

NA-SRHR-100

Single Room Heat Recovery Fan

Installation and Maintenance

1.0 The Nuair NA-SRHR-100 Single Room Heat Recovery Fan

The fan is suitable for refurbishment or new build in Kitchen, Bathroom and Toilet applications. The fan can be directly installed into existing 100mm fan holes.

The fan will run continuously at a 6l/s trickle extraction rate with an automatic boost to 15l/s when activated by the integral humidistat sensor.

2.0 Where to install the fan

1. In walls 380mm maximum thickness.
2. Locate it as high as possible.
3. At least 100mm from the edges of the mounting surface to sides/top of unit.
4. As far away as possible from and opposite to the main source of air replacement to ensure airflow across the room (e.g. opposite the internal doorway).
5. Near the source of steam or odours.
6. Not where ambient temperatures are likely to exceed 50°C or are below -20°C.
7. If installed in a kitchen fans must not be mounted immediately above a cooker hob, or eye level grill.
8. If installing in a room containing a fuel burning device which has a non-balanced flue, it is the installer's responsibility to ensure that there is enough replacement air to prevent fumes being drawn down the flue when the fan is operating up to maximum extract. Refer to Building Regulations for specific requirements.
9. Exhaust air must not be discharged into a flue used for exhausting of fumes from appliances supplied with energy other than electric. Requirements of all authorities concerned must be observed for exhaust air discharge and intake flow rates.
10. Not suitable for use in possible chemical corrosive atmospheres.
11. Do not site where the fan is exposed to water spray for extended periods.

3.0 What the installer will need

3mm electrician's screwdriver and No.1 or 2 Pozidrive screwdrivers.
A 115mm dia. prepared hole with a slope to the outside, cut with a minimum 115mm dia. core drill.

IMPORTANT

Isolation - Before commencing work make sure that the unit is electrically isolated from the mains supply.

4.0 Fan Installation

Installation should be carried out by competent personnel in accordance with the appropriate authority and conforming to all statutory and governing regulations.

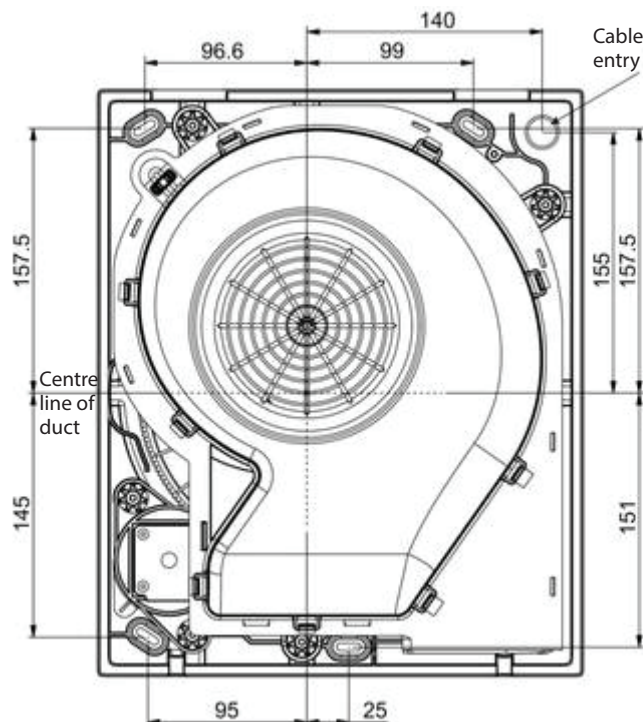
Installing the isolating switch and cable.

- Isolate the mains supply.
- Lay in the cable from the isolating switch to the fan location.
- Lay in the cable from the isolating switch to the point of connection to the mains supply.
- Install the isolating switch and make connections required.

Installing in the wall of maximum thickness 380mm.

