

**SUPPLEMENTARY INSTALLATION INSTRUCTIONS FOR THE UK
MARKET
TO BE READ IN CONJUNCTION WITH THOSE IN THE MAIN
INSTRUCTION MANUAL**

READ THE INSTRUCTION MANUALS AND THESE SUPPLEMENTARY
INSTRUCTIONS CAREFULLY BEFORE INSTALLATION

These instructions together with those in the instruction manual cover the basic principles to ensure the satisfactory installation of the boiler, although detail may need slight modification to suit particular local site conditions.

In all cases the installation must comply with current Building Regulations, Local Authority Byelaws and other specifications or regulations as they affect the installation of the boiler. It should be noted that the Building Regulations requirements may be met by adopting the relevant recommendations given in British Standards BS 8303, BS EN15287-1:2007 as an alternative means to achieve an equivalent level of performance to that obtained following the guidance given in Approved Document J.

Please note that it is a legal requirement under England and Wales Building Regulations that the installation of the boiler is either carried out under Local Authority Building Control approval or is installed by a Competent Person registered with a Government approved Competent Persons Scheme. HETAS Ltd operate such a Scheme and a listing of their Registered Competent Persons can be found on their website at www.hetas.co.uk.

CO Alarms:-

Building regulations require that when ever a new or replacement fixed solid fuel or wood/biomass appliance is installed in a dwelling a carbon monoxide alarm must be fitted in the same room as the appliance. Further guidance on the installation of the carbon monoxide alarm is available in BS EN 50292:2002 and from the alarm manufacturer's instructions. 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.

HEALTH AND SAFETY PRECAUTIONS

Special care must be taken when installing the boiler such that the requirements of the Health and Safety at Work Act are met.

Handling

Adequate facilities must be available for loading, unloading and site handling.

Fire Cement

Some types of fire cement are caustic and should not be allowed to come into contact with the skin. In case of contact wash immediately with plenty of water.

Asbestos

This boiler contains no asbestos. If there is a possibility of disturbing any asbestos in the course of installation then please seek specialist guidance and use appropriate protective equipment.

Metal Parts

When installing or servicing this boiler care should be taken to avoid the possibility of personal injury.

BOILER PERFORMANCE

The nominal heat outputs for the various boilers are detailed in the main instruction manual:

PREPARATORY WORK AND SAFETY CHECKS

IMPORTANT WARNING

This boiler must not be installed into a chimney that serves any other heating appliance.

There must not be an extractor fan fitted in the same room as the boiler as this can cause the boiler to emit fumes into the room.

Chimney

In order for the boiler to perform satisfactorily the chimney height must be sufficient to ensure an adequate draught of approximately 15 Pa so as to clear the products of combustion and prevent smoke problems into the room.

NOTE: A chimney height of not less than 4.5 metres measured vertically from the outlet of the boiler to the top of the chimney should be satisfactory. Alternatively the calculation procedure given in BS EN 13384-1 may be used as the basis for deciding whether a particular chimney design will provide sufficient draught.

The outlet from the chimney should be above the roof of the building in accordance with the provisions of Building Regulations Approved Document J.

Because these boilers run at high efficiencies the temperature of the flue gases is lower than conventional solid fuel appliances. Although they are not classed as condensing appliances, the low flue gas temperature results in condensation occurring within the flue. Any chimney flue system must therefore be able to withstand the effects of condensate and operate under wet conditions (designation letter W). In addition it should be soot fire resistant and able to withstand the corrosive effects of flue products generated by solid fuels (designation G and 3 respectively). If installation is into an existing masonry chimney then it will require re-lining with a liner meeting the specification described above. Existing concrete or clay lined chimneys are not suitable for these boilers and must be lined as described above. All installations must be in accordance with Building Regulations Approved Document J.

Any existing chimney must be clear of obstruction and have been swept clean immediately before installation of the lining system.

If there is no existing chimney then any new system must be to the designation described above and in accordance with Building Regulations Approved Document J.

A single wall metal fluepipe is suitable for connecting the boiler to the chimney but is not suitable for use as the complete chimney. The chimney and connecting fluepipe must not be less than the size of the outlet socket of the boiler. The length of this connecting pipe should be kept to a minimum. Refer also to the main instruction manual for further guidance.

