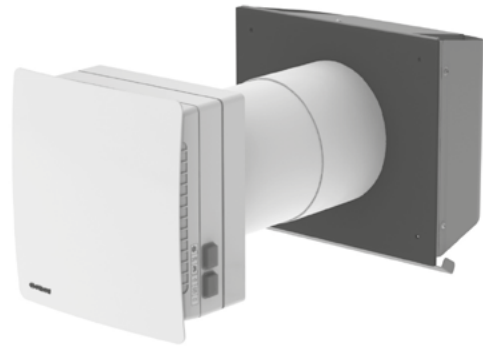


## INSTALLATION GUIDE

### SINGLE-ROOM REVERSIBLE ENERGY RECOVERY VENTILATOR TWINFRESH COMFO: RA1-50-2



## INSTALLATION

### Tools required



Pencil



Drill  $\varnothing 6$  mm (1/4"), 40 mm (1 9/16")



Screwdriver



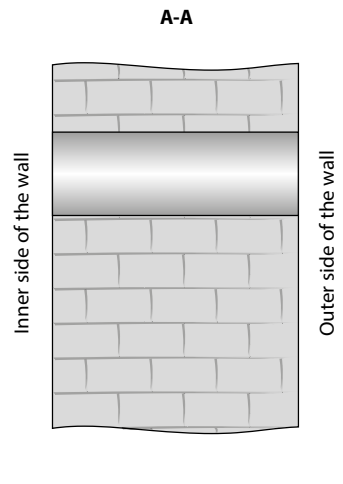
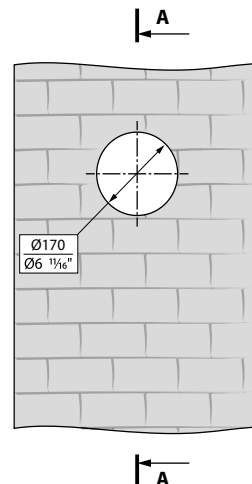
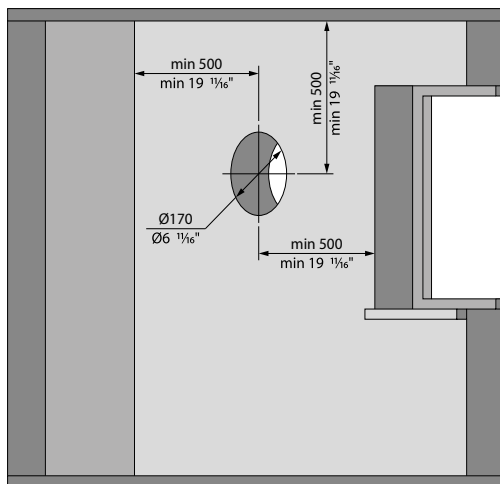
Dowel  $\varnothing 6$  mm (1/4"), 40 mm (1 9/16")  
4 pcs.



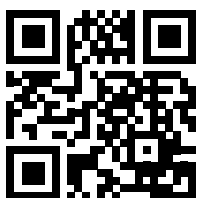
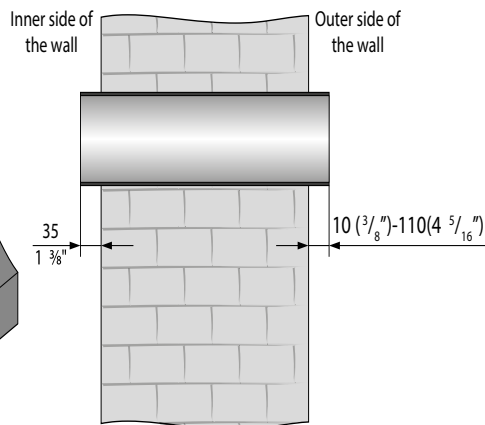
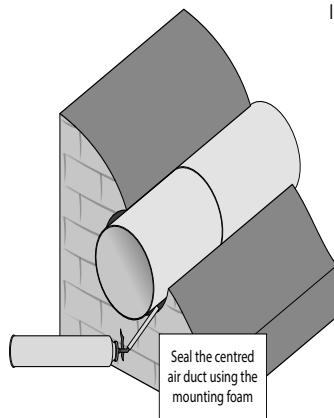
Screws  $\varnothing 6$  mm (1/4"), 40 mm (1 9/16")  
4 pcs.

