Technical data sheet

FLUX GO FLAT

System D+® - V2024.05

Demand-controlled, energy-efficient balanced ventilation combined with pure ease of installation

Flux Go Flat is part of the energy-efficient D+ ventilation concept, with demand-controlled ventilation. Fresh, filtered air is mechanically supplied to dry rooms and polluted air is mechanically extracted from wet rooms.
This compact and flexible ventilation unit is suitable for residential applications and is available in three versions, depending on the nominal ventilation flow rate:

- up to 225 m³/h
- up to 275 m³/h
- up to 370 m³/h

Primary features

Demand-controlled balanced ventilation

- The **integrated, central humidity sensor** constantly monitors the humidity level in the air extracted from the wet rooms in the home. Based on this humidity level, the ventilation flow rate is controlled autonomously. This smart demand-controlled system keeps the humidity level under control in wet rooms using the lowest possible ventilation flow rate, and the lowest possible energy consumption as a result. The balance between supply and extraction is constantly maintained.
- Flux Go Flat can be expanded as an option with **room sensors** (CO_2 detection) for local demand management.
  This ensures further improvement of the indoor climate and a cost-efficient reduction of the E-level.

Easy installation

- **ONE-MAN-SHOW:** due to its low weight of 25 kg and the **Quick Fix**, the Flux Go Flat can be easily, **quickly and ergonomically** installed without a second person.
- **ALWAYS A SOLUTION:**
  - In small spaces
  - Ceiling or wall mounting (vertically)
  - Can be converted from a left to right version via the installer app
  - Compact connection of the air ducts to the unit with 2 connections per connection point
- Quick setup starts with the installation website, which can be accessed on a smartphone, tablet or PC.

Service convenience

- The appliance is designed to ensure the components and technologies are easily and quickly accessible. Do you need some maintenance? No problem: the Quick-Fix ceiling bracket ensures the appliance can easily be put into the service position.

Efficient design

- Counterflow heat exchanger for up to **91% heat recovery**
- Low-noise and energy-efficient EC motor

Filters

- Appliance supplied as standard with: 2x Classic Protection ISO Coarse 65% (G4)
- Optionally available: 1x Urban Protection ePM1 55% (F7) + 1x Classic Protection ISO Coarse 65% (G4)

Optimal operation of this D+ ventilation system is only guaranteed if the following are present and matched:

- Air is supplied to dry rooms and extracted from wet rooms via the Renson Aeroo valve
- Supply and extraction of air from and to the outside via Renson roof/wall penetration
- Easyflex air channels
- Renson filters
- Mechanical supply & extraction via **Flux Go Flat**

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References

29912	Flux Go 225 Flat
29913	Flux Go 275 Flat
29914	Flux Go 370 Flat
17792	Dry siphon kit for Flux Flat

Technical specifications

	Flux Go 225 Flat	Flux Go 275 Flat	Flux Go 370 Flat
(Max.) ventilation airflow	225 m³/h (at 200 Pa)	275 m³/h (at 200 Pa)	370 m³/h (at 200 Pa)
Thermal efficiency	**Belgium** - conform to Annex G of Annex V of the Energy Decree (conform to EN13141-7)		
	91% at 75 m³/h 89% at 124 m³/h 87% at 175 m³/h 85% at 225 m³/h	91% at 75 m³/h 87% at 175 m³/h 85% at 225 m³/h 83% at 275 m³/h	83% at 290 m³/h 82% at 322 m³/h 81% at 352 m³/h 80% at 370 m³/h
	Netherlands - conform to Section 11 of NTA 8800 in the context of the Building Regulations (conform to EN13141-7)		
	91% at 157 m³/h	89% at 191 m³/h	88% at 259 m³/h
Sound level In accordance with EcoDesign directive	43,5 dB(A)	46,0 dB(A)	50,5 dB(A)
Sound level Lw(A)	At 225 m³/h - 100 Pa – Box: 50,5 dB(A) – Supply: 59,5 dB(A) – Extraction: 47,0 dB(A)	At 275 m³/h - 100 Pa – Box: 53,0 dB(A) – Supply: 62,5 dB(A) – Extraction: 49,5 dB(A)	At 370 m³/h - 100 Pa – Box: 57,5 dB(A) – Supply: 67,5 dB(A) – Extraction: 56,0 dB(A)
Maximum power used	2 × 42 W	2 × 53 W	2 × 83 W
Connection voltage	230 Vac -15%/+10% (50 Hz, 60 Hz) Power cord included (2 m length)		
Dimensions	1188 × 745 × 300 mm (L x W x H)		
Weight	25 kg		
Ø unit connections	Ø 160 mm 2 connections per connection point		
Bypass	Yes, fully		
Automatic control (constant flow)	Yes		
Fan	Extremely quiet & energy-efficient EC motor with forward curved Ø180 fan blade		
Maximum fan operating pressure	300 Pa – Recommended working pressure at design airflow: ≤ 200 Pa – Guidance value for very good working pressure at design flow (cfr TV n° 258): ≤ 100 Pa		
External input/output	– 1x Ethernet connection – 2x USB connections *(USB dongle for Wi-Fi connection included*)* – 3x digital inputs & outputs for ventilation position control or feedback of general error messages and filter messages		