- Use the dimensions in fig 1. to mark the wall with the centre of the duct hole, the 4 wall fixing positions and the cable inlet.
- Use the centre line to cut a 115mm dia. hole through the wall for the wall tube using a core drill (if replacing the tube of an existing 100mm dia. fan ensure the wall tube fits without distortion).
- ENSURE THAT THE DUCT SLOPES DOWN, away from the fan at an angle of 3° to allow drainage of any incoming rain water to the outside.
- Drill 4 holes for wall fixings (not supplied), in positions shown and fit wall plugs. (see fig 1.)
- Align the fan in the duct hole and ensure the fan wall box fits flat and flush to the wall.

Figure 1. Wall fixing positions and cable inlet.

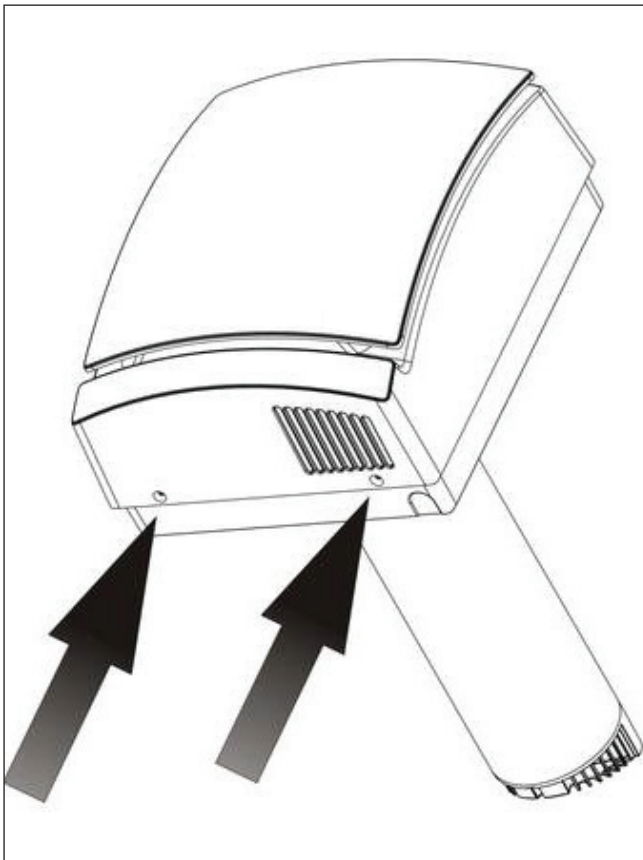


4.0 Installation cont.

Remove the Front Cover / Baffle assembly by removing the two screws on the underside of the cover and lifting off the cover by unhinging from the top of the Wall Box. (see fig 2.)

- Knock out the cable entry hole in the back of the Wall Box and feed the flexible mains cable through.
- Align Wall Tube to hole in wall and present fan to wall square and flat. Secure to wall with four fixing screws (not supplied).
- Make good the hole around the wall tube on the outside wall and seal in place to prevent water ingress.
- Seal the Wall Box to the inner wall.
- Allow to set before continuing the fan installation.

Figure 2. Removing the front cover.



5.0 Wiring

A means for disconnection in all poles must be incorporated in the fixed wiring in accordance with the wiring rules.

IMPORTANT

Isolation - Before commencing work make sure that the unit is electrically isolated from the mains supply.

- The cross-sectional area of the supply cord used should be in the range 1-1.5mm².
- Use the cable grip provided to secure the cable.

See fig 3. for connection position and fig 4. for wiring diagram.

- Re-fit Front Cover / Baffle assembly before connecting the cable from the isolating switch to the electrical supply.

For fixed wiring circuits the protective fuse for the appliance must not exceed 5A.

Figure 3. Connection position.

