# STOVAX



# **Stockton**Clean-burn stove

MODELS: 3 MF/4 Wood/4 MF/5 MF

# Installation and Operating Instructions

For Use in Great Britain and Eire

This product is suitable for use in the stated countries. To install the product in other countries it is essential to obtain translated instructions and in some cases the product may require modification. Contact Stovax to obtain further information.

### **IMPORTANT**

Please read these instructions carefully before using the appliance. Keep them safe for future reference and when servicing the stove.

# FOR YOUR RECORDS

To assist us in any Guarantee claim please complete the following information:-

Stovax dealer appliance was purchased from		
Name:		
Address:		
Telephone number:		
Important information must	be completed	
Date installed:		
Model description:		
Serial number:		
Installation Engine	ner -	
Ü		
Company name:		
Address:		
Telephone number:		
Commissioning Checks (to be compl	eted and signed)	
Is flue system correct for the appliance	YES NO	
Flue swept and soundness test complete	YES NO	
Smoke test completed on installed appliance	YES NO	
Spillage test completed	YES NO	
Use of appliance and operation of controls explained	YES NO	
Model details and serial number recorded above	YES NO	
Instruction book handed to customer	YES NO	
Signature: Print nam	ne:	

# PRE-INSTALLATION CHECKS

#### Before installation of this product please read these instructions fully.

It is very important to also understand the requirements of the UK Building Regulations (England and Wales – Document J / Scotland - Part F), along with any local regulations that may apply. Should any conflict occur between these instructions and these regulations the regulations shall apply.

Your local Building Control Officer would be happy to advise should questions arise regarding the requirements of the regulations.

The Stockton stove should be fitted by a HETAS approved installer, or approved by your local Building Control Officer. Your Stovax dealer should be able to arrange this service for you.

A faulty installation could cause danger to the inhabitants and structure of the building.

#### 1. FLUE AND CHIMNEY

The construction of the Flue or Chimney system should meet the requirements of the Building Regulations.

The minimum flue sizes required are:-

**Stockton 3** 125mm (5") diameter with liner or factory made system.

150mm (6") diameter without liner or 135mm (5 $^1\!\!/_2\!")$  square.

**Stockton 4** 125mm (5") diameter with liner or factory made system.

150mm (6") diameter without liner or 135mm ( $5^{1}/_{2}$ ") square

**Stockton 5** 150mm (6") diameter or 135 (51/2)" square

If a suitable approved factory made system is to be used it should be installed to the manufacturer's instructions. Do not connect to systems containing large voids, or over 230mm square (9" square).

The minimum height of the Flue or Chimney must be 4m (13') when measured from the hearth to the top of the flue, with no horizontal sections, and the maximum of 4 bends with angles of less than 45 degrees.

The flue exit from the building should be positioned to comply with the requirements of the Building Regulations.

The Flue or Chimney must be free from any obstruction of any kind.

The Flue or Chimney must be clean and sound, and should be swept before re-use.

# PRE-INSTALLATION CHECKS

Ensure no other heating appliances are connected to the same Flue or Chimney system.

Check that the Flue or Chimney is structurally sound. In particular, it should not be possible for products of combustion to come into contact with combustible materials in the structure of the building.

Check the flue draught. This should be done with all windows and doors closed and any extraction fans in adjoining rooms running at maximum speed. (See next section for additional ventilation requirements)

Note: A guide containing general information on Chimneys and Flues is obtainable from: -

The British Flue & Chimney Manufacturers' Association, Henley Road Medmenham Marlow Bucks SL7 2ER

Tel: - 01491 578674 Fax: - 01491 575024 e-mail: - info@feta.co.uk

#### 2. ADDITIONAL VENTILATION

Additional ventilation is not required for the use of the Stockton 3, 4 and 5 stoves. However well sealed properties fitted with double glazing or similar may require additional ventilation to maintain a suitable flue draught.

Extractor fans or cooker hoods should not be placed in the same room or space as the Stockton stove.

If any of these checks reveal problems do not proceed with the fitting of the stove until they have been rectified.

# **INSTALLATION**

Because each installation is unique to the property, it is not possible to give full details of the constructional hearth setting. However, this should be constructed to comply with the requirements of the Building Regulations and be made using "best practice" construction methods. Remember that many fireplace openings will have a supporting lintel. Do not remove this without making provision to support the remaining structure of the building. The Stockton stove must not form any part of the supporting structure.

