

# **CYFAN-C EXTRACT FANS**

230V/24V DC SELV Surface and Semi-Recessed Mounted Domestic Fans INSTALLATION AND MAINTENANCE



The Nuaire CYFAN-C centrifugal extract fan is a major advancement and has been designed to meet the flow rates for all wet room applications such as the bathroom, kitchen, utility and WC etc.

The unit discharges air through a 100mm or 125mm dia. spigot which for surface and semi-recessed mounted units exits at the rear of the unit. The subsidiary spigot kit allows the fan to extract air through the side of the fan via a 50mm dia. spigot.

The motor is 24V brushless DC. Bearings are sealed, self-lubricating ball type with integral locked rotor protection.

Units are supplied with a separate transformer enclosure if fans are required for SELV usage.

#### Important

Warning: Isolate from power supply before removing any covers. During installation/maintenance ensure all covers are fitted before switching on the mains supply.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

Precautions must be taken to avoid the back-flow of gases into the room from the open flue of gas or other fuel-burning appliances.

Means for disconnection must be incorporated in the fixed wiring as shown in the wiring diagram in accordance with IEE wiring or national wiring rules.

CAUTION: In order to avoid a hazard due to inadvertent resetting of the thermal cut-out, this appliance must not be supplied through an external switching device, such as a timer, or connected to a circuit that is regularly switched on and off by the utility.

#### \*IPX4 to EN 60335-2-80 with front cover fitted.

# 1.1 Unit Operation includes 230V to 24V conversion, continuous or intermittent

The fan can be converted to operate as a 24V DC SELV for zone 1 and 2 applications. The fan has the option to select continuous or intermittent operation up to a installed performance of 60 l/s.

#### **1.2 Mounting options**

The CYFAN range can be:

#### Surface Mounted,

**Semi-Recessed Mounted**, Using the optional extra Semi-Recessed mounting frame kit suitable for 100mm and 125mm dia duct, consists of mounting plate and mounting flange.

Window Mounted, using the optional kit.

Surface mounted with side spigot, using the optional kit (see accessories and kits for part numbers).

#### 1.3 Accessories/kits available for CYFAN-C:

- Wall mounting kit
   Product Code
   COlour option
   CYFAN-WALLKIT-WH
   White
   CYFAN-WALLKIT-BR
   Brown
   CYFAN-WALLKIT-COT
   Cotwolds
   CYFAN-WALLKIT-TC
   Terracotta
- Optional window mounting kit (Part number: CYFAN-WKIT).
- Optional subsidiary spigot kit for ventilation of adjacent bathroom/separate toilet (Part number: CYFAN-DKIT).
- Semi-recessed mounting kit (Part number: CYFAN-RKIT).

**Fixing Kit** 

Pan Screw

Pan Screws

Pan Screws

3 off Cable Clamps

1 off Shutter Spring

3 off Off nylon spacers

**8** off No6 x  $\frac{3}{4}$  inch Pozi

■ 6 off No6 x <sup>1</sup>/<sub>2</sub> inch Pozi

2 off No8 x <sup>3</sup>/<sub>8</sub> inch Pozi

Optional filter available (Part number: 7702017).

## 1.4 What comes in the box?

The following components are included.

#### Fan Body

- Fan Scroll including Motor and Removable Impeller
- Control / PSU PCB, complete with Boost Pull Switch
- PCB Cover
- Front Grille
- Front Cover
- 125mm Spigot (fitted)
- Additional 100mm dia. Spigot
- 2 off 100mm Back Draught Spigot
- 2 off 125mm Back Draught Spigot
- 24V Transformer Enclosure

0 inch	1	2

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The EMC Directive

The Low Voltage directive

2014/35/EU

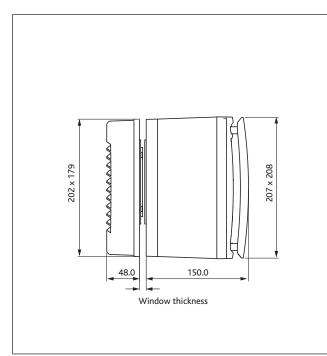
\*IPX4

# SECTION 1.0 INTRODUCTION CYFAN-C EXTRACT FANS

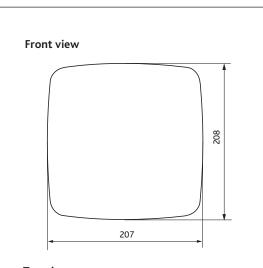
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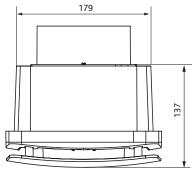
1.6 Optional window Kit Dimensions (mm)



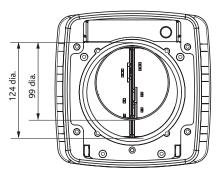
# 1.5 Fan Unit Dimensions (mm)