* Only compatible with 2.4GHz

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Control of demand-controlled ventilation

Type of ventilation	Mechanical demand-controlled balance ventilation with heat recovery
Air quality detection	Via a electronic humidity sensor located centrally in the unit. The sensor measures the air quality in the extracted air flow 24/7.
Reduction factors ($F_{reduc, vent, heat}$)	– Standard: • Configuration 1.0 = central humidity sensor in the unit (extraction) – With optional room sensors: • Configuration 0.87 = CO_2 room sensors in the living room and master bedroom • Configuration 0.70 = CO_2 room sensors in all bedrooms • Configuration 0.61 = CO_2 room sensors in all dry rooms
Control possibilities	– Demand-controlled (standard), optionally via room sensors – Manual control (user app and optional switch)

Control

Resident app

- Read the air quality in the home
- Personalisation and (temporary) manual adjustment of the ventilation flow rate possible

Optional

- Potential-free wired 3-position switch for manual adjustment of the ventilation extraction rate
- 4-position switch, integrated in the wireless room sensors

Room sensors

The Renson Sense room sensors can be combined with the Flux Go Flat to regulate the **local air quality** via ventilation flow. These 230 V powered sensors communicate wirelessly with the ventilation unit. This provides a further increase in air quality and a reduction in the E level.

Installation

Room	Indoor installation in an insulated room. Temperature limits from 0 °C to +40 °C.
Installation options	– Left and right position, adjustable via software – Ceiling mounting – Vertical wall mounting (in both directions) – **Supplied Quick Fix** ceiling bracket makes one-person installation possible

Products to combine

Aeroo extraction and supply valve	Design valve
Easyflex air ducts	Air transport ducts with best airtightness class D
Easyduct air ducts	Air transport ducts with insulating properties
Isodec	Air flexible with insulating properties
Acoudec	Air flexible duct with high acoustic damping properties
Renson roof exhaust / wall exhaust	Design feed with limited pressure loss

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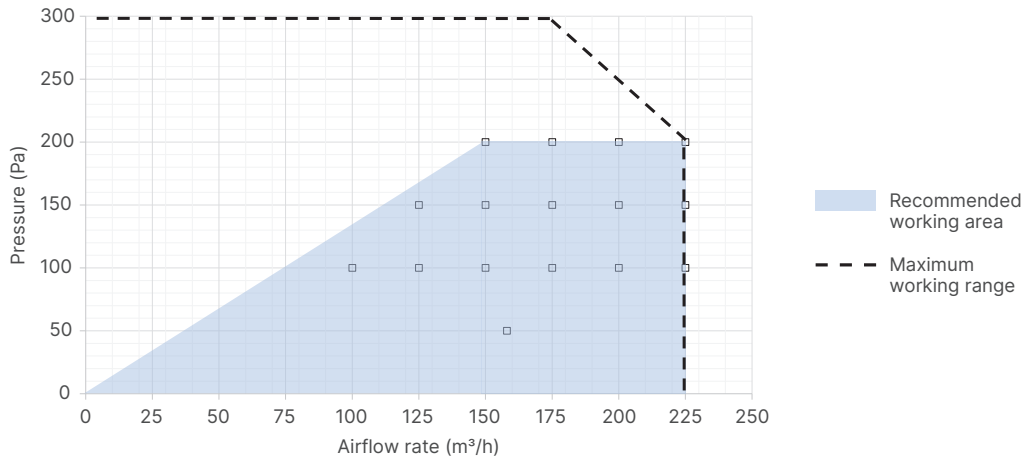
Other features

Automatic fault notification & filter notification	Via app resident		
Fire safety (internal)	√		
EU declaration of conformity	√		
Energy rating (in accordance with directive 2010/30/EU)	Flux Go 225 Flat: A+	Flux Go 275 Flat: A+	Flux Go 370 Flat: A+
Minimum density for wall/ceiling	Minimum density for wall/ceiling of 100 kg/m², because of firmness for fastening & sufficient mass for further vibration damping.		