#### 1. INSTALLING THE STOVE

- 1.1 Decide if the installation is to be top or rear flue exit, and fit and seal the flue collar and blanking plate to suit. The flue collar attaches to the stove backplate or top plate with hexagonal headed bolts. The blanking plate is fixed to the unused flue outlet with fixing nuts.
- 1.2 Lift the stove into position on the prepared hearth area, taking care not to damage the hearth finish
- 1.3 Connect the stove to the chimney system, using Stovax enamelled flue pipe and seal the connecting joints.

#### 2. FITTING FIREBRICKS AND BAFFLE

- 2.1 To fit the baffle, first remove the log retainer from the door opening. Then ease the baffle through the door and rotate so that the front of the baffle rests on the two 10mm pins and the back of the baffle rests on the cast iron air chamber at the rear of the stove. The front lip of the baffle should point downwards.
- 2.2 To fit the firebricks slide them into position on each side of the firebox. The back edge of the brick should be held in place by the side of the cast iron air chamber. The Stockton 4 wood is fitted with 4 firebricks. Therefore to fit the second brick, slide the first brick up until it touches the baffle support pin and slide the second brick into position below it. Repeat this procedure for the other side of the stove.
- 2.3 Replace the log retainer.

# **INSTALLATION**

#### 3. COMMISSIONING

- 3.1 Check the firebricks, baffles and log retainer are correctly fitted, all seals are undamaged and the air controls and door catch are operating freely. The fit of the door may be adjusted if required by moving the hinge blocks. This may be done by loosening the hinge clamping nuts, and re-tightening when the correct fit is achieved.
- 3.2 Carry out a final smoke draw test on the installed stove, by first warming the flue with a blow-lamp, or similar, for about 10 minutes. Then place a smoke pellet in the stove, with the air controls open, and close the door. Smoke should now be drawn up the flue and be seen to discharge at the terminal. This test should be completed with all doors and windows in the room where the stove is fitted closed. Should this test fail the suitability of the flue system should be re-checked.
- 3.3 Light the stove and gently allow the temperature to increase slowly to operating levels. Check that no combustion products are entering the room. When the stove has reached a steady operating condition open the main firedoor and carry out a spillage test with a smoke match or pellet around the door opening. If excessive spillage does occur allow the stove to cool and re-check the suitability of the flue system.
- 3.4 Explain the safe operation of the stove and the use of the controls to the user, along with the need to only use suitable fuels. Also explain the cleaning and routine maintenance requirements.
- 3.5 Explain the requirements to use a suitable fireguard when children, elderly or infirm persons may be near the stove.
- 3.6 Record dealer/supplier details and installer details on page 2.
- 3.7 **Record serial number on page 2.**
- 3.8 Give this booklet to the customer.

#### Caution!

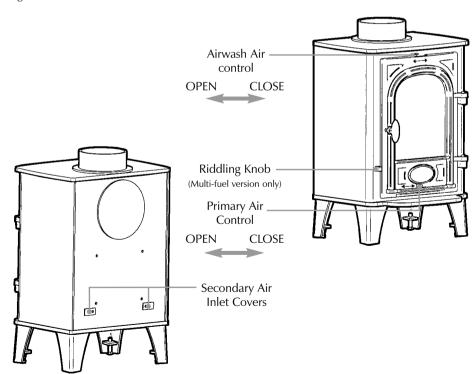
Parts of the Stockton stove are manufactured from cast iron, which needs to be tempered before the stove is operated at the highest temperatures. Therefore it is recommended that the stove is operated at low temperatures for the first 24 hours of use.

During this time the appliance may give off some unpleasant odours, as the paint cures, and we recommend that you keep the room well ventilated during this period to avoid a build-up of fumes.

After a prolonged period of time without burning, such as the summer, it is recommended to re-temper the castings by keeping the fire low for about 4 hours.

#### 1. LIGHTING & BURNING THE STOVE

#### Diagram 1



N.B: The secondary combustion air control at the rear of the stove is pre-set during manufacture.