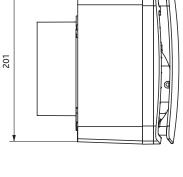




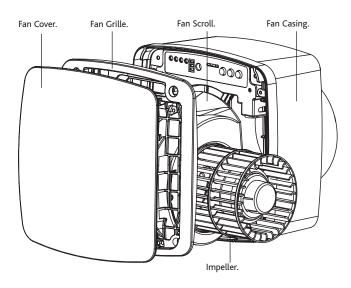
#### Back view







## SECTION 2.0 UNIT PREPARATION

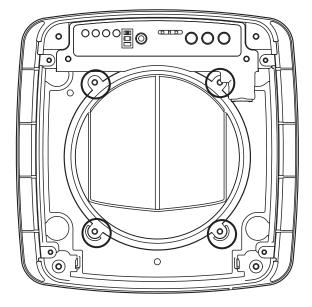


### 2.1 How to change the spigot size

The CYFAN-C is fitted with a 125mm dia. spigot, if a 100mm dia. spigot is required follow the following steps.

- Remove the front cover and grille
- Remove fan scroll from fan casing (Do not disconnect wiring)
- Using a PH2 screw head driver remove 4 off No8 <sup>1</sup>/4 inch screws
- Remove 125mm spigot
- Place 100mm dia. spigot into position (as shown in fig 3)
- Replace 4 off No8 <sup>1</sup>/<sub>4</sub> inch screws
- Replace fan scroll on fan casing
- Replace front cover and grille

Fig 1. Screws to be removed and refitted during spigot change.



# 2.2 Fitting back draught shutters to the spigot

The CYFAN-C kit comes complete with back draught shutters for 100mm and 125mm spigots, however these are not fitted as standard and should not be used when using your CYFAN-C in continuous operation.

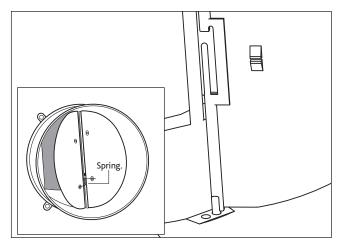
It is also recommended that you should not fit back draught shutters if your intermittent operation duties are below 15 l/s and for installations other than directly through the wall application to avoid failure of the shutters opening.

Please follow these simple steps to fit your back draught shutters if required: It is advised to fit the shutters before installing the fan unit.

- Collect all required parts
- 125mm shutters (2 off 41285) or 100mm shutters (2 off 41286)
- Spring (Part of Fixing Kit 770173)

Fit 1 shutter with the part number facing in, by placing the bottom pin into the bottom hole, slightly deflect the shutter and then fit the top pin into the top hole. Repeat this process for the other shutter.

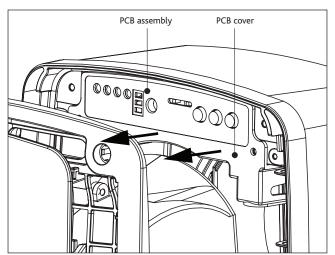
Fig 2. Fit spring to the bottom of the two shutters.



## 2.3 Conversion from 230V to 24V

- 1. Unpack the fan unit, components and transformer. Ensure that all parts listed on page 1 are present. If not please contact the manufacturer for replacement / missing parts.
- 2. Place the front cover and inlet grille to one side.
- 3. Remove the PCB cover by removing 2 off No6 x  $\frac{1}{2}$  inch screws.
- 4. Partially remove the PCB assembly from the fan casing by placing a finger tip behind the dip switches and pulling the PCB away from the fan casing. (see fig 3).

Fig 3. Removal of PCB cover from casing.



Continued on the following page.

SECTION 2.0 UNIT PREPARATION CONT.

#### 2.3 Conversion from 230V to 24V cont.

5. Separate section 2 of the PCB from section 1 by cutting the tabs in the positions shown. (see fig 4). Replace section 2 of the PCB into the fan unit.

Fig 4. Separate section 1 of the PCB (Power supply 230V/24V) from section 2 (Control PCB 24V DC) by cutting the tabs in the positions shown with the dotted circles.

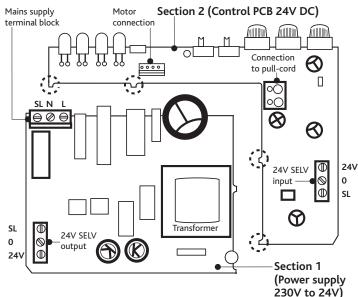
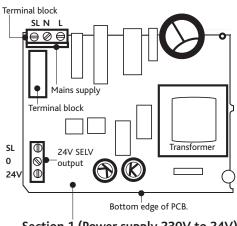


Fig 5. Section 1 of PCB will be installed into the transformer enclosure after the 24V wiring has been completed.



