Tech sheet

FLUX GO FLAT

System D+® - V2024.05

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

Flux Go Flat is part of the energy-efficient ventilation concept D+, with demand-controlled ventilation. The freshly filtered air is mechanically supplied to the dry rooms and the polluted air is mechanically extracted from the wet rooms. This compact & flexible ventilation unit is suitable for residential applications and is available in 3 versions, depending on the nominal ventilation flow rate: • up to 225 m³/h • up to 275 m³/h • up to 370 m³/h

Main features

Demand-controlled balanced ventilation

• The integrated humidity sensor continuously measures the humidity level in the extracted air flow from the wet areas of the home. The ventilation flow is controlled autonomously based on the humidity level. This smart demand control keeps the humidity level in the wet areas under control with a minimum ventilation flow and therefore low energy consumption. There is a continuous balance between supply and exhaust.

• Flux Go Flat can optionally be expanded with room sensors (CO2 detection) for local demand control. This ensures a further improvement of the indoor climate and a cost-efficient reduction of the E-level.

Ease of installation

• ONE-MAN SHOW: thanks to its low weight of 25 kg and the Quick-Fix, the Flux Go Flat can be installed easily, quickly and ergonomically be installed without a second person.

• ALWAYS A SOLUTION:
  – In small spaces
  – Ceiling or wall mounting (vertical)
  – Software adjustable from left to right version
  – Compact connection of the air ducts to the unit through double connection option per connection point

• A smooth start-up is achieved using the installation web page, which can be operated via smartphone, tablet or PC.

Service convenience

• The device is designed in such a way that parts and techniques are easily and quickly accessible. Maintenance required? No problem: with the Quick-Fix ceiling bracket the device can easily be placed in service position.

Efficient design

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

Filters

• Device supplied as standard including: 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 when the following components are present and coordinated: • Supply of air in dry areas and extraction of air in wet areas via Renson Aeroo valve • Supply and extraction of air from and to the outside via Renson roof/facade duct • Easyflex air ducts • Renson filters • Mechanical supply & extraction via Flux Go Flat

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References

29912	Flux Go 225 Flat Flux Go
29913	275 Flat Flux Go 370 Flat
29914	Droogsifon kit voor Flux Flat
17 792	

Technical specifications

	Flux Go 225 Flat	Flux Go 275 Flat	Flux Go 370 Flat
(Max.) ventilation flow	m3/h (at 200 Pa)	m3/h (at 200 Pa)	m3/h (at 200 Pa)
rate Thermal efficiency	Belgium - in accordance with Annex G of Annex V of the Energy Decree (in accordance with 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 - in accordance with Chapter 11 of NTA 8800 within the framework of the Building Regulations (in accordance with EN13141-7)		
	89% at 191 m³/h	91% at 157 m³/h	88% at 259 m³/h
Noise level According to EcoDesign directive	43,5 dB(A)	46,0 dB(A)	50,5 dB(A)
Sound level Lw(A)	At 225 m³/h - 100 Pa – Kastafstraling: 50,5 dB(A) – Supply: 59.5 dB(A) – Exhaust: 47.0 dB(A)	At 275 m³/h - 100 Pa – Kastafstraling: 53,0 dB(A) – Supply: 62.5 dB(A) – Exhaust: 49.5 dB(A)	To be determined
Maximum power consumption	2 x 42 W	2 x 53 W	2 x 83 W
Connection voltage	230 Vac -15% / +10% (50Hz, 60Hz) Power cord included (2 m length)		
Dimensions Weight	1188 x 745 x 300 mm (L x B x H) 25 kg		
Ø connections unit	Ø 160 mm Double connection option per connection point		
	Yes,		
Bypass	complete Yes		
Automatic control (constant flow) Fan	Extremely quiet & energy-efficient EC motor with forward curved impeller Ø180		
Maximum working pressure fan	300 Pa		
	– Recommended working pressure at design flow rate: ≤ 200 Pa – Guideline value of a very good working pressure at design flow rate (cf. TV n° 258): ≤ 100 Pa		
Externe input/output	– 1x Ethernet connection – 2x USB connection – 3x digital inputs & outputs for ventilation position control or feedback of general error messages and filter notification		