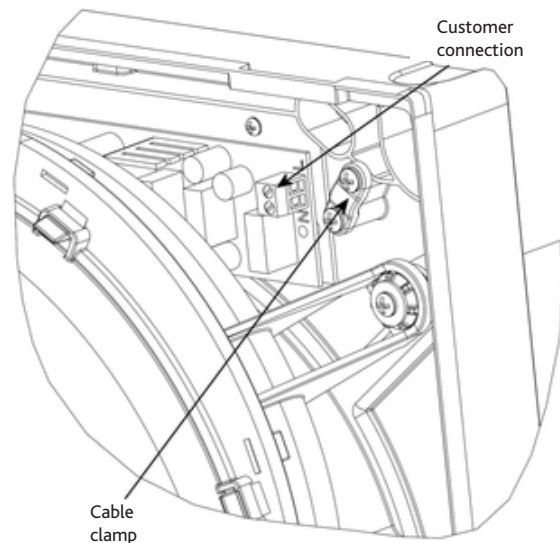
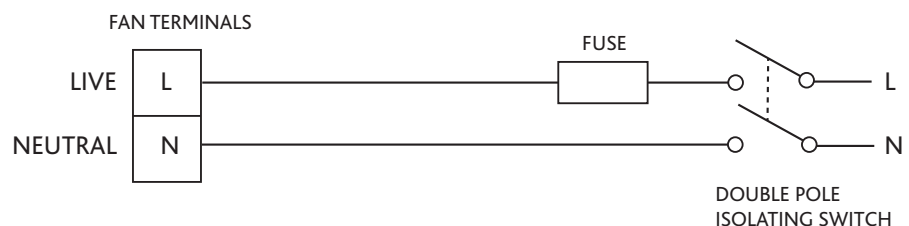


Figure 4. Wiring diagram.

This appliance is intended for connection to fixed wiring. Check that the electrical rating shown on each fan matches the mains supply.

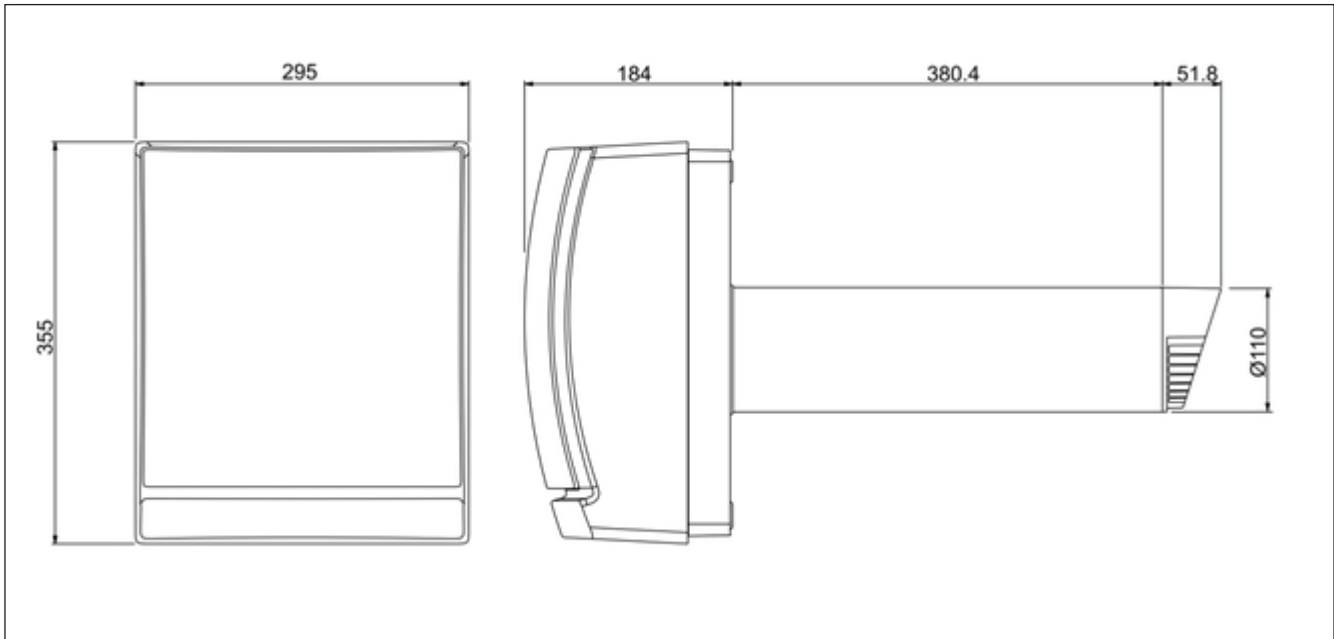
THIS APPLIANCE IS DOUBLE INSULATED AND DOES NOT REQUIRE AN EARTH CONNECTION.