Any bend in the chimney or connecting fluepipe should not exceed 45°. 90° bends should not be used, except for connecting to a rear outlet appliance, and the connection should be no more than 150 mm in length and have a debris trap.

Combustible material should not be located where the heat dissipating through the walls of

fireplaces or flues could ignite it. Therefore when installing the boiler in the presence of combustible materials due account must be taken of the guidance on the separation of combustible material given in Building Regulations Approved Document J and also in these boiler instructions.

If it is found that there is excessive draught in the chimney then a draught stabiliser should be fitted in the chimney above the chimney above the flue pipe connection. Fitting of a draught stabiliser will affect the requirement for the permanent air supply into the room in which the boiler is fitted in accordance with Approved Document J (see also combustion air supply).

Adequate provision e.g. easily accessible soot door or doors must be provided for sweeping the chimney and connecting fluepipe.

Connection to the chimney

All the boilers have a flue gas connector that allows connection to the main chimney using a suitable connecting pipe. All joints must be sealed in accordance with the recommendations in Approved Document J. See also "Chimney" above.

Hearth

The hearth should be able to accommodate the weight of the boiler and its chimney if the chimney is not independently supported. The weight of the boiler is indicated in the instruction manual.

The boiler should always be installed on a non-combustible hearth of a size and construction that is in accordance with the provisions of the current Building Regulations Approved Document J.

The clearance distances to combustible material beneath, surrounding or upon the hearth and walls adjacent to the hearth should comply with the guidance on the separation of combustible material given in Building Regulations Approved Document J and also in these boiler instructions.

Combustion air supply

In order for the boiler to perform efficiently and safely there should be an adequate air supply into the room in which the boiler is installed to provide combustion air. This is particularly necessary if the room is double-glazed or a flue draught stabiliser is operating in the same room as the appliance. The provision of air supply to the boiler must be in accordance with current Building Regulations Approved Document J. An opening window is not appropriate for this purpose.

Connection to the central heating system

Ensure the heating system is the correct design for the boiler. It is an essential requirement that the system incorporates a heat storage buffer tank (often referred to as an accumulator). Full guidance is given in the main installation manual. Depending on the intended design of the heating installation and also on the output of the boiler, the central heating system must be in accordance, as appropriate, with either BS 6880:1988 Parts 1 to 3, Code of Practice for low temperature hot water heating systems of output greater than 45kW. Further guidance is available from the following sources: BS EN 14336:2004: Heating Systems in Buildings. Installation and commissioning of water based heating systems. BS EN 12828: 2003; Heating Systems in Buildings. Design of water based heating systems. BS EN 12831: 2003; Heating Systems in Buildings. Method for calculation of the design heat load.

Particular attention must be paid to the installation and correct functioning of any Thermal Safety Device where necessary. This is described fully in the installation manual.

Electrical connections

The installation of any electrical services during the installation of this boiler and the associated heating system must be carried out by a registered competent electrician and in accordance with the requirements of the latest issue of BS 7671.

Commissioning and handover

Before commissioning this boiler be sure to read and follow the operation manuals to ensure that everything is carried out in accordance with the correct procedures.

Ensure any loose parts are fitted in accordance with the instructions.

Once the boiler is under fire check all seals for soundness and that the boiler and water system are operating correctly. Ensure that the flue is functioning correctly and that all products of combustion are vented safely to atmosphere via the chimney terminal.

On completion of the installation and commissioning ensure that the instruction manuals for the boiler are left with the customer. Ensure to advise the customer on the correct use of the appliance with the fuels likely to be used on the boiler and warn them to use only the recommended fuels for the boiler. The user should be given a demonstration of the required routine maintenance and safety checks. Remind the user of the importance of regular chimney sweeping and servicing by qualified persons to ensure continued safe operation of the boiler. Leave the boiler operational and inform the user that this is the case.

Advise the user what to do should smoke or fumes be emitted from the boiler. The customer should be warned about the dangers to children, aged and/or infirm persons and that access to the boiler should be protected by a lockable door.