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Regeling vraaggestuurde ventilatie

Type ventilatie	Mechanisch vraaggestuurde balansventilatie met warmteterugwinning
Detectie luchtkwaliteit	Via elektronische vochtsensor centraal in de unit. De sensor meet 24h/dag het vochtgehalte in de afgevoerde luchtstroom.
Reductiefactoren ($F_{reduc, vent, heat}$)	– Standaard: • Config 1.0 = centrale vochtsensor in het toestel (afvoer) – Met optionele ruimtesensoren: • Config 0.87 = CO2 ruimtesensoren in de woonkamer en hoofdslaapkamer • Config 0.70 = CO2 ruimtesensoren in elke slaapkamer • Config 0.61 = CO2 ruimtesensoren in elke droge ruimte
Werking mogelijkheden	– Vraaggestuurd (Standaard) en optioneel via ruimtesensoren – Manuele regeling (User app en optionele schakelaar)

Bediening

App bewoner
• Aflezen van de luchtkwaliteit in de woning
• Mogelijkheid tot personalisatie en (tijdelijke) manuele aanpassing van het ventilatiedebiet

Optioneel
• Potentiaalvrije bedrade 3-standenschakelaar voor manuele aanpassing van het ventilatie-afvoerdebiet
• 4-standenschakelaar, geïntegreerd in de draadloze ruimtesensoren

Ruimtesensoren

De Renson Sense ruimtesensoren kunnen gecombineerd worden met de Flux Go Flat om aan de hand van lokale luchtkwaliteit het ventilatiedebiet te regelen. Deze 230V gevoede sensoren communiceren draadloos met de ventilatie-unit. Dit zorgt voor een verdere verhoging van de luchtkwaliteit en verlaging van het E-peil.

Installatie

Ruimte	Binnen opstelling in geïsoleerde ruimte. Temperatuurgrenzen van 0° tot +40°C.
Montagemogelijkheden	– Links en rechtsopstelling – softwarematige aanpassing – Plafondbevestiging – Verticale wandbevestiging (in beide richtingen) – Bijgeleverde Quick-Fix plafondbeugel maakt installatie met één persoon mogelijk

Te combineren producten

Aeroo afvoer- en toevoerventiel	Design ventiel
Easyflex luchtkanalen	Luchtkanalen met beste luchtdichtheidsklasse D
Easyduct luchtkanalen	Luchtkanalen met isolerende eigenschappen
Isodec	Luchtflexibel met isolerende eigenschappen
Acoudec	Luchtflexibel met sterk akoestisch dempende eigenschappen
Renson dakdoorvoer / muurdoorvoer	Design doorvoeren met een beperkt drukverlies

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Demand-controlled ventilation regulation

Ventilation type Air	Mechanical demand-controlled balanced ventilation with heat recovery Via electronic humidity
quality detection	sensor centrally in the unit. The sensor measures the humidity in the extracted air flow 24 hours a day.
Reduction factors ($F_{reduc, vent, heat}$)	- Standard: • Config 1.0 = central humidity sensor in the device (drain) – With optional room sensors: • Config 0.87 = CO2 room sensors in the living room and master bedroom • Config 0.70 = CO2 room sensors in each bedroom • Config 0.61 = CO2 room sensors in every dry room
Operation options	– Demand-driven (Standard) and optionally via room sensors – Manual control (User app and optional switch)

Ministry

App resident
• Reading of the air quality in the home • Possibility of personalization and (temporary) manual adjustment of the ventilation flow rate

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

Space sensors

The Renson Sense room sensors can be combined with the Flux Go Flat to control the ventilation flow rate based on local air quality. These 230V powered sensors communicate wirelessly with the ventilation unit. This ensures a further increase in air quality and a reduction in the E-level.

