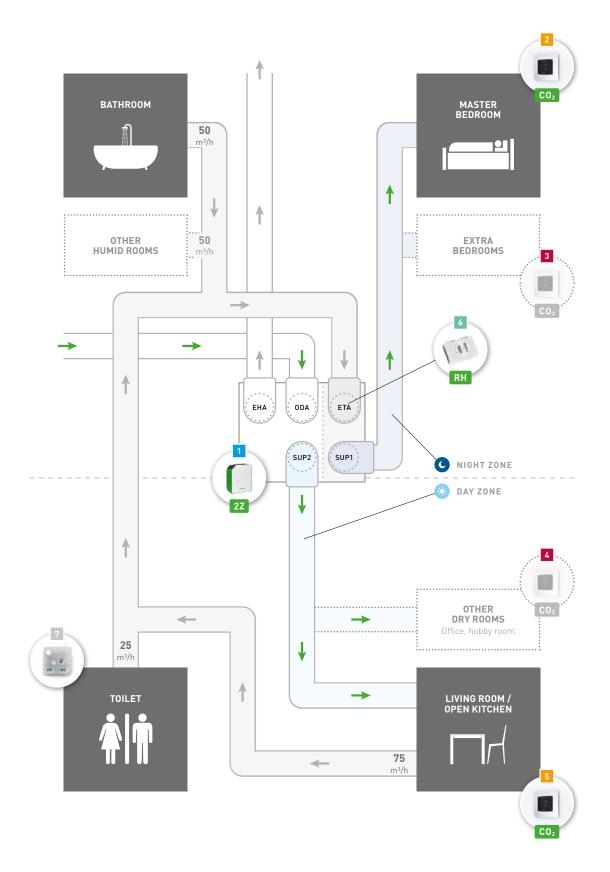
MVHR | Central ventilation (2-zone) | Up to 400 m³/h (111 l/s) at 150 Pa



	COMPONENTS	Left	Right	Component on diagram
	DucoBox Energy Premium 325-2ZS (UK)	0000-4458	0000-4462	
	DucoBox Energy Premium 325-2ZH (UK)	0000-4459	0000-4463	
-	DucoBox Energy Premium 400-2ZS (UK)	0000-4466	0000-4470	1
	DucoBox Energy Premium 400-2ZH (UK)	0000-4467	0000-4471	
	S = standard   H = with heater			
	Humidity Box sensor (Energy Premium)	0000-	-4374	6
		Black	White	
	Remote control RF/Wired	0000-4601	0000-4602	2
	Remote control RF/Battery	0000-4175	0000-4600	2
	CO <sub>2</sub> Room sensor with control RF/Wired	0000-4603	0000-4604	2 5
-/-	CO <sub>2</sub> Room sensor without control RF/Wired	0000-4636	0000-4637	3 4
	Surface-mounted box DUCO controllers / sensors available Q2/2025	-	0000-5009	
	C 11.1	0000	(48)	
	Switch sensor RF/230 VAC	0000-	-4174	7
	Dusa Carpactivity Board 2.0	0000	-4945	
	Duco Connectivity Board 2.0	0000-	-4740	

- ightarrow See chapter 'Vents' from page 90 for more information on all types of vents.
- Passive House Institute certificate only for DucoBox Energy Premium units with heater and a maximum flow rate between 119 m³/h and 239 m³/h.





Det	ection	Required	Optional
Humidity	CO <sub>2</sub>	components	components
Central	x	+	
Central	Main rooms	+   +	
Central	All rooms	+ + + +	

Extraction of stale air

Supply of fresh air

The illustration shows a right variant of the DucoBox Energy Premium.











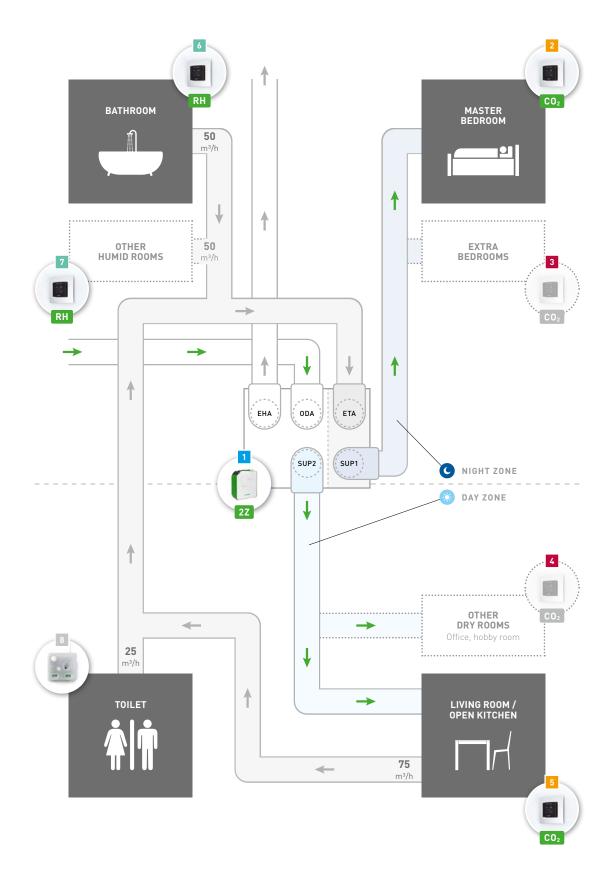
MVHR | Zonal ventilation (2-zone) | Up to 400 m³/h (111 l/s) at 150 Pa



	COMPONENTS			Component on diagram
		Left	Right	on diagram
	DucoBox Energy Premium 325-2ZS (UK)	0000-4458	0000-4462	
	DucoBox Energy Premium 325-2ZH (UK)	0000-4459	0000-4463	1
	DucoBox Energy Premium 400-2ZS (UK)	0000-4466	0000-4470	
	DucoBox Energy Premium 400-2ZH (UK)	0000-4467	0000-4471	
	S = standard   H = with heater			
		Black	White	
	Remote control RF/Wired	0000-4601	0000-4602	
	Remote control RF/Battery	0000-4175	0000-4600	
[5]	CO <sub>2</sub> Room sensor with control RF/Wired	0000-4603	0000-4604	2 5
	CO <sub>2</sub> Room sensor without control RF/Wired	0000-4636	0000-4637	3 4
	Humidity Room sensor with control RF/Wired	0000-4605	0000-4606	6 7
	Surface-mounted box DUCO controllers / sensors available Q2/2025	-	0000-5009	
	Switch sensor RF/230 VAC	0000-	-4174	8
	Duco Connectivity Board 2.0	0000-	-4945	

- ightarrow See chapter 'Vents' from page 90 for more information on all types of vents.
- \* Passive House Institute certificate only for DucoBox Energy Premium units with heater and a maximum flow rate between 119 m³/h and 239 m³/h.





