

Catalogue

VENTILATION SYSTEMS

2024



GREEN VENTILATION

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DUCO

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

DUCO

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DISCLAIMER

Illustrations in this catalogue may differ from 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.

Discover the magic of zonal ventilation

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



30% less noise



40% energy savings

MEV SYSTEM

Mechanical extract ventilation



DucoBox **Focus**

Up to 11 zones

MVHR SYSTEM

Mechanical ventilation with heat recovery



DucoBox
Energy Premium

2 zones - day / night



Multi-zone valve

2 zones - day / night in combination
with DucoBox Energy Comfort (Plus)



**START YOUR JOURNEY TO
ZONAL VENTILATION!**

Discover the magic at duco.eu/zonal-ventilation

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. CO₂ 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 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.

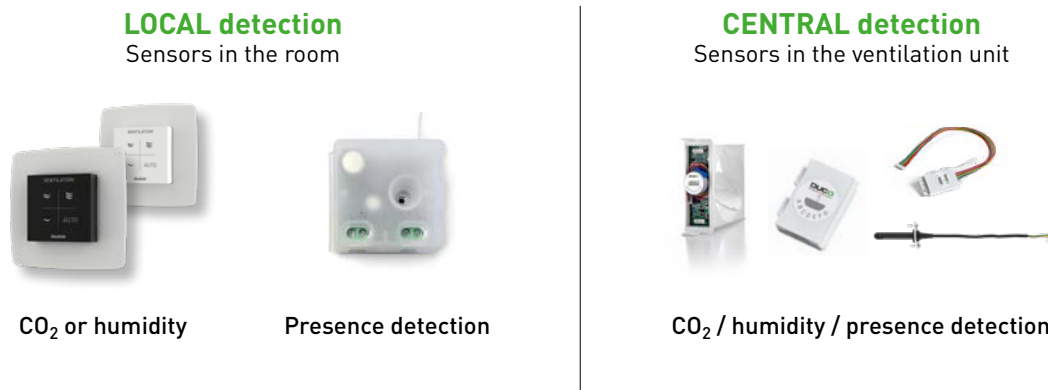


DUCO introduces **DEMAND-CONTROLLED VENTILATION**

Historically, MVHR-units were running **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 (CO₂ 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).

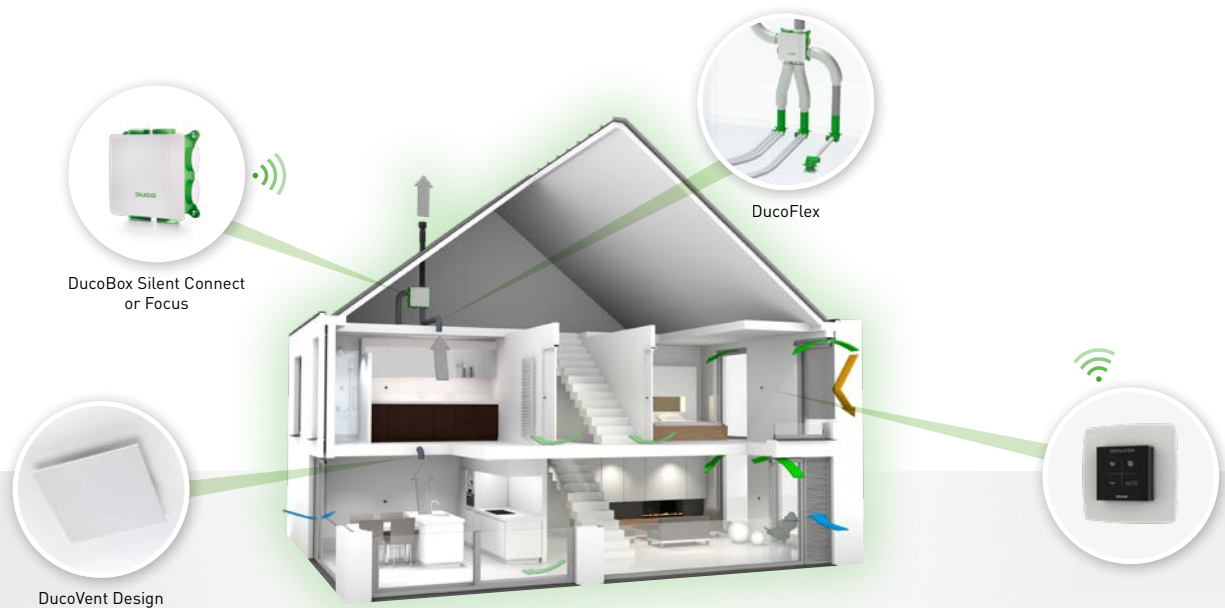
With an “**on demand**” DUCO-system, the occupant can always be assured to breathe the best possible indoor air, whilst also using the least amount of energy! **DUCO brings you the SMARTEST ventilation solutions!**

Check out our various control components from page 56 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.



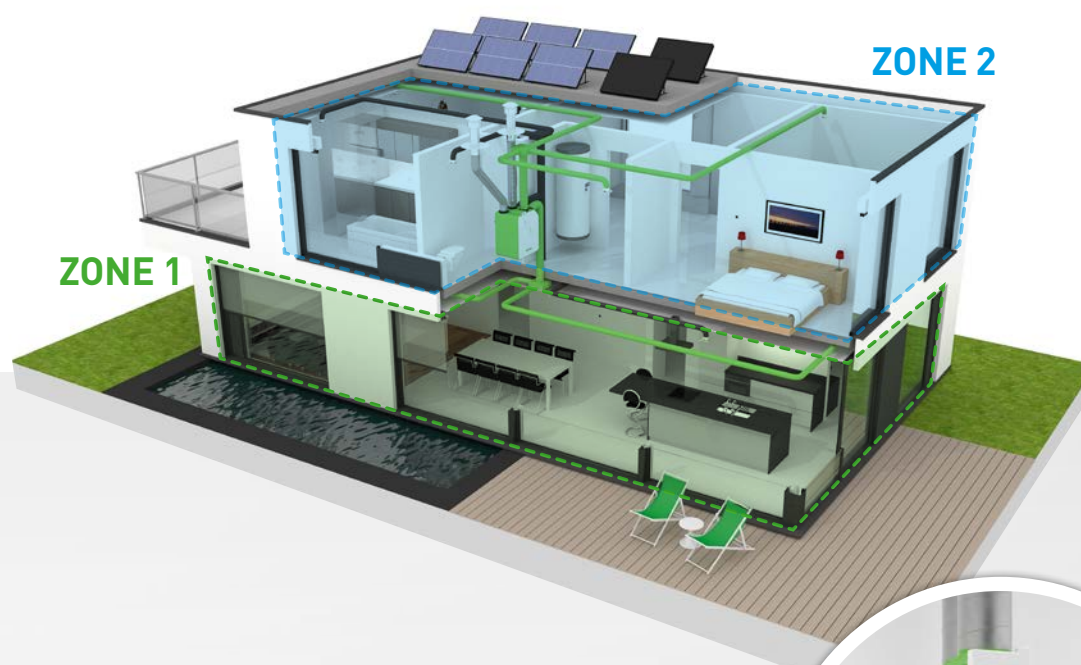
- ✓ **100% automatic**
Demand-controlled ventilation based on CO₂, Humidity and temperature.
- ✓ **Optimal indoor climate**
The Duco Focus System ventilates only where and when needed, and in the right amount.
- ✓ **Acoustic comfort**
The QUIETEST and SMARTEST ventilation boxes on the market.
- ✓ **Aesthetic & minimalist**
DucoVent Design: Aesthetic and functional aluminium vents.
- ✓ **Highest energy gain**
Controlled supply and extraction = 100% controlled ventilation.

UNIQUE AT DUCO

MVHR SYSTEM

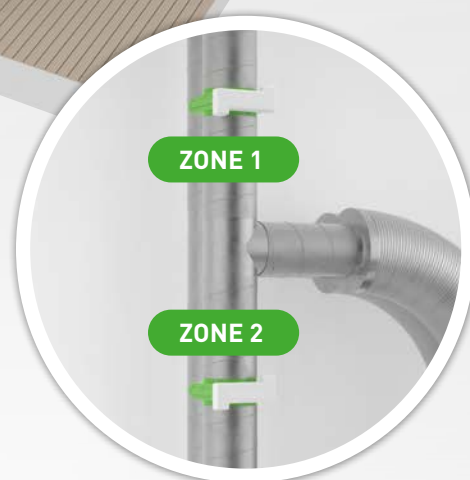
With the **DucoBox Energy Comfort (Plus)** and the **DucoBox Energy Comfort Premium** DUCO offers a unique ventilation system where 2-zone control can be realised on the supply.

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!



Sensors meticulously detect the resident's movements throughout the home. This enables where, when and how much ventilation is required to be determined **automatically**.

By controlling both zones separately with an external valve, the consumption of the EC fans is significantly lower, which translates into lower electricity costs.



- ✓ **Low energy consumption**
- ✓ **The quietest MVHR system on the market!**
- ✓ **Automatic calibration!**



MEV SYSTEM

The **QUIETEST** and **SMARTEST** Mechanical Extract Ventilation System of Europe!



DucoBox **Silent Connect**



Intelligent demand control

Room or box sensors based on CO₂ and humidity measurement



Carefree night's sleep

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



Save on your energy bill

Financially attractive thanks to energy-efficient DC motor



DucoBox **Focus**



Intelligent demand control

Control valve system based on CO₂ and humidity measurement



Smart zonal control

Up to 7 zones, expandable to 11 zones with duplicator



Automatic calibration

Guaranteed flow at each vent

NEW

DucoFlex



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

Europe's **QUIETEST** and **SMARTEST** MVHR!



DucoBox Energy Comfort (Plus)



A solution for every situation

Flow rate up to 550m³/h (at 200 Pa)



Left/right exchangeable

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



Automatic calibration

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



DucoBox Energy Premium



Smart 2-zone control

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

NEW

DucoFlex



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 **Silent**

The **QUIETEST** MEV system for Europe!



Intelligent demand control

Room or box sensors based on CO₂ and humidity measurement



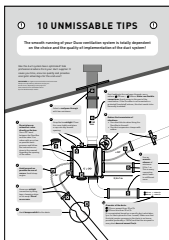
Carefree night's sleep

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



Save on your energy bill

Financially attractive thanks to energy-efficient DC motor



Please refer to page 78 for essential installation tips!

DucoBox Silent

MEV system

Up to **400 m³/h** at 150 Pa

The DucoBox Silent is an extraction fan that provides **central extraction** within DUCO's Demand-Controlled Natural Ventilation Systems (DCNVS). The DucoBox Silent 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

<p>Width x Height x Depth: 480 x 480 x 194 mm</p> <p>Weight: 4,3 kg</p> <p>Extraction capacity at 150 Pa: 400 m³/h</p> <p>Power supply: 230 VAC</p> <p>Energy label: class B in a system with at least two sensors</p>	<p>Communication: RF and Wired. Expandable with Duco Connectivity Board (see 'Options & accessories') for REST API (local or cloud) and Modbus TCP (local), both via Ethernet / Wi-Fi</p>	<p>Peak power: 84 W</p> <p>Air duct connections: Extraction areas: 7 x Ø 125 mm Extraction to the outside: 1 X Ø 125 mm</p>
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VENTILATION UNIT



Type	Plug	
DucoBox Silent Standard	F	0000-4215
DucoBox Silent Connect	F	0000-4250

BASIC KITS DucoBox Silent

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

<p>Basic kit Duco Silent System</p>	<p>1 x CO₂ Box sensor (dry living area) 1 x Humidity Box Sensor (humid areas) 1 x Switch sensor RF/230VAC 1 x Remote control RF/Battery Black</p>	<p>0000-4224</p>
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CONTROL COMPONENTS DucoBox Silent



→ BOX SENSORS

Box sensors can be installed very easily and quickly and provide **CO₂ 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 contains **a maximum of two box sensors** – one CO₂ 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 ₂ Box sensor		0000-4216
Humidity Box Sensor		0000-4218

→ EXTERNAL CONTROL COMPONENTS

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

User controllers and room sensors	see page 56
Switch sensor (for switch detection)	see page 58



OPTIONS & ACCESSORIES DucoBox Silent



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

0000-4810

The optional Duco Connectivity Board 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 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.



Duco Power Adapter 230VAC-24VDC/20W

0000-4762

The Duco Power Adapter 230VAC-24VDC/20W is the solution to power Duco Wired components from a 230V socket. 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 \varnothing 125

0000-4836

Flow regulator 50-100 m³/h \varnothing 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 System









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

BASIC KIT

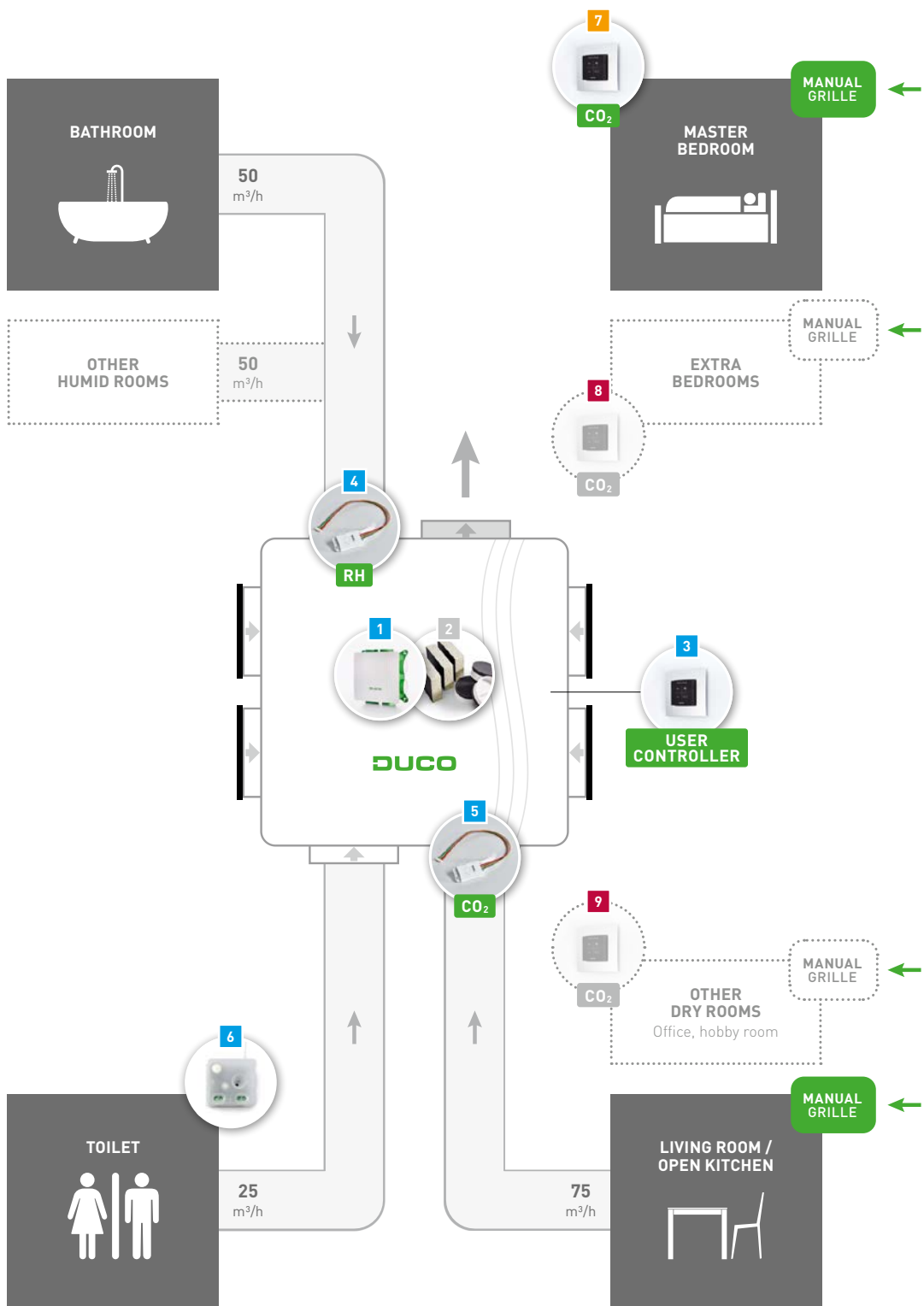
- Basic kit
Duco Silent System 0000-4224

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

COMPONENTS

			Component on diagram
	DucoBox Silent Standard	0000-4215	
	DucoBox Silent Connect	0000-4250	1
	Silent Plus Kit (3 damping pads + 3 caps)	0000-4182	2
	CO ₂ Box sensor	① 0000-4216	5
	Humidity Box Sensor	① 0000-4218	4
		Black White	
	Remote control RF / Wired	0000-4601 0000-4602	3
	Remote control RF / Battery	① 0000-4175 0000-4600	
	CO ₂ Room sensor with control RF/Wired	0000-4603 0000-4604	
	CO ₂ Room sensor without control RF / Wired	0000-4636 0000-4637	7 8 9
	Humidity Room sensor with control RF / Wired	0000-4605 0000-4606	
	Switch sensor RF/230 VAC *	① 0000-4174	6
	Duco Connectivity Board	0000-4810	
	Breech Y-piece 2 x 125 to 1 x 160	0000-4334	

→ See chapter 'Vents' from page 66 for more information on all types of vents.



