

OPUS 30 & 60

Recessed Mounted ('R' range) Domestic Extract Fans

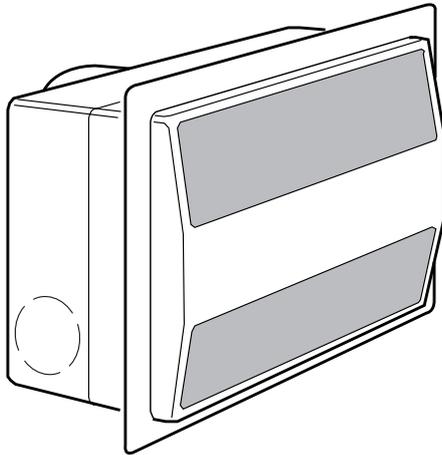


Fig. 1. General view of unit.

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Introduction

The NuAire OPUS 30 & 60 range of recess mounted domestic extract fans is designed to be installed in the area to be ventilated. For example, bathrooms and WC compartments but are ideally suited for stores, drying rooms, cupboards etc.

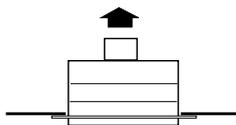
They each discharge air through a 100mm diameter outlet spigot and have provision for adding a 50mm. dia. subsidiary inlet to extract air form a second room.

IMPORTANT WARNING

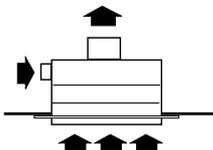
Installation and servicing MUST be carried out by electrically qualified personnel.
The unit MUST BE TOTALLY ISOLATED from the electrical supply before removing covers.
NOTE internal input socket will be exposed and MAY BE LIVE with the fan module removed.
 See 'ISOLATION' notes.

Typical arrangements

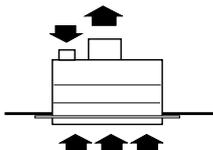
Recessed mounting, wall or ceiling



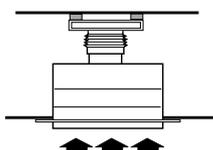
One room extraction



Two room extraction
(with side subsidiary).



Two room extraction
(with rear subsidiary).



Connected to 9' x 1'
flat duct

Units are available with one or two fans and in two duty sizes, 32 l/s and 61 l/s. Inlet is through twin filters located in the front cover of the unit and which can easily be removed for cleaning.

Units can be fitted with a selection of controls which enable them to be linked to light switches, either directly or through run-on circuits.

Coding

- R** Basic unit with single fan.
- RS** Single fan unit incorporating a run on circuit.
- 2RAS** Twin unit incorporating both run-on and fan failure detection/change over circuits.
- RX** Single fan unit providing continuous low duty running with boost when room light is switched on (Opus 30 only).

Installation and Maintenance OPUS (R range)

Installation

- a) An opening should be prepared to accept the fan case plus a clearance of 5 - 10mm which will be necessary to allow for the fixing brackets. Therefore an area 327mm x 245mm will be required. Care must be taken during this operation as an aperture larger than 335mm x 253mm will not be covered by the front panel skirt.

It is assumed that a solid non reverberant mounting position has been selected, and the necessary passages for ductwork, from outlet spigot and to subsidiary inlet spigot (if a second room is to be ventilated) as well as the electrical connection prepared. It is also assumed that compatible ductwork is already installed.

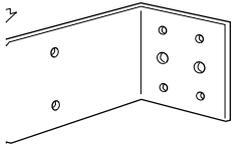


Fig.3. Selecting bracket length.

- b) Mounting brackets are supplied with all OPUS fans but, depending on the type of unit, may need to be shortened. The bracket has a series of notches, one of which is suitable for your unit. Offer up the bracket to the unit (small leg of bracket to back of unit) and note the notches which correspond with the back of the skirt. Using a hacksaw cut the bracket to length. Similarly prepare the two remaining brackets. (Fig. 3).

Attach the three brackets to the large 'Y' shaped plate using the self tapping screws supplied to form a mounting frame. (Fig. 4).

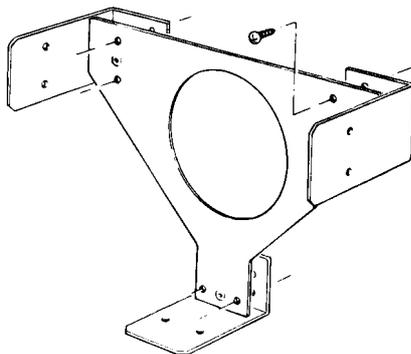


Fig. 4. Mounting frame assembly.