Det	ection	Required	Optional	
Humidity	CO <sub>2</sub>	components	components	
Local	×	+		
Local	Main rooms	+   +		
Local	All rooms	+   +   +		

Extraction of stale air

Supply of fresh air

The illustration shows a right variant of the DucoBox Energy Premium.



# **CONTROL COMPONENTS**

With DUCO each ventilation system can be custom assembled using modular control components.







### **USER CONTROLS AND ROOM SENSORS**

User controllers and room sensors contain **one or both** of the following functions:

### User controller

Using the buttons, the user sets the operation of the ventilation system to the desired level:

- Automatic mode (recommended): CO<sub>2</sub> and/or humidity measurements determine the operation of the ventilation system via intelligent algorithms. This guarantees optimum air quality in the most efficient way.
- Manual settings: the ventilation system ventilates at POS setting 1, POS setting 2 or POS setting 3.

### Measuring air quality

Sensors continuously measure the  $\mathrm{CO}_2$  or humidity level (as well as temperature) in the rooms where they are installed. The measurements determine the operation of the ventilation system when it is in automatic mode.

All controls and room sensors also function as RF repeaters (except battery-operated controls).

RF/ Wired models

Power supply: RF: 230 VAC | Wired: 24 VDC Width x Height x Depth: 69 x 69 x 55 mm

Display: 4 RGB LEDs

Peak power: 1.8 W | Stand-by power: 1.2 W

Communication: RF and wired

Colour: Control: black or white | Supplied cover plate: white

Battery-powered model

Battery: CR2430 3V coin cell battery Width x Height x Depth: 69 x 69 x 17 mm

**Display:** 1 bicolor LED **Communication:** RF

Colour: Control: black or white | Supplied cover plate: white



### User controllers + air quality measurement

These contain both a  ${\bf user\ controller}\ {\bf and\ room\ sensors}\ {\bf (CO_2\ or\ humidity)}\ {\bf for\ air\ quality\ measurement}.$ 

	Black	White
CO <sub>2</sub> Room sensor with control RF/Wired	0000-4603	0000-4604
Humidity Room sensor with control RF/Wired	0000-4605	0000-4606



### User controller only

These contain only a **user controller**. Ideal in rooms where measurement is not required, or where measurement is done by other means (in the duct).

	Black	White
Remote control RF/Battery	0000-4175	0000-4600
Remote control RF/Wired	0000-4601	0000-4602



### Air quality measurement only

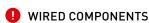
Room sensors that are only equipped with a CO<sub>2</sub> sensor. Ideal for bedrooms where no user controller is necessary.

	Black	White
CO <sub>2</sub> Room sensor without control RF/Wired	0000-4636	0000-4637



### Surface-mounted box

Surface-mounted box DUCO controllers / sensors available 02/2025	0000-5009
--	-----------



Wired / 24 VDC components require a **transformer from 230 VAC to 24 VDC**. It is possible to work with a Duco Power supply as a central power supply to power the component from the wall socket. See "Options & accessories" for the ventilation unit.





### **SWITCH SENSOR**

The Switch Sensor can perform either or both of the following functions:

**Switch detection:** the ventilation system will perform a function when closing a (two-pole) dry contact. Suitable for toilet detection or overrule setting (only one function per switch sensor).

**Repeater:** the switch sensor is ideally suited as a repeater to strengthen the signal in the event of RF communication problems. In that case the switch sensor must be positioned in such a way that the distance to be bridged and/or interference by obstacles is reduced.

A switch sensor is easy to conceal thanks to its small size.

Width x Height x Depth: 41 x 37 x 20 mm Weight: 21 g Color: white	Peak power: 0.5 W Standby power: 0.4 W	Power supply: 230 VAC Communication: RF
---	---	--

**Note:** An external switch sensor is not required if a switch is connected to the onboard dry contact on the circuit board of the 'master' unit [DucoBox or IQ unit]. Use a double-pole switch or relay and a 2 x 0.8 mm<sup>2</sup>cable for this. Refer to the **Onboard dry contact information sheet (L8001001)** for connection instructions.



Switch sensor RF/230 VAC

0000-4174



# → INTERNAL CONTROL COMPONENTS

DucoBox Energy Comfort	see page 34
DucoBox Energy Premium	see page 66



# **DUCOFLEX**AIR DUCT SYSTEM

With DucoFlex, DUCO offers a **complete air duct system** for MEV and MVHR systems. It consists of the highest airtightness class D, the lowest air resistance and maximum acoustic comfort in combination with the quietest ventilation boxes! The result is an **energy-efficient and quiet** ventilation system.

Did you know that this complete air duct system for MEV and MVHR systems is very **installation-friendly**? This is thanks to the handy 'Click & Go' principle and minimum number of fittings. DUCO as a one-stop-shop with 100 % service provision!



# **DUCOFLEX IN 3 STEPS**

Are you convinced by DucoFlex, the compact and installation-friendly air duct system? In this case you will not be left on your own! DUCO will give you peace of mind for your tailor-made project.

- 1 Provide your DUCO dealer with the necessary documents: the building plans to scale in PDF format, the chosen configuration and the intended location for the DucoBox. Then your dealer will get started!
- What's next? You will receive a tailored quotation with which you can approach your customer immediately. The calculation includes the price for the DucoBox, the system components and an estimate for the DucoFlex air-duct system.
- 3 Are you happy with the quotation? In this case you will receive a proposal for a **layout plan** within 10 work days and the completed **bill of materials** for MVHR systems.\*
- \* Only applicable for MVHR systems. Between the estimate (quotation phase) and the completed bill of materials, fluctuations are possible in relation to the number of metres of DucoFlex or manifold boxes, depending on the complexity of the practical development.