Technical data

Flux Go 225 Flat						
Airflow m³/h	Pressure Pa	Power W	SFP Wh/m³	Sound level (Lw(A))		
				Pulse (dB(A))	Extraction (dB(A))	Box (dB(A))
225	**200**	**84**	**0,41**	**64,5**	**53,0**	**54,0**
225	150	70	0,34	61,5	50,0	52,0
225	100	58	0,27	59,5	47,0	50,5
200	200	74	0,41	64,0	52,5	54,0
200	150	60	0,33	61,5	50,0	51,0
200	100	49	0,26	58,0	46,0	49,0
175	100	41	0,25	57,5	46,0	47,5
158	50	27	0,18	52,0	39,5	43,5
150	150	44	0,32	61,0	49,0	50,5
150	100	34	0,25	56,5	45,5	46,5
125	100	30	0,25	56,0	45,5	46,0
100	100	23	0,26	55,5	44,0	45,5



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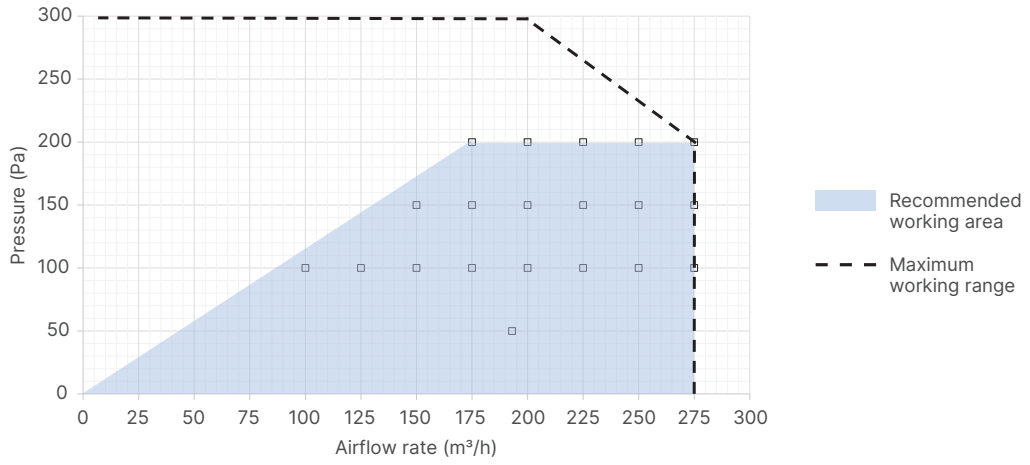
Flux Go 275 Flat						
Airflow m³/h	Pressure Pa	Power W	SFP Wh/m³	Sound level (Lw(A))		
				Pulse (dB(A))	Extraction (dB(A))	Box (dB(A))
275	**200**	**106**	**0,39**	**66,5**	**53,5**	**55,5**
275	150	92	0,33	64,5	51,5	54,5
275	100	83	0,31	62,5	49,5	53,0
250	200	95	0,38	64,5	53,5	55,0
250	150	81	0,32	63,5	50,5	53,5
250	100	69	0,28	61,5	48,5	52,0
225	200	84	0,37	64,5	53,0	54,0
225	150	70	0,31	61,5	50,0	52,0
225	100	58	0,25	59,5	47,0	50,5
200	200	74	0,37	64,0	52,5	54,0
200	150	60	0,30	61,5	50,0	51,0
200	100	49	0,25	58,0	46,0	49,0
193	50	34	0,18	54,5	42,0	46,0
175	100	41	0,23	57,5	46,0	47,5
150	150	44	0,29	61,0	49,0	50,5
150	100	34	0,23	56,5	45,5	46,5
125	100	30	0,24	56,0	45,5	46,0
100	100	23	0,23	55,5	44,0	45,5