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

→ Extraction of stale air
 → Supply of fresh air



DucoBox Focus

The **SMARTEST** MEV system in Europe!



Intelligent demand control

Control valve system based on CO₂ and humidity measurement



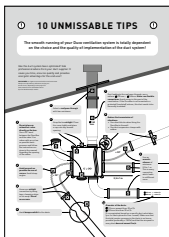
Smart zonal control

Up to 7 zones, expandable to 11 zones with duplicator



Automatic calibration

Guaranteed flow at each vent



Please refer to page 78 for essential installation tips!

DucoBox Focus

MEV system

Up to **400 m³/h** 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

<p>Width x Height x Depth: 480 x 480 x 194 mm Weight: 4,3 kg Extraction capacity at 150 Pa: 400 m³/h Power supply: 230 VAC Peak power: 84 W</p>	<p>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 system with at least two sensors, and provided with valve control</p>	<p>Communication: RF and Wired. Expandable with Duco Connectivity Board (see 'Options & accessories') for REST API (local or cloud) and Modbus TCP (local), both via Ethernet / Wi-Fi</p>
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VENTILATION UNIT



Type	Plug	
DucoBox Focus (control valves not included!)	F	0000-4252

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.

<p>Basic kit Duco Focus System</p>	<p>1 x CO₂ Control valve 75 m³/h living room / open kitchen 1 x Humidity /CO₂ Control valve 50 m³/h bathroom + WC 1 x CO₂ Control valve 25 m³/h toilet 1 x Remote control RF/Wired Black 1 x Silent Plus Kit (3 damping pads + 3 caps)</p>	<p>0000-4646</p>
<p>Basic kit Duco Focus System with extraction in the bedroom(s)</p>	<p>1 x CO₂ Control valve 75 m³/h living room / open kitchen 1 x Humidity /CO₂ Control valve 50 m³/h bathroom + WC 2 x CO₂ Control valve 30 m³/h bedroom(s) 1 x CO₂ Control valve 25 m³/h toilet 1 x Remote control RF/Wired Black</p>	<p>0000-4645</p>



CONTROL COMPONENTS DucoBox Focus



→ CONTROL VALVES

The control valves, optionally equipped with a sensor for **CO₂** 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.

Width x Height x Depth: 141 x 167 x 46.5 mm Weight: 0.220 kg	Peak power: 2.04 W Standby power: 0.24W	Power supply: From the DucoBox
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For CO₂-controlled living areas

A CO₂ Control valve commands the ventilation system based on continuous measurement of both CO₂ (indoor climate indicator) and temperature.



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

For toilet

Based on CO₂ measurement, this valve detects **presence** in a toilet, after which the ventilation system will extract the polluted air. Note: a CO₂ 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 ₂ Control valve 25 m³/h toilet	0000-4208
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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 CO₂ measurement.



Humidity Control valve 50 m³/h bathroom/ laundry room	0000-4162
Moisture/CO ₂ Control valve 50 m³/h 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
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→ EXTERNAL CONTROL COMPONENTS

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

User controllers and room sensors	see page 56
Switch sensor (for switch detection)	see page 58

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

0000-4810

The optional Duco Connectivity Board 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 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

0000-4418

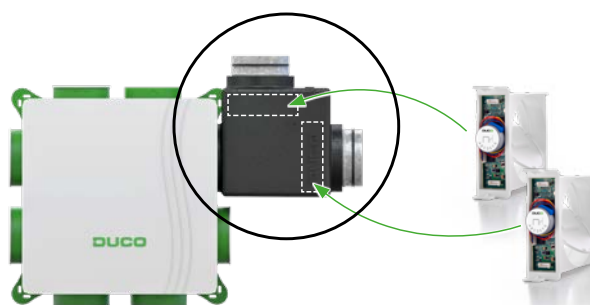
The set comprises an 8 m long coaxial cable with pre-fitted connectors at both ends. Using this set, the antenna of the DucoBox Silent Connect, DucoBox Focus or DucoBox Energy devices can be moved, if necessary, to a place where the RF range is optimal.



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 CO₂ 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.



Duco Power Adapter 230VAC-24VDC/20W

0000-4762

The Duco Power Adapter 230VAC-24VDC/20W is the solution to power Duco Wired components from a 230V socket. The sum of the peak power of all connected DUCO components can be 20W at most when using one Power Supply.



Renovation

Duco Focus System

MEV system | Local ventilation | Up to 400 m³/h at 150 Pa







BASIC KIT

● Basic kit
Duco Focus System 0000-4646

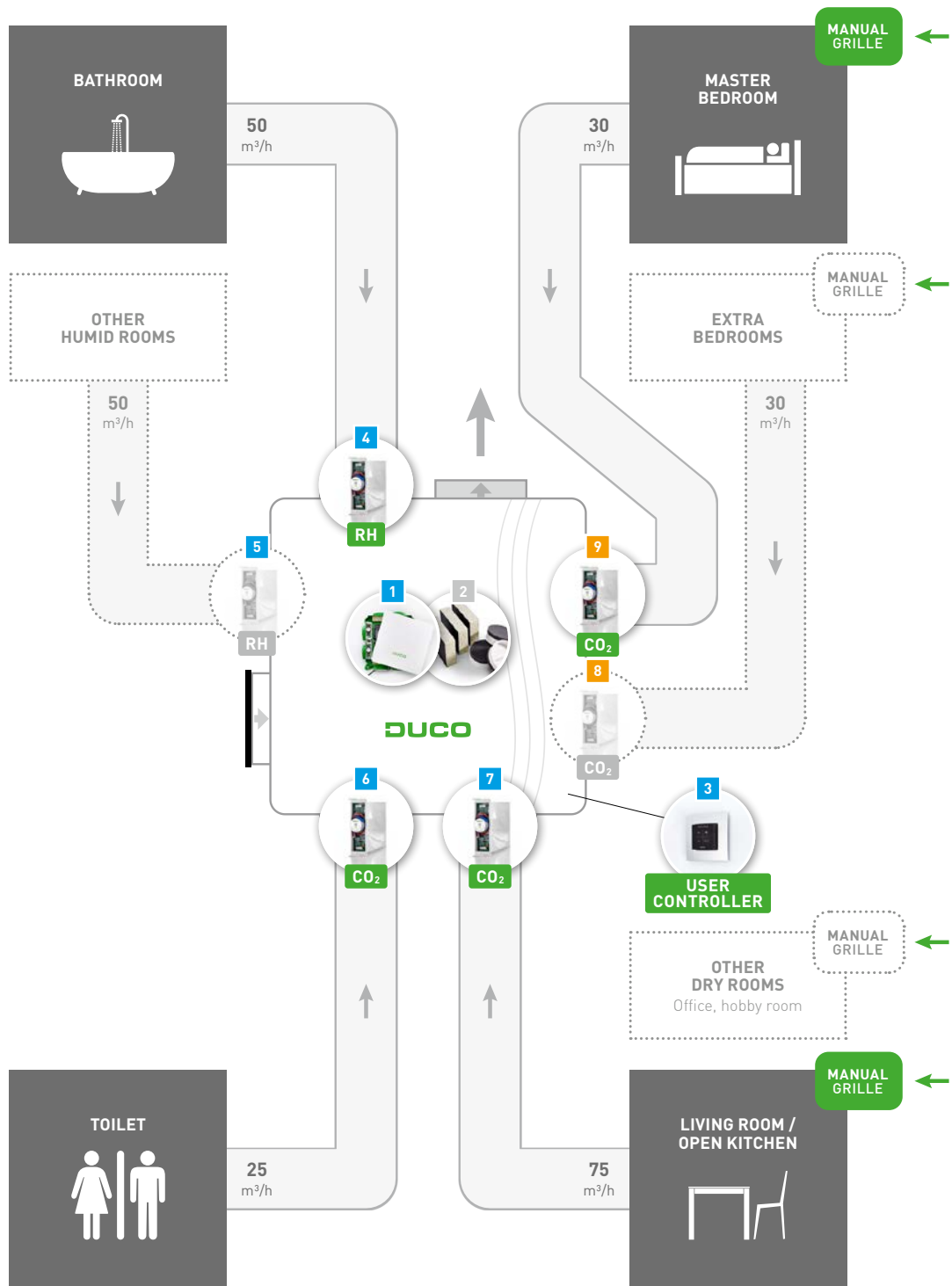
● Basic kit Duco Focus System
with extraction in the bedroom(s) 0000-4645

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

COMPONENTS

		Component on diagram
	DucoBox Focus 0000-4252	1
	Silent Plus Kit (3 damping pads + 3 caps) 1 0000-4182	2
	CO ₂ Control valve 75 m ³ /h (living room / open kitchen) 1 1 0000-4163	7
	CO ₂ Control valve 30 m ³ /h (bedroom(s)) 2 0000-4164	8 9
	CO ₂ Control valve 25 m ³ /h (toilet) 1 1 0000-4208	6
	Humidity Control valve 50 m ³ /h (bathroom / laundry room) 0000-4162	4 5
	CO ₂ /Humidity Control valve 50 m ³ /h (bathroom + WC) 1 1 0000-4644	
	Sensorless Control valve 25 m ³ /h (various applications) 0000-4165	
	Duplicator control valves 0000-4454	
	Remote control RF / Wired Black 1 1 0000-4601 White 0000-4602	3
	Remote control RF / Battery 0000-4175 0000-4600	
	CO ₂ Room sensor with control RF/Wired 0000-4603 0000-4604	
	CO ₂ Room sensor without control RF / Wired 0000-4636 0000-4637	
	Humidity Room sensor with control RF / Wired 0000-4605 0000-4606	
	Switch sensor RF/230 VAC * 0000-4174	
	Duco Connectivity Board 0000-4810	

→ See chapter 'Vents' from page 66 for more information on all types of vents.



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

→ Extraction of stale air
 → Supply of fresh air



DucoBox Energy Comfort (Plus)

Europe's **SMARTEST** MVHR unit!



D400

D325

Plus D350
Plus D450
Plus D550



A solution for every situation

Flow rate up to 550 m³/h (at 200 Pa)



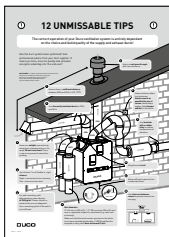
Left/right exchangeable

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



Automatic calibration

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



Please refer to page 79 for essential installation tips!

DucoBox Energy Comfort (Plus)

MVHR

Up to **550m³/h** 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 m³/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 guaranteeing an even **quieter operation** and to be able to offer **higher flow rates** (up to 550 m³/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 a heat recovery system. Please note that the **zone control** reduces the noise considerably! Comfort rules!

FEATURES

<p>General features</p> <p>Connection type</p> <ul style="list-style-type: none"> 1 x extraction to outside (EHA) 1 x supply from outside (ODA) 1 x extraction from inside (ETA) 1 x supply to inside (SUP) <p>Energy label: A+</p> <p>Communication:</p> <p>RF and Wired. Expandable with Duco Connectivity Board (see 'Options & accessories') for REST API (local or cloud) and Modbus TCP (local), both via Ethernet / Wi-Fi</p>	<p>Comfort D325</p> <p>Width x Height x Depth: 700 x 705 x 525 mm</p> <p>Weight: 21 kg</p> <p>Flow rate / pressure: 325 m³/h / 150 Pa</p> <p>Number of air ducts: 4 x Ø 160</p> <p>Peak power: 2 x 59 W</p> <p>Comfort D400</p> <p>Width x Height x Depth: 756 x 800 x 584 mm</p> <p>Weight: 31 kg</p> <p>Flow rate / pressure: 400 m³/h / 200 Pa</p> <p>Number of air ducts: 4 x Ø 180</p> <p>Peak power: 2 x 72,5 W</p>	<p>Comfort Plus D350 / D450 / D550</p> <p>Width x Height x Depth: 760 x 803 x 584 mm</p> <p>Weight: 47 kg</p> <p>Flow rate / pressure:</p> <ul style="list-style-type: none"> D350: 350 m³/h / 200 Pa D450: 450 m³/h / 200 Pa D550: 550 m³/h / 200 Pa <p>Number of air ducts: 4 x Ø 180</p> <p>Max. power per motor:</p> <ul style="list-style-type: none"> D350: approx. 59 W D450: approx. 98 W D550: approx. 135 W
--	--	--

VENTILATION UNIT



Type of DucoBox	Passive House Certified Component	Plug	
Energy Comfort D325	✗	⊙ F	0000-4649
Energy Comfort D400	✗	⊙ F	0000-4707
Energy Comfort Plus D350		⊙ F	0000-4704
Energy Comfort Plus D450		⊙ F	0000-4705
Energy Comfort Plus D550	✗	⊙ F	0000-4706



CONTROL COMPONENTS DucoBox Energy Comfort (Plus)

→ HUMIDITY SENSOR

This sensor is placed **in the extract air duct (ETA)** of the DucoBox Energy Comfort 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)	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 iAV valves. A valve is provided for each branch to the various zones.

Peak power: 7 W	Communication: Wired connection to DucoBox	Power supply: 24 VDC (to be provided externally)
-----------------	--	--



Multi-zone valve DucoBox Energy (Sensorless) Ø125	0000-4761
---	------------------

Multi-zone valve DucoBox Energy (Sensorless) Ø160	0000-4760
---	------------------

→ EXTERNAL CONTROL COMPONENTS

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

User controllers and room sensors	see page 56
Switch sensor (for switch detection)	see page 58

→ BASIC KITS

Basic kit	2 x Multi-zone valve DucoBox Energy (Sensorless) Ø160	
Multizone D160 DucoBox Energy Comfort (Plus) Black	1 x CO ₂ Room sensor RF/Wired Black 1 x CO ₂ 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)	0000-4546
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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 x 828 x 525 mm

Width x Height x Depth (incl. DucoBox Energy Comfort D400): 700 x 933 x 525 mm

Width x Height x Depth (incl. DucoBox Energy Comfort Plus): 700 x 936 x 525 mm



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

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



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% (≈ G4) or ePM1 55% filter (≈ 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 (≈ 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 / Premium antenna, if necessary, to a spot where the RF range is optimal.