### STANDARD COMPONENTS



DucoFlex Round semi-rigid ducting D63 (50 m)	0000-4552
DucoFlex Round semi-rigid ducting D75 (50 m)	0000-4674
DucoFlex Round semi-rigid ducting D90 (50 m)	0000-4692

DucoFlex antistatic and antibacterial air ducting, being round and flexible, is easy to fit. When fitted correctly, its low internal resistance will contribute to an energy-efficient ventilation system.

The recommended range of application for  $\emptyset$ 63 is up to 25 m³/h (7 l/s) per duct, for  $\emptyset$ 75 up to 36 m³/h (10 l/s) per duct and for  $\emptyset$ 90 up to 50 m³/h (14 l/s) per duct.



DucoFlex Rubber O-ring D63 (10 pieces)	0000-4553
DucoFlex Rubber O-ring D75 (10 pieces)	0000-4675
DucoFlex Rubber O-ring D90 (10 pieces)	0000-4676

The DucoFlex O-ring (EPDM) provides a quick and perfectly airtight joint between air ducts and fittings.



DucoFlex Coupling D63	0000-4554
DucoFlex Coupling D75	0000-4677
DucoFlex Coupling D90	0000-4678

The coupling enables an airtight connection to be made between DucoFlex ducts. A built-in stop prevents the ducts from being inserted too far.



DucoFlex Elbow 90° D75	0000-4679
DucoFlex Elbow 90° D90	0000-4680

The elbow in the standard configuration enables a 90° bend to be made in flexible ducting.



### DucoFlex 90° Bend splitter vent connector long, oval D125 0000-4681

The DucoFlex  $90^{\circ}$  Bend splitter vent connector long can be utilised multifunctionally. This makes it possible to connect a DucoFlex connector 3x63, 2x75, 3x75 or 2x90 to it. Suitable for a transit size up to 300 mm.



### DucoFlex 90° Bend splitter vent connector short, oval D125

The DucoFlex 90° Bend splitter vent connector short can be used multifunctionally. This makes it possible to connect a DucoFlex connector 3x63, 2x75, 3x75 or 2x90 to it. Suitable for a transit size up to 60 mm (e.g. wide slab floor).



### DucoFlex Manifold box (floor and ceiling) 4 x oval air ducts (F) D160 0000-4687

The ceiling and floor manifold box can be utilised multifunctionally. It is a box with 4 oval connexions and a D160 riser duct. In combination with connectors D63, D75 or D90, it becomes a floor/ceiling plenum.



# DucoFlex Manifold box (floor and ceiling) 3x oval air ducts (F) 1x oval air duct (M)

The ceiling and floor manifold box can be utilised multifunctionally. It is a manifold box with 3 oval connections (F) and 1 oval connection (M). This offers the possibility to connect it to the ceiling and floor manifold box 4x oval (F) and so expand to 6x oval connections (F).



### DucoFlex Manifold box (floor) 12x63 D180

0000-4563

0000-4701

The D180 floor manifold box is the adapter between a maximum of 12 DucoFlex D63 ducts and a direct connection to a D180 riser duct. The smart 'Click & Go' system provides a quick and perfectly airtight joint between DucoFlex ducts.



### DucoFlex Manifold box (floor) 12x63 2x oval air ducts

0000-4565

The 2x oval floor manifold box is the adapter between up to a maximum of 12 D63 ducts and 2x DucoFlex oval. This enables the manifold box to be positioned more accessibly. The smart 'Click & Go' system provides a quick and perfectly airtight joint between DucoFlex ducts.





### DucoFlex Manifold box (ceiling) 12x63 D180

0000-4564

The D180 ceiting manifold box is the adapter between up to a maximum of 12 DucoFlex D63 ducts and a direct connection to a D180 riser duct. The smart 'Click & Go' system provides a quick and perfectly airtight joint between DucoFlex ducts.



### DucoFlex Riser duct connector, round D160 > 2x oval

0000-4566

The riser duct connector can be utilised multifunctionally. It is an adapter between 2x DucoFlex oval and a D160 riser duct. In combination with connectors D63, D75 or D90, it becomes a floor/ceiling plenum.



DucoFlex Adapter 3x63 oval	0000-4684
DucoFlex Adapter 2x75 oval	0000-4685
DucoFlex Adapter 3x75 oval	0000-4841
DucoFlex Adapter 2x90 oval	0000-4686

The adapter allows connecting 3x DucoFlex D63/D75 or 2x DucoFlex D75/D90 to a DucoFlex oval connection. The smart "Click & Go" system provides a quick and perfectly airtight joint between DucoFlex ducts.



### DucoFlex Rigid oval ducting W163 x H68 x L1150

0000-4567

Rigid DucoFlex oval ducting combined with the D160 - 2x oval connector enables a manifold box to be provided in a favourable location.



### DucoFlex Horizontal elbow 90°/45° Rigid oval duct

0000-4609

The horizontal bend in the standard configuration enables a 90° bend to be made in rigid oval ducting. It is possible to cut this component down to a 45° bend.



### DucoFlex Vertical elbow 90° Rigid oval duct

0000-4699

The vertical elbow in the standard version enables a vertical 90° bend to be made in rigid oval ducting.



### DucoFlex Oval duct coupling

0000-4568

The oval coupling provides a quick and perfectly airtight connection between DucoFlex oval ducting and connections.



### DucoFlex horizontal connector D125 oval

0000-4638

The D125 oval connector provides a horizontal connection between D125 round duct and DucoFlex oval duct or an optional connector for DucoFlex.



### DucoFlex Horizontal connector 2x Oval D160

0000-4700

The D160 2x oval connector provides a horizontal connection between D160 round ducts and 2x DucoFlex oval ducts or an optional connector for DucoFlex.



### DucoFlex oval cap

0000-4713

The DucoFlex oval cap makes it possible to close an oval connection of a manifold box





DucoFlex Duct cutter D63	0000-4599
DucoFlex Duct cutter D75	0000-4688
DucoFlex Duct cutter D90	0000-4689

The DucoFlex duct cutter ensures that ducting can be cut easily as well as nice and straight. This is recommended for airtight system assembly.