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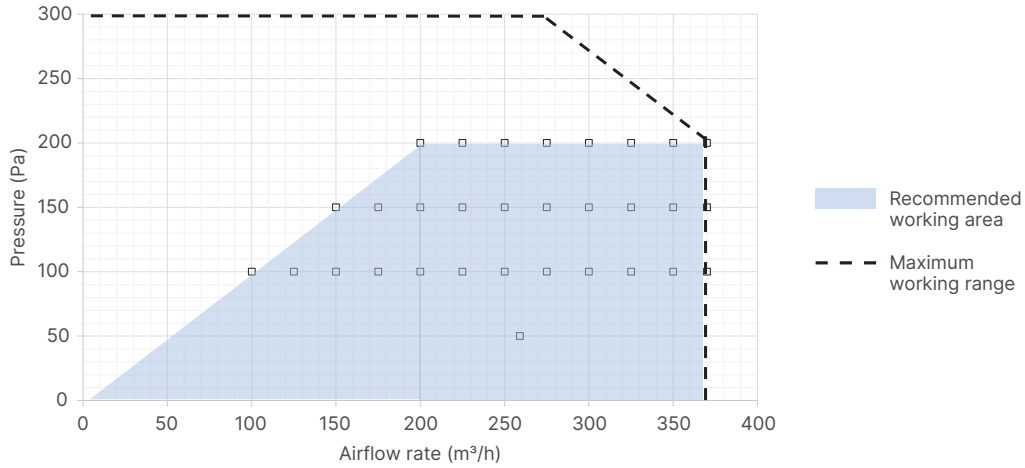
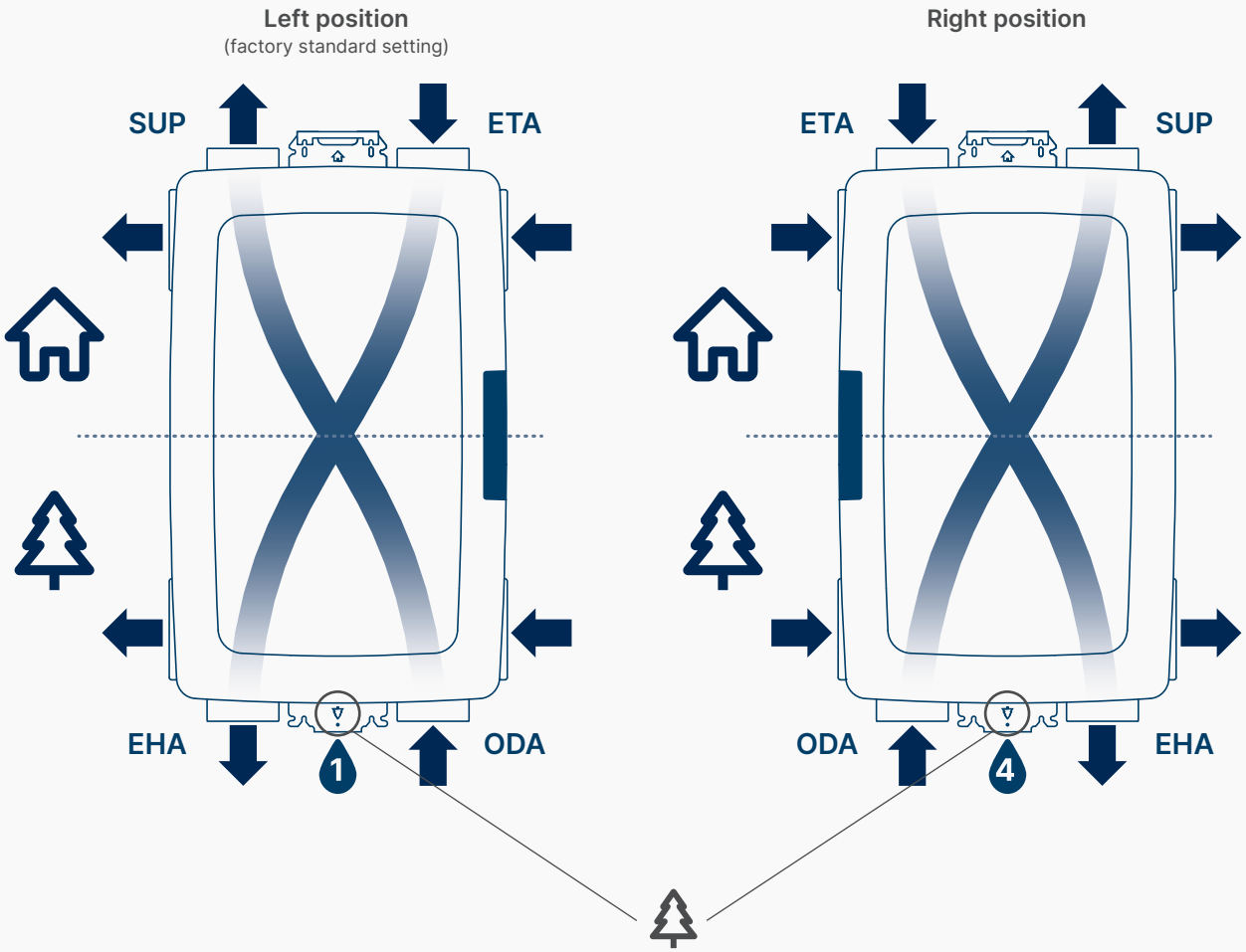
Flux Go 370 Flat						
Airflow m³/h	Pressure Pa	Power W	SFP Wh/m³	Sound level (Lw(A))		
				Pulse (dB(A))	Extraction (dB(A))	Box (dB(A))
370	**200**	**166**	**0,45**	**68,5**	**56,0**	**57,5**
370	150	142	0,38	68,5	56,0	57,5
370	100	137	0,37	67,5	56,0	57,5
350	200	151	0,43	68,0	55,5	57,5
350	150	130	0,37	67,5	55,0	57,5
350	100	124	0,35	65,5	53,5	56,5
325	200	136	0,42	67,0	55,0	56,5
325	150	117	0,36	66,0	54,0	55,5
325	100	111	0,34	64,5	52,0	55,0
300	200	121	0,40	66,5	54,5	56,0
300	150	106	0,35	65,5	52,5	55,5
300	100	96	0,31	64,5	50,5	54,0
275	200	106	0,39	66,5	53,5	55,5
275	150	92	0,33	64,5	51,5	54,5
275	100	83	0,31	62,5	49,5	53,0
259	50	60	0,23	58,0	47,0	50,5
250	200	95	0,38	64,5	53,5	55,0
250	150	81	0,32	63,5	50,5	53,5
250	100	69	0,28	61,5	48,5	52,0
225	200	84	0,37	64,5	53,0	54,0
225	150	70	0,31	61,5	50,0	52,0
225	100	58	0,25	59,5	47,0	50,5
200	200	74	0,37	64,0	52,5	54,0
200	150	60	0,30	61,5	50,0	51,0
200	100	49	0,25	58,0	46,0	49,0
175	100	41	0,23	57,5	46,0	47,5
150	150	44	0,29	61,0	49,0	50,5
150	100	34	0,23	56,5	45,5	46,5
125	100	30	0,24	56,0	45,5	46,0
100	100	23	0,23	55,5	44,0	45,5