Duco Connectivity Board
0000-4810

The optional Duco Connectivity Board 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 also enables the Duco Installation App to be used.


Connection piece with rubber D160/D160 (M/M)
0000-4724
Connection piece with rubber D180/D160 (M/M)
0000-4725
Connection piece with rubber D180/D180 (M/M)
0000-4726
Connection piece with rubber D200/D180 (M/M)
0000-4727

The connection pieces with rubber are used to make a quick and good connection between ducts (exhaust 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! They are available in 4 versions: $\varnothing 160/\varnothing 160$, $\varnothing 160/\varnothing 180$, $\varnothing 180/\varnothing 180$ and $\varnothing 180/\varnothing 200$... a solution for every situation!


Pre-Heater DucoBox Energy Comfort (Plus) 1425W
0000-4807

The Pre-heater is a frost protection based on an electrical resistance of up to 1425W that can optionally be applied in the ODA connection of DucoBox Energy Comfort (Plus). 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	1 Connector	2 Heater	3 Connector
D325	Up to 250 m ³ /h	D160/D180 0000-4725	Pre-Heater 0000-4807	D160/D180 0000-4725
	Up to 350 m ³ /h	D180/D180 0000-4726		D160/D180 0000-4725
D400 Plus D350 Plus D450 Plus D550	Up to 250 m ³ /h	D160/D180 0000-4725		D180/D180 0000-4726
	Up to 350 m ³ /h	D180/D180 0000-4726		D180/D180 0000-4726
	Up to 550 m ³ /h	D180/D200 0000-4727		D180/D180 0000-4726


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.


Duco Power Adapter 230VAC-24VDC/20W
0000-4762

The Duco Power Adapter 230VAC-24VDC/20W is the solution to power Duco Wired components from a 230V socket. 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 $\varnothing 80$
0000-4722
Flow regulator 15-50 m³/h $\varnothing 125$
0000-4836
Flow regulator 50-100 m³/h $\varnothing 125$
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 m³/h at 200 Pa










NO humidity measurement

1-ZONE SYSTEM

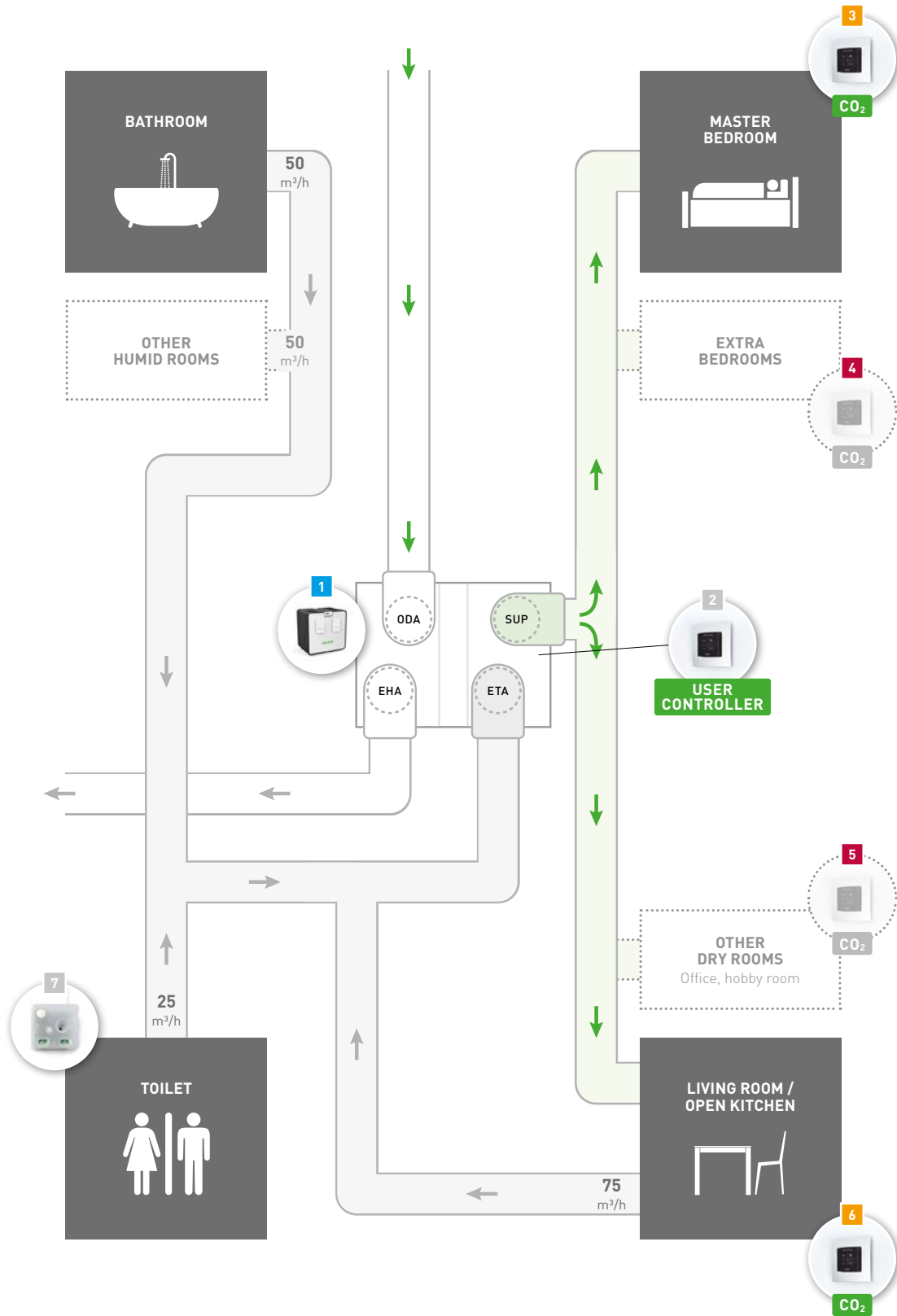


COMPONENTS

			Component on diagram
	DucoBox Energy Comfort D325	0000-4649	1
	DucoBox Energy Comfort D400	0000-4707	
	DucoBox Energy Comfort Plus D350 	0000-4704	
	DucoBox Energy Comfort Plus D450 	0000-4705	
	DucoBox Energy Comfort Plus D550	0000-4706	
		Black White	
	Remote control RF / Wired	0000-4601 0000-4602	2
	Remote control RF / Battery	0000-4175 0000-4600	
	CO ₂ Room sensor with control RF/Wired	0000-4603 0000-4604	3 6
	CO ₂ Room sensor without control RF / Wired	0000-4636 0000-4637	4 5
	Switch sensor RF/230 VAC	0000-4174	7
	Duco Connectivity Board	0000-4810	
	Pre-Heater DucoBox Energy Comfort (Plus) 1425W	0000-4807	

→ See chapter 'Vents' from page 66 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 components	Optional components
Humidity	CO ₂		
✗	✗	■	■
✗	Main rooms	■ + ■	■
✗	All rooms	■ + ■ + ■	■

→ Extraction of stale air
 → Supply of fresh air

The illustration shows a right-hand version of the DucuBox Energy Comfort (Plus).



Duco Energy Comfort (Plus) System

MVHR | Central ventilation (1-zone) | Up to 550 m³/h at 200 Pa





CENTRAL
humidity
measurement

1-ZONE
SYSTEM

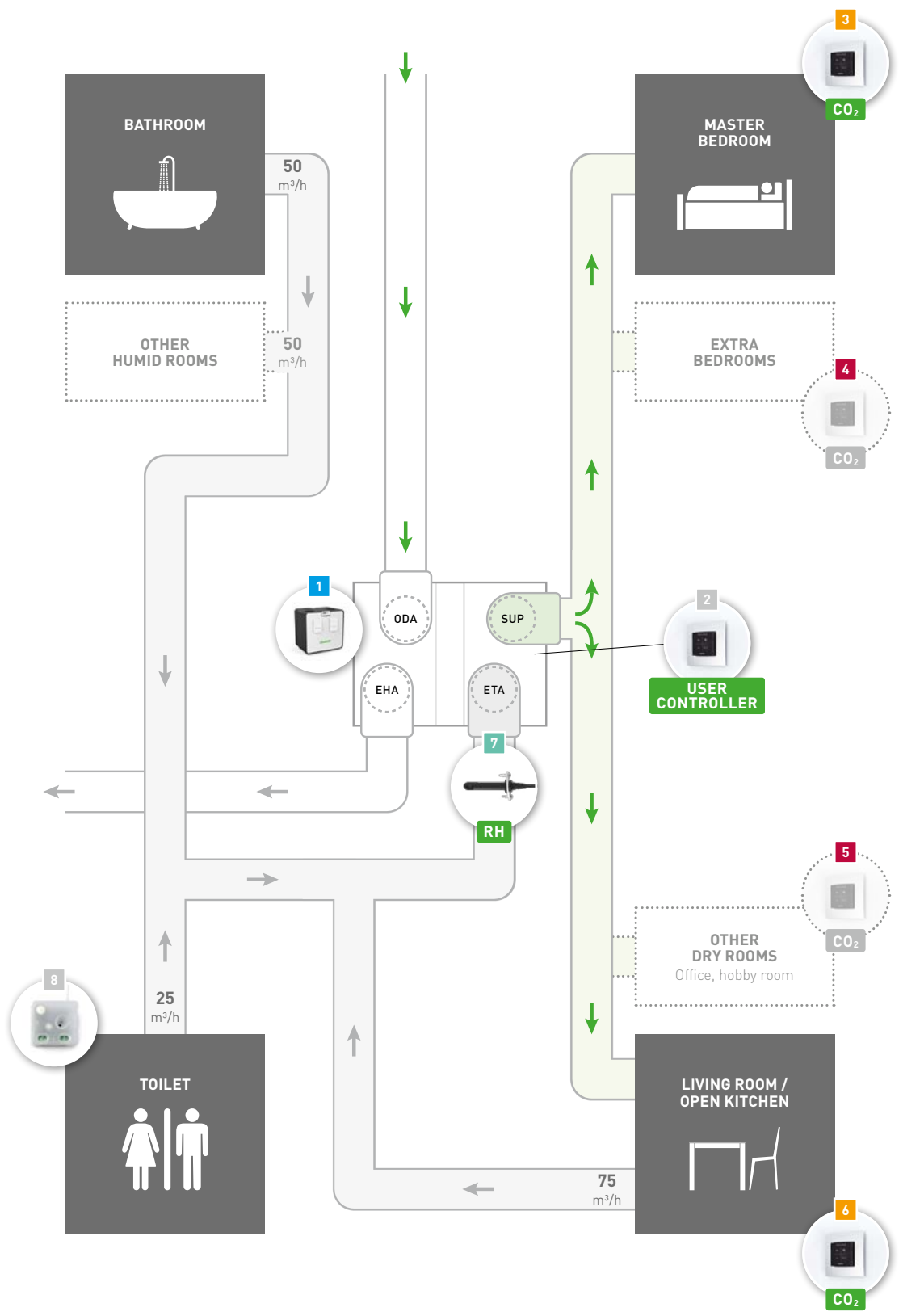


COMPONENTS

COMPONENTS			Component on diagram
DucoBox Energy Comfort D325	0000-4649		1
DucoBox Energy Comfort D400	0000-4707		
DucoBox Energy Comfort Plus D350		0000-4704	
DucoBox Energy Comfort Plus D450		0000-4705	
DucoBox Energy Comfort Plus D550	0000-4706		
Humidity Sensor DucoBox Energy Comfort (Plus)	0000-4723		7
Remote control RF / Wired	Black 0000-4601	White 0000-4602	2
Remote control RF / Battery	0000-4175	0000-4600	
CO ₂ Room sensor with control RF/Wired	0000-4603	0000-4604	3 6
CO ₂ Room sensor without control RF / Wired	0000-4636	0000-4637	4 5
Switch sensor RF/230 VAC	0000-4174		8
Duco Connectivity Board	0000-4810		
Pre-Heater DucoBox Energy Comfort (Plus) 1425W	0000-4807		

→ See chapter 'Vents' from page 66 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 components	Optional components
Humidity	CO ₂		
Central	✗	■ + ■	■
Central	Main rooms	■ + ■ + ■	■
Central	All rooms	■ + ■ + ■ + ■	■

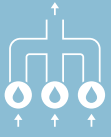
→ Extraction of stale air
 → Supply of fresh air

The illustration shows a right-hand version of the DucuBox Energy Comfort (Plus).



Duco Energy Comfort (Plus) System

MVHR | Central ventilation (1-zone) | Up to 550 m³/h at 200 Pa



LOCAL
humidity
measurement



1-ZONE
SYSTEM

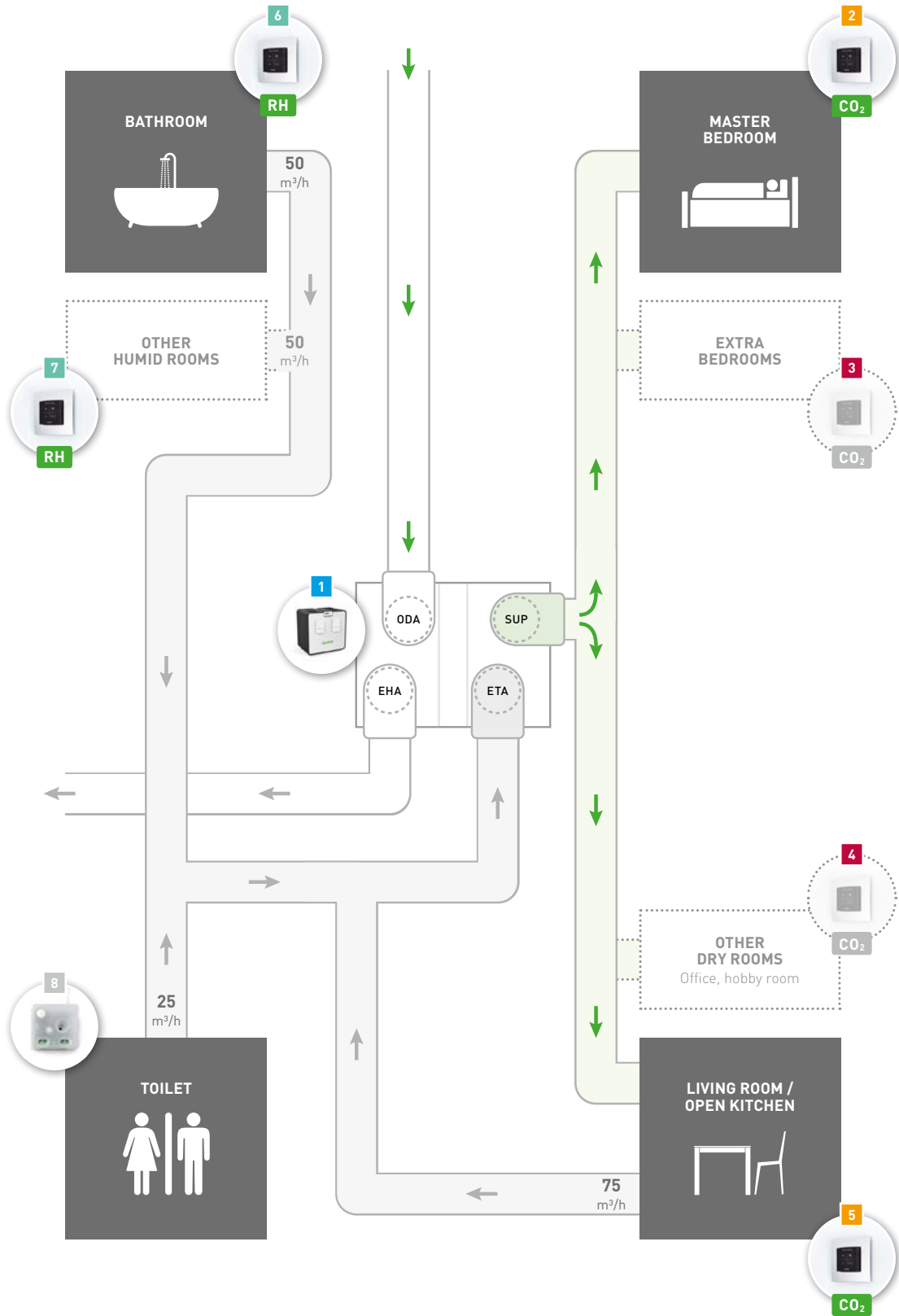


COMPONENTS

			Component on diagram
DucoBox Energy Comfort D325	0000-4649		1
DucoBox Energy Comfort D400	0000-4707		
DucoBox Energy Comfort Plus D350	0000-4704		
DucoBox Energy Comfort Plus D450	0000-4705		
DucoBox Energy Comfort Plus D550	0000-4706		
	Black	White	
Remote control RF / Wired	0000-4601	0000-4602	
Remote control RF / Battery	0000-4175	0000-4600	
CO ₂ Room sensor with control RF/Wired	0000-4603	0000-4604	2 5
CO ₂ 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
Switch sensor RF/230 VAC	0000-4174		8
Duco Connectivity Board	0000-4810		
Pre-Heater DucoBox Energy Comfort (Plus) 1425W	0000-4807		

→ See chapter 'Vents' from page 66 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 components	Optional components
Humidity	CO ₂		
Local	✗	■ + ■	■
Local	Main rooms	■ + ■ + ■	■
Local	All rooms	■ + ■ + ■ + ■	■

→ Extraction of stale air
 → Supply of fresh air

The illustration shows a right-hand version of the DucuBox Energy Comfort (Plus).