### **INSULATED DUCTING**



DucoFlex Insulated circular duct with integrated coupler D160 L1000 mm	0000-4569
DucoFlex Insulated circular duct with integrated coupler D180 L1000 mm	0000-4909
DucoFlex Insulated circular duct with integrated coupler D200 L1000 mm	0000-4905

The DucoFlex Insulated circular duct is a smooth and insulated ventilation duct made of EPS. The good insulating properties of this product prevent a thermal bridge and therefore condensation when polluted air is extracted or outside air is supplied. Energy losses from ventilation air are also avoided. In addition to the good thermal insulation value, the material used also dampens noise and is very easy to handle. A connection piece is supplied as standard which connects the various EPS components quickly and airtight.



DucoFlex Insulated 90° bend with integrated coupler D160	0000-4571
DucoFlex Insulated 90° bend with integrated coupler D180	0000-4910
DucoFlex Insulated 90° bend with integrated coupler D200	0000-4906

The DucoFlex Insulated 90° bend is a smooth and insulated elbow for ventilation ducts made of EPS. The good insulating properties of this product prevent a thermal bridge and therefore condensation when polluted air is extracted or outside air is supplied. Energy losses from ventilation air are also avoided. In addition to the good thermal insulation value, the material used also dampens noise and is very easy to handle. A connection piece is supplied as standard which connects the various EPS components quickly and airtight.



DucoFlex Insulated 45° bend with integrated coupler D160	0000-4573
DucoFlex Insulated 45° bend with integrated coupler D180	0000-4911
DucoFlex Insulated 45° bend with integrated coupler D200	0000-4907

The DucoFlex Insulated 45° bend is a smooth and insulated elbow for ventilation ducts made of EPS. The good insulating properties of this product prevent a thermal bridge and therefore condensation when polluted air is extracted or outside air is supplied. Energy losses from ventilation air are also avoided. In addition to the good thermal insulation value, the material used also dampens noise and is very easy to handle. A connection piece is supplied as standard which connects the various EPS components quickly and airtight.



DucoFlex Insulated coupler D160	0000-4575
DucoFlex Insulated coupler D180	0000-4912
DucoFlex Insulated coupler D200	0000-4908

The DucoFlex Insulated coupler is a practical connection piece that connects the various EPS components in a quick and airtight manner.

### **CONNECTION PIECES**



Connection piece with joint D160/D160 [M/M]	0000-4724
Connection piece with joint D180/D160 [M/M]	0000-4725
Connection piece with joint D180/D180 [M/M]	0000-4726
Connection piece with joint D200/D180 [M/M]	0000-4727
Connection piece 45° with joint D160/D160 (M/M)  available Q1/2025	0000-4949



### **SILENCERS**



### DucoFlex Silencer flexible D125 L1000 mm

0000-458

The DucoFlex Silencer D125 is a (semi-) flexible silencer composed of a flexible antibacterial inner duct (non-woven) and a polyester-laminated aluminium outer jacket. The space between the inner and outer jacket is filled with 25 mm sound absorbing material.

Both ends are taped to allow the silencer to be easily connected to the ventilation unit or the rigid ventilation ducts of diameter D125.



DucoFlex Silencer flexible D125 (M/F) L1000 mm	0000-4630
DucoFlex Silencer flexible D200 (M/F) L1000 mm	0000-4918

The DucoFlex Silencer (M/F) is a (semi-)flexible silencer consisting of a flexible antibacterial inner channel (non-woven) and an aluminium outer jacket laminated in polyester. The space between the inner and outer jacket is filled with 25 mm sound absorbing material.

The silencer comes standard with stainless steel caps on both ends of which 1 M and 1 F connection. This allows quick, easy and airtight connection of the damper to the ventilation unit or rigid ventilation ducts of diameter D125 or D200.



DucoFlex Silencer flexible D160 (M/M) L1000 mm	0000-4631
DucoFlex Silencer flexible D180 (M/M) L1000 mm	0000-4632

The DucoFlex Silencer (M/M) is a (semi-) flexible silencer composed of a flexible antibacterial inner duct (non-woven) and a polyester-laminated aluminium outer jacket. The space between the inner and outer jacket is filled with 25 mm sound absorbing material. The silencer is provided with stainless steel caps on both ends (2 x M connection). This allows the silencer to be connected quickly, easily and airtight to the ventilation unit or the rigid ventilation ducts of diameter D160 or D180.



DucoFlex Silencer semi rigid D160 (M/M) L1000 mm	0000-4587
DucoFlex Silencer semi rigid D180 (M/M) L1000 mm	0000-4588
DucoFlex Silencer semi rigid D200 (M/M) L1000 mm	0000-4919

The DucoFlex Silencer semi-rigid (M/M) is a semi-rigid (bendable) silencer composed of a profiled and perforated aluminium inner duct and a two-layered profiled outer jacket. The space between the inner and outer jacket is filled with 50 mm sound absorbing material.

The silencer is provided with aluminium caps on both ends  $(2 \times M \text{ connection})$ . This allows quick, easy and airtight connection of the damper to the ventilation unit or rigid ventilation ducts of diameter D160, D180 or D200.