Section 1 (Power supply 230V to 24V)

#### IMPORTANT

24V fan units must be installed in accordance with these instructions and IEE Wiring Regulations BS7671 for SELV installations. For good EMC engineering practice, any sensor cables or switched live cables should not be placed within 50mm of other cables or on the same metal cable tray as other cables.

# 2.4 Installation of Transformer Enclosure (24 Volt units only)

The enclosure containing the transformer is intended to be mounted out of sight (e.g. in a loft, cupboard, under floorboards etc.). However, if this is not possible the transformer enclosure should be mounted as close to the ceiling, or as far from the "splash zone" as possible (see below for definition of the splash zone).

As can be seen from the table of wiring sizes, it is advisable to place the enclosure as close to the fan as possible to reduce the costs of wiring and assist in installation.

#### 'Splash zone'

The 'Splash Zone' can be considered to be an area within a bathroom or shower room where a person using the bath or shower can effectively reach.

An arms reach is defined as 0.6 metres from the edge of the bath or shower up to a height of 2.25 metres.

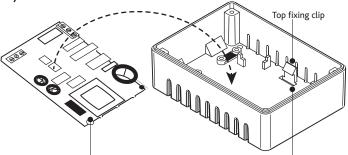
#### 2.5 Procedure for fitting the Transformer

- 1. Remove the transformer cover.
- 2. Position the transformer base enclosure on mounting surface and route cables through knockouts. Mark the fixing points on the mounting surface. Secure using suitable fixings (by others).
- Before fitting section 1 of the PCB into the transformer enclosure connect wiring as shown in (24V wiring options). Fit section 1 of the PCB by first slotting the bottom edge (see fig 6) into the fixing clip inside the base of the transformer enclosure then press on the transformer and terminal block until the PCB clicks into place. Complete by replacing the transformer cover using the screws provided.
- 4. Keep vents clear of obstruction.

Complete the installation of components by securing the PCB cover on the fan.

Note: No earth is to be connected between transformer and fan.

Fig 6. Place section 1 of the PCB into the transformer enclosure supplied with the fan.



Place section 1 of PCB into the transfomer enclosure Slot for small flat screwdriver to come from underneath the transformer to push clip to one side

# 2.6 Transformer installation notes for wiring sizes

It is important to note that the size of wire used between the transformer and the fan unit can have an adverse effect on the units performance if the following table is not adhere to.

# Mains Supply: (230V) 0.5mm sq.

Transformer to fan (24V units only)Cable run (max. 10 metres)Cable sizeUp to 2m0.75 mm sq.Up to 4m1.0 mm sq.Up to 6m1.5 mm sq.Up to 10m2.5 mm sq.

Note to installing electrician: To avoid cable insulation contact with hot transformer, always use the knockout at PCB end.

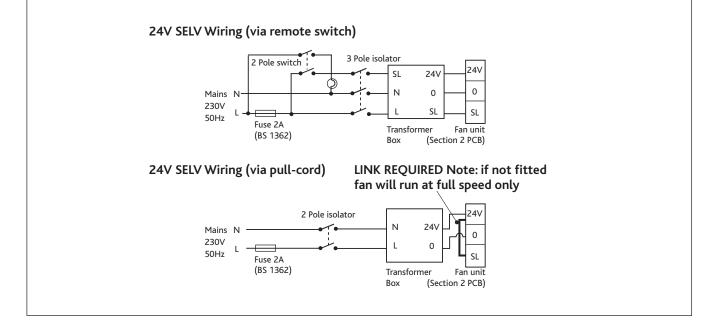
## SECTION 2.0 UNIT PREPARATION CONT.

### 2.7 Wiring diagrams

#### IMPORTANT

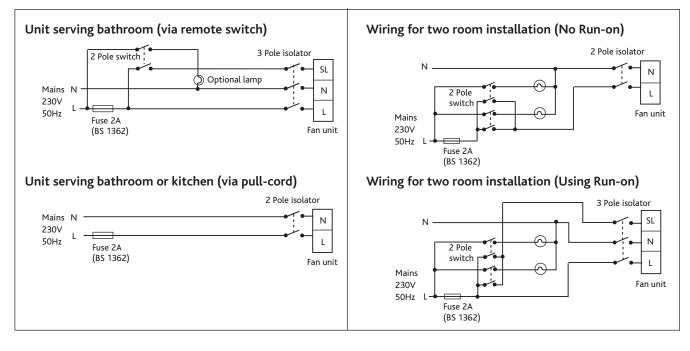
Isolation - Before commencing work make sure that the unit, and Nuaire control are electrically isolated from the mains supply.





#### Fig 8. 230V Wiring options.

# Fig 9. 230V Wiring options for two room installation (Side spigot).



# SECTION 3.0 FITTING THE PRODUCT SURFACE MOUNTING

## 3.1 Fan installation

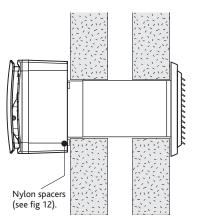
Installation must be completed by qualified personnel. A solid non reverberant mounting position must be selected and passages for ductwork from the outlet spigot, as well as electrical connection prepared. Compatible ductwork should have already been installed.

