

STOVAX



Riva Avanti

Installation Instructions

MODELS: RV66 AVC

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

**Before installation of this product please read these instructions fully.
The installer should complete the commissioning sheet at the start of the User Instructions.**

TECHNICAL SPECIFICATION

RIVA 66 AVANTI

	RIVA 66 Avanti Model: RV66 AVC
Maximum heat output	8kW
Fuel type	Seasoned wood (less than 20% moisture content) Manufactured smokeless fuel
Do not burn petroleum based fuels such as petro-coke, as these will seriously damage the Riva cassette.	
Maximum log length	450mm
Flue outlet size	Standard 150mm (6") 180mm (7") adapter available on request

STANDARD FEATURES

- Primary air (under grate air for full multifuel use)
- Airwash (for woodburning / clean glass)
- Pre-set secondary air control (to ensure complete burning of flue gases)
- Riddling grate system for clean de-ashing
- Stainless steel ashpan
- Removable door handle
- Pre-drilled convection air duct connection points
- Spacer frame kit – to suit 350mm deep opening

PACKING LIST

- User Instructions
- Installer Instructions
- Guarantee card
- Accessory catalogue
- Pair leather stove gloves
- Fixing kit (2 x Rawl plugs + 2 x Coach screws)
- 2.5mm A/F hex socket key
- 4mm A/F hex socket key

SITE REQUIREMENTS

IMPORTANT NOTICE

Before installation of this product please read these instructions fully.

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

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

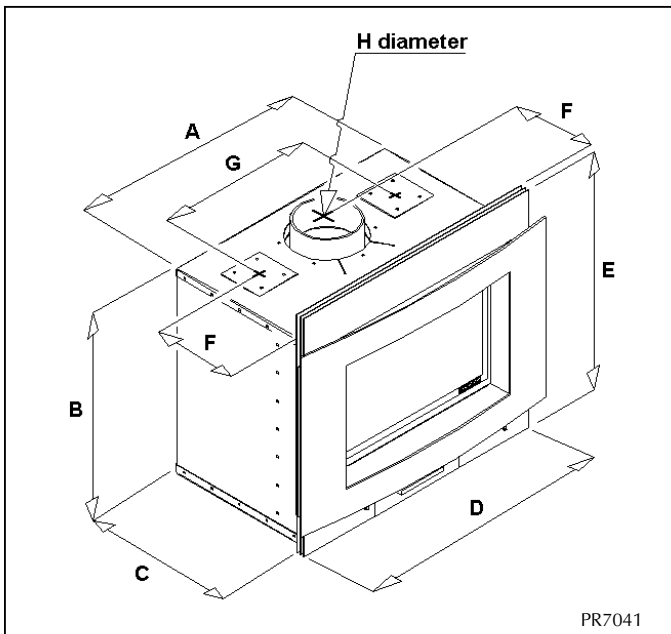
The Riva Avanti should be fitted by a HETAS (GB only) registered installer, or approved by your local building control officer. Your Stovax dealer should be able to arrange this service for you.

Your building insurance company may also require you to inform them that you have installed a new heating appliance, so check with your insurers that your cover is still valid after installing the Riva Avanti.

When completing the installation and building works you should comply with your responsibilities under the Health and Safety at Work Acts, and any new legislation which may be introduced during the lifetime of these instructions.