### RECOMMENDED RANGE OF APPLICATION

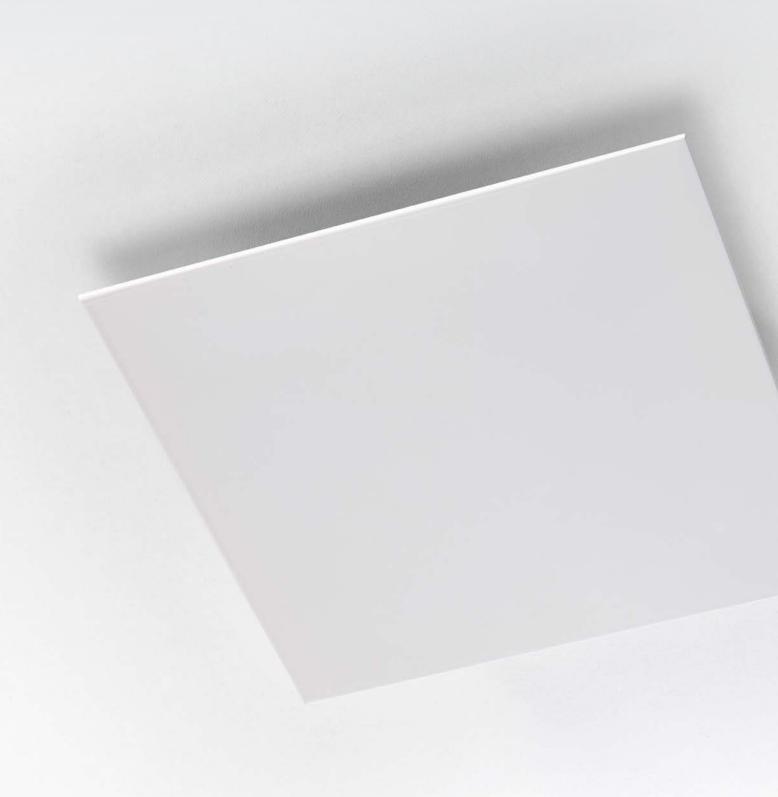
DucoFlex ducts	
Ø63	up to 25 m³/h (7 l/s) per ducts
Ø75	up to 36 m³/h (10 l/s) per ducts
Ø90	up to 50 m³/h (14 l/s) per ducts

Other components	
Ø125	up to 150 m³/h (42 l/s)
Ø160	up to 250 m³/h (69 l/s)
Ø180	up to 350 m³/h (97 l/s)
Ø200	up to 550 m³/h (153 l/s)



# **VENTS**

The vents are installed in ducts for the extraction of stale air or supply of fresh air. DUCO does not lose sight of the aesthetic or the functional aspect here either.





# WHICH VENTS TO CHOOSE?

	DucoVent Basic see p. 92	DucoVent Comfort see p. 92	DucoVent Design see p. 93	DucoVent Premium see p. 92
Type of DucoBox		DucoBox <b>Sil</b> DucoBo DucoBox <b>Energ</b> DucoBox <b>E</b>	ox Reno ent Connect ox Focus y Comfort (Plus) Energy Sky ergy Premium	
Type of vent	Supply Extraction	Supply Extraction	Supply* Extraction * With the exception of 'Standard' vents	Supply Extraction
Air flow	Up to 75 m³/h	Extract air: up to 75 m³/h Supply air: up to 75 m³/h	Extract air: up to 75 m³/h Supply air: up to 50 m³/h	Up to 50 m³/h
Design	*	***	***	****
Shape	Round	Round	Round Square Standard and XL Rounded Square Standard and XL	Round (trimless)
Material	Plastic	Plastic (ASA)	Aluminium	Plastic
Colour	White	White	All RAL	White (can be painted)
Sound absorption	*	***	****	***
Ease of maintenance	**	***	****	***
Mounting	To be clamped in DucoFlex	Sealing joint in DucoFlex	To be clamped in DucoFlex	Sealing joint in DucoFlex + plastering
Setting the flow rate	Fine-tuning via rotary adjuster	11 adjustable positions	Preregulation with flow rings + Fine-tuning via rotary adjuster	32 adjustable positions
Price	€	€€	€€€	€€€€€



Extraction

Supply

### **STANDARD VENT** All systems

### **DucoVent Basic**

The DucoVent Basic is the standard vent that is manufactured from plastic and is suitable for ceiling and wall mounting. Fine adjustment is by means of a cone that screws in and out. Suitable for both extraction and supply.

Maximum flow rate: 75 m³/h	Colour: White	Connection diameter: 125 mm
----------------------------	---------------	-----------------------------



DucoVent Basic Extraction 0000-4178
+ Supply

Extraction

### **STANDARD VENT** All systems

Supply

### **DucoVent Comfort**

A vent where both aesthetics and ease of adjustment are central. This is what DucoVent Comfort stands for! Thanks to a clever principle of adjustment positions, the vent can be adjusted both in advance and during installation. The ideal addition to all Duco ventilation systems in serial construction where the copy function saves a lot of time!

Maximum flow rate: 75 m³/h	Colour: White	Connection diameter: 125 mm
----------------------------	---------------	-----------------------------



	Suitable for		
DucoVent Comfort	Extraction + Supply	0000-4769	

Extraction

### STANDARD VENT All systems

Supply

# **DucoVent Premium**

(by Prado)

The DucoVent Premium Trimless is by far the finest vent in the market that can be used for both supply and extraction. A 'trimless' integration into the plasterwork makes the vent almost invisible. The well-thought-out design ensures a diffuse air supply via the Coanda effect and therefore guarantees optimal comfort. Aesthetics and quality in one product! A perfect combination with DUCO's high-quality ventilation solutions!

Maximum flow rate: 50 m³/h	Colour: White (can be painted over)	Connection diameter: 125 mm
----------------------------	-------------------------------------	-----------------------------



	Suitable for	
DucoVent Premium Trimless	Extraction + Supply	0000-4903





### SOUND ABSORBING DESIGN VENT All systems

# **DucoVent Design**

The DucoVent Design is an **aesthetic vent**, available with five different cover plates: square (standard and XL), rounded square (standard and XL) or fully circular. The sleek design, combined with simple installation thanks to its magnetic fastening, ensures **virtually invisible integration** into any room where air extraction or supply is provided. The acoustic rings provide optimal **sound reduction** and easy calibration. Suitable for ceiling and wall mounting. Easy to clean without disturbing the settings.

The DucoVent Design Round and all XL models are also suitable for use as supply vents. Two inserts are included which can be used to reduce the supply angle, when positioning the vent close to a wall or in a corner, for example.

Maximum flow rate: Extraction: 75 m³/h	Noise level: <15 dB(A) at 50 m³/h Colour: White [RAL 9010 structure (AE03059901020)], other RAL colours on request
Supply: 50 m³/h	Duct diameter: 125 mm



Square	Dimensions	Suitable for	
DucoVent Design Square <b>Standard AK</b>	Width / Height: 180mm Depth: 52mm	Extraction	0000-4179
DucoVent Design Square <b>XL AK</b>	3		0000-4226



Round	Dimensions	Suitable for	
DucoVent Design Round AK	Diameter: 215mm Depth: 52mm	Extraction + Supply	0000-4210



Rounded	Dimensions	Suitable for	itable for	
DucoVent Design Rounded Square <b>Standard AK</b>	Width / Height: 180mm Depth: 52mm	Extraction	0000-4211	
DucoVent Design Rounded Square <b>XL AK</b>	Width / Height: 215 mm Depth: 52mm	Extraction + Supply	0000-4227	



# **AIR FLOW**

DUCO supplies a wide range of grilles for extraction and supply for every conceivable use. Please refer to the DUCO website for the complete range.