## MOUNTING

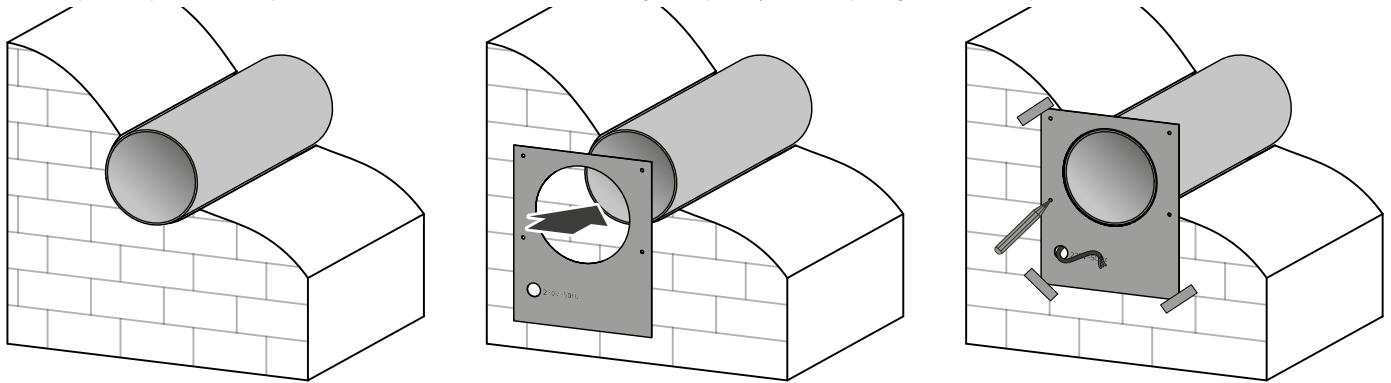
1. Prepare a round core hole in the outer wall. The hole size is shown in the figure below. While preparing a core hole it is recommended to make preparations for layout of the power cable and other required cables.



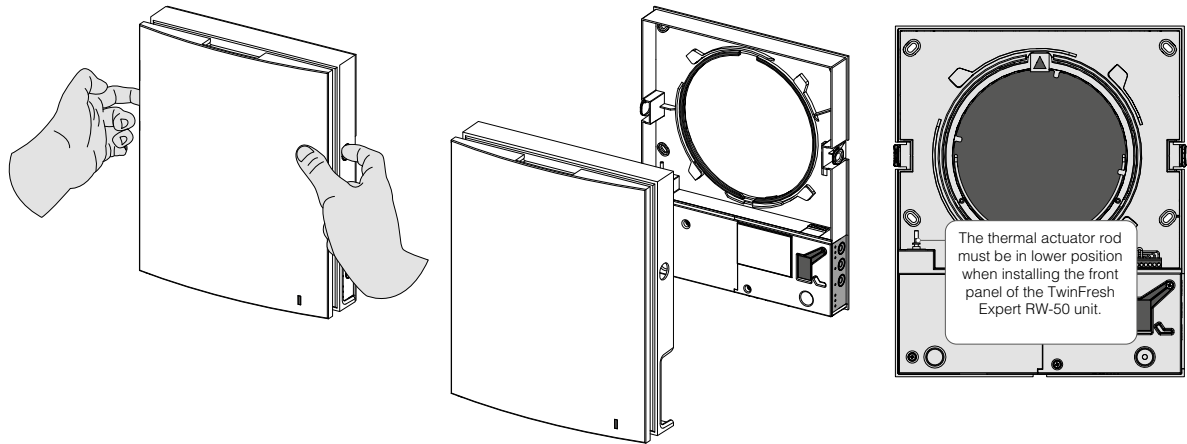
2. Install the telescopic air duct inside the wall. centre the air duct using the mounting plate and seal it with mounting foam.