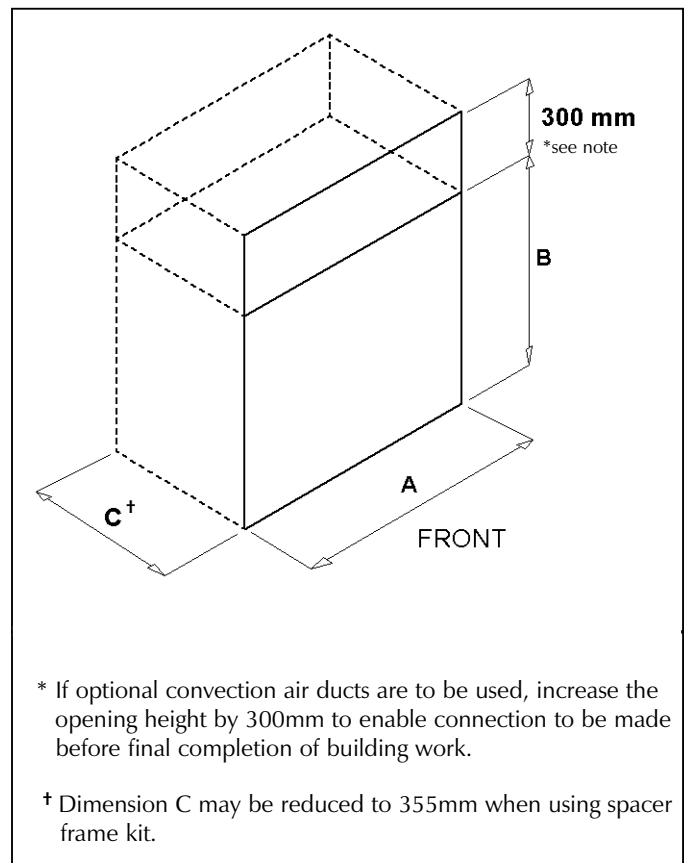
A faulty installation could cause danger to the inhabitants and structure of the building.

DIMENSIONS



	Riva 66 Avanti RV66 AVC
A	650mm
B	550mm
C	395mm
D	694mm
E	636mm
F	248mm
G	420mm
H	153/178mm

MINIMUM DIMENSIONS BUILDERS OPENING



RIVA MF CASSETTE

	Riva 66 Avanti RV66 AVC
A	660mm
B	560mm
C ⁺	405mm

†Dimension C may be reduced to 355mm when using spacer frame kit. (Stovax part no. RV66AVSP)

SITE REQUIREMENTS

BUILDERS OPENING

Because each opening is unique to the property, it is not possible to give full details of the construction. However the builders opening should be constructed from non-combustible materials which remain stable at high temperatures, and comply with the requirements of local and national building regulations using "best practice" construction methods. It is possible for the outer casing of the Riva to reach temperatures of 300°C and for the flue to reach higher temperatures.

Remember that many fireplace openings will have supporting lintels. Remove the covering plaster to identify the position of these before starting any construction work. Do not remove constructional lintels without making provision to support the remaining structure of the building. The Riva Avanti must not form any part of the supporting structure.

As the structure of the builders opening will reach high temperatures it is recommended that it is lined with insulating blockwork to reduce the heat transfer to the external walls, in particular the area of the chimney breast above the opening.

Should the finish of the chimney breast and surrounding area be smooth plaster, consideration should be given to the conducted and convected heat emitted by the Riva Avanti, as this could be high enough to crack normal gypsum based plaster. It is recommended that a high temperature plaster is used, or the area faced with a suitable high temperature plasterboard. New plaster should be fully dried before the Riva Avanti is used, or cracking could occur.

Due to the high temperature of the convected air above the front of the stove we recommend that no valuable photographs, paintings, porcelain or other items are placed on the wall in this area. Such artefacts may be damaged by long term exposure to fluctuating temperatures.

If you are in any doubt about your ability to produce a safe opening contact your Stovax dealer for professional advice.

Should you wish to connect air ducting to the convection system, provision should be made to increase the opening height by an additional 300mm. This will allow the access needed to fit the duct pipes after connecting the flue system.