Please refer to our website for more supply and feed-through options. DUCO offers a wide range of products ranging from standard self-regulating grilles which can be fitted in any kind of window or installation situation, including grilles with sound deadening, fire-resistant grilles, customised grilles for high-rise buildings, as well as ventilation and solar shading in a single product or electronically-controlled grilles with preheating.



MEV system

### FEED-THROUGH VIA FACADE Inside + outside

### **Silenzio**

The Silenzio is a wall damper that is excellent for **renovation**. Not only has its appearance been given a complete makeover, but from now on the Silenzio also features an SR flap so it can easily be used in one of our ventilation systems. This **sound absorbing** ventilator has been developed specifically for situations where high noise levels are an issue.

The Silenzio SR and Silenzio Retro SR are **suitable for wall thicknesses from 250 mm**. For a deviant pipe length, contact your DUCO dealer.

For more information such as drawings, flow rates and other specifications, consult the brochure "Window and sound-absorbing ventilation" or www.duco.eu.

Diameter of tube: 250 mm Length of tube: 300 mm (suitable for wall thicknesses from 250 mm) For a deviant pipe length, contact your DUCO Silenzio SR Interior and exterior colours: standard RAL 9010, other RAL colours possible on request. Maximum flow rate: Silenzio SR: 59.4 m³/h [2 Pa]

Silenzio SR AK: 36.4 m³/h (2 Pa)

Silenzio Retro SR
Colour of inner part: standard RAL 9010, other RAL colours available on request.
Colour DUCO external louvre grille: RAL 7048 (mother of pearl mouse grey)
Maximum flow rate:

Without external louvre grille: 54.7 m³/h (2 Pa) With DUCO external louvre grille: 46.5 m³/h (2 Pa)



### Silenzio SR

The AK variant is extra sound absorbing.

Silenzio SR	7352-4055
Silenzio SR AK	7372-4055



### Silenzio Retro SR

The retro variant is specifically suitable for listed buildings with a protected façade. This grille integrates invisibly into the façade (by means of a weep hole) or can be fitted with a discreet external louvre grille (DUCO external louvre grille or external section of your choice).

Silenzio Retro SR without external louvre grille	7512-4055
Silenzio Retro SR with DUCO external louvre grille	7502-4055





### FEED-THROUGH VIA FACADE Outside

# DucoFlex Wall feed-through

The DucoFlex Wall feed-through can be used as a supply and extraction point with **very low pressure losses**. The fitted flange with a diameter of 160 or 180 provides a quick and air-tight connection to the DucoFlex ISO D160 or D180 pipes without any need for **connecting pieces**. The pre-fitted condensation strip prevents the possible undesired settling of dripping condensate. The sleek design and black or white colour enable the unit to be used discretely in **any type of façade**.



	White	Black
DucoFlex Wall feed-through <b>D160</b>	0000-4627	0000-4584
DucoFlex Wall feed-through <b>D180</b>	0000-4628	0000-4585
DucoFlex Wall feed-through <b>D200</b>	0000-4913	0000-4914



### FEED-THROUGH VIA FACADE Inside

### DucoGrille Close M100

DucoGrille Close M 100 is a **closable** surface mounted internal louvre grille. The plastic slides provide adjustable ventilation. Thanks to the small punching, this grille is **insect repellent**.

These products are also available in other sizes and colours. If interested, we would like to refer you to our sister company Duco Projects NV.

Material: aluminium | Colour: anodisation SAA (15-20  $\mu$ m)



	Width (mm)	Height (mm)	
DucoGrille Close M 100	200	200	S5501001

A = Width x Height (see table) | B = 12 mm | C = 13 mm





### FEED-THROUGH VIA DOOR

### MVHR system

### **DoorVent**

The DoorVent is a transfer grille that **can be installed discretely in internal doors**. Unlike gaps under the door, the DoorVent thereby avoids draughts and **attenuates intrusive noise**.

### Dimensions

Overall (Width x Height): 436 x 58 mm Recessed fitting (Width x Height): 417 x 48 mm

Airflow: 70 cm²

Door thickness: 37-47 mm



DoorVent RAL 9001	1030-0800
DoorVent RAL 9010	1030-0700
DoorVent other DUC0300RAL	1030-0500

RAL colours other than those described above on request.



### FEED-THROUGH VIA FACADE Outside

# DucoGrille Solid 30Z

The height and width of these **customised grilles** can be determined to the millimetre, both in rectangular and round format. The DucoGrille Solid 30Z is vandal-resistant thanks to its **extra sturdy louvres** and can also be made burglary-resistant. Available for various construction situations (recessed, surface mounted, glass replacement) and in variants with vermin and insect protection.

See the Brochure 'Louvre Grilles' for more information, and feel free to get in touch with our sister company Duco Projects NV, marketing these specific products.











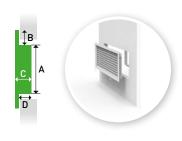
### FEED-THROUGH VIA INTERIOR WALL & DOOR

# **DucoGrille Transfer**

This **transfer grille** can easily be installed in **doors and walls**. The frame depth can be adjusted. The grille can be fitted **with or without a counterframe**. The DucoGrille Transfer is ideally suited for larger airflows between interior spaces, but can also be used between interior and exterior spaces (e.g. exterior doors).

These products are also available in other sizes and colours. If interested, we would like to refer you to our sister company Duco Projects NV.

