



Installation and Operating Instructions 4" Extractor Fan Model: H113

Thank you for purchasing a quality Extractor Fan from GreenBrook. Please read these instructions fully prior to initial use.

Every effort has been made to ensure that the guidance information on this sheet will enable the installation of the fan to be carried out safely and correctly.

IMPORTANT

This product should be installed by a competent person and in accordance with the current IEE Wiring Regulations. If in doubt, consult a qualified electrician.

When installing fan, switch off mains supply before making any electrical connections.

1. H113 may be fitted to a wall or window.
2. This fan is double insulated and does not require an earth connection.
3. The fan's electrical supply, must be connected via a double pole switched fuse connection unit, having a contact separation of at least 3mm in all poles fitted with a 3 amp fuse. This must be sited outside of a room containing a fixed bath or shower.
4. For best performance, fans should be mounted on a wall as high as possible.
5. Wall mounted fans are not intended for use with ducting beyond 2 metres in length.
6. Extraction fans should not be located in rooms containing open flued appliances, or where the normal air temperature may exceed 40°C or in an area containing excessive levels of grease.
7. They must NOT be fitted in a shower cubicle above a bath, or where there is any possibility of liquid spray.

INSTALLATION

Select a suitable mounting position for the fan ensuring there are no hidden obstructions and work out the cable runs.

Please Note: Using long lengths of ducting will reduce the efficiency of the fan, whenever possible keep the ducting straight and the distance as short as possible.

Warning: Ensure that the mains supply is isolated before making any electrical connections.

Installing the fan in an external wall

Diagram 1. Remove Front Cover

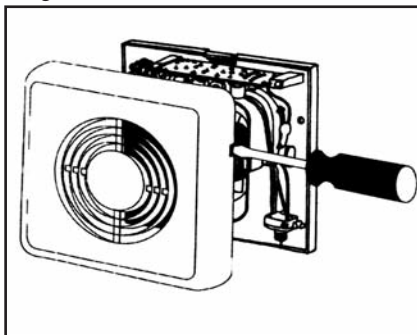


Diagram 2. Internal Fan Layout

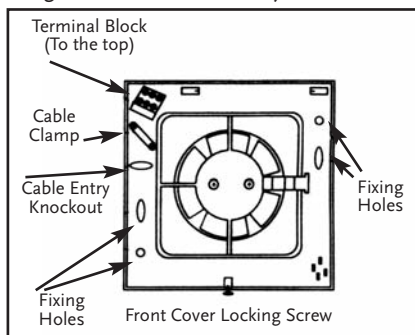


Diagram 3. Wall Kit

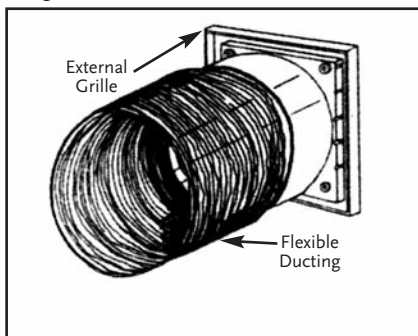
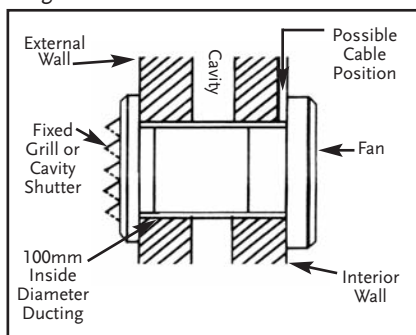


Diagram 4. Installation in an External Wall



1. Cut a hole through the wall, sized to give a small clearance of 100mm inside diameter ducting.
2. Remove the front cover from the fan, as shown in (Diagram 1).
3. Remove the cable entry knockout.
4. Hold the fan body assembly (terminal block to the top) centrally in the hole and mark two fixing positions and the cable entry.
5. Drill and plug the two fixing positions and chase a groove for the cable. Fix the cable in position, ensuring sufficient length is left for the connections.
6. Bridge the wall cavity using a length of rigid or flexible 100mm inside diameter ducting and make good the wall surfaces where necessary.
7. Fix the fan body assembly to the wall using pan head screws of a suitable length.
8. Make the correct electrical connections (see wiring diagrams) to the terminal block and clamp the cable securely to the fan body.

IMPORTANT

Ensure that the fan blades rotate freely.

Refit the front cover and tighten the locking screw. Fit a suitable external grille or gravity shutter models G425/G400, Shown in Diagram 3.

Installing the fan in a ceiling

Diagram 5. Installation in a ceiling

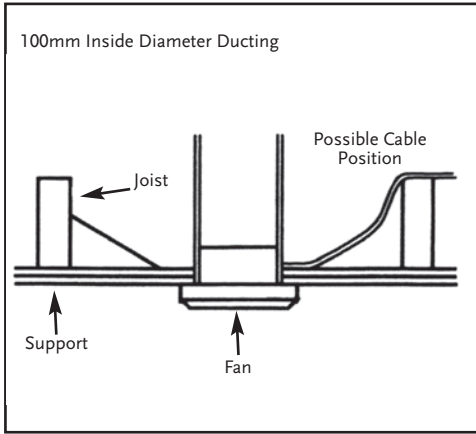
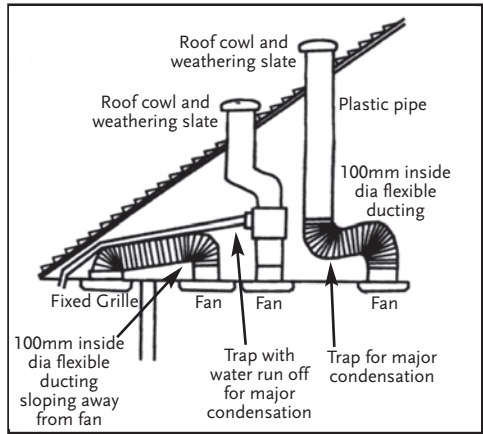