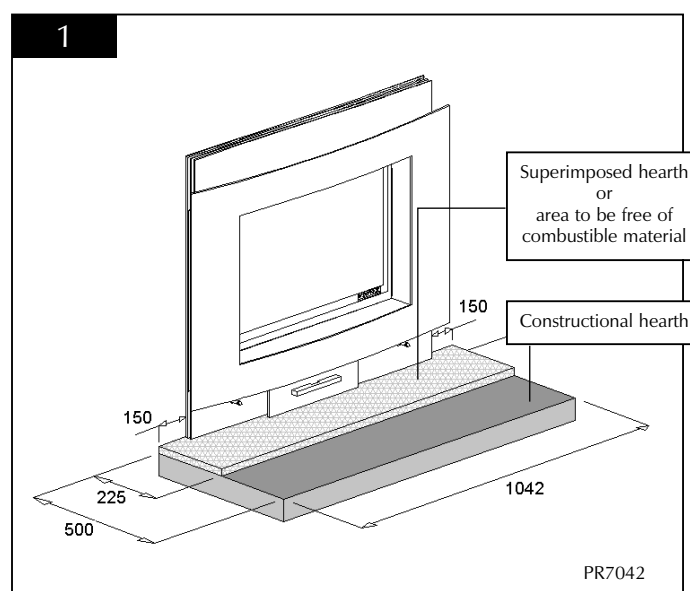
Due to the high temperature of the ducts combustible material must be placed no closer than 100mm to the surface. The duct exits and grills must only be placed in a non-combustible wall panel constructed to be stable under high temperatures.

The exit ducts should be placed at high level or protected, as the grill surfaces will become very hot when in use. If the exit is at low level a suitable guard should be used to prevent touching or obstruction. Care should also be taken with the placement of combustible items near the operating duct exit as conducted and radiated heat could cause a fire hazard.

Additional information covering the installation of the Riva Avanti may be found in the following British Standards:- BS6461, BS6999, and BS8303.

MINIMUM DIMENSIONS - HEARTH

The Riva Avanti must stand on a constructional hearth with the minimum dimensions as shown in diagram 1. If it is to be fitted in a raised setting consideration may need to be given to extending the depth of the hearth to safely contain any falling logs or embers.



If you are fitting the Riva Avanti into an existing hearth setting check that it complies with the current regulations and is the minimum size shown.

If you have no existing fireplace or chimney, it is possible to construct a suitable non-combustible housing and hearth setting. However this should be constructed to comply with the requirements of both current national and local regulations and the design approved by your local building control officer. Remember that any new chimney added to your property may also require planning permission.

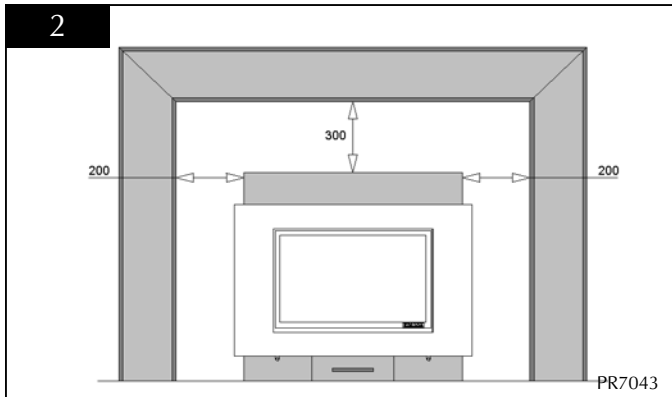
As some modern houses are built using a timber frame construction with high levels of thermal insulation consideration must be given to isolating the setting from combustible materials, and providing sufficient air circulation to maintain the heating efficiency.

SITE REQUIREMENTS

FIRE SURROUND CLEARANCES

If the Riva Avanti is to be fitted with a fire surround, we would recommend the minimum clearances, as shown in diagram 2, are maintained between any point of the Riva Avanti and any combustible material. A selection of surrounds is produced by Stovax and details can be obtained from your local supplier.

We therefore suggest that you obtain expert advice before proceeding with work of this nature.



We cannot guarantee that some finishes will not discolour with heat and that some lower quality products will not distort, or crack, when in use.