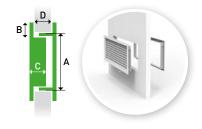
Material: aluminium | Colour: aluminium colour



### Without counterframe

	Width (mm)	Height (mm)	
	190	90	S5201001
	290	90	S5201002
	290	190	S5201003
DucoGrille Transfer	390	90	S5201004
without counterframe	390	190	S5201005
	390	290	S5201006
	490	290	S5201007
	590	390	S5201008

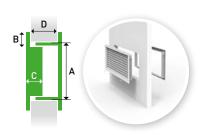
A = Width x Height (see table) | B = 21 mm | C = 36 mm | D = 31 mm



### With counterframe (wall depth 28-54 mm)

	Width (mm)	Height (mm)	
	200	100	S5301001
	300	100	S5301002
	300	200	S5301003
DucoGrille Transfer	400	100	S530100 <b>4</b>
with counterframe 28-54 mm	400	200	S5301005
	400	300	S5301006
	500	300	S530100 <b>7</b>
	600	400	S5301008

A = Width x Height (see table)  $\mid$  B = 21 mm  $\mid$  C = 36 mm  $\mid$  D = 28-54 mm



### With counterframe (wall depth 54-84 mm)

	Width (mm)	Height (mm)	
	200	100	S5401001
	300	100	S5401002
	300	200	S5401003
DucoGrille Transfer	400	100	S5401004
with counterframe 54-84 mm	400	200	S5401005
	400	300	S5401006
	500	300	S5401007
	600	400	S5401008

A = Width x Height (see table) | B = 21 mm | C = 36 mm | D = 54-84 mm



MEV system

MVHR system

### FEED-THROUGH VIA FLAT & SLOPING ROOF

# DucoFlex Roof feed-through



DucoFlex Roof feed-through Compact D160 - <b>Slate</b>	0000-4582
DucoFlex Roof feed-through Compact D160 - <b>Terracotta</b>	0000-4580
DucoFlex Roof feed-through Compact D200 - <b>Slate</b>	0000-4920
DucoFlex Roof feed-through Compact D200 - <b>Terracotta</b>	0000-4921

The DucoFlex Roof feed-through Compact can be used as a supply and extraction point. The dark grey or terracotta colour and the design allow this unit to be used very discretely in a **sloping roof**. The pre-fitted lead sheet ensures quick and water-tight installation.

The smart design ensures that this compact roof feed-through is hardly sensitive to atmospheric turbulences. The connection piece fits seamlessly into DucoFlex ISO pipes D160 or D200.



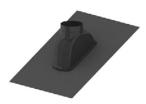
DucoFlex Universal Roof feed-through D160/180 (1.0m)	0000-4578
DucoFlex Universal Roof feed-through D180/200 (1.0m)	0000-4915

The DucoFlex Universal Roof feed-through can be used as a supply and extraction point on **both flat and sloping roofs**. This unit can also be used at higher air flow rates thanks to its low airresistance. The pre-assembled connection piece is 635 mm, allowing the roof feed-through to be used in any possible situation. The insulated end piece fits for DucoFlex ISO D160 and D180 pipes or D180 and D200 pipes.



DucoFlex Roof feed-through plate flat roof D204	0000-4581
DucoFlex Roof feed-through plate flat roof D263	0000-4916

The DucoFlex Roof feed-through plate **flat roofs** can be combined with the Universal Roof feed-through D160/D180 or D180/D200. The base plate has a diameter of 420 mm (D204) or 644 mm (D263). It is made completely of aluminium, making it suitable for all standard finishes of roof feed-throughs in flat roofs.



DucoFlex Universal Roof feed-through tile D205	0000-4579
DucoFlex Universal Roof feed-through tile D263	0000-4917

The DucoFlex Universal Roof feed-through tile can be combined with the Universal Roof feed-through D160/D180 or D180/D200. The unit is a 2-tile solution which is suitable for **sloping roofs** with a pitch between  $25^{\circ}$  and  $50^{\circ}$ . The pre-mounted plastic flashing flange ensures quick and water-tight installation.

# **PART F**

# **BUILDING REGULATIONS**

Please find below the ventilation requirements in line with Part F of the building regulations for UK & Ireland

### UK

A continuous rate is given for the general operation of the fan and a high rate for when additional extraction is required.

### Minimum extract ventilation rates for continuous extract systems1:

Room	High rate (L/S)	Continuous rate	
Kitchen	13	The sum of all extract ventilation in	
Utility Room	8	the dweiling on its continuous rate should be at least the whole dweiling ventilation rate given in the table below.	
Bathroom	8		
Sanitary accommodation	6		

<sup>&</sup>lt;sup>1</sup> If the continuous rate of ventilation provided in a room is aqual to or higher than the minimum high rate specified in the table, no extra ventilation is needed.

The minimum whole dwelling ventilation rate for the supply of air to the habitable rooms in a dwelling should meet both of the following conditions

- a. A minimum rate of 0.3 litres per second per m² of internal floor area
- b. A minimum rate determined by the number of bedrooms, as specified in the below table.

### Minimum whole dwelling ventilation rates determined by the number of bedrooms:

Number of bedrooms <sup>2</sup>	Minimum ventilation rate by number of bedrooms (l/s)
1	19
2	25
3	31
4	37
5	43

<sup>&</sup>lt;sup>2</sup> If the dwelling only has one habitable room, a minimum ventilation rate of 13 l/s should be used. For each additional bedroom, add 6 l/s to the values in the table above.

### **Ireland**

The minimum capacity of a centralized continuous ventilation system should be based on the calculated general ventilation rate. The calculated general ventilation rate to be provided by is determined as the greater of:

a. 5 l/s plus 4 l/s per person, e.g. 25 l/s for a five person, 3-bedroom semi-detached dwelling. This is based on two occupants in the main and second bedrooms, and a single occupant in the third bedroom. This should be used as the default value, if a greater level of occupancy is expected, then add 4 l/s per occupant.

OR

b. 0.3 l/s per m² internal floor area, e.g. 30 l/s for a 100 m² dwelling.

In order to meet extract requirements, the system may require a higher extract or boost capacity depending on the number of wet rooms (kitchens, bathrooms, etc.) and sanitary accommodation. The minimum boost extract rate to be provided for each wet room and sanitary accommodation is specified in the table below. The required overall minimum boost extract rate is calculated by adding together the relevant individual extract rates.