Duco Energy Comfort (Plus) System

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

NO humidity measurement



BASIC KIT

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

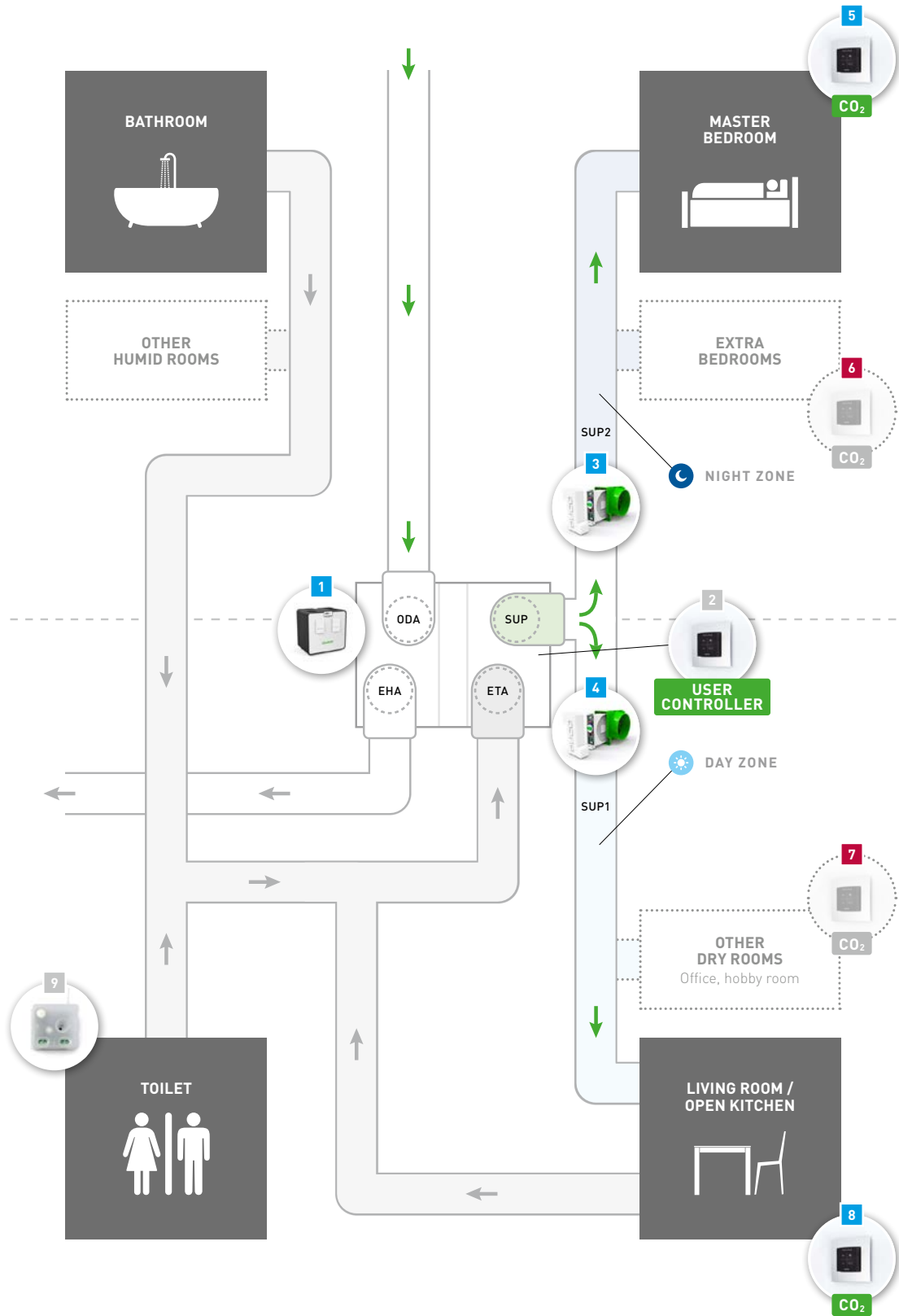
The bullet next to the item numbers below indicates which and how many components the basic kit contains.

COMPONENTS

			Component on diagram	
	DucoBox Energy Comfort D325	0000-4649	1	
	DucoBox Energy Comfort D400	0000-4707		
	DucoBox Energy Comfort Plus D350	0000-4704		
	DucoBox Energy Comfort Plus D450	0000-4705		
	DucoBox Energy Comfort Plus D550	0000-4706		
	Multi-zone valve DucoBox Energy (Sensorless) Ø125	0000-4761	3 4	
	Multi-zone valve DucoBox Energy (Sensorless) Ø160	2 0000-4760		
		Black	White	2
	Remote control RF / Wired	0000-4601	0000-4602	
	Remote control RF / Battery	0000-4175	0000-4600	
	CO ₂ Room sensor with control RF/Wired	1 0000-4603	0000-4604	
	CO ₂ Room sensor without control RF / Wired	1 0000-4636	0000-4637	
	Switch sensor RF/230 VAC	0000-4174	9	
	Duco Connectivity Board	0000-4810		
	Pre-Heater DucoBox Energy Comfort (Plus) 1425W	0000-4807		
	Duco Power supply 230VAC-24VDC/20W + casing	1 0000-4763		

→ See chapter 'Vents' from page 66 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 components	Optional components
Humidity	CO ₂		
✗	Main rooms	■	■
✗	All rooms	■ + ■	■

Extraction of stale air
 Supply of fresh air

The illustration shows a right-hand version of the DucuBox Energy Comfort (Plus).



Duco Energy Comfort (Plus) System

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



BASIC KIT

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

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

COMPONENTS

			Component on diagram				
	DucoBox Energy Comfort D325	0000-4649	1				
	DucoBox Energy Comfort D400	0000-4707					
	DucoBox Energy Comfort Plus D350	0000-4704					
	DucoBox Energy Comfort Plus D450	0000-4705					
	DucoBox Energy Comfort Plus D550	0000-4706					
	Multi-zone valve DucoBox Energy (Sensorless) Ø125	0000-4761	4 5				
	Multi-zone valve DucoBox Energy (Sensorless) Ø160 2	0000-4760					
	Humidity Sensor DucoBox Energy Comfort (Plus)	<table border="0"> <tr> <td style="padding: 0 10px;">Black</td> <td style="padding: 0 10px;">White</td> </tr> <tr> <td style="text-align: right;">0000-4723</td> <td style="text-align: right;">0000-4723</td> </tr> </table>	Black	White	0000-4723	0000-4723	3
Black	White						
0000-4723	0000-4723						
	Remote control RF / Wired	<table border="0"> <tr> <td style="padding: 0 10px;">Black</td> <td style="padding: 0 10px;">White</td> </tr> <tr> <td style="text-align: right;">0000-4601</td> <td style="text-align: right;">0000-4602</td> </tr> </table>	Black	White	0000-4601	0000-4602	2
Black	White						
0000-4601	0000-4602						
	Remote control RF / Battery	<table border="0"> <tr> <td style="padding: 0 10px;">Black</td> <td style="padding: 0 10px;">White</td> </tr> <tr> <td style="text-align: right;">0000-4175</td> <td style="text-align: right;">0000-4600</td> </tr> </table>	Black	White	0000-4175	0000-4600	
Black	White						
0000-4175	0000-4600						
	CO ₂ Room sensor with control RF/Wired 1	<table border="0"> <tr> <td style="padding: 0 10px;">Black</td> <td style="padding: 0 10px;">White</td> </tr> <tr> <td style="text-align: right; border: 1px solid black;">0000-4603</td> <td style="text-align: right;">0000-4604</td> </tr> </table>	Black	White	0000-4603	0000-4604	6 9
Black	White						
0000-4603	0000-4604						
	CO ₂ Room sensor without control RF / Wired 1	<table border="0"> <tr> <td style="padding: 0 10px;">Black</td> <td style="padding: 0 10px;">White</td> </tr> <tr> <td style="text-align: right; border: 1px solid black;">0000-4636</td> <td style="text-align: right;">0000-4637</td> </tr> </table>	Black	White	0000-4636	0000-4637	7 8
Black	White						
0000-4636	0000-4637						
	Switch sensor RF/230 VAC	0000-4174	10				
	Duco Connectivity Board	0000-4810					
	Pre-Heater DucoBox Energy Comfort (Plus) 1425W	0000-4807					
	Duco Power supply 230VAC-24VDC/20W + casing 1	0000-4763					

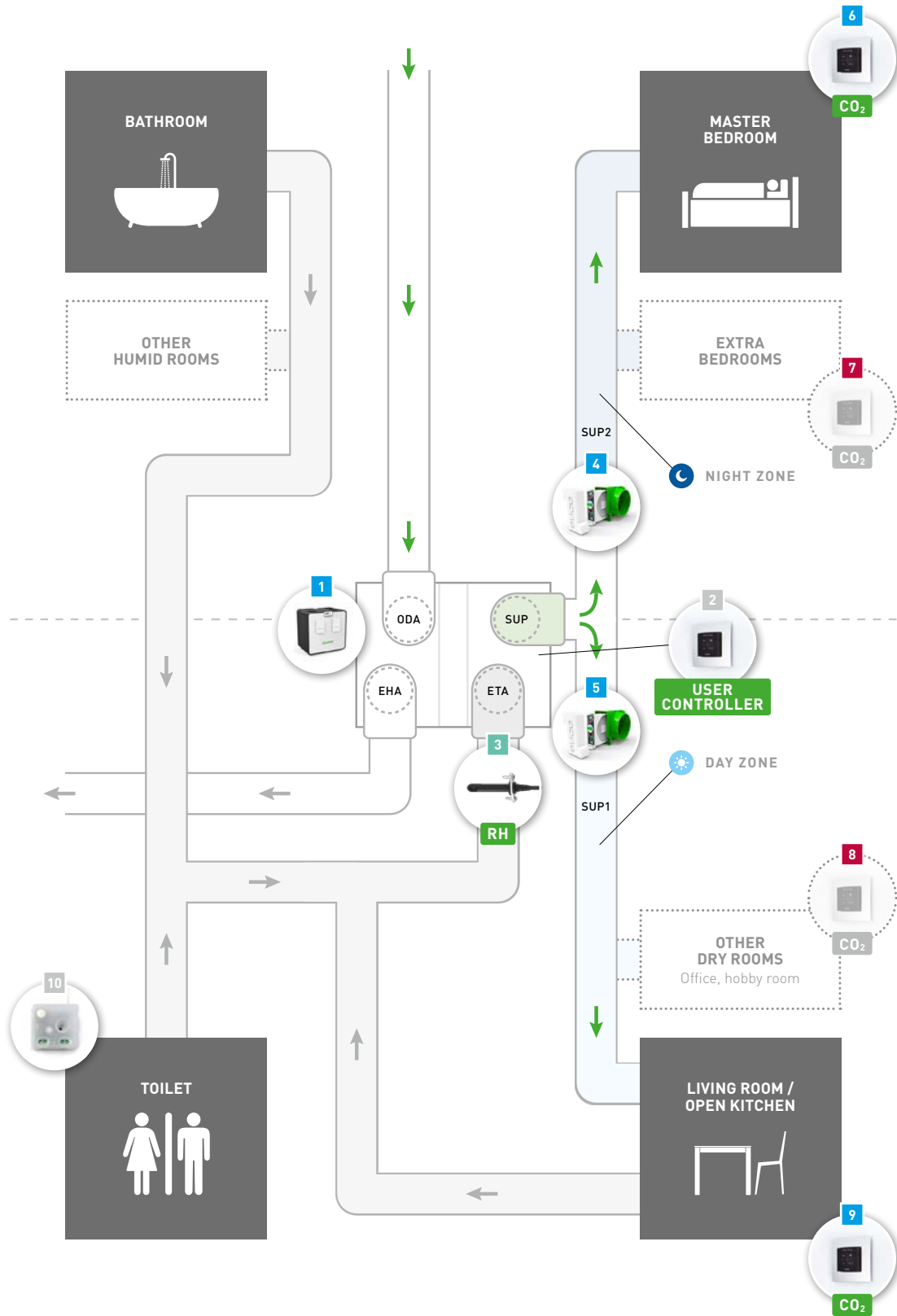
→ See chapter 'Vents' from page 66 for more information on all types of vents.

* 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.

CENTRAL
humidity
measurement

2-ZONE
SYSTEM





Detection		Required components	Optional components
Humidity	CO ₂		
Central	Main rooms	■ + ■	■
Central	All rooms	■ + ■ + ■	■

Extraction of stale air
 Supply of fresh air

The illustration shows a right-hand version of the DucuBox Energy Comfort (Plus).



