

Installation Instructions: LUNOS e2 and e2 short with 5/UNI No.:39975 Controller

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About this manual

- Read this manual carefully and completely before assembly. Comply with the general safety instructions and the safety symbols with information in the text.
- Hand out this manual to the user (tenant, proprietors, property management etc.) after completing assembly.

Symbols in this manual



This symbol is a danger warning in connection with risk of injury



This symbol is a danger warning in connection with risk of injury from electricity

Safety instructions



Beware! Any assembly work to the ventilation device may only be carried out after disconnecting all phases of supply currents! The ventilation device is fitted with protective insulation according to Protection Class II, the protection connection is superfluous!



Attention! The electric connection may only be made by authorised qualified electricians according to the local building codes.



Attention! This device may not be operated by children and persons (filter replacement/cleaning) who are not able to operate the device safely due to their psychic, sensory or mental abilities or their inexperience or lack of knowledge. Children should be supervised to ensure that they do not play with the device.

Technical specifications

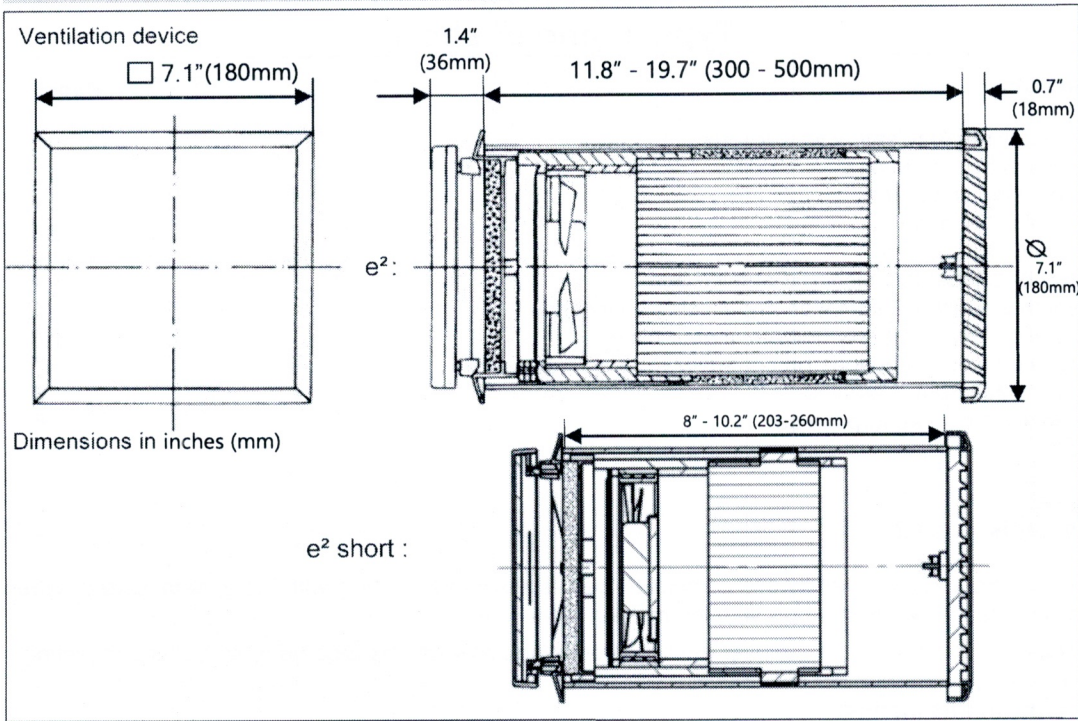
Device voltage:	12 VDC SELV
Type of protection:	IP 22
Volume flow:	10;15;20 CFM or (9CFM-15m ³ /h;18CFM-30m ³ /h,22CFM-38m ³ /h)
Measuring sound pressure level	16,5 dB; 19,5 dB
Sound level difference:	42 dB