#### 3.2 Required tools

Drill, PH2 Screwdriver, Terminal Screwdriver and Tape Measure.

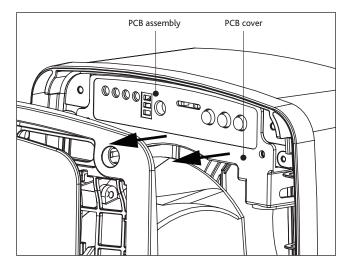
#### 3.3 Installation procedures

Fig 10. Surface mounted on a cavity wall.



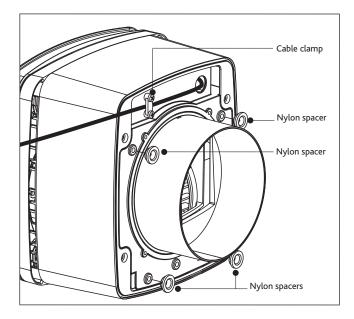
- 1. Unpack the fan unit and other components, and ensure that all parts listed on page 1 are present. If not please contact the manufacturer for replacement / missing parts.
- 2. Place the front cover and inlet grille to one side.
- 3. Remove the PCB cover by removing 2 off No6 x  $^{1}/_{2}$  inch screws.
- 4. Partially remove the PCB assembly from the fan casing by placing a finger tip behind the dip switches and pulling the PCB away from the fan casing. (see fig 11).

Fig 11. Removal of PCB cover from casing.



- 5. Disconnect and remove the fan scroll from assembly and completely remove the PCB assembly. Note: if the pull cord is not required, remove it completely.
- Core cut a hole through mounting surface at desired mounting position to suit the size of the discharge spigot required, 100mm or 125mm dia.
- Place the fan casing in the mounting position (spigot placed into core cut hole) and use the base as a template to mark the mounting screw hole positions (x3), remove casing once marks are made.
- 8. Drill and plug (if necessary) the mounting surface.
- Feed wiring flex through the back of the fan casing and secure into place using cable clamps and screws provided in the CYFAN fixing kit.
- Secure the case to the surface (fixings supplied by others). Note: care must be taken not to twist or distort the case whilst fitting. Ensure the 3 spacers are used from the fixing kit (see fig 12).
- 11. Partually replace PCB into the fan casing and wire flex into the terminal block (see wiring options on page 5).

Fig 12. Use cable clamp on rear of casing to secure wiring, and the 3 nylon spacers from the fixing kit to ensure the unit is not flush to the wall. This will allow the power cable to run behind the unit.



- 12. Replace fan scroll assembly and plug motor into PCB, replace PCB fully into position by pushing the dip switches.
- 13. Replace PCB cover by fitting with 2 off No6 x  $^{1}/_{2}$  inch screws. (see point 2 of the procedure).
- 14. Fit front inlet grille using 4 off No6 x  $^{3}/_{4}$  inch screws found in the fixing kit.
- 15. Remove rubber gasket and adjust control to required settings (shown in section 4). Once required settings are complete and desired airflow rate is achieved replace rubber gasket.
- 16. Complete the fan installation by fitting (push fit) the front cover.

# SECTION 3.0 FITTING THE PRODUCT SEMI-RECESSED MOUNTING

#### 3.4 Fan installation

Note: Semi-Recessed mounting requires the optional mounting kit: (Part number: CYFAN-RKIT).

Installation must be completed by qualified personnel. A solid non reverberant mounting position must be selected and passages for ductwork from the outlet spigot, as well as electrical connection prepared. Compatible ductwork should have already been installed.

### 3.5 Required tools

Drill, PH2 Screwdriver, Terminal Screwdriver and Tape Measure.

- 5. Partially remove the PCB assembly from the fan casing by placing a finger tip behind the dip switches and pulling the PCB away from the fan casing. (see fig 14).
- 6. Disconnect and remove the fan scroll from assembly and completely remove the PCB assembly. Note: if the pull cord is not required, remove it completely.
- 7. Prepare an opening 205mm x 185mm in the mounting position.
- Position the mounting bracket in the previously prepared aperture so that the ends of the bracket are flush with the surface of the wall. Secure the bracket top and bottom with suitable fixings (by others).
- 9. Drill and plug (if necessary) the mounting surface.
- 10. Feed wiring flex through the back of the fan casing and mounting plate.
- Secure the case to the surface (fixings supplied by others). Note: care must be taken not to twist or distort the case whilst fitting.
- 12. Partually replace PCB into the fan casing and wire flex into the terminal block (see wiring options on page 5).