Duco Energy Comfort (Plus) System

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












BASIC KIT

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

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

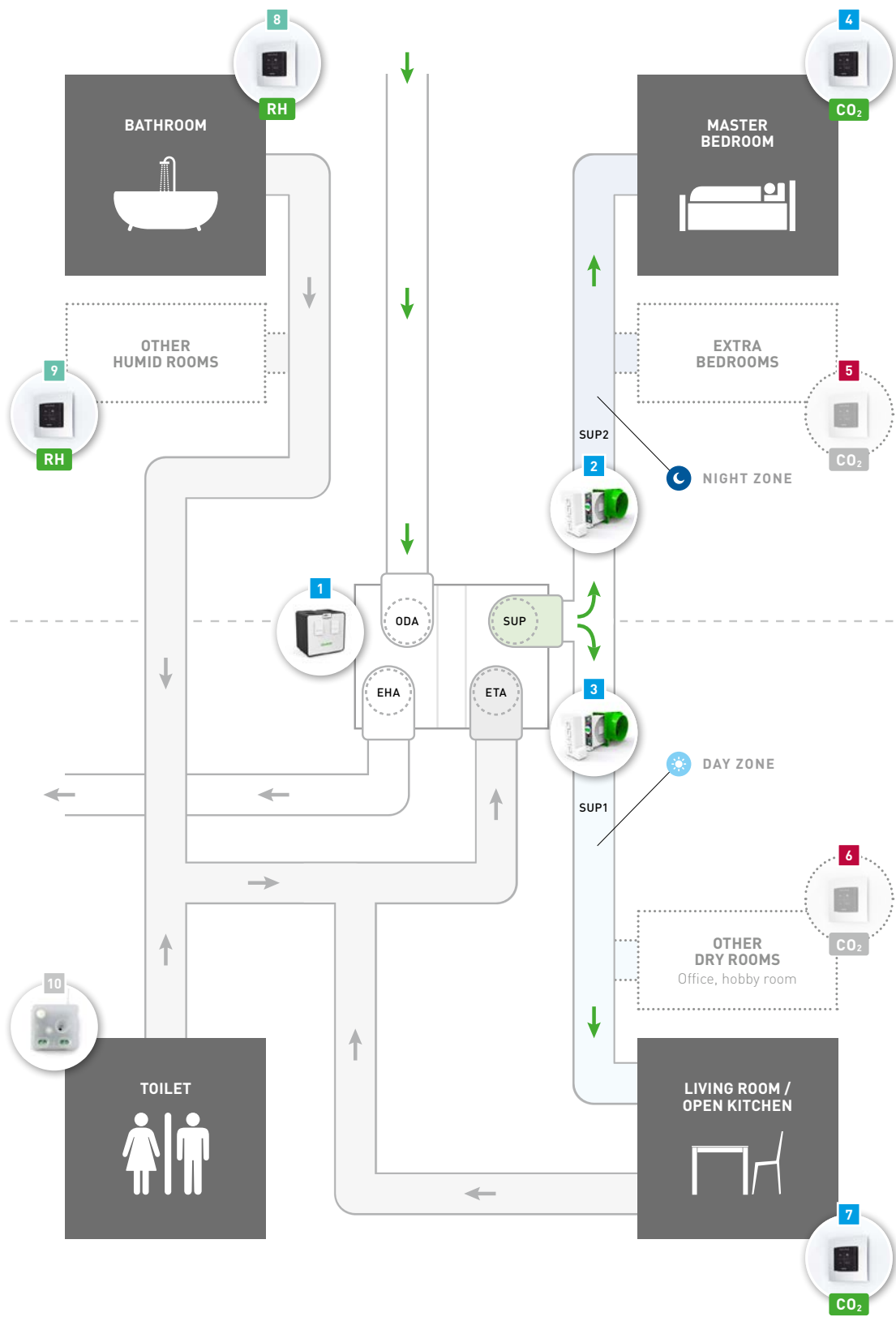
COMPONENTS

			Component on diagram
	DucoBox Energy Comfort D325	0000-4649	1
	DucoBox Energy Comfort D400	0000-4707	
	DucoBox Energy Comfort Plus D350 	0000-4704	
	DucoBox Energy Comfort Plus D450 	0000-4705	
	DucoBox Energy Comfort Plus D550	0000-4706	
	Multi-zone valve DucoBox Energy (Sensorless) Ø125	0000-4761	2 3
	Multi-zone valve DucoBox Energy (Sensorless) Ø160	● 0000-4760	
		Black White	
	Remote control RF / Wired	0000-4601 0000-4602	
	Remote control RF / Battery	0000-4175 0000-4600	
	CO ₂ Room sensor with control RF/Wired	1 0000-4603 0000-4604	4 7
	CO ₂ 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
	Switch sensor RF/230 VAC	0000-4174	10
	Duco Connectivity Board	0000-4810	
	Pre-Heater DucoBox Energy Comfort (Plus) 1425W	0000-4807	
	Duco Power supply 230VAC-24VDC/20W + casing	1 0000-4763	

→ See chapter 'Vents' from page 66 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 components	Optional components
Humidity	CO ₂		
Local	Main rooms	■ + ■	■
Local	All rooms	■ + ■ + ■	■

→ Extraction of stale air
 → Supply of fresh air

The illustration shows a right-hand version of the DucuBox Energy Comfort (Plus).



DucoBox Energy Premium

Europe's **QUIETEST** MVHR unit!



Smart 2-zone control

Saving up to 40% through smart zone control



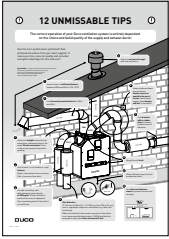
Quietest MVHR on the market

Enjoy a good night's sleep!



Automatic calibration

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



Please refer to page 79 for essential installation tips!

DucoBox Energy Premium

MVHR

Up to **400 m³/h** 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 guarantee a **whisper-quiet operation**, especially in the living areas where this matters most (bedroom and living room)!

The DucoBox Energy 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

<p>Width x Height x Depth: 740 x 957 x 585 mm</p> <p>Weight: 47 kg</p> <p>Power supply: 230 VAC</p> <p>Peak power at 150 Pa: 2 x 60,5 W (325 m³/h / 460 m³/h) 2 x 91,5 W (400 m³/h / 570 m³/h)</p> <p>Energy label: A+</p> <p>Efficiency in accordance with EU 1253/2014: Types 325: 89% Types 400: 88%</p>	<p>Extraction capacity at 150 Pa: Types 325: 325 m³/h Types 400: 400 m³/h</p> <p>Supply capacity at 150 Pa: Types 325: 325 m³/h Types 400: 400 m³/h</p> <p>Communication: RF and Wired. Expandable with Duco Connectivity Board (see 'Options & accessories') for REST API (local or cloud) and Modbus TCP (local), both via Ethernet / Wi-Fi</p>	<p>Number of air ducts: 5 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</p>
---	--	---






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	Passive House Certified Component	Max air flow at 150 Pa	Heater	Plug	LEFT	RIGHT
Energy Premium 325-1ZS	✗	325 m ³ /h	✗	⊖ F	 0000-4358	 0000-4359
Energy Premium 325-1ZH		325 m ³ /h	yes	⊖ F	0000-4360	0000-4361
Energy Premium 400-1ZS	✗	400 m ³ /h	✗	⊖ F	0000-4366	0000-4367
Energy Premium 400-1ZH	✗	400 m ³ /h	yes	⊖ F	0000-4368	0000-4369

→ 2-ZONE VARIANT

Type of DucoBox	Passive House Certified Component	Max air flow at 150 Pa	Heater	Plug	LEFT	RIGHT
Energy Premium 325-2ZS	✗	325 m ³ /h	✗	⊖ F	 0000-4362	 0000-4363
Energy Premium 325-2ZH		325 m ³ /h	yes	⊖ F	0000-4364	0000-4365
Energy Premium 400-2ZS	✗	400 m ³ /h	✗	⊖ F	0000-4370	0000-4371
Energy Premium 400-2ZH	✗	400 m ³ /h	yes	⊖ F	0000-4372	0000-4373

1Z = 1 zone | 2Z = 2 zones
S = without 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 Box sensor (Energy Premium)	0000-4374
--------------------------------------	-----------

→ EXTERNAL CONTROL COMPONENTS

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

User controllers and room sensors	see page 56
Switch sensor (for switch detection)	see page 58



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 x 1110 x 570 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% (= G4) or ePM1 55% filter (= 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 (= G4)



Siphon flat (Energy)

0000-4376

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



Duco Connectivity Board

0000-4810

The optional Duco Connectivity Board 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 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.



Connection piece with rubber D160/D160 (M/M)

0000-4724

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

0000-4725

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

0000-4726

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

0000-4727



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.



Duco Power Adapter 230VAC-24VDC/20W

0000-4762

The Duco Power Adapter 230VAC-24VDC/20W is the solution to power Duco Wired components from a 230V socket. 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 m³/h at 150 Pa

NO humidity measurement



1-ZONE SYSTEM



COMPONENTS

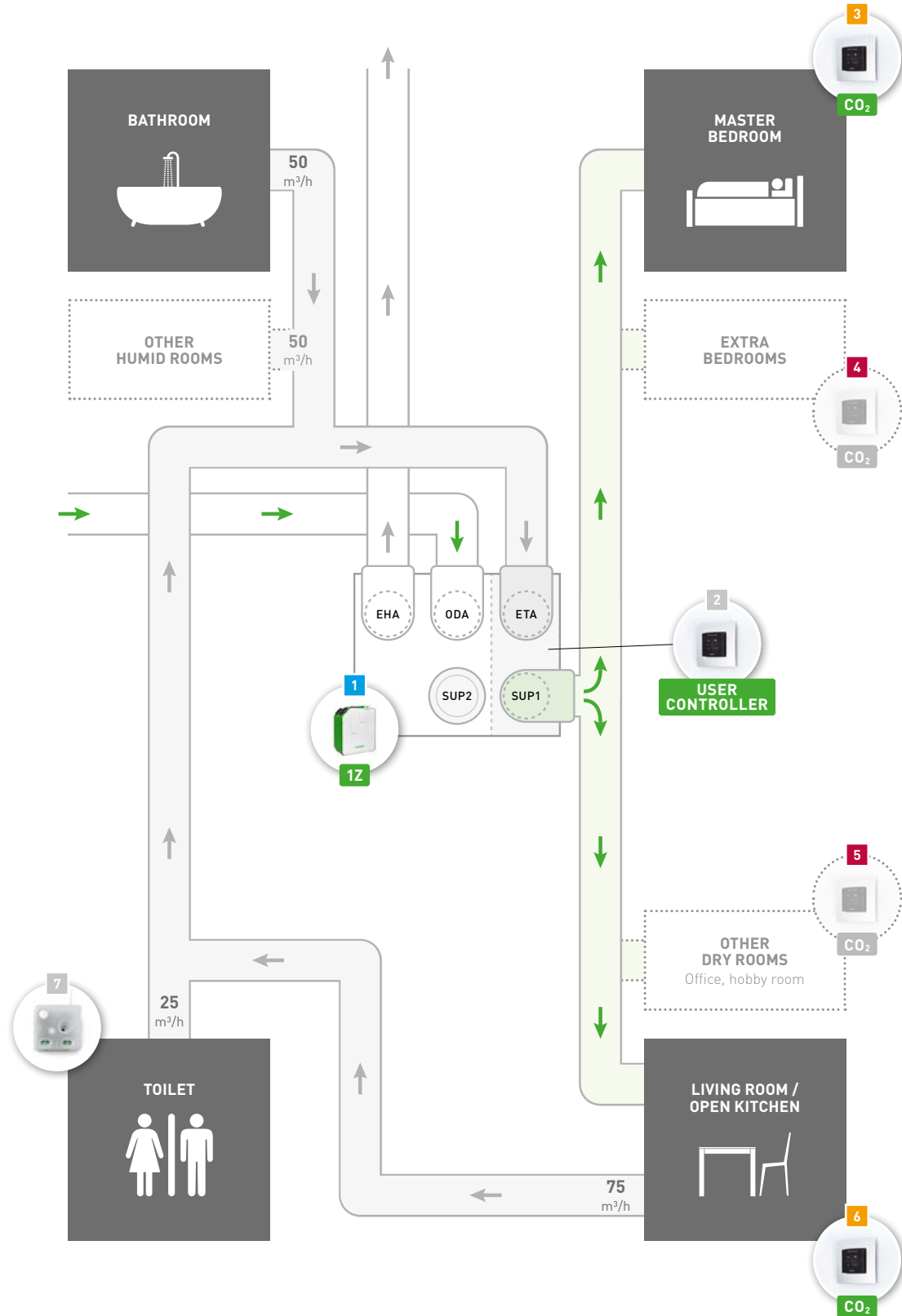


	Left	Right	Component on diagram
DucoBox Energy Premium 325-1ZS	0000-4358	0000-4359	1
DucoBox Energy Premium 325-1ZH	0000-4360	0000-4361	
DucoBox Energy Premium 400-1ZS	0000-4366	0000-4367	
DucoBox Energy Premium 400-1ZH	0000-4368	0000-4369	
S = standard H = with heater			
	Black	White	
Remote control RF / Wired	0000-4601	0000-4602	2
Remote control RF / Battery	0000-4175	0000-4600	
CO ₂ Room sensor with control RF/Wired	0000-4603	0000-4604	3 6
CO ₂ Room sensor without control RF / Wired	0000-4636	0000-4637	4 5
Switch sensor RF/230 VAC	0000-4174		7
Duco Connectivity Board	0000-4810		



→ See chapter 'Vents' from page 66 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.



Detection		Required components	Optional components
Humidity	CO ₂		
✗	✗	■	■
✗	Main rooms	■ + ■	■
✗	All rooms	■ + ■ + ■	■

→ Extraction of stale air
 → Supply of fresh air

The illustration shows a right-hand version of the DucuBox Energy Premium.



Duco Energy Premium System

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

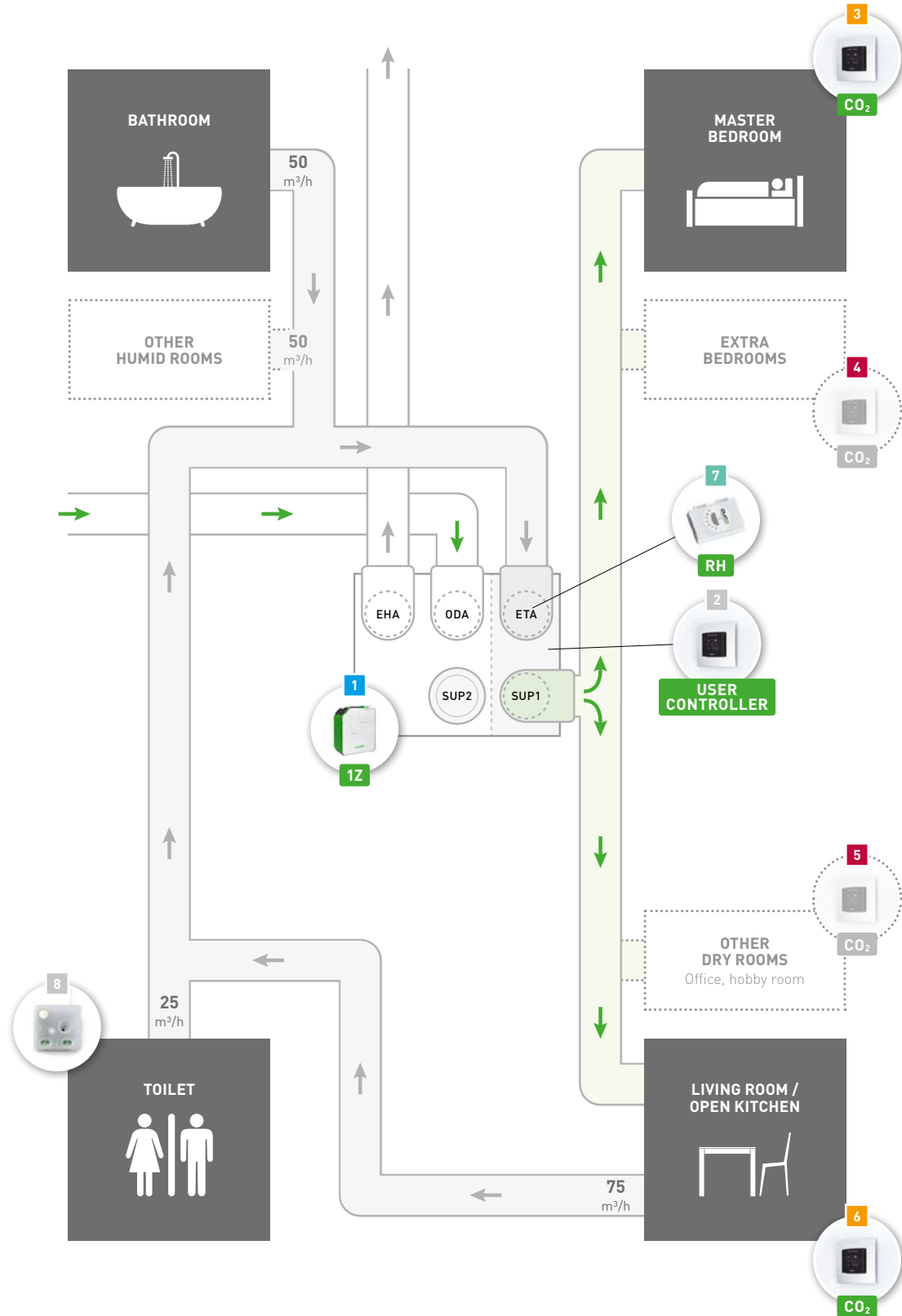
CENTRAL
humidity
measurement1-ZONE
SYSTEM

COMPONENTS

	Left	Right	Component on diagram
DucoBox Energy Premium 325-1ZS	0000-4358	0000-4359	1
DucoBox Energy Premium 325-1ZH	0000-4360	0000-4361	
DucoBox Energy Premium 400-1ZS	0000-4366	0000-4367	
DucoBox Energy Premium 400-1ZH	0000-4368	0000-4369	
S = standard H = with heater			
Humidity Box sensor (Energy Premium)	0000-4374		7
	Black	White	2
Remote control RF / Wired	0000-4601	0000-4602	
Remote control RF / Battery	0000-4175	0000-4600	3 6
CO ₂ Room sensor with control RF/Wired	0000-4603	0000-4604	
CO ₂ Room sensor without control RF / Wired	0000-4636	0000-4637	4 5
Humidity Room sensor with control RF / Wired	0000-4605	0000-4606	
Switch sensor RF/230 VAC	0000-4174		8
Duco Connectivity Board	0000-4810		

→ See chapter 'Vents' from page 66 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.