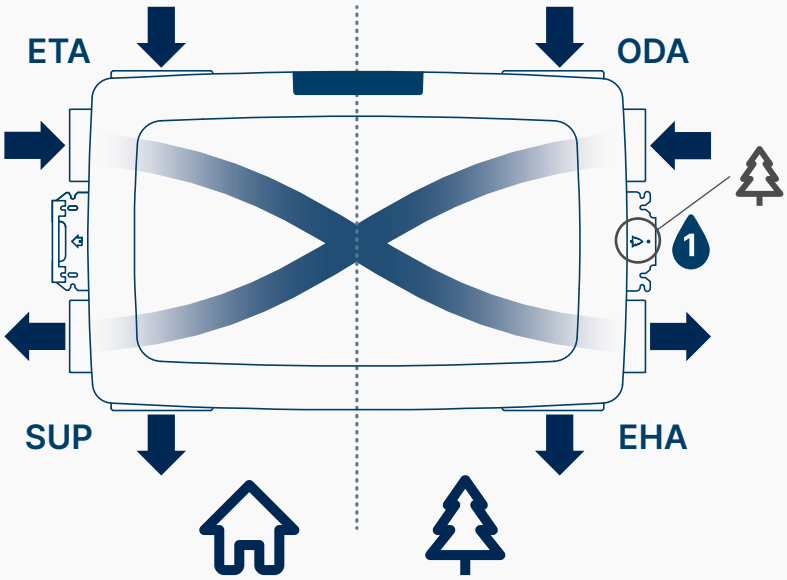
Installation

Vertical wall installation

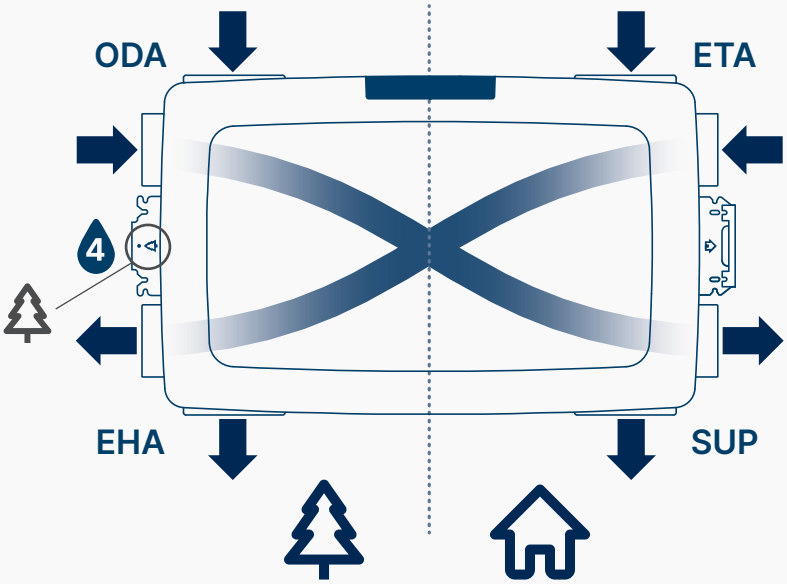


Ceiling installation

Left position
(factory standard setting)

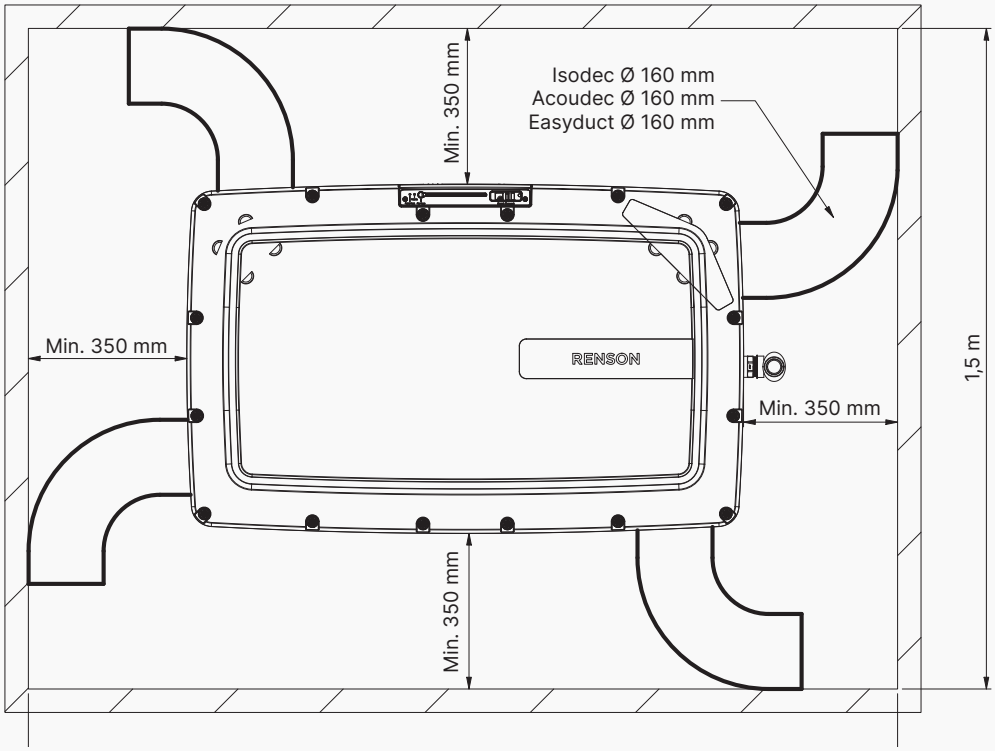


Right position



Installation dimensions

In both ceiling and wall mounting, provide **at least 350 mm distance** between the unit and the wall at each side where a **duct connection** is present. If this duct connection consists of a Renson Isodec, Acoudec or Easyduct in Ø 160 mm, respecting this minimum distance ensures a low pressure drop and easy assembly and disassembly for any service.
In addition, **at least 100 mm** should be provided at the height of the **condensate connection**.



Below you will see some examples of set-ups in practice, taking into account the minimum distances mentioned above and the Renson recommendation to always provide 1 m Acoudec Ø 160 mm at pulse and extraction side.
This will ensure a whisper-quiet installation!