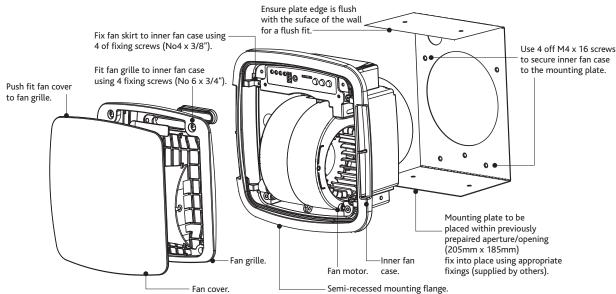
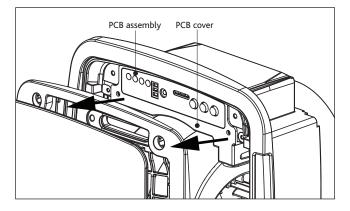


Fig 13. Semi-Recessed mounting frame kit suitable for 100mm and 125mm dia duct, consists of mounting plate and mounting flange.

#### 3.6 Installation procedures

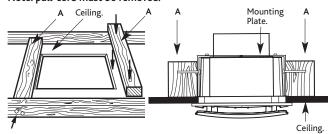
- 1. Unpack the fan unit and other components, and ensure that all parts listed on page 1 are present. If not please contact the manufacturer for replacement / missing parts.
- 2. Place the front cover and inlet grille to one side.
- 3. Remove 4 off No8 x  $^{3}$ / $_{8}$  inch Pozi screws from the rear of the unit. This allows the exterior case to be removed and disposed of.
- 4. Remove the PCB cover by removing 2 off No6 x  $^{1}/_{2}$  inch screws.

#### Fig 14. Removal of PCB cover from casing.



- Serie recessed mounting hange.
- 13. Replace fan scroll assembly and plug motor into PCB, replace PCB fully into position by pushing the dip switches.
- 14. Replace PCB cover by fitting with 2 off No6 x  $\frac{1}{2}$  inch screws. (see point 2 of the procedure).
- 15. Fit semi-recessed mounting flange to case using 4 off No4 x  $^{3}/_{8}$  inch screws.
- 16. Fit front inlet grille using 4 off No6 x  $^{3}/_{4}$  inch screws found in the fixing kit.
- 17. Remove rubber gasket and adjust control to required settings (shown in section 4). Once required settings are complete and desired airflow rate is achieved replace rubber gasket.
- 18. Complete the fan installation by fitting (push fit) the front cover.

Fig 15. Ceiling mounting using the Semi-Recessed mounting kit. First cut an aperture for the fan in the ceiling, cut and fit (A) timber supports (not supplied) and fit fan as shown. Note: Remove the shutters from the spigot if you are mounting CYFAN in the ceiling. Note: pull-cord must be removed.



# SECTION 3.0 FITTING THE PRODUCT WINDOW MOUNTING

#### 3.7 Fan installation

Note: Window mounting requires the optional mounting kit: (Part number: CYFAN-WKIT).

Installation must be completed by qualified personnel.

#### 3.8 Required tools

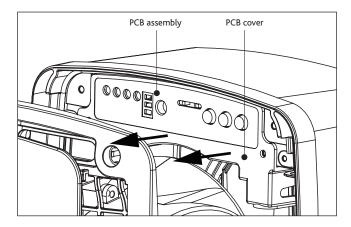
Drill, PH2 Screwdriver, Terminal Screwdriver and Tape Measure.

## 3.9 Installation procedures

#### 3.10 Fitting the fan

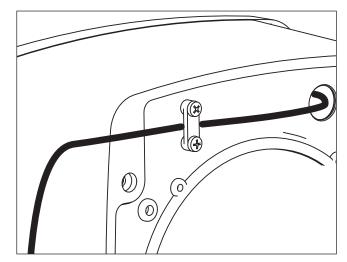
- Unpack the fan unit and window kit components, and ensure that all parts listed are present (see page 1 and 3.11 of this document for window kit parts. If not please contact the manufacturer for replacement / missing parts.
- 2. Place the front cover and inlet grille to one side.
- 3. Remove the PCB cover by removing 2 off No6 x  $\frac{1}{2}$  inch screws.

Fig 16. Removal of PCB cover from casing.



- 4. Partially remove the PCB assembly from the fan casing by placing a finger tip behind the dip switches and pulling the PCB away from the fan casing. (see fig 16).
- 5. Disconnect and remove the fan scroll from assembly and completely remove the PCB assembly. Note: if the pull cord is not required, remove it completely.
- Feed wiring flex through the back of the fan casing and secure into place using cable clamps and screws provided in the CYFAN fixing kit.
- 7. Secure the case to the window kit. Note: care must be taken not to twist or distort the case whilst fitting.
- 8. Partually replace PCB into the fan casing and wire flex into the terminal block.
- 9. Replace fan scroll assembly and plug motor into PCB, replace PCB fully into position by pushing the dip switches.
- 10. Replace PCB cover by fitting with 2 off No6 x  $^{1}/_{2}$  inch screws. (see point 2 of the procedure).