Detection		Required components	Optional components
Humidity	CO ₂		
Central	✗	■ + ■	■
Central	Main rooms	■ + ■ + ■	■
Central	All rooms	■ + ■ + ■ + ■	■

Extraction of stale air
 Supply of fresh air

The illustration shows a right-hand version of the DucuBox Energy Premium.



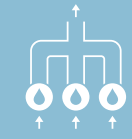
Duco Energy Premium System

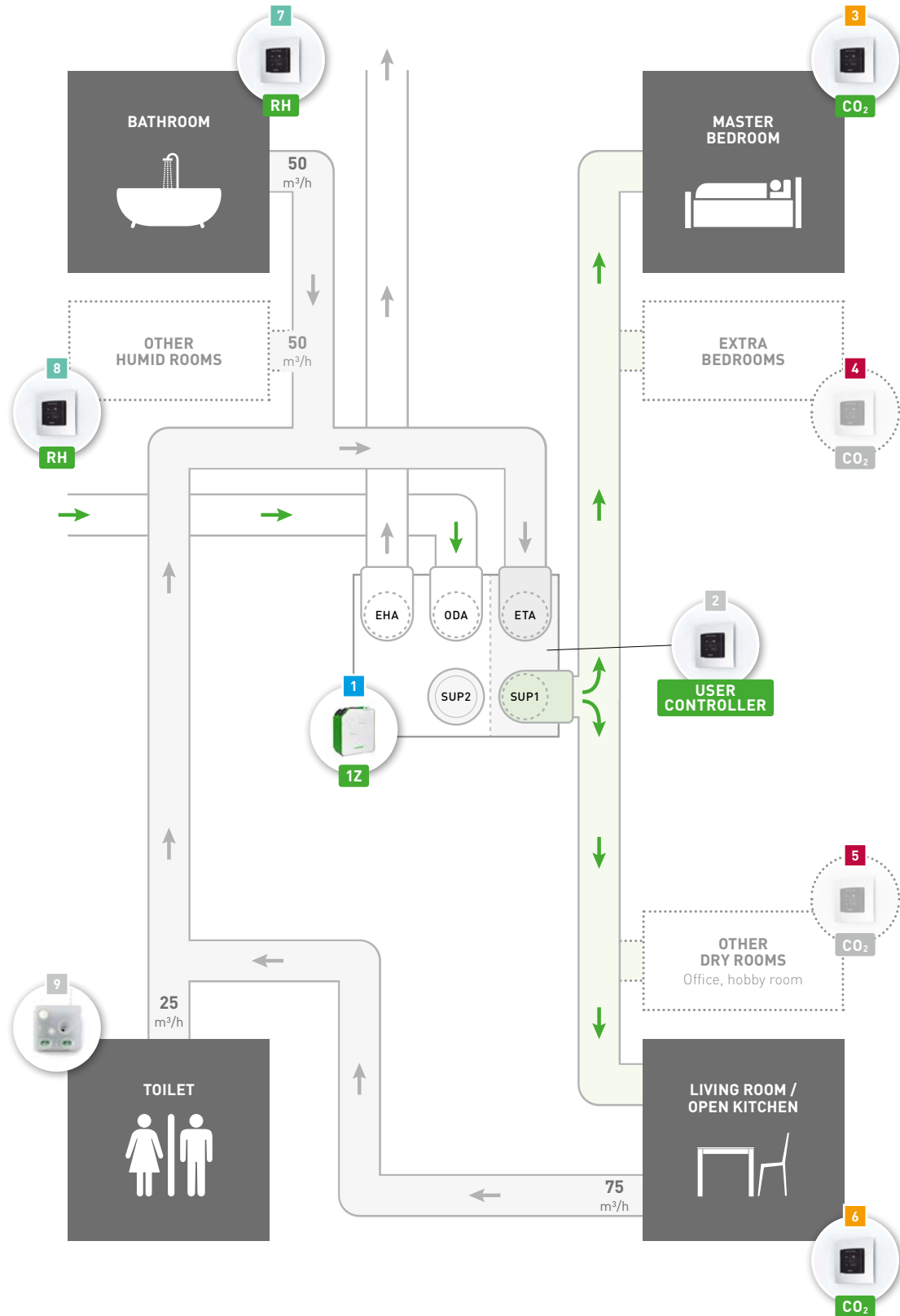
MVHR | Zonal ventilation (1-zone) | Up to 400 m³/h at 150 Pa

COMPONENTS

	Left	Right	Component on diagram
DucoBox Energy Premium 325-1ZS	0000-4358	0000-4359	1
DucoBox Energy Premium 325-1ZH	0000-4360	0000-4361	
DucoBox Energy Premium 400-1ZS	0000-4366	0000-4367	
DucoBox Energy Premium 400-1ZH	0000-4368	0000-4369	
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	
CO ₂ Room sensor with control RF/Wired	0000-4603	0000-4604	3 6
CO ₂ 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
Switch sensor RF/230 VAC	0000-4174		9
Duco Connectivity Board	0000-4810		

→ See chapter 'Vents' from page 66 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.LOCAL
humidity
measurement1-ZONE
SYSTEM



Detection		Required components	Optional components
Humidity	CO ₂		
Local	✗	■ + ■	■
Local	Main rooms	■ + ■ + ■	■
Local	All rooms	■ + ■ + ■ + ■	■

→ Extraction of stale air
 → Supply of fresh air

The illustration shows a right-hand version of the DucuBox Energy Premium.



Duco Energy Premium System

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

NO humidity measurement

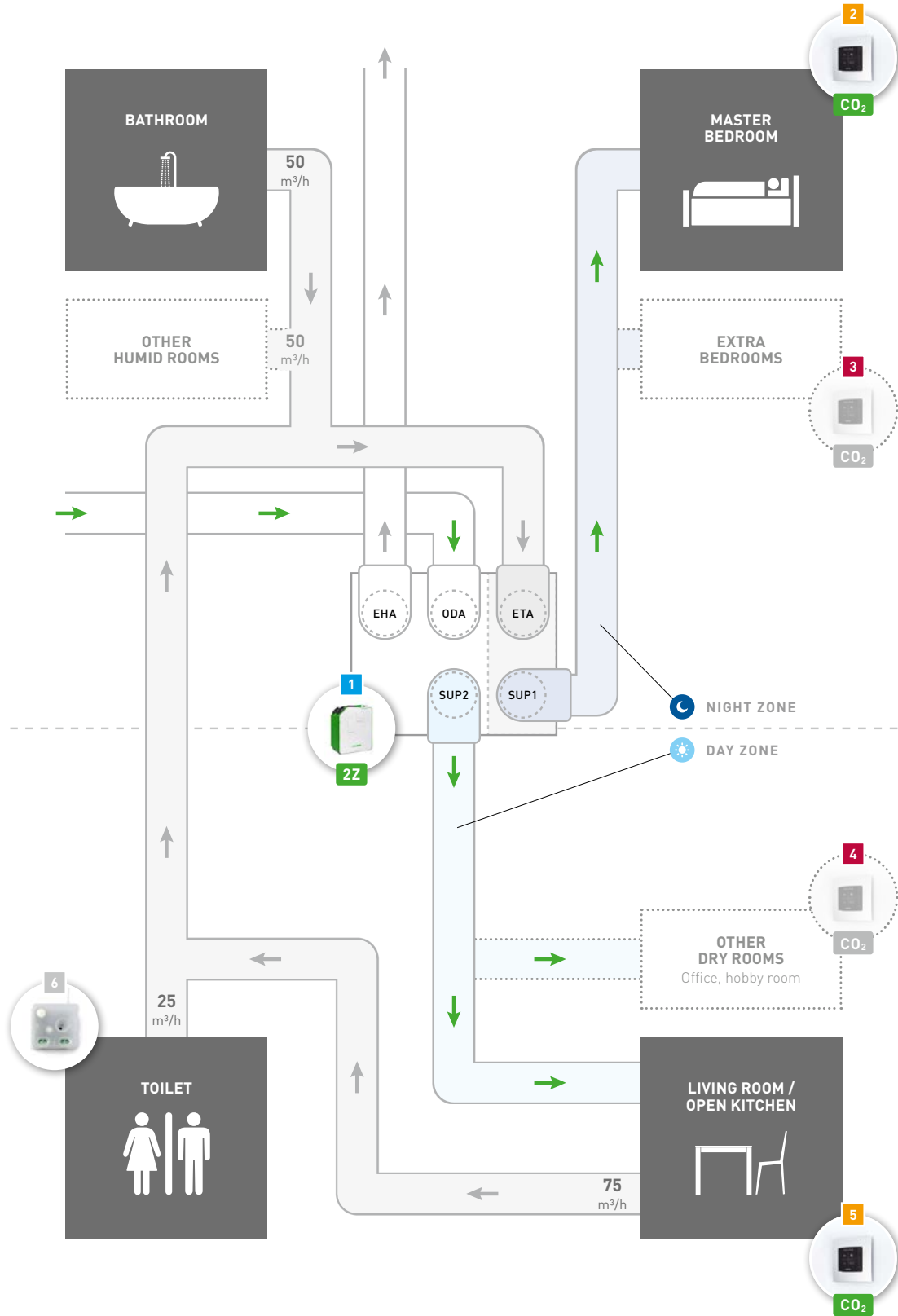


COMPONENTS

	Left	Right	Component on diagram
DucoBox Energy Premium 325-2ZS	0000-4362	0000-4363	1
DucoBox Energy Premium 325-2ZH	0000-4364	0000-4365	
DucoBox Energy Premium 400-2ZS	0000-4370	0000-4371	
DucoBox Energy Premium 400-2ZH	0000-4372	0000-4373	
S = standard H = with heater			
	Black	White	
Remote control RF / Wired	0000-4601	0000-4602	
Remote control RF / Battery	0000-4175	0000-4600	
CO ₂ Room sensor with control RF/Wired	0000-4603	0000-4604	2 5
CO ₂ Room sensor without control RF / Wired	0000-4636	0000-4637	3 4
Switch sensor RF/230 VAC	0000-4174		6
Duco Connectivity Board	0000-4810		

→ See chapter 'Vents' from page 66 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.



Detection		Required components	Optional components
Humidity	CO ₂		
×	×		
×	Main rooms	+	
×	All rooms	+ +	

Extraction of stale air
 Supply of fresh air

The illustration shows a right-hand version of the DucoBox Energy Premium.



Duco Energy Premium System

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

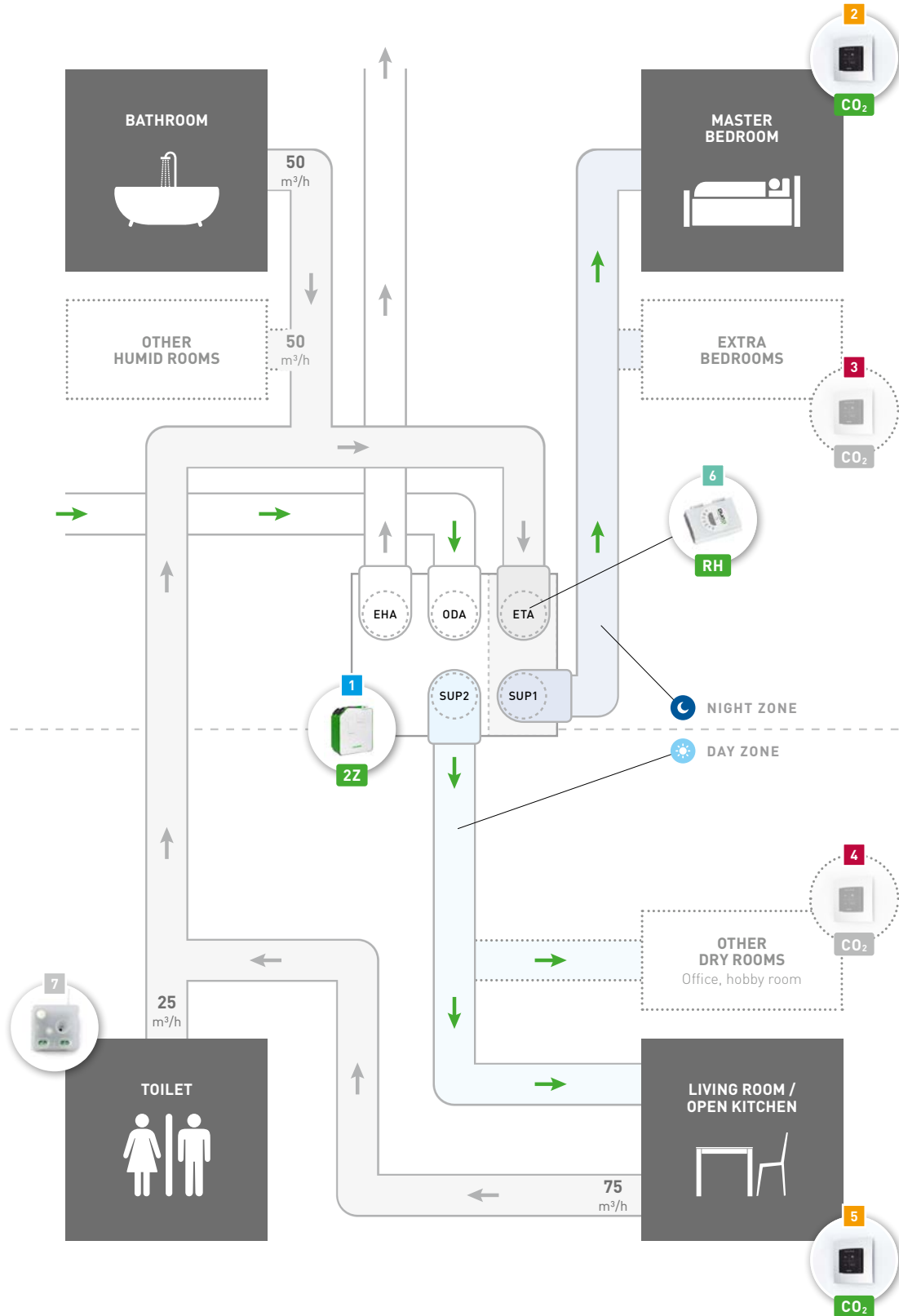
CENTRAL
humidity
measurement2-ZONE
SYSTEM

COMPONENTS

	Left	Right	Component on diagram
DucoBox Energy Premium 325-2ZS	0000-4362	0000-4363	1
DucoBox Energy Premium 325-2ZH	0000-4364	0000-4365	
DucoBox Energy Premium 400-2ZS	0000-4370	0000-4371	
DucoBox Energy Premium 400-2ZH	0000-4372	0000-4373	
S = standard H = with heater			
Humidity Box sensor (Energy Premium)	0000-4374		6
	Black	White	2
Remote control RF / Wired	0000-4601	0000-4602	
Remote control RF / Battery	0000-4175	0000-4600	2 5
CO ₂ Room sensor with control RF/Wired	0000-4603	0000-4604	
CO ₂ Room sensor without control RF / Wired	0000-4636	0000-4637	3 4
Switch sensor RF/230 VAC	0000-4174		7
Duco Connectivity Board	0000-4810		

→ See chapter 'Vents' from page 66 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.