Installation

Room	Indoor installation in insulated space. Temperature limits from 0° to +40°C.
Mounting options	– Left and right setup – software adjustment – Ceiling mounting – Vertical wall mounting (in both directions) – Included Quick-Fix ceiling bracket allows for one-person installation

Products to combine

Aeroo exhaust and supply valve	Design valve
Easyflex air ducts	Air ducts with best air tightness class D
Easyduct air ducts	Air ducts with insulating properties
Isodec	Air flexible with insulating properties
Acoudec	Air flexible with strong acoustic damping properties
Renson roof duct / wall duct	Design feed-throughs with limited pressure loss

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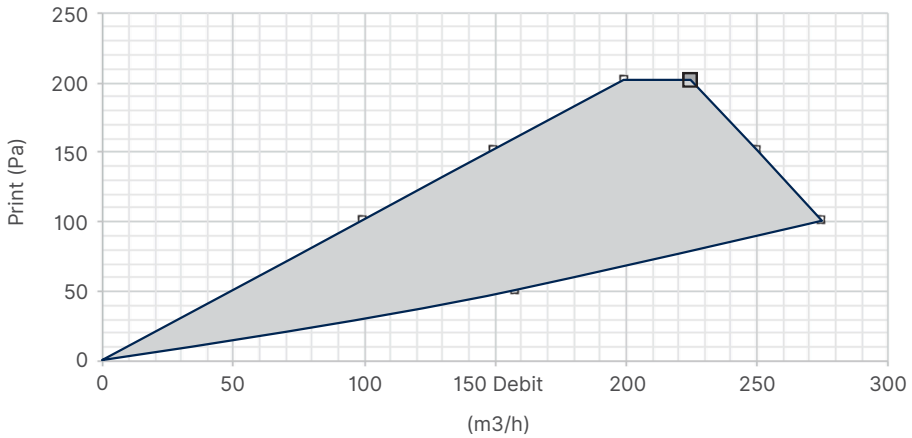
Other features

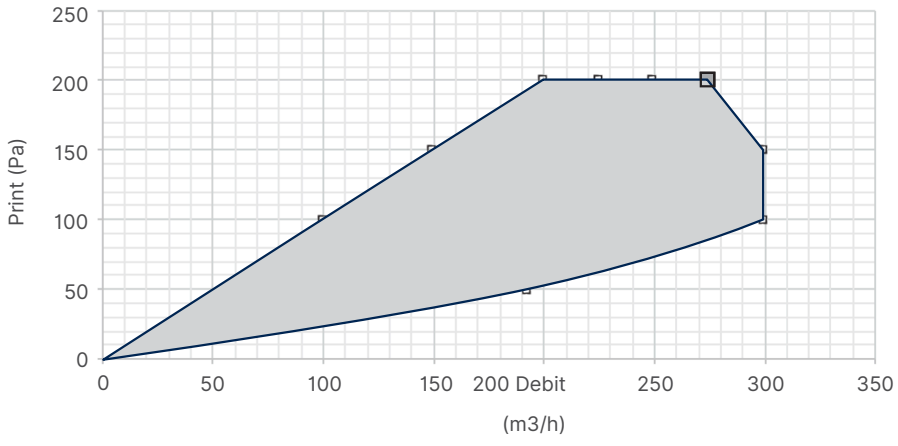
Automatic fault reporting & filter notification Fire protection (internal)	Resident via app		
EU declaration of conformity Energy class (according to Directive 2010/30/EU)	√		
	√		
	Flux Go 225 Flat: A+	Flux Go 275 Flat: A+	Flux Go 370 Flat: A+