Disposal



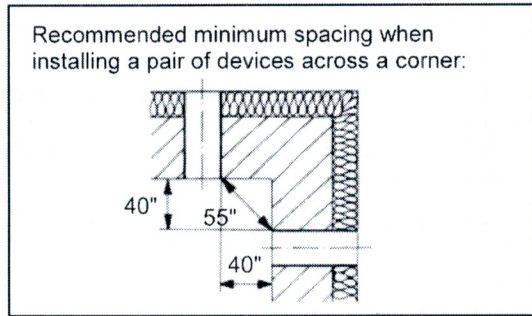
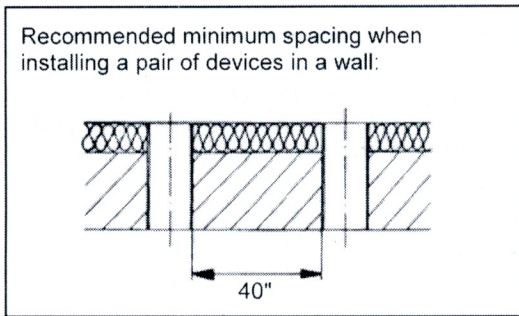
Dispose of the packaging correctly sorted. If you want to dispose of the device, abide by the current rules and regulations. The applicable municipal office will provide information.

Dimensional diagrams All dimensions in inches (mm)



Installation position

Ductless e2 ventilation devices with heat recovery can only function in pairs operating in opposite direction. Each fan operates 70 seconds (50 seconds for e2 short) in supply air operation, the other 70 seconds (50 seconds for e2 short) in exhaust air operation at the corresponding set flow rates. After which both air flows direction are changed. This assures that the total of supplied ventilation volume is equal to the total exhausted volume. If a pair of fans that in this balanced push-pull operation is installed in two different rooms of a dwelling, a sufficiently dimensioned interconnection (under cut door, etc) between the rooms should be installed to allow unrestricted air movement between these spaces. Please see product page at foursevenfive.com for videos.



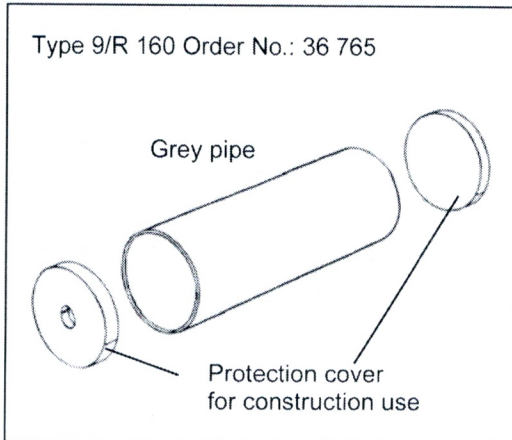
Operating conditions

Rated conditions: 5°F to 104°F (-15°C to +40°C) with relative humidity up to 65%.
 During heating period it is possible for very small amounts of condensate to form on grills if such conditions arise. If these limitation of use are exceeded for extended periods of time, the device can be closed with the indoor cover. Do ensure IAQ is maintained in such cases.

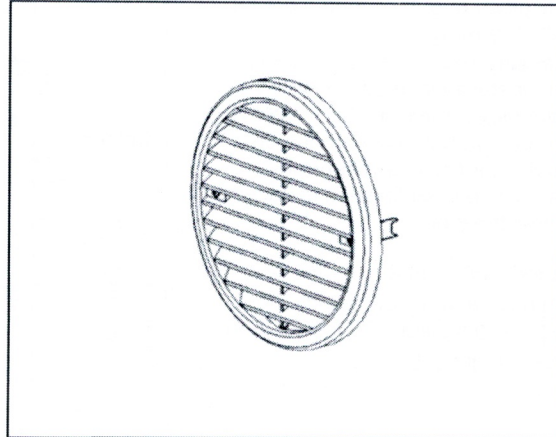
Shipping units

Check the shipment for completeness and note any missing items or damages asap.