Detection		Required components	Optional components
Humidity	CO ₂		
Central	✗	■ + ■	■
Central	Main rooms	■ + ■ + ■	■
Central	All rooms	■ + ■ + ■ + ■	■

→ Extraction of stale air
 → Supply of fresh air

The illustration shows a right-hand version of the DucoBox Energy Premium.



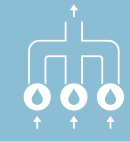
Duco Energy Premium System

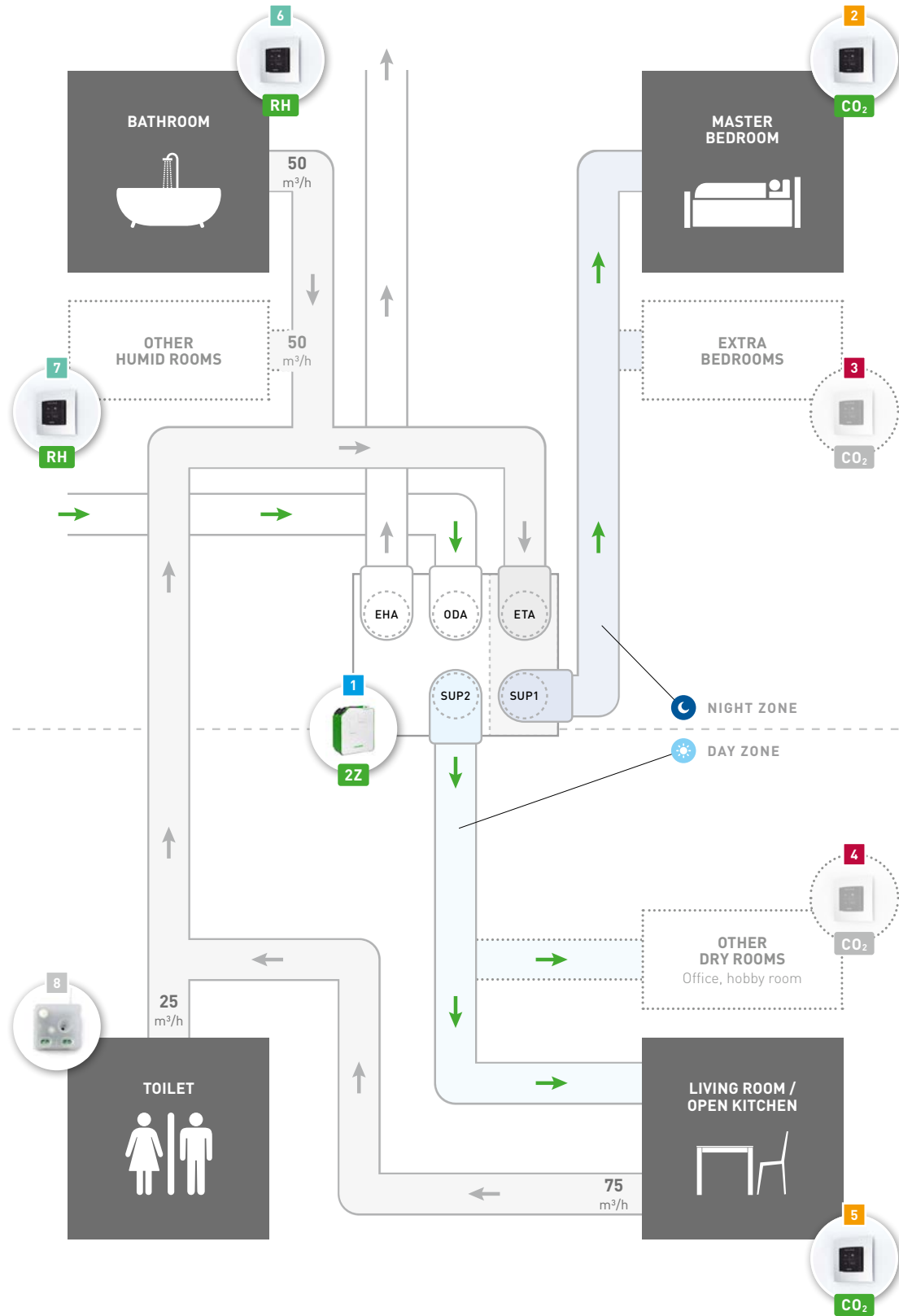
MVHR | Zonal ventilation (2-zone) | Up to 400 m³/h at 150 Pa

COMPONENTS

	Left	Right	Component on diagram
DucoBox Energy Premium 325-2ZS	0000-4362	0000-4363	1
DucoBox Energy Premium 325-2ZH	0000-4364	0000-4365	
DucoBox Energy Premium 400-2ZS	0000-4370	0000-4371	
DucoBox Energy Premium 400-2ZH	0000-4372	0000-4373	
S = standard H = with heater			
	Black	White	
Remote control RF / Wired	0000-4601	0000-4602	
Remote control RF / Battery	0000-4175	0000-4600	
CO ₂ Room sensor with control RF/Wired	0000-4603	0000-4604	2 5
CO ₂ 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
Switch sensor RF/230 VAC	0000-4174		8
Duco Connectivity Board	0000-4810		

→ See chapter 'Vents' from page 66 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.LOCAL
humidity
measurement2-ZONE
SYSTEMcool, temperate climate
*
CERTIFIED
COMPONENT
Passive House Institute



Detection		Required components	Optional components
Humidity	CO ₂		
Local	✗	■ + ■	■
Local	Main rooms	■ + ■ + ■	■
Local	All rooms	■ + ■ + ■ + ■	■

Extraction of stale air
 Supply of fresh air

The illustration shows a right-hand version 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): CO₂ 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 10% (setting 1), 50% (setting 2) or 100% (setting 3) of the maximum ventilation capacity.

Measuring air quality

Sensors continuously measure the CO₂ 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).

<p>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</p>	<p>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</p>
---	---



User controllers + air quality measurement

These contain both a **user controller** and **room sensors** (CO₂ or humidity) for air quality measurement.

	Black	White
CO ₂ 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 **CO₂ sensor**. Ideal for bedrooms where no user controller is necessary.

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

WIRED COMPONENTS

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, or with a Duco Power Adapter 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 mm² cable for this. Refer to the **Onboard dry contact information sheet (L8001001)** for connection instructions.



Switch sensor RF/230 VAC

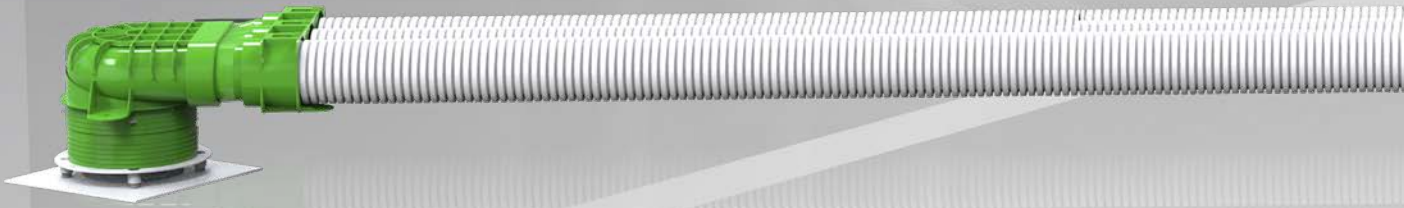
0000-4174



→ INTERNAL CONTROL COMPONENTS

Control components which are specific for a certain ventilation unit can be found on the corresponding ventilation unit page:

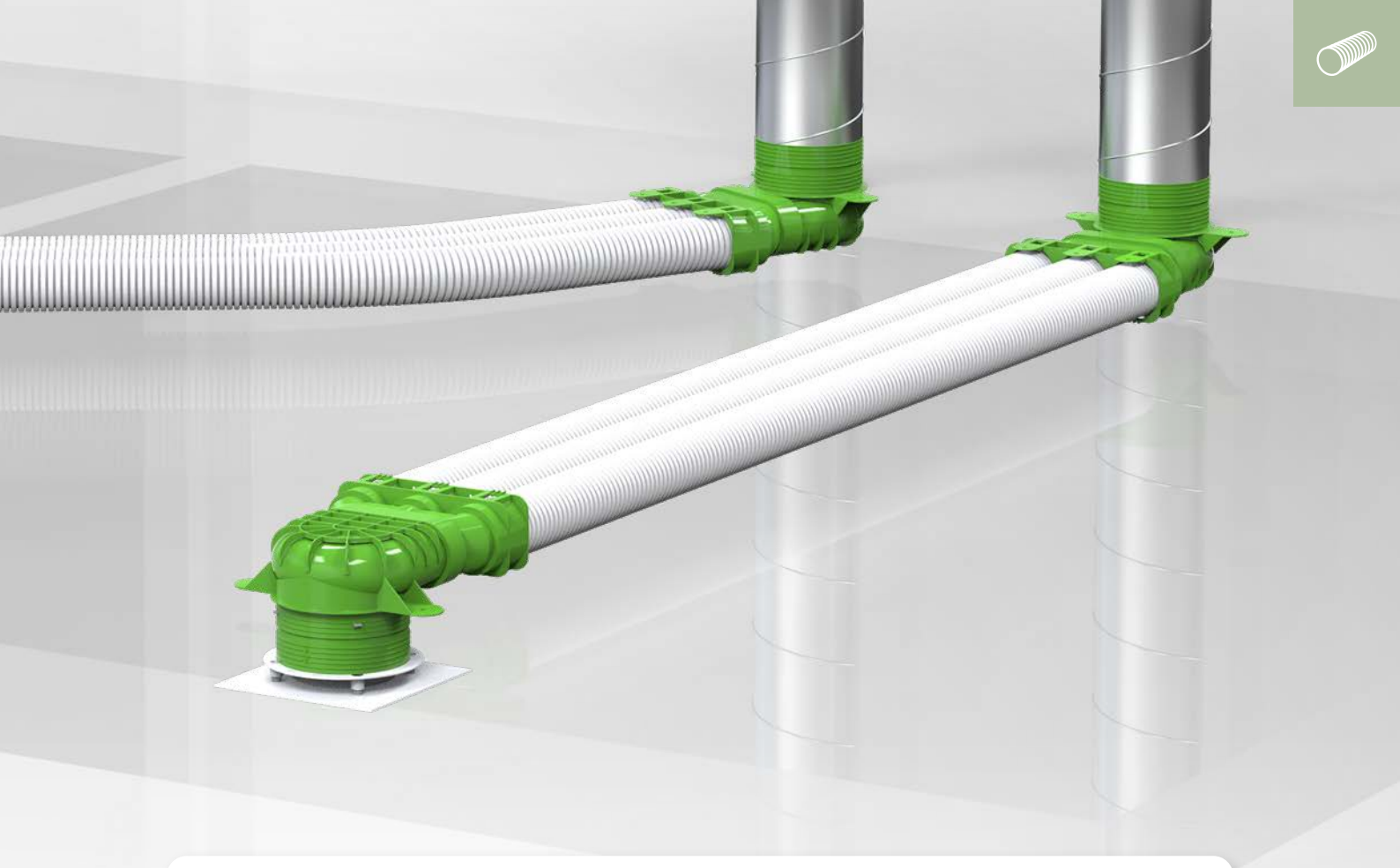
DucoBox Energy Comfort	see page 26
DucoBox Energy Premium	see page 42



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 in Europe! 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 a minimum of accessories. 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!
- 2 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 implementation.



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.



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



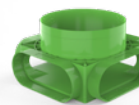
DucoFlex 90° Bend splitter vent connector long, oval D125	0000-4681
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The DucoFlex 90° Bend splitter vent connector long can be utilised multifunctionally. This makes it possible to connect a DucoFlex connector 3x63, 2x75, 3x75 or 2x90 to it.



DucoFlex 90° Bend splitter vent connector short, oval D125	0000-4682
--	-----------

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.



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. Combined 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)	0000-4701
--	-----------

The ceiling and floor manifold box can be utilised multifunctionally. It is a manifold box with 3 oval connexions (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
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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 ceiling 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. Combined 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

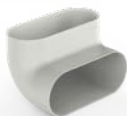
Rigid DucoFlex oval ducting combined with the D160 - 2x oval connector enables a manifold box to be provided in a favourable location.



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 bend in the standard configuration 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 D160 2x oval

0000-4700

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



DucoFlex End cap oval

0000-4713

The DucoFlex End cap oval makes it possible to close an oval connection of a plenum

TOOLS



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	0000-4570
DucoFlex Insulated circular duct with integrated coupler D200 L1000 mm	0000-4905
available Q3/2024	

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 pulled in. Energy losses 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	0000-4572
DucoFlex Insulated 90° bend with integrated coupler D200	0000-4906
available Q3/2024	

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 pulled in. Energy losses 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	0000-4574
DucoFlex Insulated 45° bend with integrated coupler D200	0000-4907
available Q3/2024	

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 pulled in. Energy losses 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	0000-4576
DucoFlex Insulated coupler D200	0000-4908
available Q3/2024	

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



SILENCERS



DucoFlex Silencer flexible D125 L1000 mm

0000-4586

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 x M 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.

CONNECTION PIECES



Connection piece with rubber D160/D160 (M/M)

0000-4724

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

0000-4725

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

0000-4726

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

0000-4727



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. 68 	DucoVent Comfort see p. 68 	DucoVent Design see p. 69 	DucoVent Premium see p. 68 
Type of DucoBox	DucoBox Silent (Connect) DucoBox Focus DucoBox Energy Comfort (Plus) DucoBox Energy Premium			
Type of vent	Supply Extraction	Supply Extraction	Supply* Extraction <small>* With the exception of 'Standard' vents</small>	Supply Extraction
Air flow	Up to 75 m ³ /h	Extraction: up to 75 m ³ /h Supply: up to 75 m ³ /h	Extraction: up to 75 m ³ /h Supply: up to 50 m ³ /h	Up to 50 m ³ /h
Design	★	★★★★	★★★★★	★★★★★★
Shape	Round	Round	Round Square <small>Standard and XL</small> Rounded Square <small>Standard and XL</small>	Round (trimless)
Material	Plastic	Plastic (ASA)	Aluminium	Plastic
Colour	White	White	All RAL	White (can be painted)
Sound absorption	★	★★★★★	★★★★★★	★★★★★
Ease of maintenance	★★	★★★	★★★★★	★★★
Fitting	To be clamped in DucoFlex	Sealing joint in DucoFlex	To be clamped in DucoFlex	Sealing joint in DucoFlex + plastering
Setting flow rate	Fine adjustment via rotary adjuster	11 adjustable positions	Preregulation with flow rings + Fine adjustment 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



Suitable for

DucoVent Basic

Extraction
+ Supply

0000-4178

Extraction

Supply

STANDARD VENT All systems

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

Supply

STANDARD VENT All systems

DucoVent Premium

(by Prado)

The DucoVent Premium 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

Extraction
+ Supply

0000-4903



Extraction

Supply

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 absorption** 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 outlet angle, when positioning the vent close to a wall or in a corner for example.