Technical data

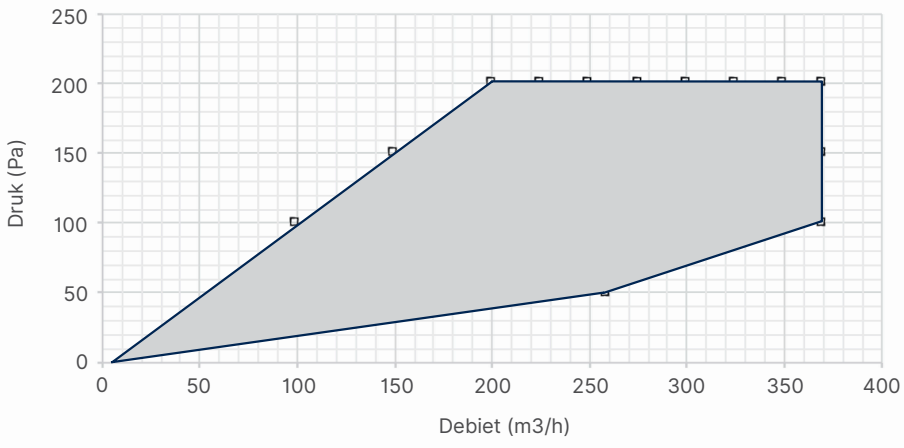
Flux Go 225 Flat						
Flow rate m³/h	Druk Pa	Power W	SFP Wh/m³	Sound power (Lw(A))		
				Pulse (dB(A))	Extraction (dB(A))	cupb (dB(A))
275	100	83	0,33	62,5	49,5	53,0
250	150	81	0,36	63,5	50,5	53,5
250	100	69	0,30	61,5	48,5	52,0
225	200	84	0,41	64,5	53,0	54,0
225	150	70	0,34	61,5	50,0	52,0
225	100	58	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



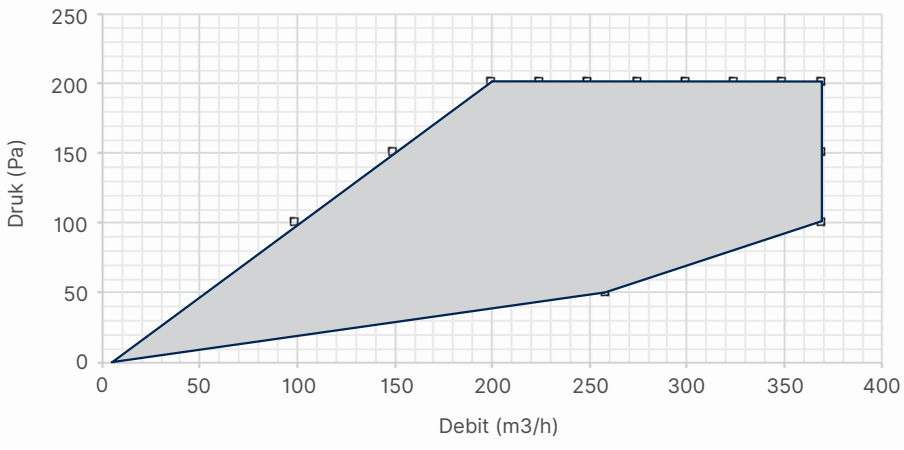
Flux Go 275 Flat						
Flow rate m³/h	Druk Pa	Power W	SFP Wh/m³	Sound power (Lw(A))		
				Pulse (dB(A))	Extraction (dB(A))	cupboard (dB(A))
315	100	106	0,34	65,5	52,0	55,5
300	150	106	0,35	65,5	52,5	55,5
300	100	96	0,31	64,5	50,5	54,0
275	200	106	0,39	66,5	53,5	55,5
275	150	92	0,33	64,5	51,5	54,5
275	100	83	0,31	62,5	49,5	53,0
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



Flux Go 370 Flat						
Debiet m³/h	Druk Pa	Vermogen W	SFP Wh/m³	Geluidsvermogen (Lw(A))		
				Pulsie (dB(A))	Extractie (dB(A))	Kast (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