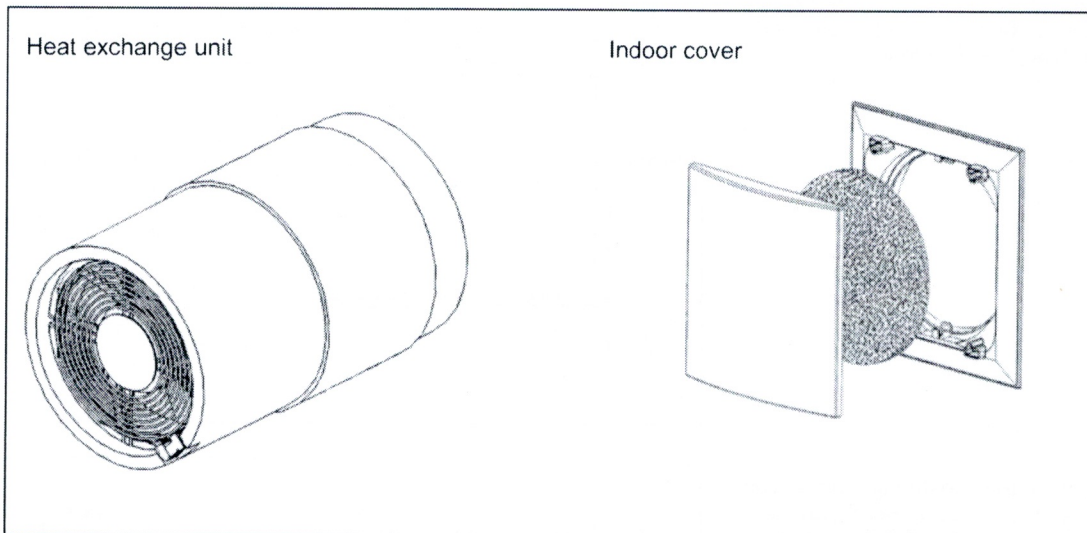
Installation pipe



Outside grill



Heat exchanger unit – Indoor cover



e²:

Installation pipe, exterior white grill, heat exchange unit, indoor cover and installation instructions are supplied as a complete set.

e² short:

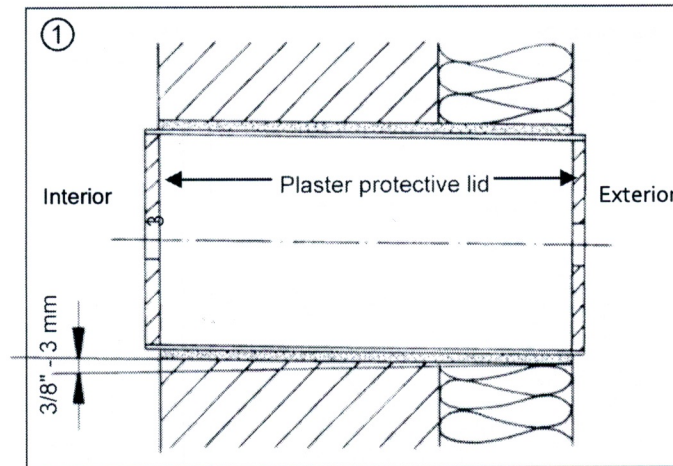
Installation pipe, exterior white grill, heat exchanger unit, indoor cover and installation instructions are supplied as a complete set.

Assembly – Installation pipes

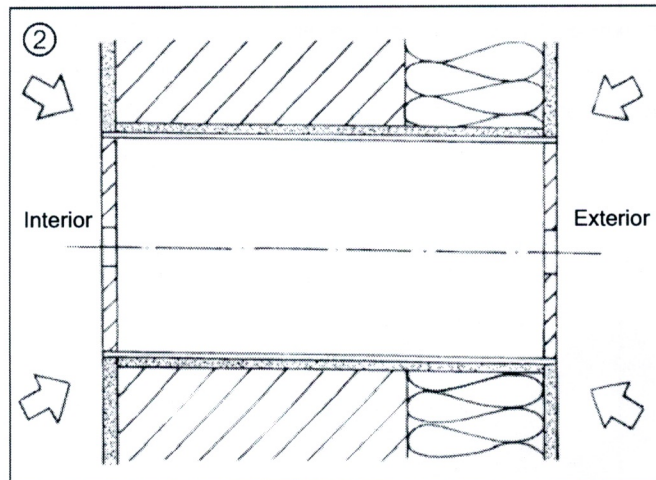
Make the wall openings for the assembly pipes (e.g. by coring, core bit $\text{\O} 6.37"/162 \text{ mm}$).