#### Fig 17. Use cable clamp on rear of casing to secure wiring.



- 11. Fit front inlet grille using 4 off No6 x  $^{3}/_{4}$  inch screws found in the fixing kit.
- 12. Remove rubber gasket and adjust control to required settings (shown in section 4). Once required settings are complete and desired airflow rate is achieved replace rubber gasket.
- 13. Complete the fan installation by fitting (push fit) the front cover.

## 3.11 Fitting the window kit

The window kit is designed for mounting the unit into windows 4mm to 32mm thick using a 125mm dia. hole in the glass. (see fig 18.)

Checklist CYFAN-WKIT	Part No.	
Window Cover	041351	
Outside Clamp	041350	
Inner Clamp	041349	
Backdraught Shutter	041286	
Screw Kit containing	772285	
Shutter Spring		
-	Window Cover         Outside Clamp         Inner Clamp         Backdraught Shutter         Screw Kit containing	Window Cover041351Outside Clamp041350Inner Clamp041349Backdraught Shutter041286Screw Kit containing772285

# Parts Checklist SCREW KIT-772285 Part No. 2 off No.8 x 1" CSK HD Supascrew 691646

2 off	No.8 x 1° CSK HD Supascrew	691646
4 off	No.8 x 1-1/2" CSK HD Supascrew	680193
4 off	No.8 x 1-3/4" CSK HD Supascrew	691647
2 off	No.8 x 2-1/4" CSK HD Supascrew	691648
3 off	No.8 x ¾" Panhead Pozi	180394
	(Main Case to Inner Clamp)	
1 off	Spring	580069

Fig 18.



- Employ a qualified glazier to cut a hole 125mm dia in the glass or, alternatively, replace your window with new glass incorporating a precut hole.
- The outer assembly consists of a cover complete with clamping plate and an 'O' ring seal. The clamping plate incorporates a moulded spigot which is designed to locate inside the 125mm dia hole in the glass.

# SECTION 3.0 FITTING THE PRODUCT WINDOW MOUNTING

#### 3.11 Fitting the window kit cont.

- 3. Back draught Shutters (see fig 2 and fig 19. are clipped into Inner clamp and the spring is fitted in the lower position.
- 4. Position the assembly on the outside of the glass. If only one person is installing the fan it may be helpful to tape the assembly to the outside glass at this stage during installation as all fixings and assembly are completed from inside.
- 5. Working from inside the room with the clamp. Position this inner clamp over the hole in the glass and and line up the 4 mounting holes.
- 6. Select appropriate screws from the screws kit supplied for mounting into different thicknesses of glass, see table below. Should the screws foul on the back of the grille during installation replace with the next size down. There are 2 long and 2 short screws for each thickness of glass, the shorter screws are at the top.
- 7. Using four screws locate with the screw bosses in the outer assembly, draw the inner and outer assemblies together. Remove any tape supporting the outer assembly and continue to draw the units together until the 'O' ring is compressed on the window. Note: do not over tighten the fixing screws as this may distort the assembly.

8. Wire unit in accordance with the appropriate wiring diagram. A cable clamp is provided inside the case. Note: the remaining installation procedures for Window Mounting are as the description in section 3.10.

#### Window mounting Screws

	Window thickness	Screw size
2 off	4mm - 11mm	No8 x1" CSK HD
2 off		No8 x1-1/2" CSK HD
2 off	12mm - 21mm	No8 x1-1/2" CSK HD
2 off		No8 x1-3/4" CSK HD
2 off	22mm - 32mm	No8 x1-3/4" CSK HD
2 off		No8 x2-1/4" CSK HD

#### Fig 19. Spring assembly. (Also see fig 2).

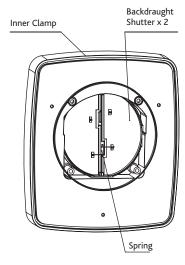
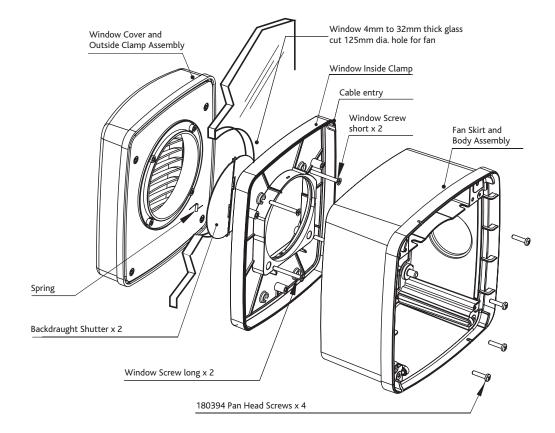


Fig 20. Window mounting using the optional window mounting kit. The window kit is designed for mounting the unit into windows 4mm to 32mm thick using a 125mm dia. hole in the glass.