If stone / granite / marble or any other natural material is used to construct the fire surround, or any part of it, provision should be made for expansion and movement of the parts due to heating and cooling.

If you are in any doubt about the installation requirements, or suitability of fire surrounds contact your Stovax dealer.

All fire surrounds should be suitable for use with solid fuel heating products.

PRE-INSTALLATION CHECKS

It is important that adequate Ventilation exists and the Flue or Chimney system that is to be used is in good working condition. Products of combustion that enter the room could be a serious health risk. Before installation of the Riva Avanti we recommend that the Flue or Chimney system and Ventilation requirements are inspected by a competent person, and passed as suitable for use with the Riva Avanti. In particular the following should be checked.

1. FLUE AND CHIMNEY

- 1.1 The construction of the flue or chimney system should meet the requirements of the Building Regulations, and be of the size listed.

	Riva 66 Avanti RV66 AVC
Round	150mm (6")
Square	135mm x 135mm (5 1/2" x 5 1/2")
A suitable approved factory made system may be used when installed to the manufacturers instructions. The maximum recommended flue size is 230mm (9") square	

- 1.2 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.
- 1.3 The flue exit from the building should be positioned to comply with the requirements of the Building Regulations.
- 1.4 The Flue or Chimney must be free from any obstruction of any kind.
- 1.5 The Flue or Chimney must be clean and sound, and should be swept before re-use.
- 1.6 Ensure no other heating appliances are connected to the same Flue or Chimney system.
- 1.7 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.
- 1.8 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)

MAXIMUM DRAUGHT - 2.5mm WG
MINIMUM DRAUGHT - 1.0mm WG

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

The British Flue & Chimney Manufacturers' Association,
2 Waltham Court, Milley Lane
Hare Hatch, Reading
Bucks, RG10 9TH
Tel: 0118 9403416
e-mail: info@feta.co.uk

2. ADDITIONAL VENTILATION

- 2.1 As the rated output of the Riva Avanti cassette is above 5Kw **additional ventilation** will be required to comply with the requirements of the Building Regulations.

	Riva 66 Avanti RV66 AVC
Additional ventilation	1650mm²
This should be provided using a permanently open vent which is positioned so that it is not liable to be blocked, both inside and outside the building	

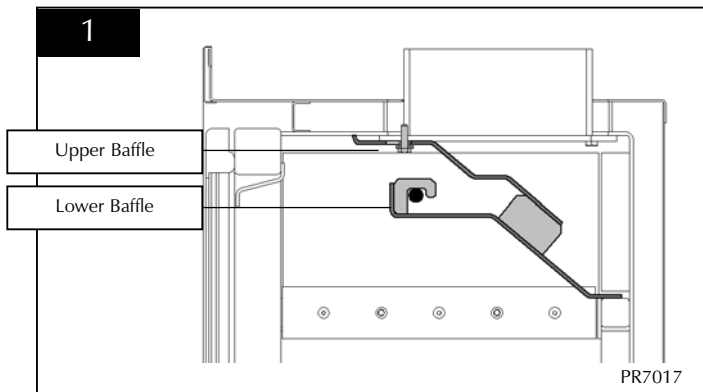
- 2.2 Extractor fans or cooker hoods should not be placed in the same room or space as the Riva Avanti.
- 2.3 **If any of these checks reveal problems do not proceed with the fitting of the Riva Avanti until they have been rectified.**