Position the mounting frame in the prepared aperture so that the ends of the three cut brackets are flush with the surface of the wall. Secure the mounting frame with suitable fixings.

- c) Unclip and remove the fan module from the case. Knock out a suitable cable entry hole in the rear face of the case. If a second room is to be served remove the appropriate weakened area from the case, and, working from the inside fit the subsidiary inlet spigot by passing it through the case and turning it one quarter of a turn to lock in position, see fig. 5.

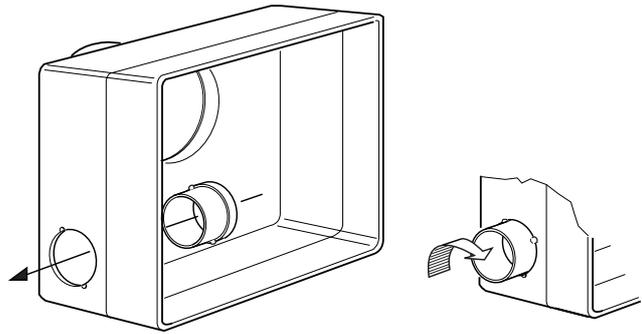


Fig. 5. Fitting a subsidiary spigot (supplied in optional kit)

- d) Offer up the casing to the mounting frame feeding the supply cable through the entry hole. Engage the outlet spigot(s) in the ductwork and fix the casing to the frame using the three screws supplied.
- e) Connect the wiring to the internal terminal block/socket.
- f) Fit the fan module to the case, mating it's plug fully with the internal socket. Secure in position with the two spring clips.
- g) Re-fit the cover using the 4 screws provided. Fit the filters into the front cover panel rebates. NOTE: If a subsidiary spigot kit is employed the Balancing Plates included can be inserted under the filters to adjust the extract from the rooms. Test / run the unit.

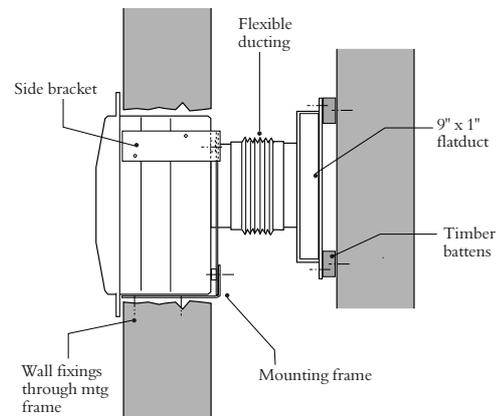


Fig. 6. Flatduct installation

Installing the unit into flatduct.

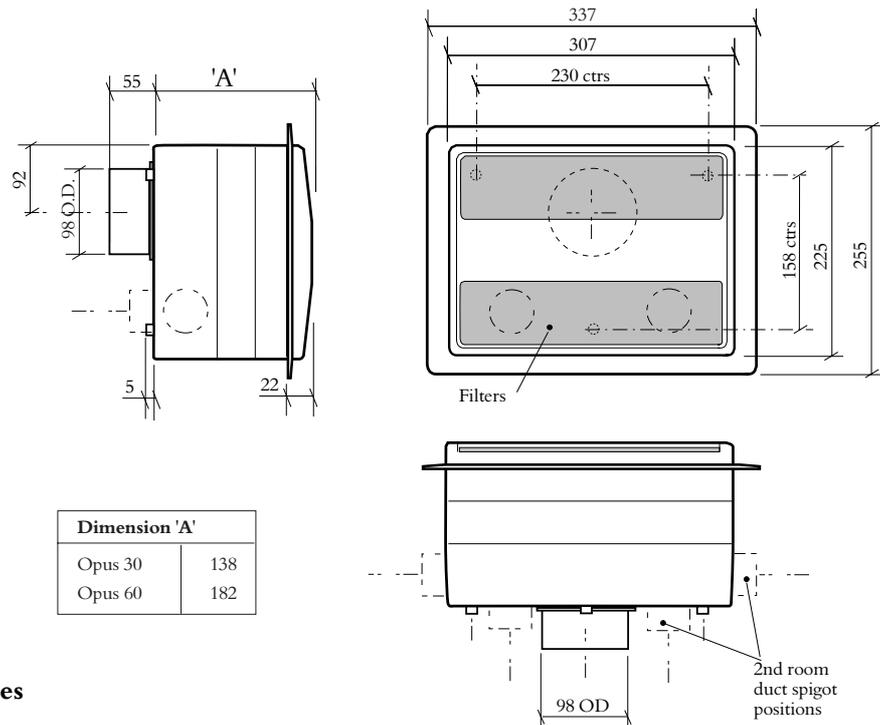
It is assumed that the flatduct is already fitted with a plenum section incorporating a 100mm dia. spigot in the area of the proposed extract fan.