If necessary shorten the pipe to the desired installation length **e² minimum 11.8"(300 mm); e² short: minimum 8"(200 mm)**. Take care that the pipe extends on both sides for finishes (sheetrock, plaster, siding (with finishes installed flush with the pipe)).

Insert the pipe, with a min. 3/8":12 (3mm) pitch and airseal it with ROFLEX 150 gaskets, TESCON tapes or other airtight solutions.



Apply exterior finishes and waterproofing with ROFLEX/TESCON tape combination or other construction type specific measures.

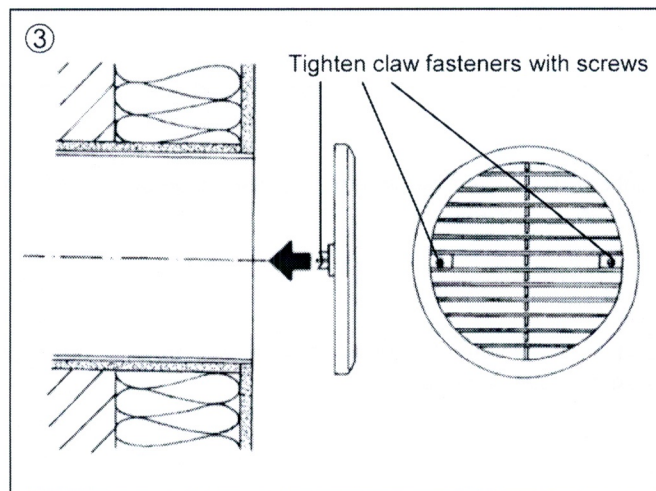


Remove the construction protection lid outdoors. Insert and attach the exterior grill using the integrated claw fasteners (tighten screws).

Make sure the exterior grill is mounted with the louvers directing rain away from the tube.





Exterior grill finishes also available in:

- Stainless Steel
- Grey
- Burgundy
- White



Assembly – electric installation and electric connection

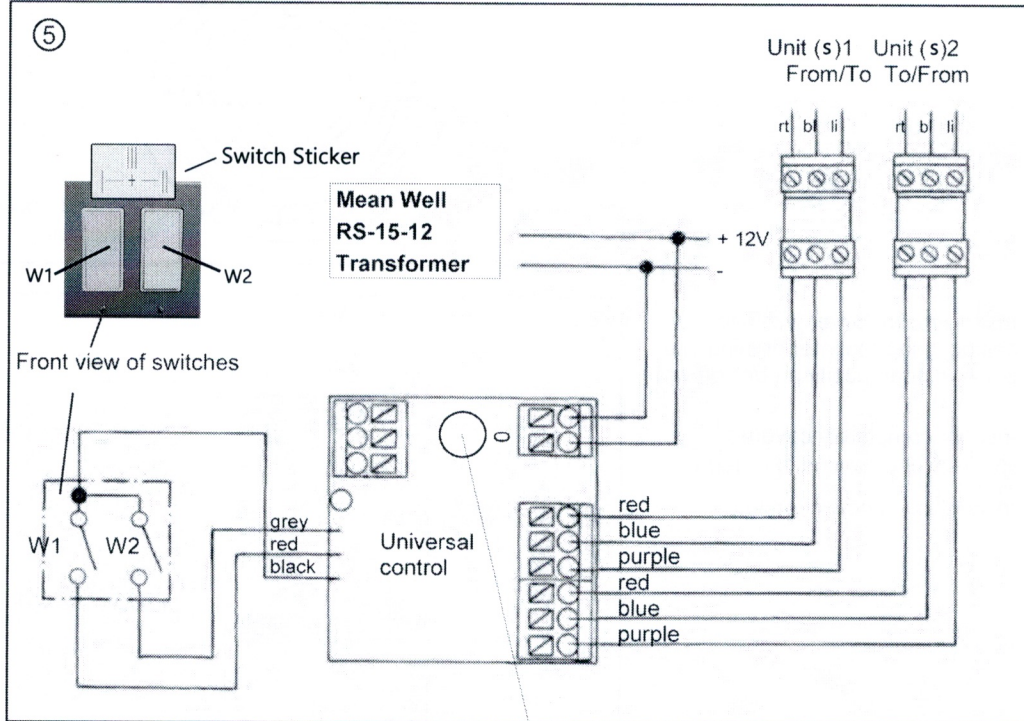
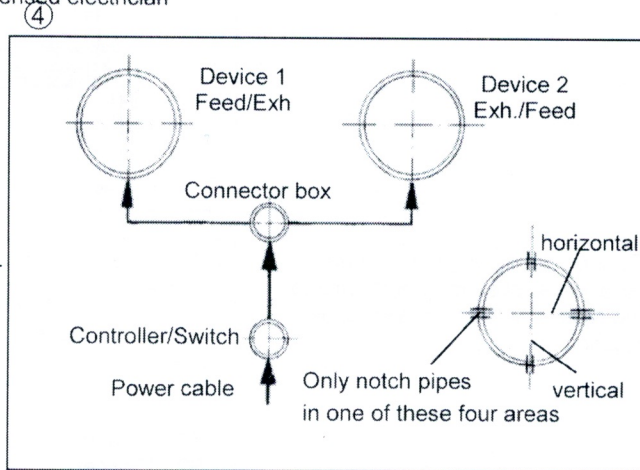
Safety instructions:

-  Beware! Any assembly work to the ventilation device may only be carried out when all of supply current has been disconnected!
-  Make sure that electrical circuits are turned off
-  All controllers of this ventilation system should be installed on a AFCI protected circuit
-  Electric connection only by a licensed electrician

The system is controlled by Universal Control 5/UNI

Select the location for the switch.
Run the wiring (120V + 12V cables to the device pairs).
120V cable (12 or 14 gauge)
12V to each fan (3 x 18 gauge solid-thermostat wire).

Controller is wired and set per diagram below.

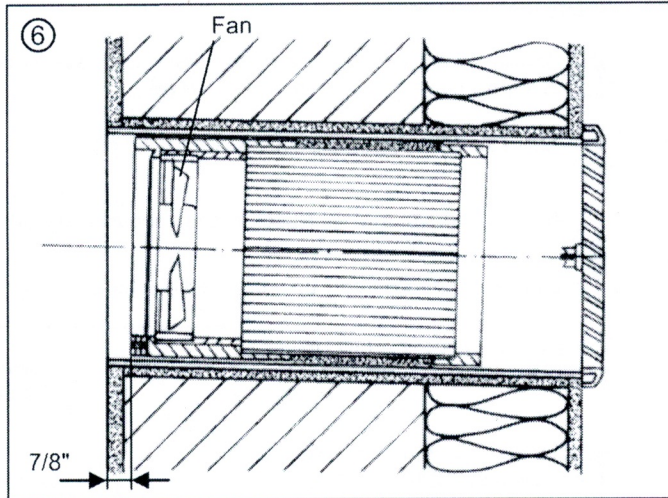


Important! Set coding dial to the functions requested in accordance with the Table on p. 7. Selecting other dial settings leads to malfunctions!