## SECTION 3.0 FITTING THE PRODUCT SURFACE MOUNTING WITH SIDE-SPIGOT

#### DKIT is recommended for Intermittent Extract Only.

#### 3.10 Fan installation

# Note: Surface mounting with side spigot requires the optional mounting kit: (Part number: CYFAN-DKIT).

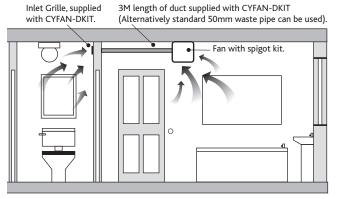
Installation must be completed by qualified personnel. A solid non reverberant mounting position must be selected and passages for ductwork from the outlet spigot, as well as electrical connection prepared. Compatible ductwork should have already been installed.

## 3.11 Required tools

Drill, PH2 Screwdriver, Terminal Screwdriver and Tape Measure.

### 3.12 Installation procedures

Fig 21. Typical installation example of fan unit with subsidiary spigot kit in bathroom and adjacent toilet application.

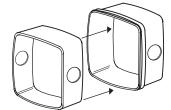


 Unpack the fan unit and components, and the subsidiary spigot kit. Ensure that all parts are present. If not please contact the manufacturer for replacement / missing parts.

#### The subsidiary Spigot Kit incorporates:

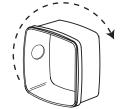
- a. A new outer fan skirt with one 50mm dia. hole in the side.
- b. A new fan body with a 55mm dia. hole in each side.
- c. A 50mm dia. sub spigot.
- d. 3M of 50mm duct.
- e. Inlet grille with filter.
- f. Reduction Filter.

Fig 22. Example of a subsidiary spigot kit (Code: CYFAN-DKIT). Note: 50mm grille available (Code: 50IG).

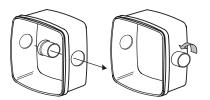


Subsidiary spigot kit inner fan body with 2 spigot holes.

Subsidiary spigot kit outer fan skirt with 1 spigot hole.



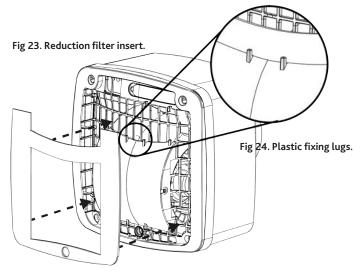
The outer fan skirt can be rotated if required which enables the spigot hole to be positioned on the right or left side to meet the application requirements.



Install the 50mm dia. subsidiary spigot from inside both the inner fan body and outer skirt, by ensuring both lugs have been passed through the cut-out. Turn the spigot a quarter turn to lock.

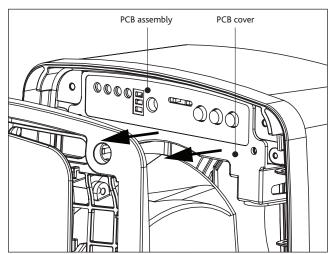


- 2. Place the front cover to one side.
- 3. Place the reduction filter over the grille. Secure the filter by pressing the filter under the lugs located around the grille (see fig 23 and 24).



- 4. Remove the PCB cover by removing 2 off No6 x 1/2 inch screws.
- 5. Partially remove the PCB assembly from the fan casing by placing a fingertip behind the dip switches and pulling the PCB away from the fan casing. (see fig 25).

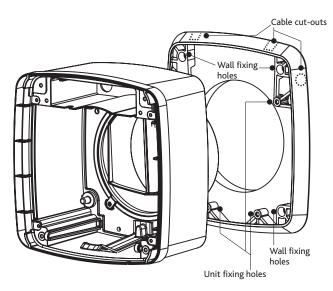
#### Fig 25. Removal of PCB cover from casing.



## SECTION 3.0 FITTING THE PRODUCT SURFACE MOUNTING WITH SIDE-SPIGOT

- 6. Disconnect and remove the fan scroll from assembly and completely remove the PCB assembly. Note: if the pull cord is not required, remove it completely.
- 7. If using surface mounted wiring the 15mm fan skirt may be used, see point 13 onwards.
- Core cut a hole through mounting surface at desired mounting position to suit the size of the discharge spigot required, 100mm or 125mm dia.
- Place the fan casing in the mounting position (spigot placed into core cut hole) and use the base as a template to mark the mounting screw hole positions (x4), remove casing once marks are made.
- 10. Drill and plug (if necessary) the mounting surface.
- 11. Feed wiring flex through the back of the fan casing and secure into place using cable clamps and screws provided in the CYFAN fixing kit.
- 12. Secure the case to the surface (fixings supplied by others). Note: care must be taken not to twist or distort the case whilst fitting.
- Partially replace PCB into the new fan casing and wire flex into the terminal block (see wiring options on page 5). (Go to point 19).
- 14. Utilizing the fan skirt.- Using the template on page 12 mark out the position of the spigot hole, (depending on spigot size chosen), and the four mounting holes.