INSTALLATION INSTRUCTIONS

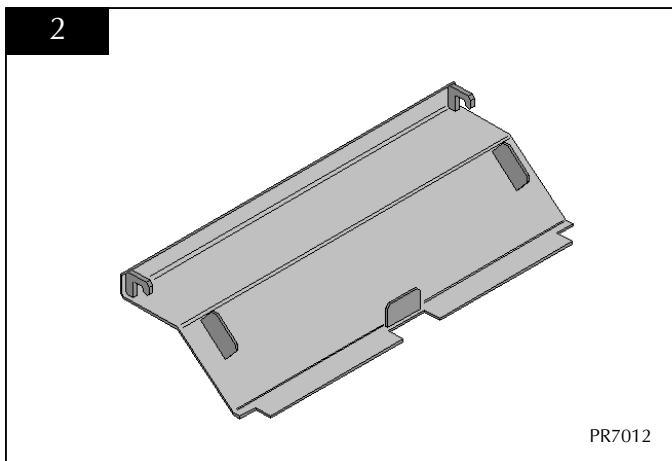
1. BAFFLE REMOVAL

(Tools required – None)

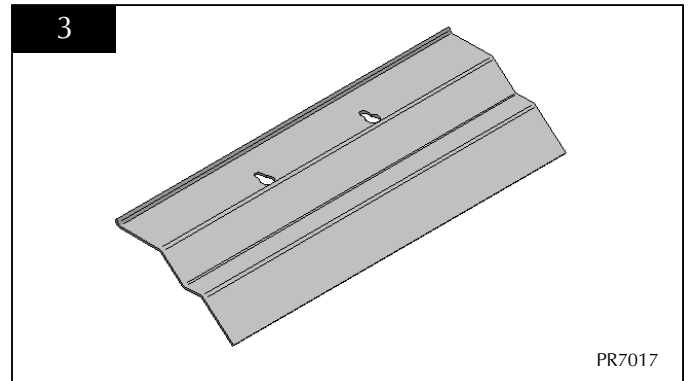
The Riva Avanti is fitted with a twin baffle system, consisting of upper and lower baffles. See diagram 1.



- 1.1 To remove the baffle system, first remove the Log Guard from the Riva Avanti to give access to the firebox.
- 1.2 **First** remove the **Lower Baffle**, see diagram 2, by lifting the front edge to unhook it from the support bars, then pull the baffle forward to disengage the rear edge from the location above air inlet holes. Rotate the baffle to remove from the firebox through the door opening.



- 1.3 **Second** remove the **Upper Baffle**, see diagram 3, by pulling forward to disengage it from the hanging points at the top of the firebox. Rotate the baffle to remove from the firebox through the door opening.

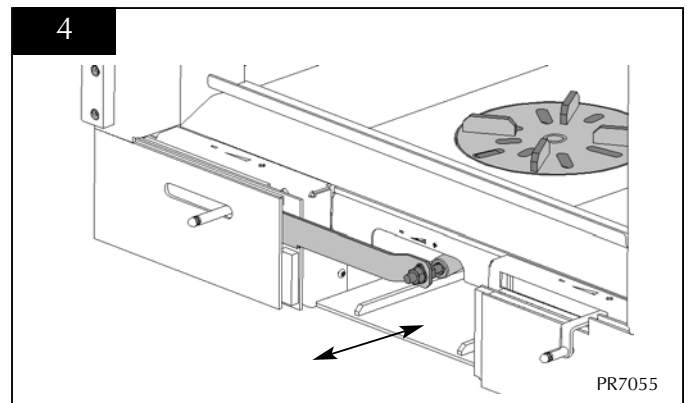


- 1.4 The replacement of the system is the reverse of the previous operations.

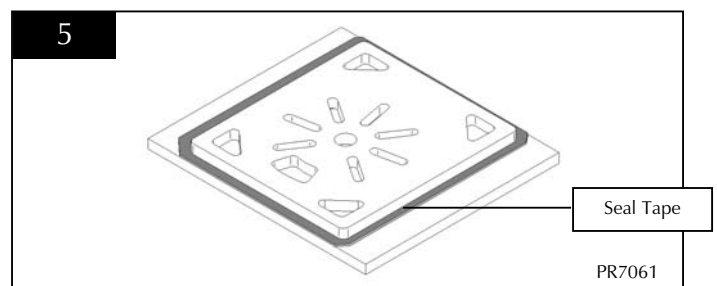
2. FIREGRATE REMOVAL

(Tools required – None)

- 2.1 To remove the firegrate, first remove the centre grate. To do this disconnect the operating linkage from the grate. Moving the Primary air control to the fully open position, then springing the operating link forward to disconnect the balljoint does this. The centre grate can then be lifted out from the inside of the firebox.



