

Dedicated External Air Kit

For the Sheraton & Chesterfield range



Instructions for Use, Installation & Servicing For use in GB & IE (Great Britain & Republic of Ireland).

IMPORTANT

Please read these instructions carefully and in conjunction with the appropriate Installation and User instructions. Care must be taken when handling to avoid injury or damage to the stove.

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They will be needed when maintenance or servicing is required.



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General Information

General

Direct External Air Supply (DEAS)

The Stovax Sheraton & Chesterfield models can be converted for use with a purpose built Direct External Air Supply (DEAS) by the addition of an optional kit Stovax part number:

Appliance	Kit Part No.	
Sheraton 5	SH-5AIR	
Chesterfield 5		
Sheraton 5 Wide	- SH-5WIDAIR	
Chesterfield 5 Wide		

Only this kit should be fitted to supply direct external air to the Stovax Sheraton & Chesterfield appliances.

The DEAS kit must be installed and commissioned as detailed in these instructions and National Building Regulations, by a HETAS installer who has attended a HETAS H003 course and must be aware of the requirements of HETAS guidance note **HETAS_TN_0020**.

When fitting the appliance with a DEAS **all** of the following installation criteria must be met:

The installer must assess the requirement for additional air to enable the safe use of the appliance, taking into consideration:

The air permeability of the building. Existing air extraction / circulation systems. The air requirement of other heating appliances / fireplaces in the building.

A risk assessment must be completed as detailed in HETAS guidance note HETAS_TN_0020.

The installer must complete the following spillage checks, as detailed in HETAS guidance note HETAS_TN_0020, when commissioning the appliance:

*General check.
*Cold Test – Appliance Door Shut.
*Hot Test - Refuelling.
*Depressurisation test (effects of extraction fans and mechanical ventilation systems).

*see page 8 for full details.

A commissioning sheet must be completed as detailed in HETAS guidance note HETAS_TN_0020.

Should the appliance fail any test and a solution cannot be found it must be disconnected from the flue, and left so it is not possible to use. And the end user notified in writing that it is not safe to use until the problem is rectified. In some cases the addition of a normal ADJ vent will be the only way to ensure correct and safe operation of the appliance.

The user must be instructed on the lighting and use of the appliance along with the maintenance requirements to enable safe operation.

These instructions must be read in conjunction with the Installation and User Instructions for the Sheraton (PM1656)/ Chesterfield (PM1700).



Installation Requirements

Technical Data

The following Technical Data should be considered when installing an External Air Kit.

Product Code	SH-5AIR	SH-5WIDAIR
Appliance Rated Output (*In order to achieve the rated output set the air controls in the position shown in the User Section of the Instruction manual - Sheraton PM1656/ Chesterfield PM1700)	5kW	5kW
Typical Room Size	70m ³	70m ³
Max length of Ducting	3m	3m
Max No. of Bends (90°)	2	2
Grill Cover Free Air Space	49.5cm ²	49.5cm ²
Diameter of Duct**	ø80mm	ø80mm

** Note: Only use duct supplied by Stovax.

Packing List

Model	Packing List	
SH-5AIR (Sheraton 5 & Chesterfield 5)	1 x Outer Air Chamber metalwork assembly 2 x Collar 6 x Self Tapping Screws	1 x Air Duct 1 x Fixing Band
SH-5WIDAIR (Sheraton 5 Wide & Chesterfield 5 Wide)	1 x Outer Air Chamber metalwork assembly 2 x Collar 6 x Self Tapping Screws	1 x Air Duct 1 x Fixing Band





Installation Requirements





Installation Instructions

1. General

Decide on the method of installation, see Installation Instructions supplied with the appliance.

The kit must be fitted to the appliance prior to installation.

A risk assessment must be completed as detailed in HETAS guidance note HETAS_TN_0020 to confirm the suitability of using the DEAS prior to installation of the appliance. This should consider:

Air tightness of the building

Older buildings that are less air tight will naturally have an additional amount of ventilation air that will compliment the combustion air required, in particular when the door is opened for refuelling the appliance. As buildings become more sealed this air is reduced and it is important to ensure the room where the appliance is sited is maintained at a positive pressure to reduce the possibility of spillage.