# Centralized continuous mechanical extract ventilation systems: minimum boost extract rates<sup>3</sup>

Wet rooms	Minimum extract rate (l/s)
Kitchen	13 <sup>4</sup>
Utility Room	8
Bathroom	8
Sanitary accommodation (no bath or shower)	6 <sup>5</sup>

- <sup>3</sup> The above are minimum boost extract rates and may need to be increased to archieve the general ventilation rate.
- <sup>4</sup> Excludes cooker hood extract.
- <sup>5</sup> As an aternative, an opening window provided for purge ventilation may be relled on for extract.

### (only for MVHR)

Supply and extract rates should be nominally balanced. Airflow supply rates should be greater or equal to extract rates. In all cases, the supply airflow rate should be no greater than 15% above extract airflow rate.

# **SERVICE PLEASE!**

### STUDY SERVICE Tailored advice

Thanks to years of know-how in the field of ventilation, DUCO's design department has all the **expertise in house** to offer the installation best suited to your project. For this purpose please contact your trusted DUCO distributor or DUCO contact, or submit your project via the website:

www.duco.eu/yourproject





### **HELP DESK** Let yourself be guided

Your DUCO dealer is available to provide you with **support for all possible practical challenges**. If you need support during design or installation, feel free to consult them: their experts are trained by DUCO.

info@duco.eu

### **DUCO.TV** Instructional videos

Our **short instruction videos** will help you step-by-step during installation or maintenance of DUCO products.

duco.tv





### **BIM LIBRARY** Consult online

The construction market is becoming increasingly centralised and thus efficiently managed with BIM as a guiding principle. DUCO has anticipated this since the early days by making an **Autodesk Revit product library** available online. In addition, DUCO products are also included in the internationally oriented platform **BIM Object**.

duco.eu/bim

www.bimobject.com

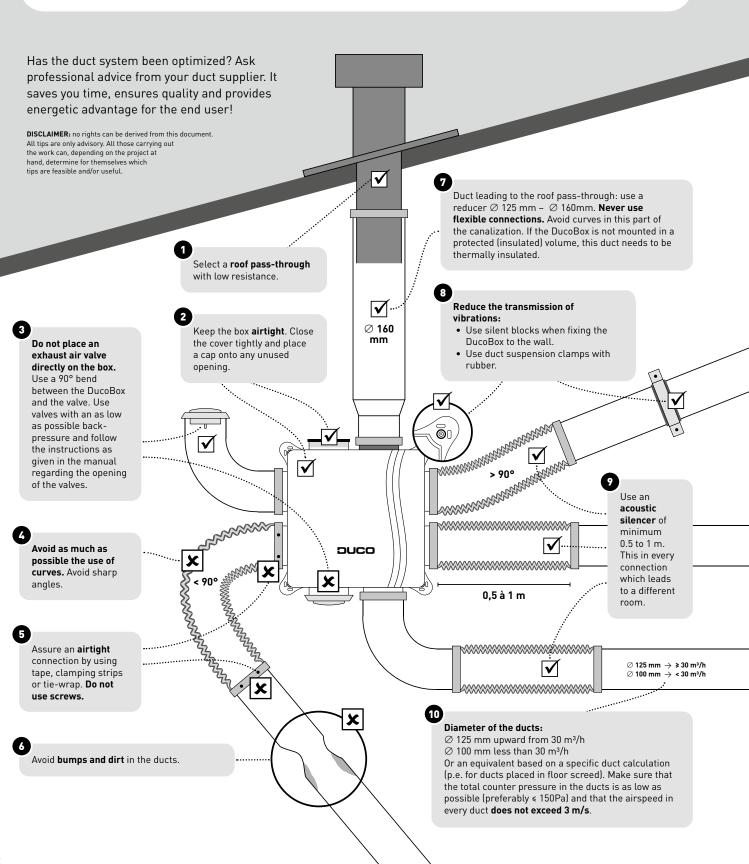
# **NOTES**

# **NOTES**



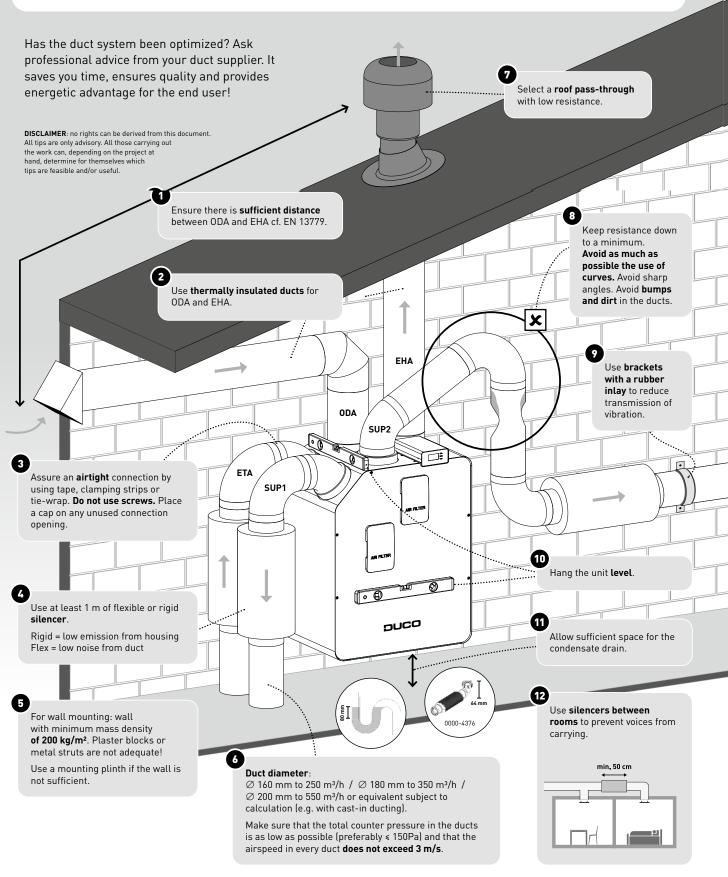
# INSTALLATION TIPS DUCOBOX RENO / SILENT CONNECT / FOCUS

The smooth running of your DUCO ventilation system is totally dependent on the choice and the quality of implementation of the duct system!



# INSTALLATION TIPS DUCOBOX ENERGY COMFORT (PLUS) / SKY / PREMIUM

The correct operation of your DUCO ventilation system is entirely dependent on the choice and build quality of the supply and exhaust ducts!





We inspire at www.duco.eu