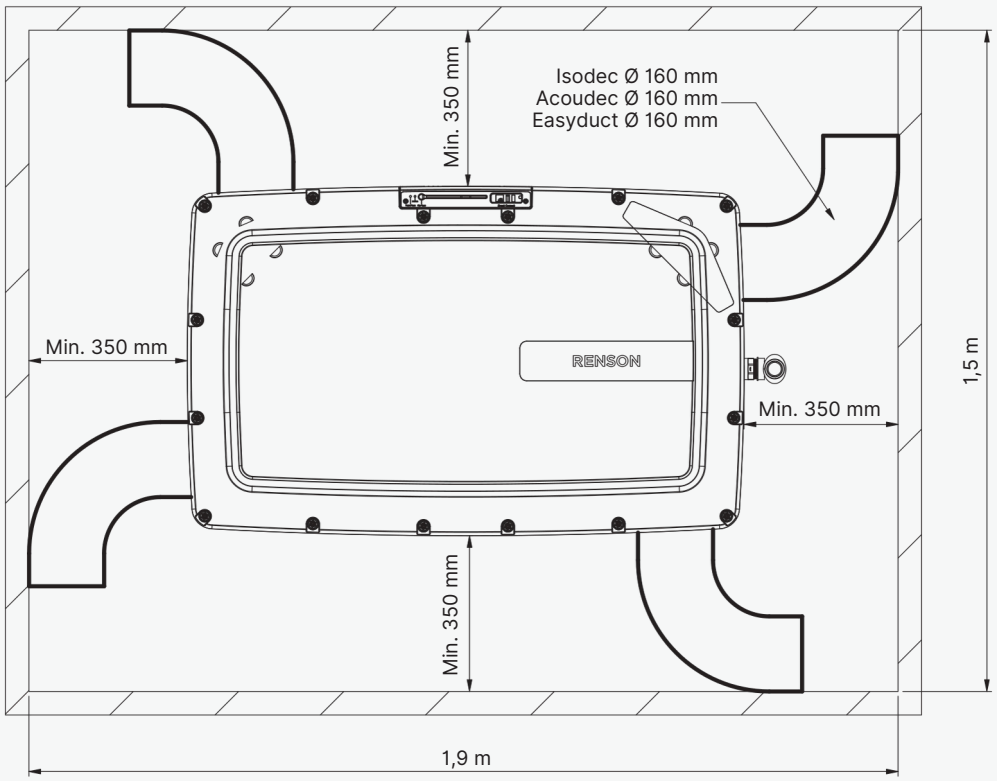


Flux Go 370 Flat						
Flow rate m³/h	Druk Pa	Power W	SFP Wh/m³	Sound power (Lw(A))		
				Pulse (dB(A))	Extraction (dB(A))	cupb (dB(A))
370	200	166	0,45	68,5	56,0	57,5
370	150	142	0,38	68,5	56,0	57,5
370	100	137	0,37	67,5	56,0	57,5
350	200	151	0,43	68,0	55,5	57,5
350	150	130	0,37	67,5	55,0	57,5
350	100	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 dimensions

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



Below you will see some examples of practical set-ups, taking into account the above minimum distances and the Renson recommendation to always provide 1 m Acoudec Ø 160 mm on the supply and extraction side. This way you are assured of a whisper-quiet installation!

