***GO 650***  is a central, demand-driven ventilation unit with heat recovery that takes care of the controlled extraction and supply of air in residential applications. The central demand control adjusts the flow rate automatically using continuous measurements of the moisture, CO₂ and VOC content of the extracted indoor air. The maximum nominal volume is 650 m³/h per unit, guaranteed up to 200Pa back pressure.

Optimal operation of the energy-saving ventilation system D+ is guaranteed when the following coordinated components are present:

Supply and extraction:

Flux+ Wall unit: Motor unit with central fan

Ventilation ducts: Easyflex – best airtightness class: D – material PE

Valves: Renson® Aeroo

Supply: Renson® roof/façade duct

Extraction: Renson® roof/façade duct

Throughput: 25 m³/h at 2 Pa – 50 m³/h at 2 Pa (to kitchen)

**EPB – VALUES**

**Product** Flux+ Wall 650

**Maximum flow rate** 650 m³/h @ 200 Pa

**Max. power (P)elec, fan**   2 x 135 W

**Performance ht,EPB**              ≤450m³/h 🡪 84%

*(conforms to EN13141-7)* ≤550 m³/h 🡪 82%

≤600m³/h 🡪 81%

≤650m³/h 🡪 80%

**Demand control reduction factors**

freduc,vent,heat: 0.93

freduc, vent, cool:         1.00

freduc, vent, overheat:     1.00

**Sound level:** 53.5 dB(A) (Cabinet appearance: 70% Qvmax/50 Pa)

**Control strategy:**  Speed control and variable pressure

**Speed control type:** DC motor with commutation control

**Automatic control:** Yes

**Summer bypass:** Yes, Full  
**Demand control bypass:** Yes (Breeze function)

Optional: local CO₂ control using ***wireless*** RF room sensors,

available in 3 different configurations. The reduction factor improves freduc,vent,heat

correspondingly:

* Config 0.87: 0.87
* Config 0.70: 0.70
* Config 0.61: 0.61

Optional: 2-zone control using smartzone kit for Flux+ Wall. Add two valves to the supply side of the installation. Combined with 2 or more room sensors:

* Config 0.53: 0.53
* Config 0.49: 0.49

**DEMAND-DRIVEN & CONNECTED**

**Automatic & standard central demand-driven control and extraction**

Electronic sensors measure the air quality in the exhaust air flow 24/7. The sensors are placed on the connection print via a plug & play connector to facilitate maintenance/replacement. The changing air discharge rate depends on the centrally measured air quality, which in turn is based on the following sensors:

* + Dynamic & absolute humidity detection: dynamic and proportional control taking the relative and absolute humidity into account
  + Absolute CO₂ detection: proportional control taking the CO₂ level into account
  + Dynamic VOC detection: dynamic control taking the VOC level into account

**Connected as standard:**

* Connection via Ethernet (RJ45 connector) for a wired internet connection
* Wi-Fi dongle included for a wireless Wi-Fi connection to a router
* Automatic software updates over the network
* The Flux+ Wall is equipped with “remote access”. This means error messages and specific data can be consulted remotely. Any adjustments can be made without being on site.

**Digital communication**

Communication with the resident user via the Renson Ventilation App:

* + - Insight into the air quality and ventilation level in the home, shown with a clear colour representation
    - Control: possibility of (temporary) manual adjustment of the ventilation flow rate and setting of ventilation profiles – inside and outside the local network
    - Push notifications on smartphone for error & filter notification

Communication with the installer: via the Renson Ventilation Set-up App & installer web portal

* + - Installer web portal for project preparation, planning & service follow-up. Also collects all necessary data for the creation of a ventilation report that can be sent digitally
    - The Set-up app supports the installer through the installation process: retrieval of project parameters prepared in the installer portal, system calibration, display of installation parameters and insertion of measurement results for the automatic creation of the measurement report in the installer portal.
    - As an extension to the above: Aeroo coupling. The app will display the positions to which the Renson Aeroo valve can be set during system calibration. This means smoother calibration and more robust installation.

**External input/output**

Communication with Smart Home/home automation/building management system via:

* 3x digital inputs & outputs for ventilation position control or feedback of general error messages and filter messages

**FLEXIBLE & EASY MAINTENANCE**

**Installation:**

* + Wall: bracket with easy levelling (The appliance can be easily adjusted from the front so that it hangs perfectly level.)
  + Floor: free-standing plinth

**Dimensions:**  870 x 790 x 580 mm (H x B x D)

**Weight**: 32kg

Including bracket with easy levelling

Flexible connection options with double connection option per quadrant thanks to the internal plenum

Standard left-hand version, can be converted to right-hand version by software

Polypropylene connections D200 mm with UPVC seal:

* + - Easyduct ducts: inner diameter 200 mm with sleeve
    - Ducts with an inner diameter of 180mm can also be coupled directly to the ventilation system

**PERFORMANCE**

Integrated UPVC cross-flow heat exchanger

Automatic constant flow control:

* + 2 motors in polypropylene fibre glass 40% (PP-GF40); connection voltage 1 x 230V/50-60Hz
  + Fan control: active constant flow control

Automatic modulating full **bypass**

**Breeze** function:

* + Passive cooling via temporary nominal ventilation (= deactivating demand control). This is good for times when cooling is always required.

**Automatic** **frost protection**

* Temporary imbalance and flow limitation to prevent freezing of the heat exchanger

As standard equipped with 2 x ISO Coarse 65% (G4) filters, ISO ePM1 ≥ 55% (F7) optional, ISO ePM1 80% (F9) optional or Coarse 65% with activated carbon (G4 + act. Carbon) optional (according to ISO16890)

Integrated condensation drain with male connection 32 mm

Appliance airtightness class: internal class A1, external class A1 (according to EN13141-7)

**SPI**: 0.21 W/(m³/h)

**ACCESSORIES**

**Room sensors**: possibility of local CO2 control using wireless RF room sensors

* Recessed head box, including 230 V converter
* Including basic control of the ventilation unit & filter message

Reduction factor configurations:

**Config 0.87**  CO2 – semi-local: one or more sensors in the main living room and one or more sensors in the main bedroom

**Config 0.70** CO2 – semi-local: one or more sensors in each bedroom

**Config 0.61** CO2 – local: one or more sensors in each dry room

**Config 0.53** Smartzone kit (day & night valve) **+** CO2 – semi-local: one or more sensors in the main living room and one or more sensors in the main bedroom

**Config 0.49** Smartzone kit (day & night valve) +CO₂ – local: one or more sensors in each dry room

**Control:** via potential-free (wired) 3-position switch (XVK3)