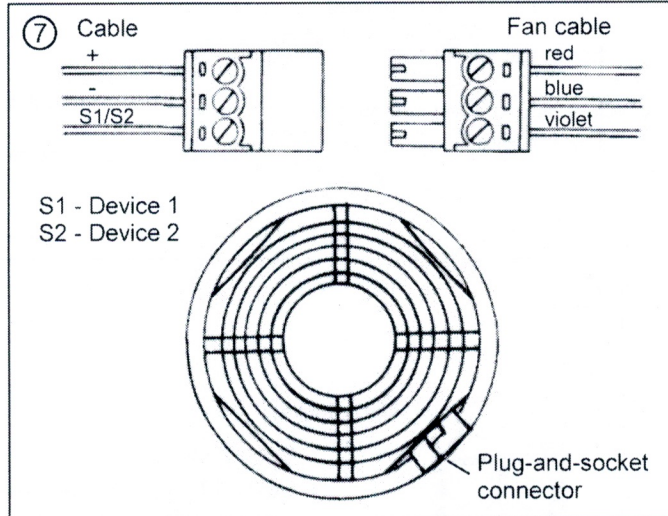
Assembly – Assembly of the ventilation insert and the indoor room cover

Remove interior protection lid cover, insert heat exchanger unit into the installation pipe, ensure there is a 7/8" on int of pipe. Motor/fan faces interior.

The loop on fan unit can be used to pulled unit for maintenance.

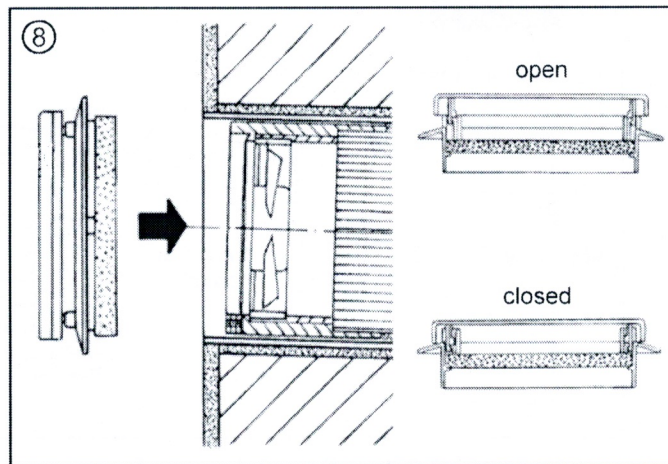


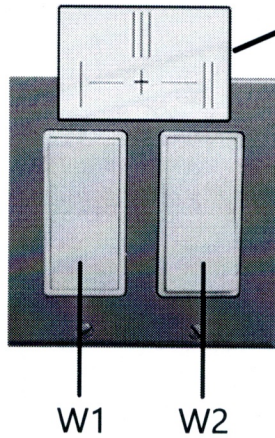
Connect wiring to plug. Connect plug into socket and set them into the recess of the heat exchanger casing.



Insert interior cover with filter casing, snap the interior blind into place in open position (1/4" off wall)

If cover completely covered, lift cover and rotated 180 degrees. Installation is now complete.





For proper operation of the Lunos e2, we recommend a double rocker switch. Apply the provided sticker to the switch plate as shown. The markings on the sticker correspond to the following:

- I = Switch W1 on
- II = Switch W2 on
- III = Both switches on

Selections on controller for flow regulation program

Setting at controller	Device	Function	Switch Position and ventilation volume				Switching W2 on/off within 3 seconds activates
			W 1 - Off	W 1 - On	W 1 - Off	W 1 - On	
			W 2 - Off	W 2 - Off	W 2 - On	W 2 - On	
0	RA 15-60	Off, three flow rates	Off	15 m³/h	30 m³/h	45 m³/h	60 m³/h
1	RA 15-60	Off, three flow rates	Off	15 m³/h	30 m³/h	60 m³/h	
2	RA 15-60	vierstufig	15 m³/h	30 m³/h	45 m³/h	60 m³/h	
3	e²	Off, three flow rates	Off	15 m³/h	30 m³/h	38 m³/h	
4	e²	four flow rates	15 m³/h	20 m³/h	30 m³/h	38 m³/h	Summer vent.
5	e² short	Off, three flowrates	Off	15 m³/h	30 m³/h	38 m³/h	Summer vent.
6	e² USA	Off, three flow rates	Off	10 cfm	15 cfm	20 cfm	Summer vent.
7	e² USA short	Off, three flow rates	Off	10 cfm	15 cfm	20 cfm	Summer vent.
8	e² mini	Off, three flow rates	Off	5 m³/h	10 m³/h	20 m³/h	Summer vent.
9	e ⁹⁰	Off, three flow rates	Off	5 m³/h	10 m³/h	20 m³/h	Summer vent.
A	e ⁹⁰	vierstufig	5 m³/h	10 m³/h	15 m³/h	20 m³/h	Summer vent.
B	e ⁹⁰	three flows rates and exhaust only	5 m³/h	10 m³/h	20 m³/h	45 m³/h (Exhaust)	Summer vent.
C	e ⁹⁰	Off, two flow rates and exhaust only	Off	5 m³/h	10 m³/h	45 m³/h (Exhaust)	Summer vent.
D							
E							
F							