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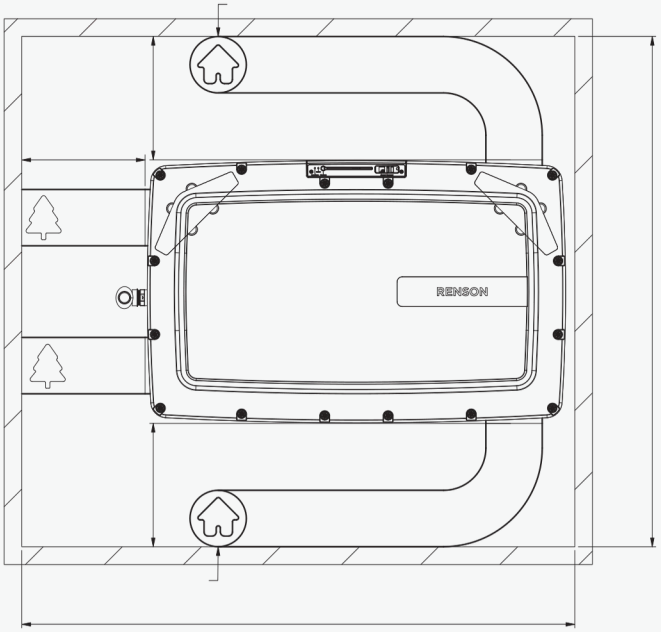
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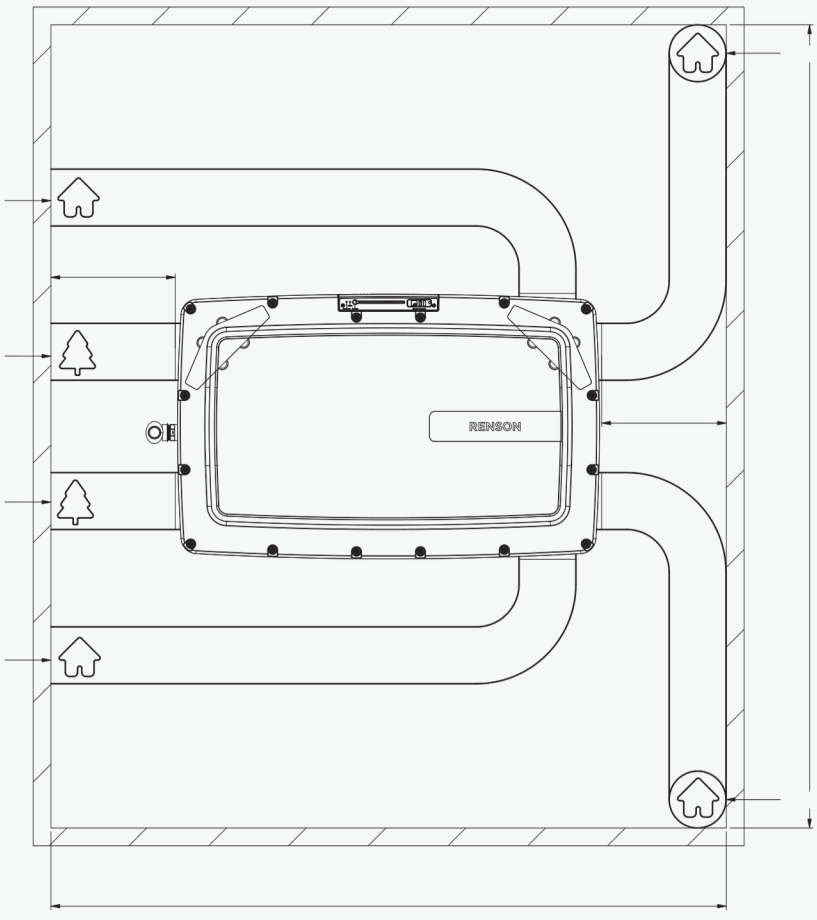
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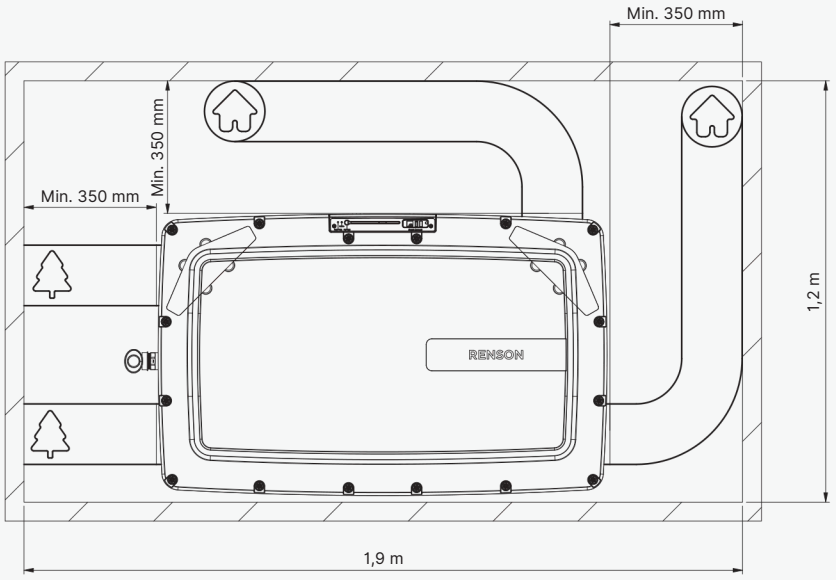