Maximum flow rate: Extraction: 75 m ³ /h Supply: 50 m ³ /h	Noise level: <15 dB(A) at 50 m ³ /h Colour: White (RAL 9010 structure [AE03059901020]), other RAL colours on request Duct diameter: 125 mm
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Square

	Dimensions	Suitable for
DucoVent Design Square Standard AK	Width / Height: 180mm Depth: 52mm	Extraction 0000-4179
DucoVent Design Square XL AK	Width / Height: 215 mm Depth: 52mm	Extraction + Supply 0000-4226



Round

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



Rounded

	Dimensions	Suitable for
DucoVent Design Rounded Square Standard AK	Width / Height: 180mm Depth: 52mm	Extraction 0000-4211
DucoVent Design Rounded Square XL AK	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 window ventilators which can be fitted in any kind of window or installation situation, including window vents with sound deadening, fire-resistant window vents, customised window vents for high-rise buildings, as well as ventilation and solar shading in a single product or electronically controlled window vents with preheating.



MEV system

FEED-THROUGH VIA FACADE Inside + outside

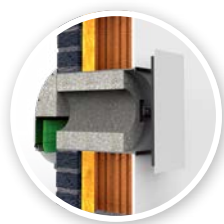
Silenzio

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.

<p>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 dealer.</p>	<p>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]</p>	<p>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]</p>
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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

MEV system

MVHR system

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 possible undesired deposits of dripping condensation water. 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 D160	0000-4627	0000-4584
DucoFlex Wall feed-through D180	0000-4628	0000-4585
DucoFlex Wall feed-through D200	0000-4913	0000-4914

available Q3/2024

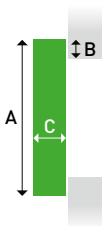
MEV system

FEED-THROUGH VIA FACADE Inside

DucoGrille Close M100

DucoGrille Close M 100 is a **closable** surface mounted internal louvre grille. The plastic slide valves allow for adjustable ventilation. Thanks to the small punching, this grille is **insect repellent**. Contact DUCO for deviating sizes and colours.

Material: aluminium | Colour: anodisation SAA (15-20 µm)



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

S5501001

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



MEV system

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 DUCO300RAL	1030-0500

RAL colours other than those described above on request.

MEV system

FEED-THROUGH VIA FACADE Outside

MVHR system

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.

Please refer to the 'Wall and window louvre grilles' brochure for more information.





MEV system

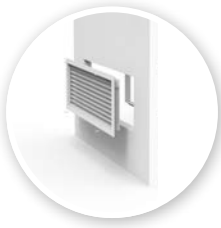
MVHR system

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). Contact DUCO for deviating sizes and colours.

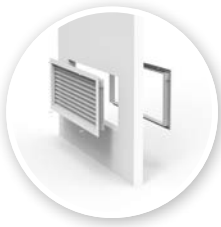
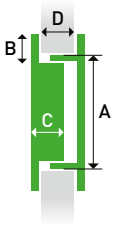
Material: aluminium | Colour: aluminium colour



Without counterframe

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

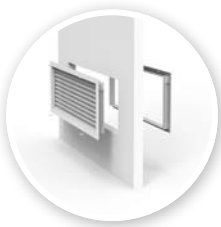
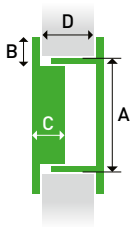
A = Width x Height (see table) | B = 21 mm | C = 36 mm | D = 31 mm



With counterframe (wall depth 28-54 mm)

	Width (mm)	Height (mm)	
DucoGrille Transfer with counterframe 28-54 mm	200	100	S5301001
	300	100	S5301002
	300	200	S5301003
	400	100	S5301004
	400	200	S5301005
	400	300	S5301006
	500	300	S5301007
	600	400	S5301008

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



With counterframe (wall depth 54-84 mm)

	Width (mm)	Height (mm)	
DucoGrille Transfer with counterframe 54-84 mm	200	100	S5401001
	300	100	S5401002
	300	200	S5401003
	400	100	S5401004
	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 - Slate	0000-4582
DucoFlex Roof feed-through Compact D160 - Terracotta	0000-4580
DucoFlex Roof feed-through Compact D200 - Slate	0000-4920
DucoFlex Roof feed-through Compact D200 - Terracotta	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 ducting D160 or D200.



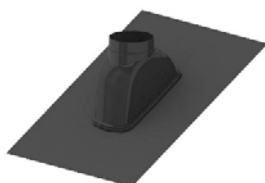
DucoFlex Universal Roof feed-through D160/180 (1.0m)	0000-4578
DucoFlex Universal Roof feed-through D180/200 (1.0m)	0000-4915
available Q4/2024	

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 air-resistance. 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 ducts, D180 ducts as well as D200 ducts.



DucoFlex Roof feed-through plate flat roof D204	0000-4581
DucoFlex Roof feed-through plate flat roof D266	0000-4916
available Q4/2024	

The DucoFlex Roof feed-through plate **flat roof** can be combined with the Universal Roof feed-through D160/180 or D200. The base plate has a diameter of 420 mm. It is made completely of aluminium, making it suitable for all standard finishes of roof feed-throughs on flat roofs.



DucoFlex Universal Roof feed-through tile D205	0000-4579
DucoFlex Universal Roof feed-through tile D263	0000-4917
available Q4/2024	

The DucoFlex Universal Roof feed-through tile can be combined with the Universal Roof feed-through D160/180 or D200. The unit is a 2-tile solution which is suitable for **sloping roofs** with a pitch between 25° and 50°. The pre-mounted plastic flashing flange ensures quick and water-tight installation.

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. In addition to tailored advice, it is also possible to request a **layout plan for the ventilation ducts** for each 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

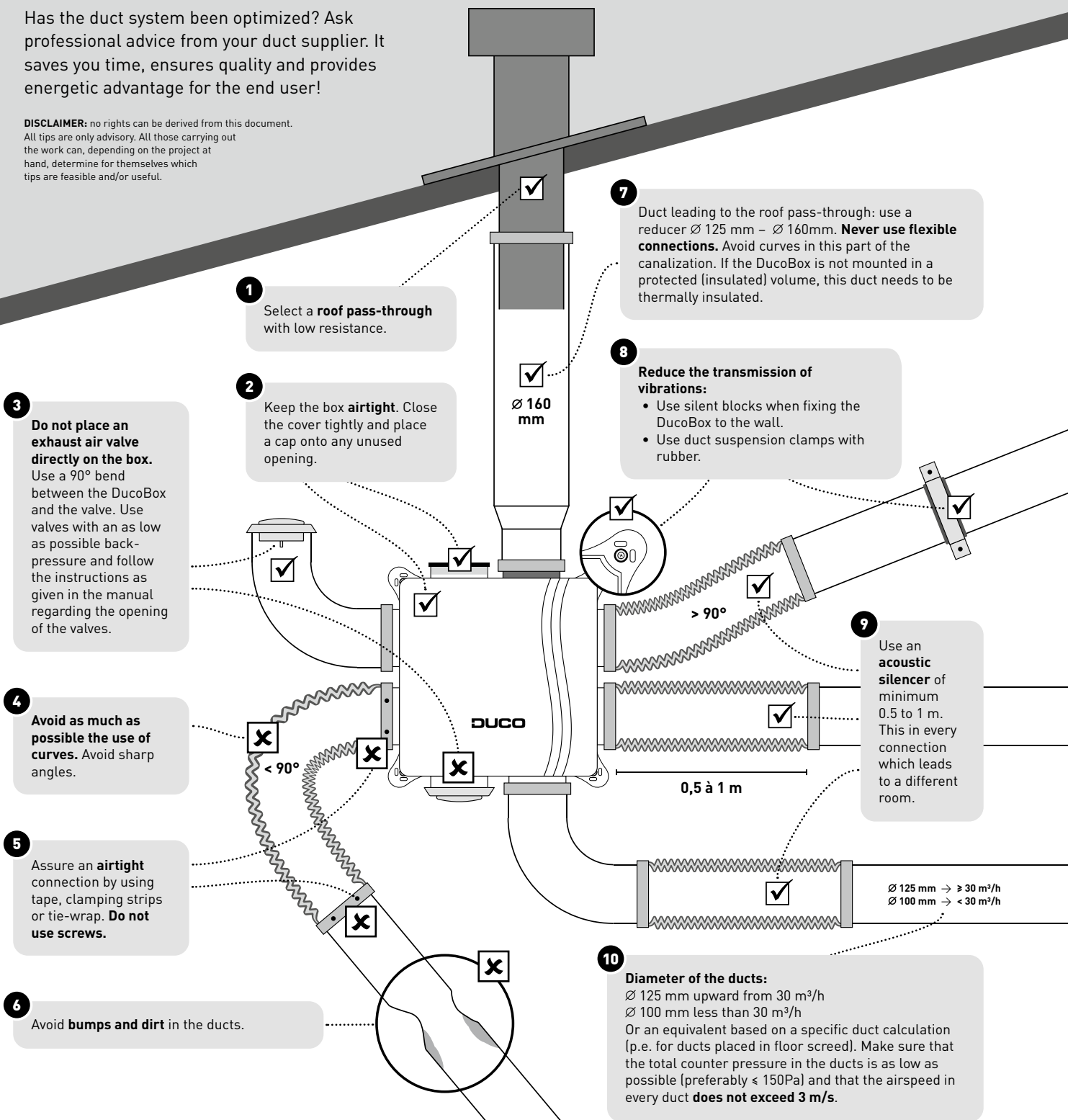
www.bimobject.com

INSTALLATION TIPS DUCOBOX 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!

Has the duct system been optimized? Ask professional advice from your duct supplier. It saves you time, ensures quality and provides energetic advantage for the end user!

DISCLAIMER: no rights can be derived from this document. All tips are only advisory. All those carrying out the work can, depending on the project at hand, determine for themselves which tips are feasible and/or useful.



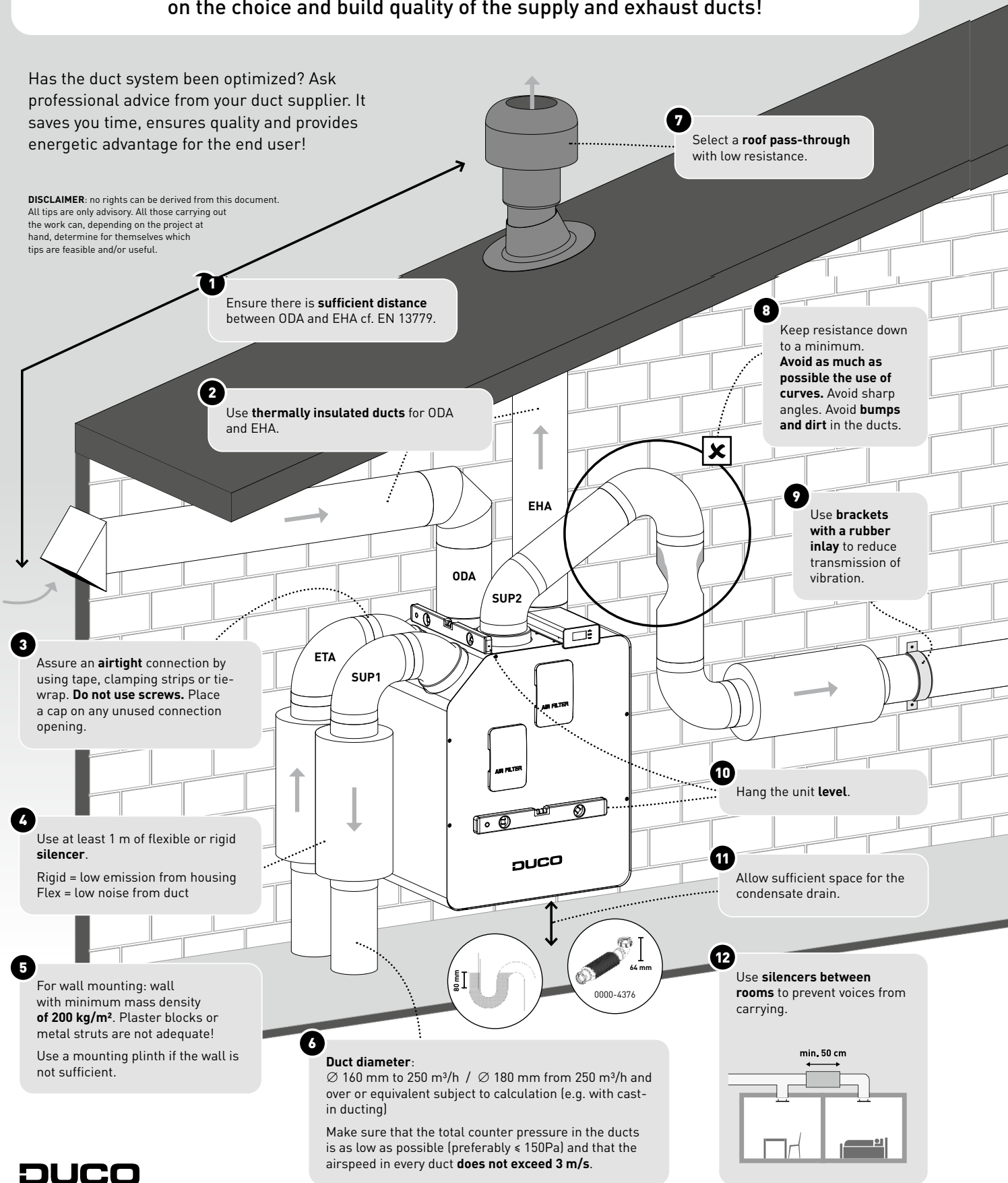
INSTALLATION TIPS

DUCOBOX ENERGY COMFORT / PREMIUM

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

Has the duct system been optimized? Ask professional advice from your duct supplier. It saves you time, ensures quality and provides energetic advantage for the end user!

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1 Ensure there is **sufficient distance** between ODA and EHA cf. EN 13779.

2 Use **thermally insulated ducts** for ODA and EHA.

3 Assure an **airtight** connection by using tape, clamping strips or tie-wrap. **Do not use screws.** Place a cap on any unused connection opening.

4 Use at least 1 m of flexible or rigid **silencer**.
Rigid = low emission from housing
Flex = low noise from duct

5 For wall mounting: wall with minimum mass density of **200 kg/m²**. Plaster blocks or metal struts are not adequate!
Use a mounting plinth if the wall is not sufficient.

6 **Duct diameter:**
Ø 160 mm to 250 m³/h / Ø 180 mm from 250 m³/h and over or equivalent subject to calculation (e.g. with cast-in ducting)
Make sure that the total counter pressure in the ducts is as low as possible (preferably < 150Pa) and that the airspeed in every duct **does not exceed 3 m/s**.

7 Select a **roof pass-through** with low resistance.

8 Keep resistance down to a minimum. **Avoid as much as possible the use of curves.** Avoid sharp angles. Avoid **bumps and dirt** in the ducts.

9 Use **brackets with a rubber inlay** to reduce transmission of vibration.

10 Hang the unit **level**.

11 Allow sufficient space for the condensate drain.

12 Use **silencers between rooms** to prevent voices from carrying.
min. 50 cm

Manuals
Instruction videos
Technical data sheets
...



Please visit our website
www.duco.eu

DUCO