By **switching W1 switch on and off** within 3 seconds, the filter warning light will reset (turn off)

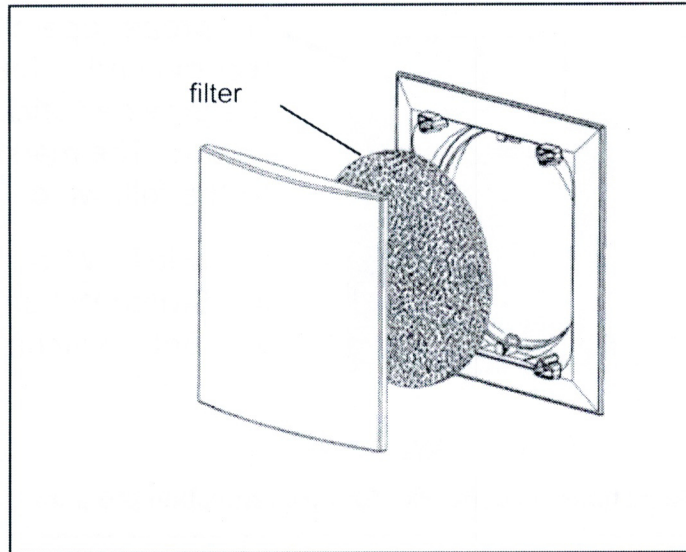
*Summer/night ventilation means fans reverse 1x per hour - to facilitate night time cooling

Filter replacement

LED light will light when filter needs servicing.

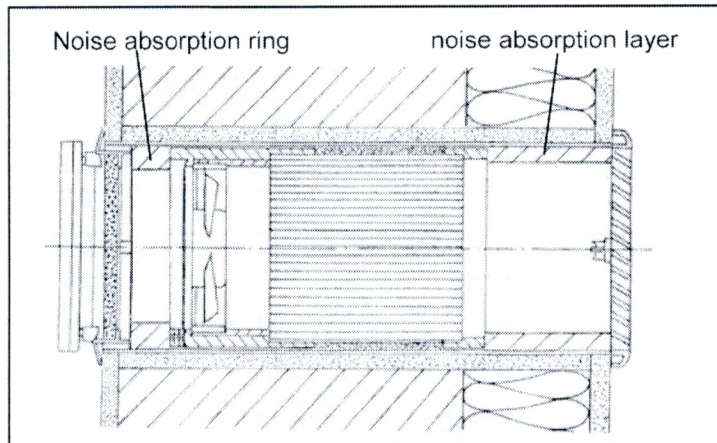
By switching W1 on/off within 3 seconds, the filter warning light will reset (turn off).

Put the indoor closure off, extract the filter, insert new or cleaned filter (the filter cleaning could be done in for example a dishwasher), put the indoor closure back on.



Assembly noise absorption set

Can be used in a installation pipe length of 12" for e² and 9" for e² short. Position noise absorption ring and noise absorption layer as shown. The noise absorption layer can be shortened if necessary.



LUNOS



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LUNOS e² fans are certified to UL 507-2010: Electric Fans 9th Edition