All installations must be supervised by a qualified electrician. Installations and wiring must conform to current IEE Regulations (UK), local or appropriate regulations (other countries).



6.0 Dimensions

Figure 5. Dimensions.



7.0 Using the fan

The fan is fully automatic and has no user adjustments. The fan will run continuously at 6l/s flow rate and will boost to 15l/s when activated by the integral active humidistat. The fan automatically adjusts to slow changes in natural humidity levels without operating the fan. If the humidity levels increase at a rate slower than 5% RH in 5 minutes, the fan will not be triggered by humidity. This is to prevent nuisance triggering of the fan. If humidity levels increase quicker than 5% RH in 5 minutes the fan will operate. When relative humidity drops the fan continues to operate for a fixed time delay.

7.1 Summer by-pass

Should the air temperature within the room exceed 25°C, the heat exchanger will be switched off. The fan will continue to run to provide extraction of stale air but fresh incoming air will not be warmed by the heat exchanger. When the temperature drops below 25°C the heat exchanger will be switched back on and heat recovery will recommence. The humidistat function remains active throughout the summer by-pass period.

7.2 Winter setting

The fan is capable of operating down to -20°C without the need for frost protection. The fan continues to operate to comply with building regulations.

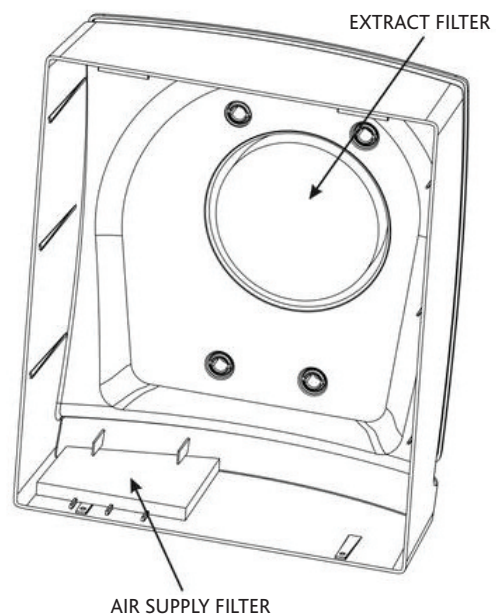
8.0 Maintenance

Cleaning

Before cleaning, isolate the fan completely from the mains supply. Remove the front cover / baffle assembly by removing the two screws on the underside of the cover and lifting off the cover by unhinging from the top of the Wall Box. To clean the cover, either wipe it with a damp, lint free cloth or wash it in warm soapy water. Thoroughly dry the cover and re-fit.

Do not immerse the fan in water or other liquids to clean any other parts of the fan. Never use strong solvents to clean the fan. The Air Supply and Extract filters should be checked regularly and cleaned or replaced when necessary. Filter life is dependent on environmental operating conditions. We recommend filter replacement every 12 months. Should the filters become excessively dirty beforehand they can be removed and shaken clean. (see fig 6) The fly screen filter is designed to prevent insects and large dust particles entering the heat exchanger. Due to the self cleaning nature of the heat exchanger it should not be necessary to replace this filter. The unique triple filtering and self cleaning heat exchanger means no maintenance is required on the heat exchanger matrix. Use only genuine RXG filters.

Figure 6. Filter locations.



9.0 Replacement of Parts

Should any component need replacing Nuair keep extensive stocks for quick delivery. Ensure that the unit is electrically isolated, before carrying out any work. When ordering spare parts, please quote the serial number of the unit and the ARC number of the purchase if possible. (This information will be available on the fan label).

10.0 Warranty

The fan unit has a 2 year warranty which starts from the day of delivery. The motor is covered with a 5 year warranty.

11.0 Service Enquiries

Nuair can assist you in all aspects of service. Our Technical Support department will be happy to provide any assistance required.

**Technical Support Department
on 029 2085 8400**



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Technical or commercial considerations may, from time to time, make it necessary to alter the design, performance and dimensions of equipment and the right is reserved to make such changes without prior notice.