Flow
MANHATTAN®

A revolutionary decentralised HRV installed "under the skin" in the exterior cladding

FlowMANHATTAN reinvents decentralised ventilation for individual rooms offering a solution to designers and builders **in which the HRV unit is camouflag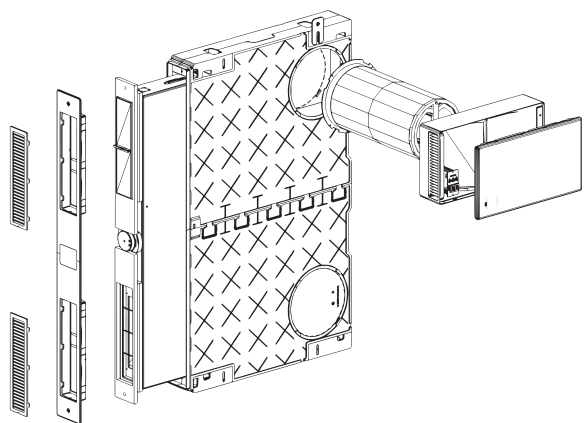ed in the external cladding layer.** The airflow grills, which are arranged on the side of the window, respect the architectural profile of the building **and avoid any impact on the facade. The internal impact is also minimal** with a particularly compact diffuser design. The intake and extraction airflows, separated by a special septum, pass through a **single 160-mm coring hole.** The formwork, which is fixed to the external masonry when the exterior cladding is installed, makes it possible to prepare for **HRV system** installation and complete it at a later stage with the ventilation unit if required. The dual–flow HRV unit extracts stale air from the indoor environment and introduces **new, oxygenated and clean air through special ePM2.5 65% filters** as standard. Ventilation speeds are variable as required with **maximum airflow rate of 70 m³/h.** The enthalpy heat exchanger allows **recovery of up to 70% of the heat in the extracted air by pre–heating the fresh airflow.**

Standard, Plus, Elite versions and control from the app

The most equipped versions integrate a **hygrometric sensor, CO_2 and VOC** sensors on board the HRV unit to monitor indoor air quality parameters, as well as a removable control panel and the possibility of **remote control** via the Helty Home app.

Patented
IT202000022837

Sensors for automatic humidity, CO_2 and VOC management

Remote panel for controlling the unit and setting functions.

It is easy to control it from anywhere in the room using the included infrared remote control.