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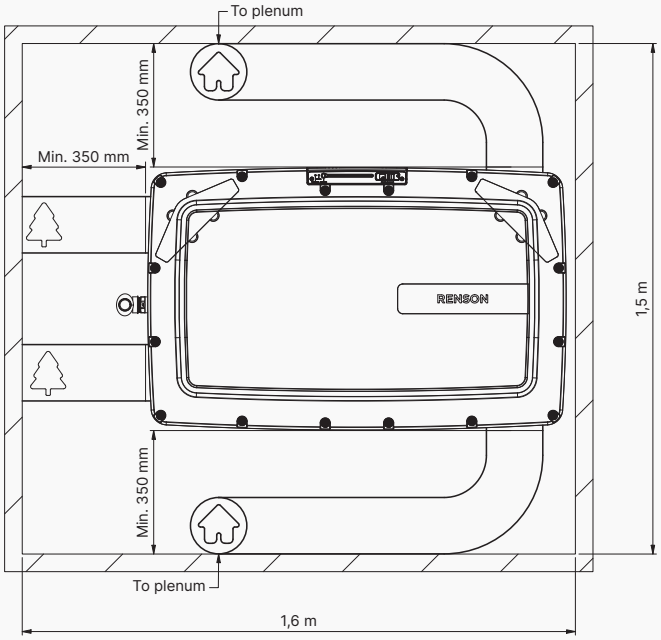
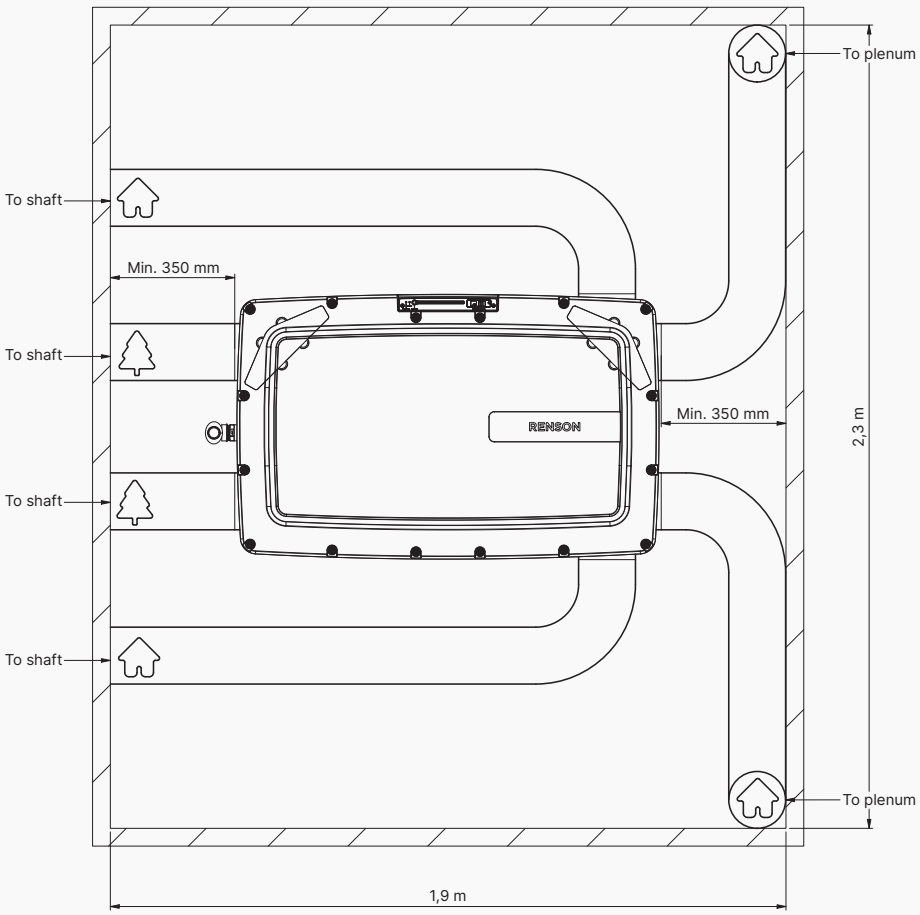