Diagram 6. Venting through a roof



1. Fit a firm support between the joists.
2. Cut a hole through the ceiling and support, sized to give a small clearance of 100mm inside diameter ducting.
3. Remove the front cover from the fan, as shown in (Diagram 1).
4. Remove the cable entry knockout.
5. Hold the fan body assembly centrally in the hole and mark two fixing positions and the cable entry.
6. Drill pilot holes for the fixing positions and a clearance hole for the cable.
7. Fix the supply cable in position ensuring sufficient length is left for the electrical connections.
8. Fix the fan body assembly to the ceiling using pan head screws of a suitable length.
9. Install ducting from the fan spigot either through the roof using a weatherproof slate and roof cowl, or under the eaves using an external fixed grille model G425.
10. Make the correct electrical connections (see wiring diagrams) to the terminal block and clamp the cable securely to the fan body.

WARNING

If installing any ducting which will be positioned higher than the fan itself, a condensation trap must be used, this should be fitted as close to the fan as possible. Fan ducting outlet must be positioned well away from any existing flue gas outlets such as central heating exhausts.

IMPORTANT

Ensure that the fan blades rotate freely.
Refit the front cover and tighten its locking screw.

Installing the fan in a window

Diagram 7. Window Conversion Kit

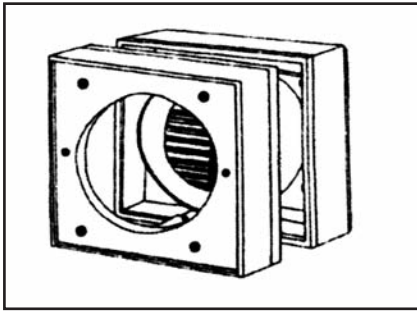
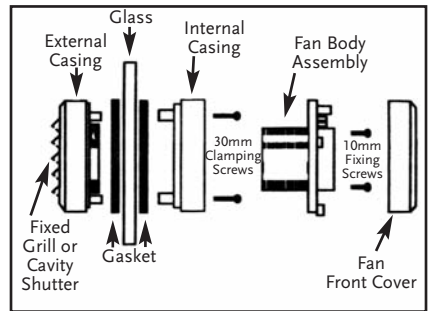


Diagram 8. Installation in a Window



Please Note: This installation requires a window fan and a conversion kit KingShield models CK4GS or CK4FG. Fans can be fitted into most types of glass with varying thickness (including double glazed units) from 4mm to 28mm. It is advisable to have the hole pre-cut in a new pane of glass by a professional glazier. If the fan is to be mounted in hermetically sealed double glazing it will be necessary to obtain a window from a glazing manufacturer.

1. Pre-cut a 140mm diameter hole in the glass.
2. Remove the front cover from the fan, as shown in (Diagram 1).
3. Undo the two clamping screws positioned top and bottom on the internal casing and separate from the external casing.

IMPORTANT

Ensure the sealing gaskets are fitted correctly to the edges of the casings.

From the Inside:

1. With the clamping screw holes positioned top and bottom, place the internal casing and gasket centrally in the hole.

From the Outside:

1. With the louvres/shutters slanting downward, re-locate the external casing and gasket squarely on to the internal casing.
2. Re-locate and tighten the two clamping screws sufficiently to create a seal on the glass.

DO NOT OVERTIGHTEN

3. Fix the fan body assembly to the internal casing (terminal block to the top) using the two 10mm fixing screws.
4. Fix the cable in position, ensuring sufficient length is left for the connections.
5. Remove the knockout or form a suitable cable entry in the front cover.
6. Make the correct electrical connections (see wiring diagram) to the terminal block and clamp the cable securely to the fan body.

IMPORTANT

Ensure that the fan blades rotate freely.
Refit the front cover and tighten its locking screw.

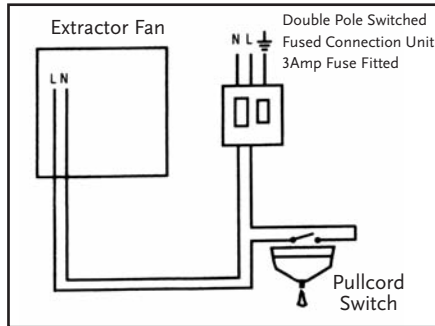
WIRING DIAGRAMS

Model	Wiring Diagram	Description	Operating
Standard	9	For remote switching	Remote switch on - Fan runs Remote switch off - Fan stops

Dia 9 - Standard Models

Terminal L - Live Supply

Terminal N - Neutral Supply



CLEANING

Before cleaning, ensure the fan is isolated from the mains supply. The front cover of the fan may be cleaned with a damp cloth. The interior of the fan should be cleaned occasionally. To do this, first remove the front cover by loosening its locking screw, then clean carefully with a dry cloth if necessary the fan blade may be cleaned with a soft brush.

NOTE: A direct replacement, without a wiring change, need not be notified to your Building Control Department.

TECHNICAL INFORMATION

Rated voltage:	230V AC - 50Hz
Load:	17W Maximum
IP Rating:	IP44
Insulated:	Class II Double
Air Movement:	
4"	Up to 80 Cubic Metres/Hour (22.2 Litres/Sec)

GUARANTEE

Your KingShield 4" Extractor Fan is guaranteed for 12 months from the date of purchase.
This is in addition to your statutory rights.

**PLEASE KEEP THESE INSTRUCTIONS
SAFE FOR FUTURE REFERENCE**

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