- 2.2 The main grate can then be lifted out from the firebox.
- 2.3 Replace the grate system in the reverse order from removal.
- 2.4 Ensure that the seal tape on the underside of the grate is in good condition and correctly fitted. If not replace with new. (Stovax part number 4998)



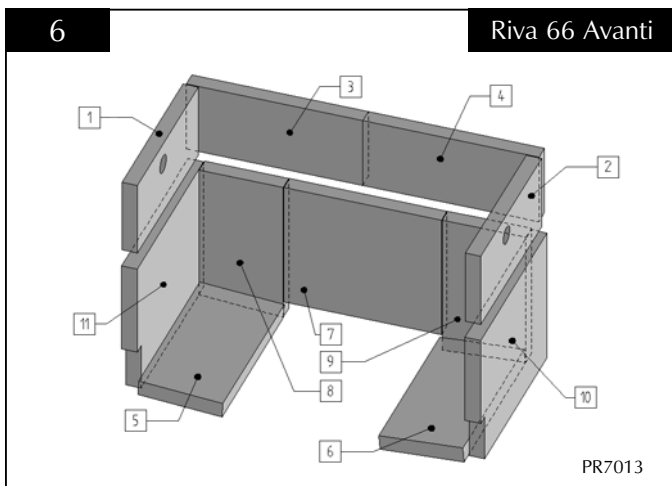
INSTALLATION INSTRUCTIONS

- 2.5 Ensure that the grate sits flat on to the side supports, and that no debris are trapped under it. Check also that the centre grate sits flat and rotates freely with no debris trapped under it.

3. BRICK REMOVAL

(Tools required – None)

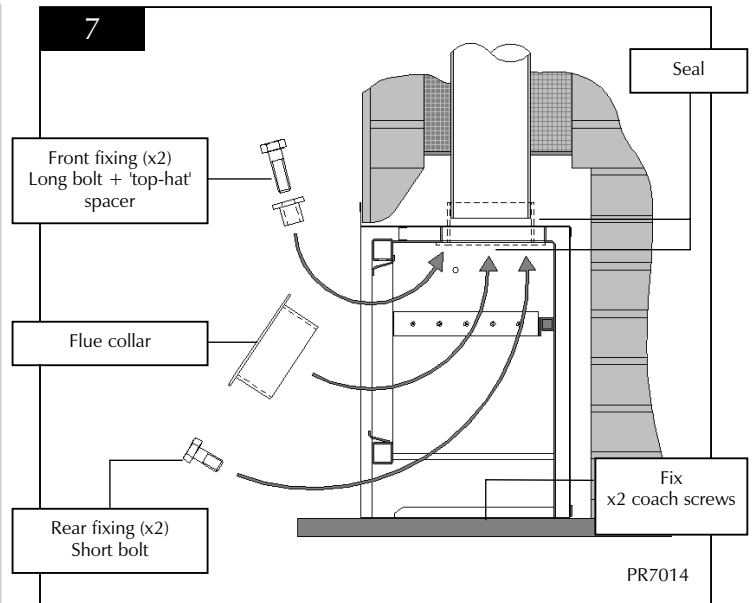
- 3.1 The bricks must be removed and replaced in the correct order, as shown in diagram 6, after removing the baffles and grate system.



- 3.2 Replace the bricks in the reverse order from removal.