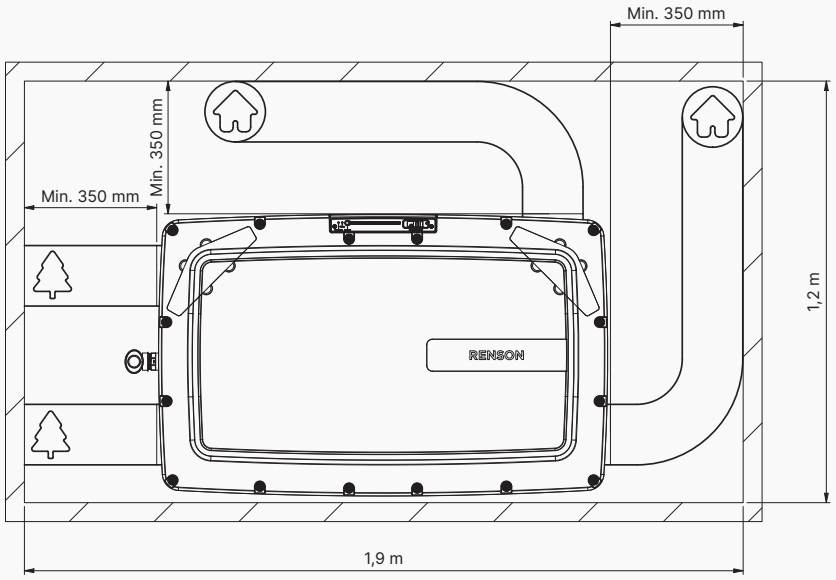
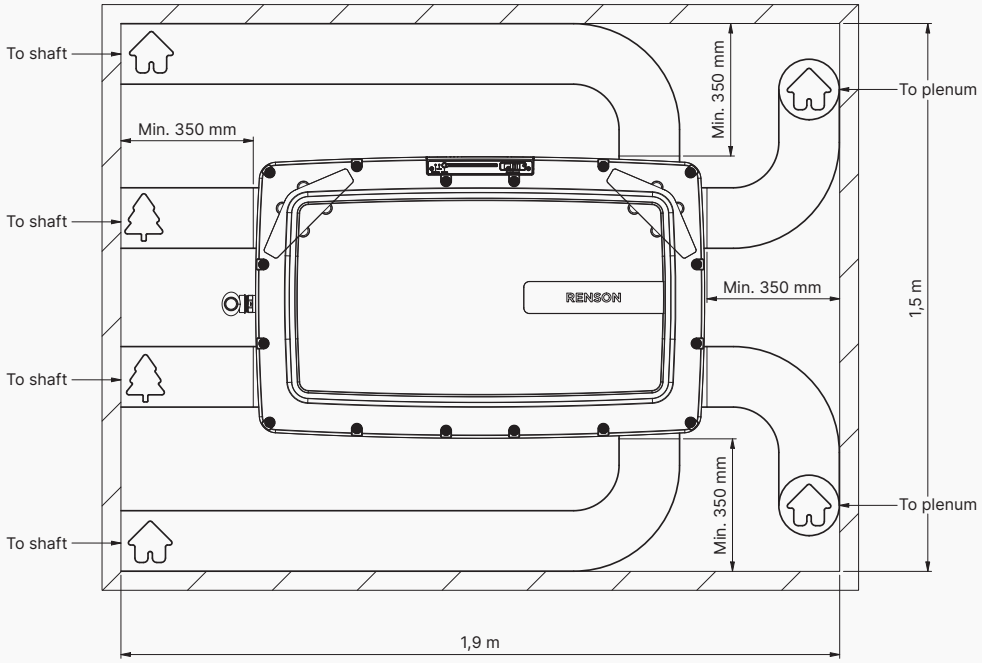
Examples of a ceiling installation:





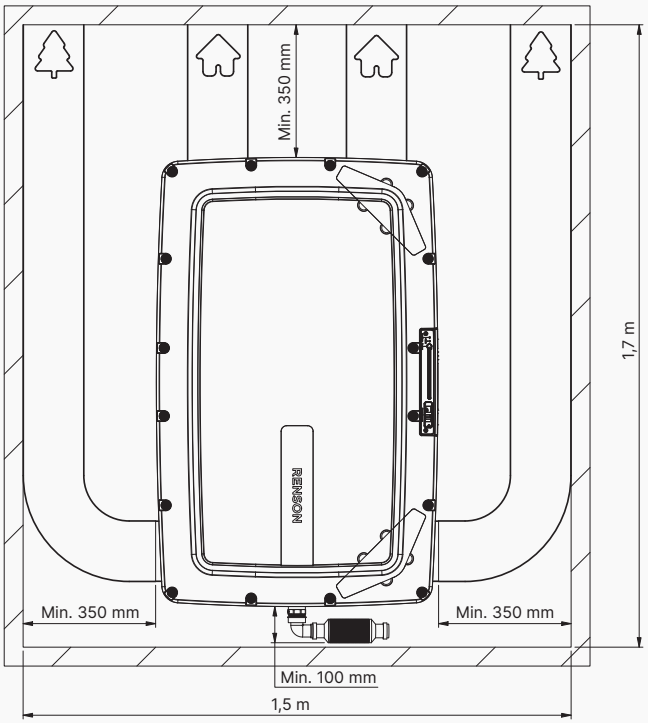
Examples of a ceiling installation:





Example of a wall installation:

Vertical setup possible only



Technical drawings