70% Heat recovery efficiency

16.5dB(A) Sound pressure

70m³/h Maximum airflow

ISO ePM2.5 65% Intake air filtration

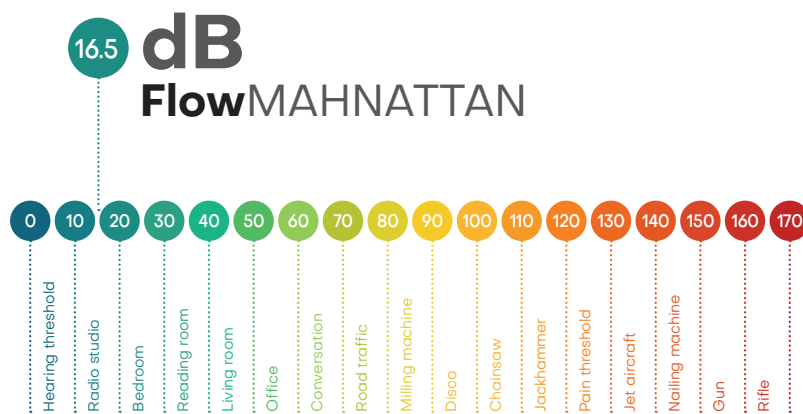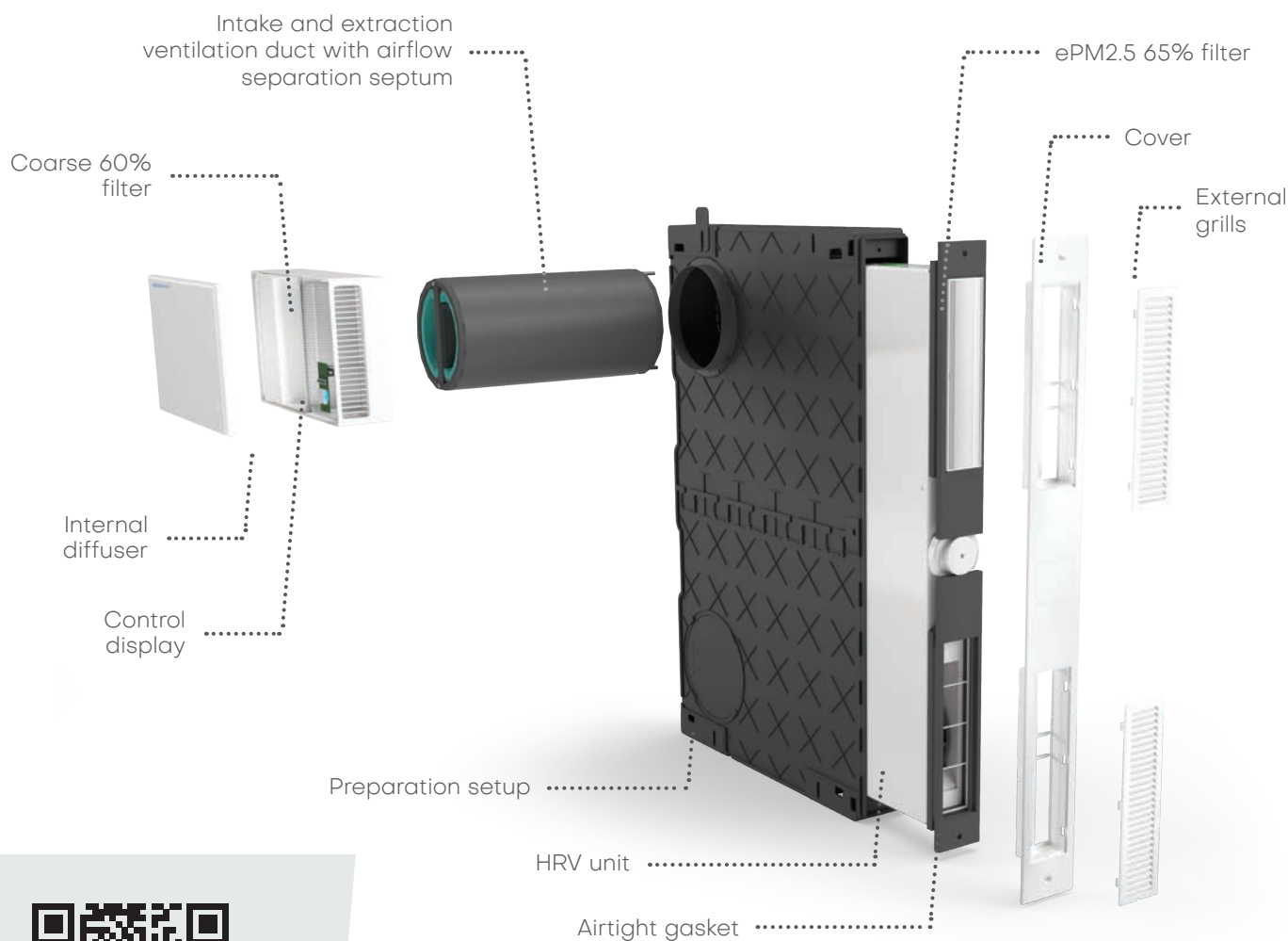**-35.4**kWh/m²a SEC energy consumption (temperate climate)

Classe Energetica **A**

Installation totally from the outside while installing the exterior cladding.

A completely external solution, which has minimal impact on the design of the house and guarantees the highest levels of acoustic comfort

16.5 dB
FlowMANHATTAN

0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170

Hearing threshold
Radio studio
Bedroom
Reading room
Living room
Office
Conversation
Road traffic
Milling machine
Disco
Chainsaw
Jackhammer
Pain threshold
Jet aircraft
Nailing machine
Gun
Rifle

By placing the HRV unit in the outer edge of the masonry, inside the insulating cladding, Helty Flow MANHATTAN ensures **a sound performance that provides optimal acoustic comfort,** with a sound pressure of 16.5 dB at minimum speed.