Existing building ventilation

All buildings will have some form of existing ventilation which may range from trickle vents in doors and windows, localised mechanical extraction in kitchens and bathrooms to whole house mechanical ventilation systems (MHRV). The position and effectiveness of this will effect the operation of the appliance.

Existing Chimney

This should meet the requirements of Approved Document J and the specification as detailed in the appliance installation instructions.

2. Internal Positioning of the Air Duct

2.1 The air duct must not touch any combustible materials within 700mm of the back of the stove, see Diagrams 1 & 2.



- 2.2 Only use Stovax non combustible ducting supplied with the connection kit within 700mm of the air duct connection.
- 2.3 Take care when routing the duct to ensure it is not deformed and restricting the airflow.

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Installation Instructions

3. External Termination of the Air Duct

- 3.1 The external air duct should be positioned so it is not effected by:
 - Adverse weather conditions and prevailing winds.
 - Blockages caused by debris.

Regular checks should be made to ensure the vent is not blocked, in particular after windy weather or snow falls. Diagram 3.



3.2 If the building has a suspended floor, which has external ventilation into the void below the termination may be made into this area.

Note: Choose only one vent position.



- 3.3 Terminations should be made with a proprietary fixed open external air vent kit, which gives minimum free area of greater than listed, positioned so no blockage can occur and not permit the entry of birds or animals.
- 3.4 Under normal circumstances the small models (5kW) require no additional air supply. If the product is fitted in a well sealed home it may require additional ventilation to enable the product to work effectively. This could be achieved by the fitting of the external air kit.
- 3.5 The free area of the external vents is:

	5 / 5 Wide (Ø80mm)
mm ²	5027
cm ²	50.3
in ²	7.8

4. Fixing Kit to the Appliance



WHEN FITTING THE AIR CHAMBER, COLLAR, AND BLANKING PLATE, ENSURE A GOOD SEAL IS ACHIEVED. IF THE SEAL IS NOT SATISFACTORY USE A SUITABLE HIGH TEMPERATURE SILICONE SEALANT AROUND THE MEETING FACES.

Remove the Door and the Cast Top, see Installation Instructions supplied with the appliance.

4.1 Carefully tilt the appliance forward so the air control is visible.

Slide the outer air chamber over the air control from the rear of the appliance, see Diagram 5.

NOTE: Views below are shown for clarity. DO NOT turn the stove upside down unless ALL loose parts are removed. The kit can be fitted with the stove on its legs.



4.2 Secure the outer air chamber in position on the rear of the stove with the 2 x M6 bolts. Tighten both bolts against the body of the kit.





4.3 Choose whether the Outdoor Air Kit will be rear or base exit. Secure with the 6 Self Tapping Screws provided.



4.4 Fix air duct connection and secure with fixing band supplied.



1. General Check

1.1 Check that the appliance is fully assembled and all parts are in their correct position.

Check that the manufacturer's instructions have been followed with particular regard to the correct fitting and adjustment of the Dedicated External Air Supply.

Ensure that a carbon monoxide alarm has been securely fitted in a suitable position.

Complete the appliance commissioning procedure as detailed in the appliance installation instructions

1a. Cold test – Appliance door shut

- 1a.1 Close all doors and windows in the room that contains the appliance.
- 1a.2 Preheat the flue by lighting a small fire using kindling or use a blow lamp or electric heater.
- 1a.3 Light a small smoke pellet (30g / 15m³) in the appliance and shut the appliance door. All air-controls should be in their maximum open position.
- 1a.4 Check that all of the smoke enters the flue and none comes back into the room through any part of the stove, connecting flue pipe or air supply duct.
- 1a.5 If smoke enters the room then repeat the flue preheat, increasing the warmth of the flue to generate additional flue draught.
- 1a.6 If it still fails, progressively open a window. If the flue starts to draw the smoke, this will indicate the appliance is not being provided with adequate air via the dedicated external air supply system to the room. Note the additional free area of ventilation provided by the window and add permanent ventilation into the room by that amount to correct the problem.

Retest to confirm safe operation.