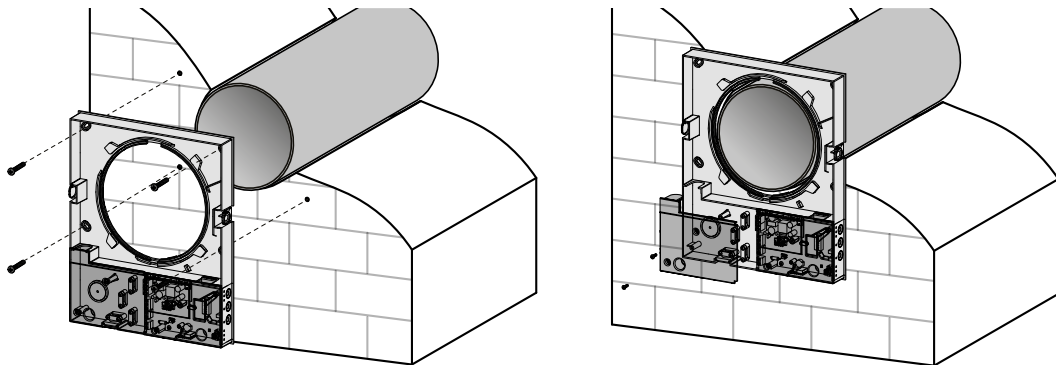
3. Stick the delivered cardboard master plate on the indoor wall using a mounting tape. The large opening in the master plate must be axially aligned with the air duct. For aligning of the master plate with respect to the horizon line it is recommended to use a builder's level. Then mark the fastening holes for installation of the supplied dowels and drill the holes to a required depth. Route the power cable from the ventilator outside through the specially marked opening on the master plate.



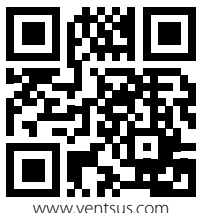
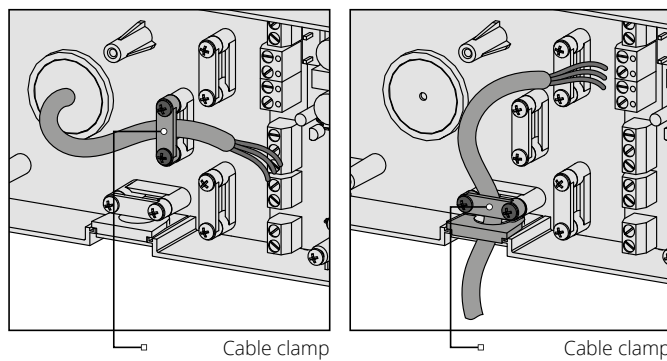
4. Press the side latches to detach the front part of the indoor unit from its back part.



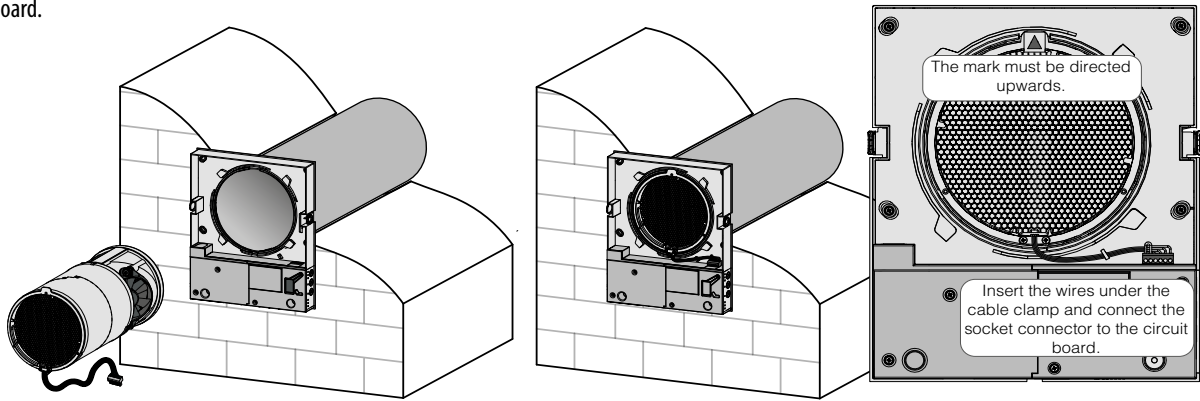
5. Fix the back part of the indoor unit on the wall with the screws supplied with the mounting kit of the ventilator. Remove the two retaining screws from the left transparent cover to enable access to the terminals.