- a) Proceed as in steps (a), (b) & (c) above.
- b) Feed the 100mm flexible ducting (supplied) through the rear of the mounting frame and fit to the spigot on the flatduct plenum.
- c) Offer up the casing to the mounting frame and join the other end of the flexible ducting to the outlet spigot using tape (not supplied). Fig. 6. Feed the electrical supply cable through the entry hole and fix the case to the mounting frame using the three screws supplied.

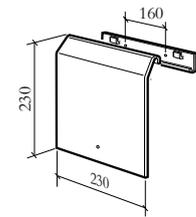
Continue as in (e) to (g) above.

Installation and Maintenance OPUS (R range)

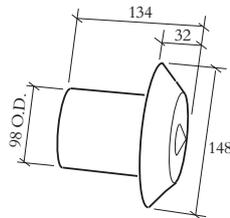
Dimensions



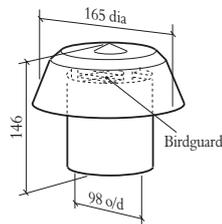
Optional ancillaries



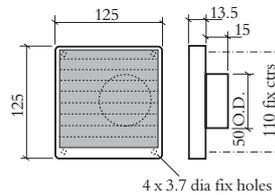
Outlet Baffle



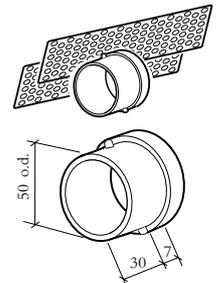
Wall Cowl



Roof Cowl



50mm Inlet grille



Subsidiary spigot kit

Maintenance

General

It is inevitable that some dust, fluff etc. will pass through the filters; if allowed this will build up internally on the motors and impellers, shortening the life of the unit. It will, in severe cases, lead to overheating of the motors.

Consequently, it is strongly recommended that all units are inspected and cleaned every six months. To clean the filters, remove them from the unit, wash in tepid water to which a little mild detergent has been added. Shake out excess water and allow to dry naturally. Replace when dry.

Isolation

Ensure that the unit is totally isolated from the electrical supply. This is particularly important when dealing with a run-on circuit (letter S in the Model Code) or a continuously running fan with boost when the room light is switched on (letter X in the code).

NOTE

THE INPUT SOCKET TERMINALS WITHIN THIS UNIT REMAIN LIVE, EVEN WHEN THE ROOM LIGHT OR OTHER ACTUATING SWITCH IS OFF
Take care therefore when working within the case with the fan module removed.

Procedure

At all times, take care not to damage, distort or disturb the balance of the impellers. Remove the cover and then the fan module after releasing the spring clips. Inspect all parts. Clean the backplate with a brush or dry cloth. Lightly brush away dust and dirt from the fan module. If stubborn, carefully remove with a suitable blade or scraper. Wash the cover in warm soapy water. Dry thoroughly. Refit the fan module, followed by the cover.

Test/run the unit.

Adjusting the run-on timer.

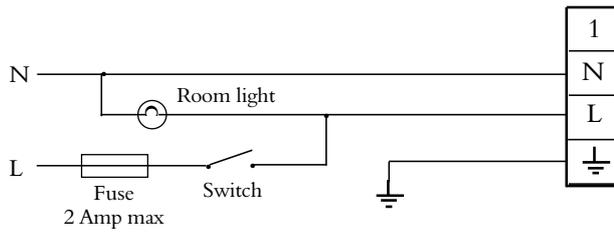
Remove cover. Locate the Time Delay Adjustment at the plastic box integral with the fan module. Re-set against the graduated scale. Re-fit the cover.