1b. Hot test - Refuelling

- 1b.1 Light a small fire in the appliance using the recommended amount of kindling for the appliance as detailed in the manufacturers operating instructions. This will establish a flue draught.
- 1b.2 Allow the kindling to burn down to glowing char with little or no visible flames. Insert a smoke match into a smoke match extension rod (min 15 seconds burn time). Set the appliance air controls into the manufacturers recommended refuel position. Open the appliance door. Touch the tip of the smoke match onto a burning ember in the firebox and then position the smoke match 50mm above the bed of char or any flames in the centre of the firebox and 2/3 of the firebox depth in from the front. For the duration of the smoke match burn observe if the smoke is extinguished close the appliance door.

NOTE: shining a bright light from a torch or lamp into the firebox will assist visibility of the smoke flow.



1b.3 If smoke spills from the appliance, warm the chimney further and repeat the test.

NOTE: Intermittent minor spillage (wisps) of smoke are acceptable but constant spillage is not.

1b.4 If smoke still spills into the room, progressively open a window. If the flue starts to draw the smoke, this will indicate the appliance is not being provided with adequate air via the dedicated external air supply system. Note the additional area of ventilation required, and add permanent ventilation into the room by that amount to correct the problem.

Retest and confirm safe operation.

1c. De-pressurisation test

1c.1 Turn off any already running extraction systems and open a window in the room the appliance is situated in to equalise the dwellings internal pressure with outside.

Close the window.

- 1c.2 Light a small fire in the appliance with the recommended amount of kindling detailed in the manufacturers operating instructions and allow the appliance to reach its normal operating temperature.
- 1c.3 Close all external doors, windows, and ensure all trickle ventilators that can be closed are closed.
- 1c.4 Set to maximum any extract systems in the dwelling (including cooker hoods, bathroom extractors, and externally vented tumble driers etc.).
- 1c.5 Switch on and set to maximum any additional open flued heating appliances in the same or adjacent rooms.
- 1c.6 Open any connecting doors between the room in which the appliance is fitted and the room which contains the extractor fan and or heating appliances. Leave the remaining windows and doors shut in both rooms.
- 1c.7 If the smoke continues to fail to be drawn up the flue, or fails with additional ventilation beyond that advised by ADJ, thoroughly inspect the flue / chimney and termination for other faults.

Repeat the Hot Test - refuelling (step 1b.)

- 1c.8 If smoke enters the room then additional ventilation may be required to compensate for the extraction. This can be tested by gradually opening a window.
- 1c.9 If the smoke continues to fail to be drawn up the flue, or fails with additional ventilation beyond that advised by ADJ Table 1, thoroughly inspect the flue / chimney and termination for other faults. Ensure satisfactory test results before bringing the appliance in to use.

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If any tests do not pass instruct the user not to use the appliance until the problem is rectified or an air vent as detailed in ADJ is fitted and the appliance is confirmed as safe, in writing, to use by a HETAS registered installer.

2. Maintenance

2.1 Check internal and external vents and air ducts at least once a year for any obstructions.

Regular checks should be made to ensure the vent is not blocked, in particular after adverse weather.

2.2 Check the security of air connections to the stove and tighten if required.

3. CO Alarms

All open flued appliances can be affected by temporary atmospheric conditions which may allow fumes to enter the house. Building regulations require that whenever a new or replacement fixed solid fuel or wood/biomass appliance is installed in a dwelling a carbon monoxide alarm, complying with BS EN50291, must be fitted in the same room as the appliance. Further guidance on the installation of the carbon monoxide alarm is available in the latest edition of BS EN50292 and from the alarm manufacturer's instructions.

HETAS recommend the unit is permanently fixed in accordance with the manufacturer's installation instructions or with the guidance contained in Approved Document J where no other information is available.

Provision of an alarm must not be considered a substitute for either installing the appliance correctly or ensuring regular servicing and maintenance of the appliance and chimney system.



COMMISSIONING & FLUE PERFORMANCE TEST CERTIFICATE

This form must be completed and passed to the occupier.





COMMISSIONING & FLUE PERFORMANCE TEST CERTIFICATE

This form must be completed and left with the end user.





Stovax Ltd, Falcon Road, Sowton Industrial Estate, Exeter, Devon, England EX2 7LF Tel: (01392) 474011 Fax: (01392) 219932 E-mail: info@stovax.com www.stovax.com