- 1.1 Woodburning versions using wood. (Stockton 4 Wood)
- 1.2 Open the **Primary air and Airwash air controls** fully. See diagram 1.
- 1.3 Place some pieces of firelighters or dry crumpled paper on the grate and cover with small pieces of dry kindling wood. Light the paper or firelighters. Do not burn plastics.
- 1.4 As the fire becomes established add larger pieces of wood and close the **Primary air control** and control the burn rate using the **Airwash air control** only.
- 1.5 To burn wood efficiently it is best to allow a bed of ash to build-up on the grate, and continue to control the combustion using the **Airwash air control only.**
- 1.6 Before re-fuelling the appliance it is advisable to first rake the embers evenly over the firebed then open the **Airwash air control** fully for a few minutes, to establish a glowing bed before adding new logs.
- 1.7 Allow the new logs to burn at high output for a few minutes before adjusting the burn rate with the **Airwash air control** to the desired setting. It is best to refuel little and often to maintain clean and efficient burning.
- 1.8 The ideal control settings to suit the particular installation and personal preferences will be established by experience in using the appliance.
- 1.9 It is not recommended to load large amounts of logs and burn with the Airwash air control on low settings for long periods of time. This will reduce the effectiveness of the glass cleaning effect of the Airwash air. Also this will cause large a build-up of tars and creosotes in the appliance and flue system.
- 1.10 Multi-fuel versions using solid fuel (Stockton 3 MF, 4 MF, 5 MF)
- 1.11 Open the **Airwash air control** to approximately 50% open and **Primary air control** fully. See diagram 1.
- 1.12 Place some pieces of firelighters or dry crumpled paper on the grate and cover with some small pieces of dry kindling wood. Light the paper or firelighters. Do not burn plastics.
- 1.13 As the fire becomes established add pieces of solid fuel.
- 1.14 When the fire becomes established reduce the **Airwash air control** to approximately 50% open and control the burn rate using the **Primary air control** only.

- 1.15 Before re-fuelling the appliance it is advisable to first de-ash the firebed, using the riddling grate system, operated by using removable handle to pull the riddling knob in and out. This causes the ash to fall down into the ashpan.
- 1.16 Open the **Primary air control** fully for a few minutes, to establish a glowing bed before adding new fuel.
- 1.17 Allow the new fuel to burn at high output for a few minutes before adjusting the burn rate with the **Primary air control** to the desired setting. It is best to refuel little and often to maintain clean and efficient burning.
- 1.18 The ideal control settings to suit the particular installation and personal preferences will be established by experience in using the appliance.
- 1.19 It is not recommended to load large amounts of fuel and burn with the **Primary air control** on low settings for long periods of time. As the will reduce the effectiveness of the glass cleaning effect of the airwash. Also this will cause a large build-up of tars and creosotes in the appliance and flue system.

We would recommend that the Stockton is burnt at high output for at least 30 minutes each day when it is in use. This will help reduce the build-up of tars and build-ups of tars and creosotes within the appliance.

#### 2. OPENING THE DOORS

- To open the door, hook the tool provided over the door handle and rotate clockwise  $\frac{1}{4}$  turn. Do not force the handle to turn more than  $\frac{1}{4}$  turn as damage may occur.
- 2.2 Never open the door with your bare hands.
- 2.3 Closing the door is the reverse of the previous.

#### 3. ASH REMOVAL

- 3.1 The burning of any fuel will produce ash, which will have to be removed after a period of use. This time will depend on the fuel used. Before removing the ash from the appliance it is advisable to let the fire burn down to a low level, or even go out completely.
- 3.2 The ashpan (multi-fuel only) can then be removed from the appliance using the tool provided and a gloved hand.
- 3.3 As heat can remain in the ash for a long period after use, care must be taken when removing and carrying the full ashpan. We suggest that the ash be placed directly in to a Stovax ash caddie.
- 3.4 Do not place ash in a bin made from plastic or any other combustible material.
- 3.5 Failure to remove excess ash on a regular basis could cause damage to the Stockton stove.
- 3.6 To clean the woodburning version, allow the fire to go out and cool completely and remove the ash using a suitable shovel and brush.

#### 1.GENERAL CLEANING

1.1 We would recommend that your Stockton stove be cleaned fully on a regular basis, according to the level of use. Attention should be given to cleaning the baffle system, flueways and removing ash. Regular cleaning and preventive maintenance will help give many years of safe use.

#### 2. CLEANING GLASS

- 2.1 While the correct use of the Airwash system will generally keep the glass clean when the appliance is used you may sometimes need to clean the glass.
- 2.2 This can be done as follows. Allow the Stockton stove to cool fully, never attempt to clean hot glass. Any deposits can then be removed using a soft cloth and Stovax Glass Cleaner.
- 2.3 Alternatively, it is possible to remove some stains using a soft cloth and warm soapy water, ensure that you do not wet the door sealing ropes.
- 2.4 Before re-lighting the appliance, dry the glass fully.