Intake and extraction ventilation duct with airflow separation septum

ePM2.5 65% filter

Coarse 60% filter

Cover

External grills

Internal diffuser

Control display

Preparation setup

HRV unit

Airtight gasket

Frame the QR Code and watch the video on FlowMANHATTAN

Technical data

Functions and features	UOM	FlowMAHNATTAN					
Version		LH STD	RH STD	LH Pure	RH Pure	LH Elite	RH Elite
Night function		●	●	●	●	●	●
Hyperventilation		●	●	●	●	●	●
Filter replacement alert		●	●	●	●	●	●
Humidity sensor		–	–	●	●	●	●
CO_2 and VOC sensor		–	–	–	–	●	●
IR remote control		●	●	●	●	●	●
Control panel Removable STD		optional	optional	optional	optional	optional	optional
Control panel Removable cloud		optional	optional	optional	optional	optional	optional
On/Off LED panel		●	●	●	●	●	●
Helty Home app [1]		optional	optional	optional	optional	optional	optional
Control Panel		on–board					
Airflow rate	m³/h	20/25/30/40/50/70[2]					
Flow adjustment		night + 4 stages + hyperventilation					
Power consumption	W	5/6/7/9.5/13/34[2]					
Supply voltage	V AC	230					
Max. current consumption [3]	A	035					
Weight	kg	7					
HRV unit dimensions (W x H x D)	mm	460 x 740 x 65					
Preparation setup dimensions (W x H x D)	mm	512 x 826 x 88					
Internal diffuser dimensions (W x H x D)	mm	325 x 185 x 85					
Heat exchanger		enthalpy with cross–flow countercurrent					
Heat recovery efficiency	%	70					
Bypass (free cooling/free heating)		manual electronic					
Sound power level [4]	dB(A)	28/31/36/43/48/56[2]					
Sound pressure [5]	dB(A)	16.5/19.5/24.5/31.5/36.5/44.5[2]					
Dn,e,w (facade noise abatement)	dB	51					
Intake filter		ISO ePM2.5 65%					
Extraction filter		ISO Coarse 60%					
Modbus RTU rs485		Yes [6]					
Reference climate		cold / temperate / warm					
Energy efficiency class (cold / temperate / hot)		A+ / A / E					
SEC (cold / temperate / warm)	kWh/m²a	–67.7 / –35.4 / –14.3					
Internal leakage [7]	%	1					
External leakage [7]	%	1					
Kit		installation manual, HRV filter, airtight gaskets, IR remote control with batteries					
Code		**1VMC05004**	**1VMC05000**	**1VMC05005**	**1VMC05002**	**1VMC05006**	**1VMC05003**

1. Including remote Cloud control panel
2. In hyperventilation mode
3. With 230 V AC supply voltage
4. According to UNI 3744:2010
5. Measured in a 30 m² semi–anechoic environment at a distance of 3 m
6. The Cloud control panel functions are lost
7. In accordance with EN 13141–8:2014–09

Accessories and spare parts

Article	Type	Code
FlowMANHATTAN template	Accessories	**1VMC06001**
FlowMANHATTAN external cover	Accessories	**1VMC06002**
FlowMANHATTAN preparation setup	Preparation setups	**1VMC06000**
Internal hole cover rosette Ø160 mm	Accessories	**1VMC06003**
Internal diffuser	Accessories	**1VMC06005B**
Empty internal diffuser	Accessories	**1VMC06004**
Tube + 150 mm	Accessories	**1VMC06007**
IR remote control	Accessories	**4VMC00000900**
STD flush–mounted control panel + 5 m cable	Accessories	**1VMC06006**
Cloud recessed control panel + 5 m cable	Accessories	**1VMC06011**
External control panel box 503	Accessories	**1VMC99078**
CO_2 monitor [1]	Accessories	**4VMC00000902**
IAQ monitor [1]	Accessories	**4VMC00000903**
ePM2.5 65% + Coarse 60% x10 filter	Filters	**1VMC06009**
ePM2.5 65% + Coarse 60% x30 filter	Filters	**1VMC06010**

1. Cloud Control Panel required

Dimensional drawings