Warranty

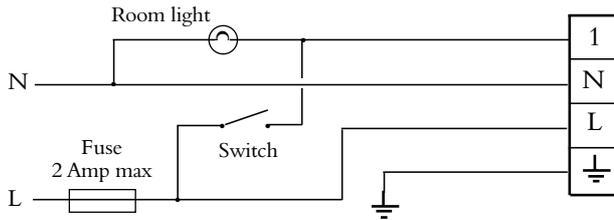
The plastic control box integral with the fan assembly is a sealed component. Breaking the plastic sealing tie will invalidate the guarantee. The unit is guaranteed for a period of 3 years. NOTE: Installation & Maintenance of the equipment must be as directed in the instructions provided with the unit.

Installation and Maintenance OPUS (R range)

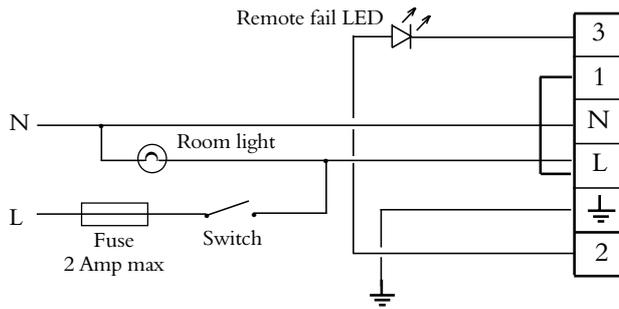
Electrical Diagrams



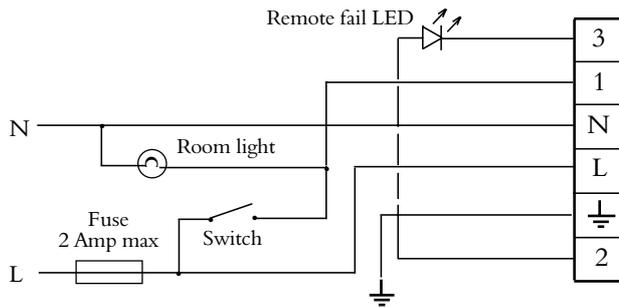
R Unit ventilating one room.



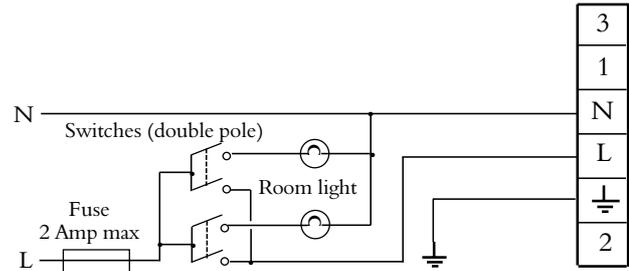
RS Unit ventilating one room (using run on circuit).



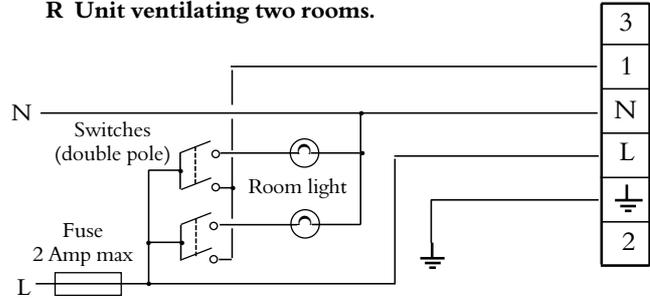
2RAS Unit ventilating one room (no run on timer).



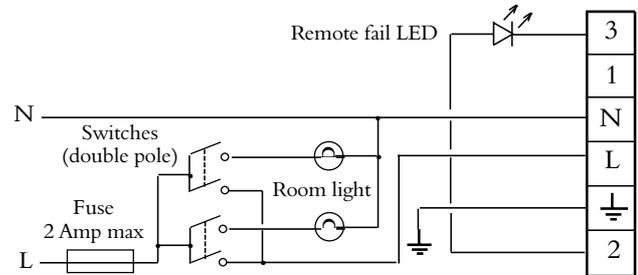
2RAS Unit ventilating one room (using run on circuit).