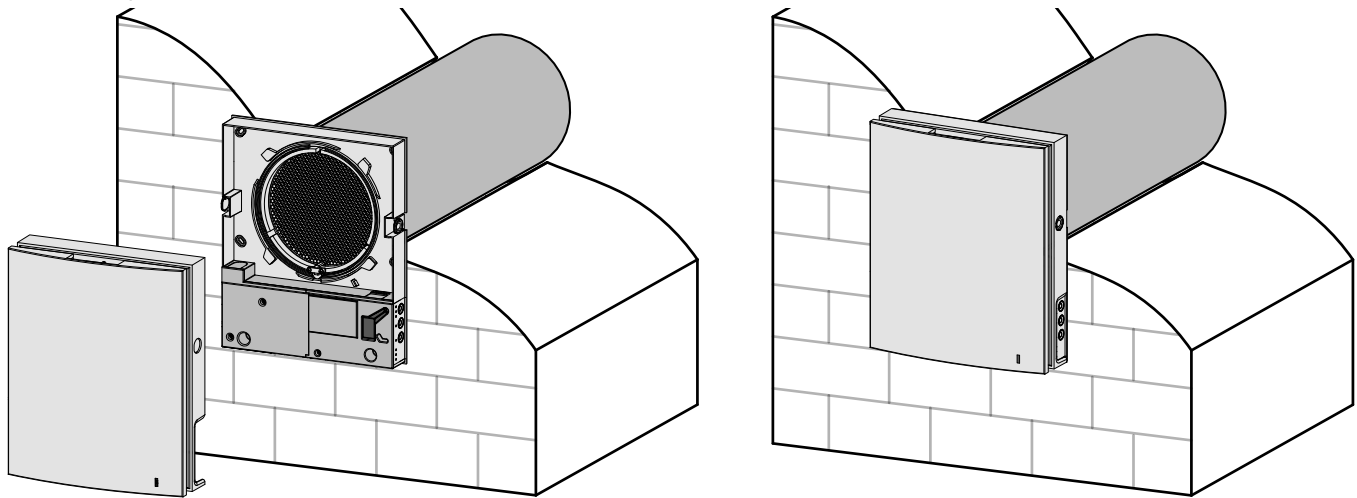
6. Route the power cable as figured below and connect the ventilator to power mains in compliance with the external wiring diagram, see page 12. Fix the power cable and the signal cables with a cable clamp. After completion of the electrical connection re-install the transparent cover in site.



7. Insert the cartridge into the air duct as figured below. Be sure the pointer is directed upwards. Then fix the wire with the protruding clamp and connect the socket connector to the circuit board.



8. Install the front part of the indoor unit.

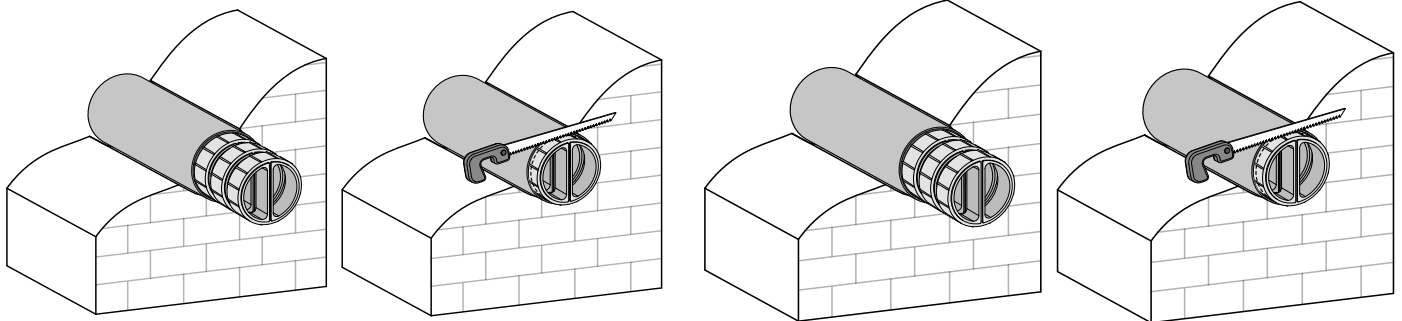


TwinFresh Expert RA1-50

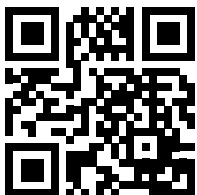
TwinFresh Expert Duo RA1-30

9. Insert the sound absorbing layer into the air duct from the outside. Roll the layer of the sound absorbing material to match the air duct diameter. The protecting paper layer must be outside. Insert the sound absorbing roll into the cartridge against stop. Make a mark at the end of the air duct, remove the material and cut the roll as marked. Insert the ready sound absorbing roll into the air duct.