4. INSTALLING THE APPLIANCE

- 4.1 Slide the Riva Avanti into the opening, taking care not to damage the hearth.
- 4.2 When the Riva Avanti is in position it **must be fixed into place using fixing holes located under the ashpan**. Only fix using the fixing kit provided. Ensure that the flange of the Riva Avanti is still flat against the opening after tightening the fixing screws.
- 4.3 If there is a void at the back or sides of the box this may be filled with 6:1 vermiculite / cement mix or any other good quality non-combustible insulation material. It is important that the back and sides of the box are well insulated.
- 4.4 Connect the flue liner to the Riva Avanti by inserting the flue spigot from the inside of the Riva Avanti and sliding the flue pipe or liner inside of the spigot. Ensure that the flue is sealed to the spigot using fire cement. Also that the spigot is sealed to the inside of the Riva Avanti using fire cement. See diagram 7.

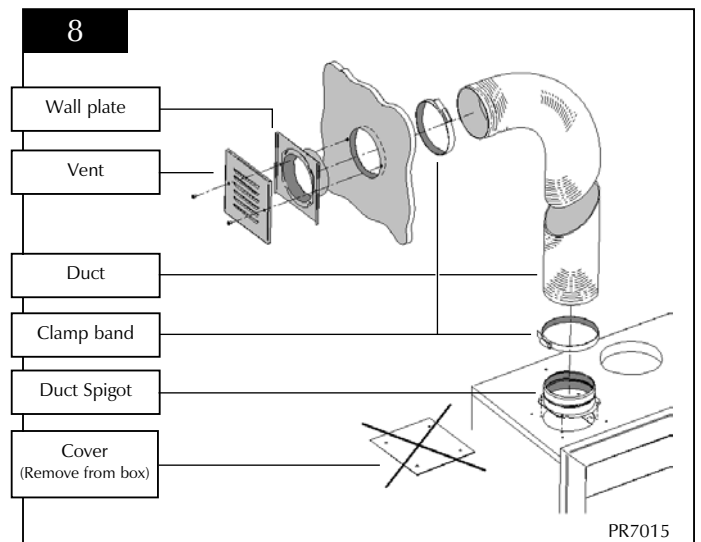


- 4.5 Should the Riva Avanti be installed on an unlined, masonry flue, first fit a non-combustible closure plate to locate the first section of single wall flue pipe from the Riva Avanti to the old system. Then make the connection as with a flue liner system. Do not connect the system into large voids that could exist in older chimney systems. If this is the case consider using a flue lining system to improve the Riva Avanti operation.

5. FITTING CONVECTION AIR DUCTS

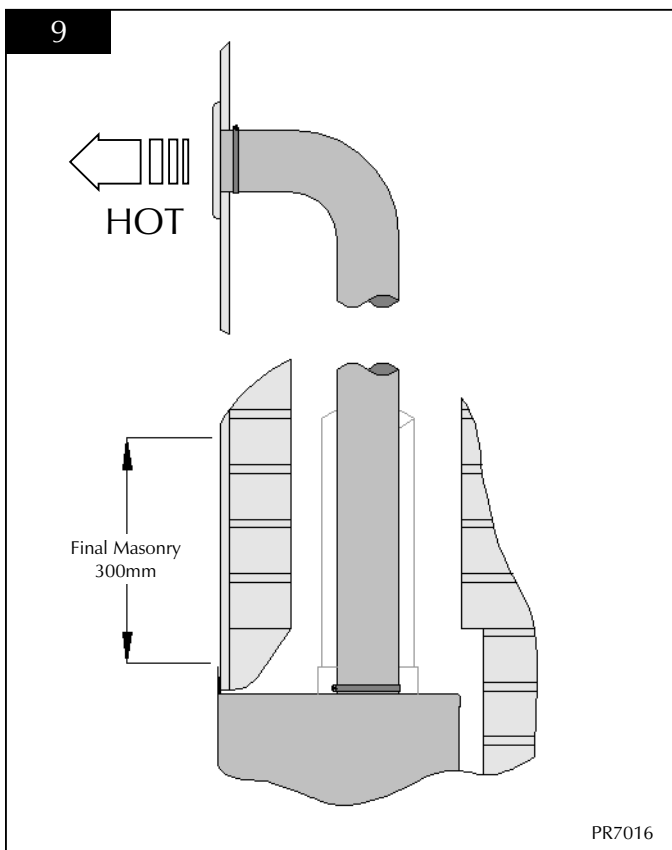
Convection air may be ducted from the Riva Avanti to distribute warm air to other parts of the building. The distance this air may be ducted, and the position of the ducts will depend on the layout of the property.