SUPPLEMENTARY OPERATING INSTRUCTIONS FOR THE UK MARKET TO BE READ IN CONJUNCTION WITH THOSE IN THE OPERATION MANUAL

**READ THE OPERATION MANUAL AND THESE
INSTRUCTIONS CAREFULLY BEFORE USING THE BOILER**

WARNING NOTE

Properly installed, operated and maintained this boiler will not emit fumes into the dwelling. Occasional fumes from de-ashing and re-fuelling may occur. However, persistent fume emission is potentially dangerous and must not be tolerated. If fume emission does persist, then the following immediate action should be taken:-

- (a) Open doors and windows to ventilate room
- (b) Shut the boiler down in accordance with the instructions and vacate the room/building.
- (c) Check for flue or chimney blockage and clean if required
- (d) Do not attempt to relight the fire until the cause of the fume emission has been identified and corrected. If necessary seek expert advice.

The most common cause of fume emission is flueway or chimney blockage. For your own safety these must be kept clean at all times.

IMPORTANT NOTES

General

Before lighting the boiler check with the installer that the installation work and commissioning checks described in the installation instructions have been carried out correctly and that the chimney has been swept clean, is sound and free from any obstructions. As part of the boilers' commissioning and handover the installer should have shown you how to operate the boiler correctly.

In particularly cold weather the boiler should not be lit if there is a possibility that any part of the heating system is frozen.

In case of a system fault the boiler is designed to safely shut itself down automatically. If however there is a need to manually shut the boiler down please follow the instructions given in the operation manual. This should only be done in emergency situations.

Always ensure the fuel charging door and the ash door are firmly shut after attending to the boiler as overheating of the boiler may occur if these doors are not fully closed.

CO Alarm

Your installer should have fitted a CO alarm in the same room as the appliance. If the alarm sounds unexpectedly, follow the instructions given under "Warning Note" above.

Protection of vulnerable persons

This type of boiler is unlikely to be installed in a part of the home that would be considered as part of the general living area or easily accessible from such. It is intended to be installed in its own boiler room. This boiler room should be guarded effectively with the use of an appropriate lockable door.

Chimney cleaning

The chimney should be swept a minimum of twice a year. It is important that the flue connection and chimney are swept prior to lighting up after a prolonged shutdown period.

In situations where it is not possible to sweep through the boiler the installer will have provided alternative means, such as a soot door. After sweeping the chimney the boiler flue outlet and the flue pipe connecting the boiler to the chimney must be cleaned with a flue brush.

Periods of Prolonged Non-Use

If the boiler is to be left unused for a prolonged period of time then it should be given a thorough clean to remove ash and unburned fuel residues. To enable a good flow of air through the boiler to reduce condensation and to avoid door seals becoming stuck and subsequently damaged, leave the filling hatch and combustion chamber doors slightly ajar. These actions will reduce the possibility of unnecessary damage and corrosion.

It is important to check, and clean if necessary, the connecting pipe and the chimney prior to lighting up the boiler after a prolonged period of non-use.

Extractor fan

There must not be an extractor fan fitted in the same room as the boiler as this can cause the boiler to emit smoke and fumes into the room.

Aerosol sprays

Do not use an aerosol spray on or near the boiler when it is alight.

Use of operating tools

Always use the operating tools provided when handling parts likely to be hot when the boiler is in use.

Chimney Fires

If the chimney is thoroughly and regularly swept, chimney fires should not occur. However, if a chimney fire does occur the control system of the boiler should shut down the system. Please follow the instructions in the operation manual for emergency manually shutting down the boiler if it appears that the boiler has not shut down automatically. This should cause the chimney fire to go out in which case the control should be kept at the minimum setting until the fire in the boiler has gone out. The chimney and flueways should then be cleaned. If the chimney fire does not go out when the above action is taken then the fire brigade should be called immediately.

After a chimney fire the chimney should be carefully examined for any damage. Expert advice should be sought if necessary

Permanent air vent

The boiler requires a permanent and adequate air supply in order for it to operate safely and efficiently.

In accordance with current Building Regulations the installer may have fitted a permanent air supply vent into the room in which the boiler is installed to provide combustion air. This air vent should not under any circumstances be shut off or sealed.

Recommended fuels

The boiler is designed to burn specific wood based fuels as detailed in the main instructions.

HETAS Ltd Approval

This appliance has obtained HETAS Ltd approval for burning the specified fuels. Approval does not cover the use of other fuels either alone or mixed with the recommended fuels listed, nor does it cover instructions for the use of other fuels.