#### Fig 26. Installation using 15mm deep fan mounting skirt. See page 12 for template.



- 15. Core cut centre and drill and plug mounting holes.
- 16. Choose one of the four cable entries and carefully trim out.

#### CYFAN EXTRACT FANS INSTALLATION AND MAINTENANCE

17. Secure skirt to wall (fixings supplied by others). Note: use wood screws not countersink screws to avoid distorting the skirt.

18. Feed cable through skirt and offer up fan case to skirt. Feed cable through unit and secure unit to skirt using 4x No6x1/2 inch screws provided.

19. Replace fan scroll assembly and plug motor into PCB, replace PCB fully into position by pushing the dip switches.

20. Replace PCB cover by fitting with 2 off No6 x 1/2 inch screws. (see point 2 of the procedure).

21. Fit front inlet grille with reduction filter fitted using 4 off No6 x 3/4 inch screws found in the fixing kit.

22. Remove rubber gasket and adjust control to required settings (shown in section 4). Once required settings are complete and desired airflow rate is achieved replace rubber gasket.

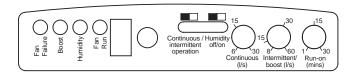
23. Complete the fan installation by fitting (push fit) the front cover.

#### 3.13 Fan Setting

The unit should be configured for intermittent use. To achieve 17L/s through the CYFAN front grille, and 6L/s through the subsidiary spigot the boost speed control should be set approximately to the 11 O'clock position.

## SECTION 4.0 SETTING THE PRODUCT TO WORK

Fig 25. View of PCB assembly control cover and functions.



#### 4.1 Default setting

As a default CYFAN-C units are set as follows:

- Intermittent setting fan will only operate from pull-cord or switched live to boost flowrate
- Continuous running (background ventilation) OFF
- Humidity sensing OFF
- Air flow rate (boost) 15 l/s
- Run-on timer (from switched live only) 1 min

# 4.2 Building regulations Part F 2010 flowrates

Room	Intermittent extract	Continuous extract	
	Minimum rate	Minimum	Minimum
		high rate	low rate*
Kitchen	30 l/s adjacent to hob;	13 l/s	8 l/s
	or 60 l/s elsewhere		
Utility room	30 l/s	8 l/s	6 l/s
Bathroom	15 l/s	8 l/s	6 l/s
Sanitary	6 l/s	6 l/s	6 l/s
accommodation			

\*Recommended values, please refer to Part F for further information

SECTION 5.0 TERMS AND CONDITIONS

### 4.3 Continuous/intermittent switch

Continuous – fans running to provide background ventilation. The amount of airflow can be set between 6 to 30 l/s.

Operating the pull cord or remote switch will boost the fan to the adjustable set point available between 8 to 60l/s.

Intermittent – fan does not operate continuously but only when the pull cord or remote switch is activated. The amount of airflow is adjustable from 8 to 60 l/s.

## 4.4 Humidity Tracker Switch

The default setting is off. Switching to 'on' will enable the unit to sense the humidity in the room. The fan will switch itself on when the humidity rises above 60% and will slowly speed up as the humidity rises. For example:

Relative	Intermittent	Intermittent	
Humidity	Boost Set at 60l/s	Boost Set at 30l/s	
60%	20 l/s	10 l/s	
70%	30 l/s	15 l/s	
80%	40 l/s	20 l/s	
90%	50 l/s	25 l/s	
100%	60 l/s	30 l/s	

#### 4.5 Run-on timer

The run-on timer is adjustable from 1 to 30 mins and can operate off a remote switch (e.g. bathroom light switch).

#### 4.6 Airflow adjustment

The unit adjustment dials have been set for a unit that has been installed directly through a wall and with a 125mm spigot. If the 100mm spigot is used and resistance is placed on the fan (long duct runs) the airflow should be checked using an appropriate measuring instrument.

## 5.1 Warranty

The 5 year warranty starts from the day of delivery and includes parts and labour for the first year. The remaining period covers replacement parts only.

This warranty is void if the equipment is modified without authorisation, is incorrectly applied, misused, disassembled, or not installed, commissioned and maintained in accordance with the details contained in this manual and general good practice.

The product warranty applies to the UK mainland and in accordance with Clause 14 of our Conditions of Sale. Customers purchasing from outside of the UK should contact Nuaire International Sales office for further details.

## 5.2 After Sales

For technical assistance or further product information, including spare parts and replacement components, please contact the After Sales Department.

## Technical Support 02920 858 400