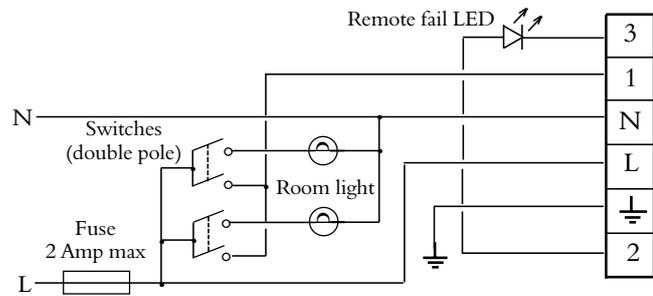
R Unit ventilating two rooms.



RS Unit ventilating two rooms (using run on circuit).

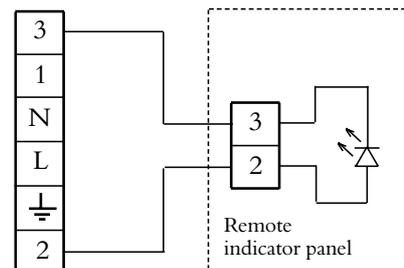


2RAS Unit ventilating two rooms (no run on timer).



2RAS Unit ventilating two rooms (using run on circuit).

Fan terminal block



Wiring details for remote indicator.

Model	Opus 30			Opus 60	
	R	RX on boost	2RAS	R	2RAS
Unit Code					
Unit input power (watts)	26	26	26	58	58
Full load running current (amps)	0.170	0.170	0.170	0.190	0.190
*Starting current (amps)	0.215	0.215	0.215	0.280	0.280

* On starting both fans run together

NUAIRE

NuAire Limited,
Western Industrial Estate, Caerphilly, Mid
Glamorgan, CF83 1XH.
United Kingdom.
Telephone: 029 2088 5911
Fax: 029 2088 7033
Email: info @ nuair.co.uk
www.nuair.co.uk

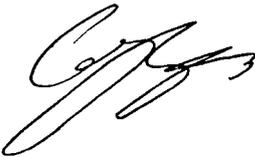
CE DECLARATION OF CONFORMITY

MARCH 2000

*We declare that the machine named below
conforms to the requirements of EC Council Directives
relating to Electromagnetic Compatibility and
Safety of Electrical Equipment.*

Designation of machinery :-	OPUS EXTRACT FANS
Machinery Types :-	OPUS 30, OPUS60 ('R' RANGE)
Relevant EC Council Directives :-	89/336/EEC, 92/31/EEC (EMC) 73/23/EEC, 93/68/EEC (Low Voltage Directive)
Applied Harmonised Standards :-	E50081-1, EN50082-1, EN60204-1 EN60335-2-80
Basis of Self Attestation :-	Quality Assurance to BS EN ISO 9001 BSI Registered Firm Certificate No. FM 149

Signature of manufacture representatives :-

	Name:	Position:	Date:
1)	 C. Biggs	Technical Director	3. 3. 00
2)	 W. Glover	Manufacturing Director	3. 3. 00

Service

As a manufacturer NuAire provides you with factory trained Service Engineers.

Our Engineers are supported by a comprehensive range of spare parts 'off the shelf'.

If you are an industrial or commercial user, you may be interested in details of NuAire's regular maintenance Service Contracts. This is a worthwhile service that helps you get the most from our products.

Our Service Department will be happy to give you more information.

Please telephone: 029 2088 5991

Controls Application Service (CAS)

A team of Engineers and technicians is available to provide pre and post order support.

We are on hand to provide help and advice from the most basic use of any NuAire equipment to the more complex applications, maximising on the versatility of our SMART and NetLink control products.

Telephone: 029 2085 8585

Facsimile: 029 2085 8586

3 Year Warranty

The three year warranty starts from the date of delivery and includes parts and labour for the first year.

The labour element is subject to full, free and safe access to the equipment as recommended by the CDM regulations.

The remaining two years covers replacement parts only.

NOTE:

Installation & Maintenance of the equipment must be as directed in the instructions provided with the unit.

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.

NUAIRE

**Western Industrial Estate, Caerphilly,
Mid Glam CF83 1XH United Kingdom.
Telephone: 029 2088 5911 Facsimile: 029 2088 7033,
Email@nuaire.co.uk
www.nuaire.co.uk**

Leaflet No. 670444

NB

If you have any comments or queries on any of our products or services please write to the Product Information Manager at the main address opposite.

GP144