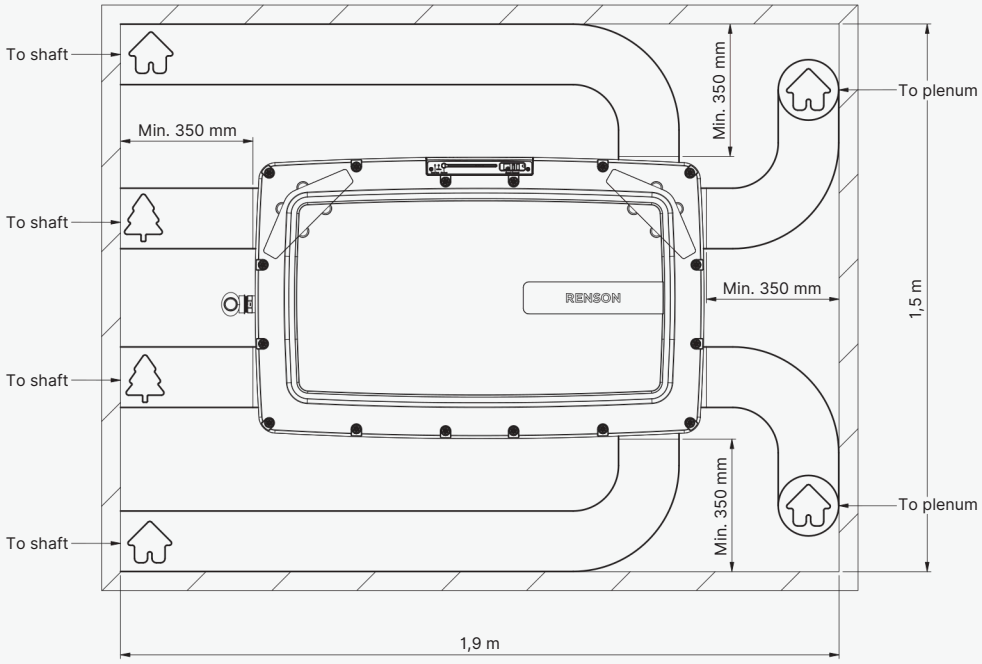
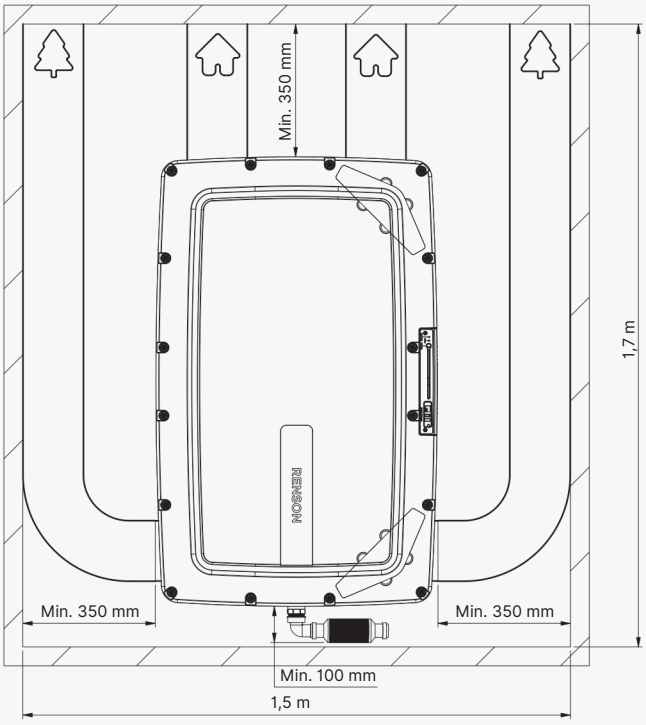
Examples of a ceiling arrangement:





Example of a wall arrangement:

Only vertical installation possible



Technical drawings