9. Install the sectional air flow separators from the outside. Install a required quantity of the air flow separators in the air duct until it bumps up the cartridge. Mark the last air flow separator to be flush with the air duct face, remove it from the air duct and cut the excessive part of the last air flow separator. Tighter fixation is provided if the air flow separator protrudes to some distance. Install the adjusted air flow separators to the air duct.



10. Install the outer ventilation hood. The mounting sequence of the outer ventilation hood is described in the installation instruction for the ventilation hood.



### CONNECTION TO POWER MAINS AND CONTROL

DISCONNECT THE VENTILATION FROM POWER MAINS PRIOR TO ANY ELECTRIC INSTALLATION OPERATIONS.

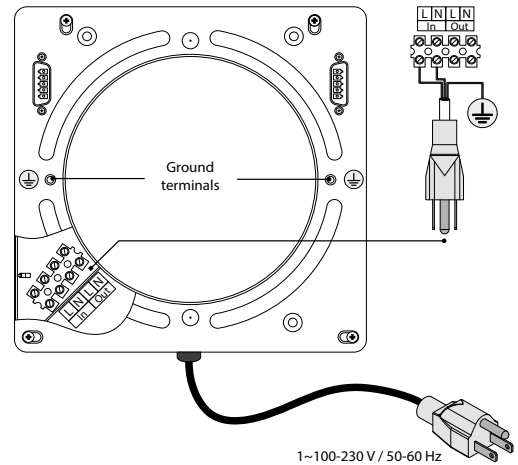
CONNECTION OF THE UNIT TO POWER IS ALLOWED BY A QUALIFIED ELECTRICIAN WITH A WORK PERMIT FOR THE ELECTRIC UNITS UP TO 1000 V AFTER CAREFUL READING OF THE PRESENT USERS MANUAL.

THE RATED ELECTRICAL PARAMETERS OF THE UNIT ARE GIVEN ON THE MANUFACTURER'S LABEL.

ANY TAMPERING WITH THE INTERNAL CONNECTIONS IS PROHIBITED AND WILL VOID THE WARRANTY.

The ventilator is rated for connection to single-phase AC 1 ~ V/ 50-60 Hz .For this purpose the power cable with a plug is connected by the manufacturer.

Connect the ventilator to power mains through the external automatic circuit breaker with a magnetic tri integrated into the fixed wiring system.

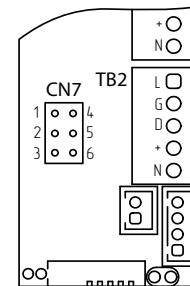


### VENTILATION MODE SETTING

The jumper between the contacts 1 and 2 or 2 and 3 of CN7 socket connector determines air flow direction in Ventilation mode. The circuit board of the controller is located inside the ventilation unit.

- If the jumper connects the 1 and 2, air is extracted from the room in the Ventilation mode (factory setting).
- If the jumper connects 2 and 3, air is supplied in the Ventilation mode.

Ventilator controller



### CONNECTION OF SEVERAL VENTILATORS IN SERIES

When the ventilators are connected in series, all the connected are controlled with the first ventilator and a remote control. To connect the ventilators in series to the wiring diagram below. Connect the second ventilator with the third ventilator in the same way, ect. Up to 10 ventilators may be connected in series.

For easy electric installations use a 3G AWG18 (3G 1,0) cable and a 2xAWG23 (2x0,25) cable (not included in the delivery set). The cable must be rated for operation in an alternating current power supply with the country-specific mains voltage.

Disconnect the power cable while connecting the second, third, etc. ventilator in series.

### CONNECTION OF SEVERAL VENTILATORS IN SERIES (BACKSIDE VIEW, THE TERMINAL BLOCK IS SHOWN SCHEMATICALLY)