#### **3 CHIMNEY SWEEPING**

3.1 We would recommend that to maintain the safe and efficient use of the appliance the flue / chimney is inspected and swept at least once a year

#### 4 ANNUAL SERVICE

- 4.1 At the end of the heating season it is recommended to strip, inspect and clean the appliance as detailed below.
- 4.2 Carefully remove all of the following internal parts. Internal Baffle, Firebricks, Complete grate and Ashpan (on multi-fuel stoves).
- 4.3 Vacuum clean any remaining ash and debris from the inside of the stove.
- 4.4 Clean the internal surfaces of the appliance using a wire brush and scraper as required. Vacuum and brush the resulting debris from the stove then give the inside of the appliance a protective coating of light oil, such as WD40®.

- 4.5 Clean the Baffle and Grate parts with a wire brush, and check the parts for any damage. Replace any damaged parts, if required, and coat all parts with a protective coating of light oil, such as WD40®.
- 4.6 Check and clean, with a soft brush the firebricks. Replace any broken bricks. It is normal for some surface damage to occur during use.
- 4.7 Re-fit cleaned internal parts.
- 4.8 Remove the glass from the door, and discard all old rope and strip seals. Clean the old glue from the door sealing rope grove and remove dust and dirt. Clean the door glass using Stovax Stove Glass Cleaner and a soft cloth, do not use abrasive cleaners to remove tar or soot deposits from the glass.
- 4.9 Replace the glass edge seal with a new seal and re-fit the glass into place in the door.
- 4.10 Fit new door rope seal, gluing it in place with Stovax Thermic Seal rope adhesive. When fitting new door seals we recommend closing the appliance door and leaving for at least 12 hours before using. This allows the adhesive to fully bond to the seal before use.
- 4.11 Lightly oil the door catch mechanism and hinge pins. Avoid getting oil on to the door seals and glass.
- 4.12 To refresh the finish on painted appliances it is possible to re-paint using Stovax Thermolac Stove paint.
- 4.13 We recommend that only genuine Stovax replacement parts are used to keep your Stockton stove in safe and efficient working order. Your local Stovax dealer will be able to provide you with the genuine parts you require.

#### **5 RECOMMENDED FUELS**

**Wood:-** Burn only seasoned timber, with a moisture content of less than 20%. In most cases this would require drying cut wood for 12 to 18 months before use. Poor quality timber could cause low combustion efficiency, produce large amounts of harmful condensation, which could reduce the effectiveness of the airwash system, and ultimately the life of the appliance Do not burn painted, treated wood or manufactured board products.

The symptoms of poor performance related to wet wood include:-

- difficulty getting a fire going and keeping it burning well
- smoky fires with little flame
- dirty glass
- rapid creosote build-up in the chimney
- low heat output
- Short burn times, excessive fuel consumption and blue/grey smoke from the chimney

To help avoid large build-ups of tars and creosote within in the stove and the flue system, it is recommended to burn at maximum output for at least 30 minutes each day. The use of Stovax Protector chimney cleaner will also help to reduce this problem.

**Solid fuel:-** Burn only manufactured smokeless fuels, or anthracite, listed as suitable for use with closed heating appliances. **Do not burn 'petro-coke' or other petroleum based fuels,** as this will invalidate and product guarantee.

If you require advice on suitable solid fuels contact your local Approved Coal Merchant. Details can be obtained by ringing the Solid Fuel Association advice line on Freephone 0800 600 000. Or their web site at www.solidfuel.co.uk

## 6. STOVAX STOVECARE PRODUCTS

The following products, all available from your local Stovax stove stockist, will help you to keep your stove in the best possible condition.

Task	Product name	Stovax code number
Glass cleaning	Stove glass cleaner (500ml wipe-on) Stove glass cleaner (500ml spray-on)	4111 4103
Preventing the build-up of creosote in the chimney	Protector (15 sachets) Protector (1kg tub)	7002 7025
Sealing flue pipe joints	Fire cement (500g tub) Fire cement (600g cartridge)	2020 2021
Re-painting	Thermolac Black (400ml aerosol) Thermolac Black (200ml brush-on)	2019 2057
Cleaning the surface of matt black stoves	Colloidal black (85ml)	7000
Protecting your hands	Heat-resistant leather gloves	4008
Sealing the stove door	14mm black rope seal (handy pack) 14mm black rope seal (25m reel)	5000 4670
Sealing the stove glass	3mm black rope seal (handy pack) 3mm black rope seal (25m reel)	4975 4974
Attaching rope seal	Thermic seal (50ml bottle)	5037