A convection air ducting kit can be purchased from your Stovax dealer (Stovax part number 8572), as shown in diagram 8.



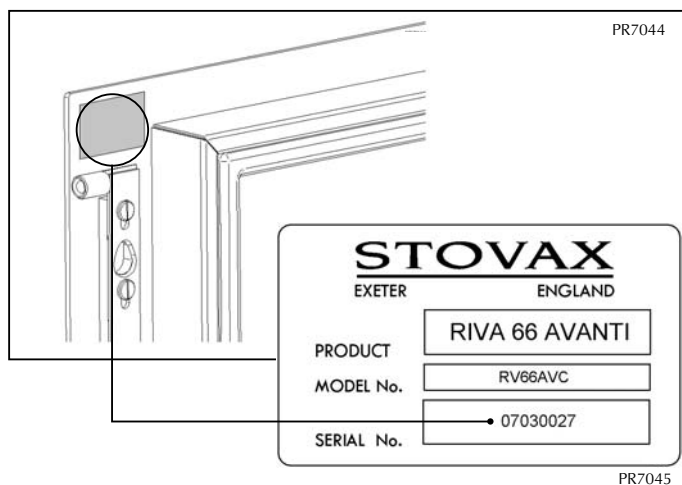
INSTALLATION INSTRUCTIONS

- 5.1 The ducts can be fitted by removing the cover plates on the top of the firebox, by drilling out the fixing rivets and fitting the duct spigots with either pop rivets or self-tapping screws. Fit and seal ducting to the spigots.
- 5.2 **Due to the high temperature of the ducts combustible material must be placed no closer than 100mm to the surface. The duct exits and grills must only be placed in a non-combustible wall panel.**
- 5.3 The exit ducts should be placed at high level or protected, as the grill surfaces will become very hot when in use. If the exit is at low level a suitable guard should be used to prevent touching or obstruction. Care should also be taken with the placement of combustible items near the operating duct exit as conducted and radiated heat could cause a fire hazard.
- 5.4 Following completion of the fitting of the ducts replace and finish the final 300mm of masonry above the front of the Riva Avanti. See diagram 9.



COMMISSIONING

- 1.1 Replace the firegrate, firebricks, baffles, log retainer, door and front trim. Check the door alignment and catch operation, adjust if required as detailed on page 11 of the Users Instructions. Inspect the door seals for damage and check the operation of the air controls.
- 1.2 Carry out a final smoke draw test on the installed Riva Avanti, by first warming the flue with a blow-lamp, or similar, for about 10 minutes. Then place a smoke pellet on the centre of the grate, 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 Riva Avanti is fitted closed. Should this test fail the suitability of the flue system should be re-checked.
- 1.3 Light the Riva Avanti and gently allow the temperature to increase slowly to operating levels. Check that no combustion products are entering the room. When the Riva Avanti 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 Riva Avanti to cool and re-check the suitability of the flue system.
- 1.4 Explain the safe operation of the Riva Avanti 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.
- 1.5 Explain the requirement to use a suitable fireguard when children, elderly or infirm persons may be near the Riva Avanti.
- 1.6 **Record dealer/supplier details and installer details in user instructions.**
- 1.7 **Record serial number in user instructions.**
This number will be required when ordering spare parts or making any warranty claims.



- 1.8 **Give the copy of the user instructions to the customer.**



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