

# Nordpeis

## Installation & User Supplement

### Required Standards and Regulations

(for fitting solid fuel appliances in the UK)



### IMPORTANT

**THE OUTER CASING, FRONT AND GLASS PANEL BECOME EXTREMELY HOT DURING OPERATION AND WILL RESULT IN SERIOUS INJURY AND BURNS IF TOUCHED. IT IS THEREFORE RECOMMENDED THAT A FIREGUARD COMPLYING WITH BS 8423:2002 IS USED IN THE PRESENCE OF YOUNG CHILDREN, THE ELDERLY OR INFIRM**

This document must be carefully read in conjunction with the installation instructions supplied with your appliance.

The following instructions must be adhered to in order to comply with the UK building regulations (ADJ) and BS8303 (the installation of solid fuel appliances) and HETAS requirements.

# Contents

This UK Building Supplement applies when installing Nordpeis brand products (Freestanding or Inset). It is essential to carefully and thoroughly read this document in conjunction with the instructions for installation and use that are supplied with the product. In the event of any conflict the UK Building Regulations must take precedent.

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# Appliance Commissioning Checklist

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

## Dealer appliance was purchased from:

Name:

Address:

Telephone number:

## Essential information - MUST be completed:

Date Installed:

Model Description:

Serial Number:

## Installation Engineer:

Company Name:

Address:

Telephone number:

## Commissioning Checks - to be completed and signed:

|                                                      |                              |                             |
|------------------------------------------------------|------------------------------|-----------------------------|
| Is flue system correct for the appliance:            | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| Flue swept and soundness test complete:              | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| Smoke test completed on installed appliance          | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| Spillage test completed                              | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| Use of appliance and operation of controls explained | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| Clearance to combustible materials checked           | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| Instruction book handed to customer                  | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| CO Alarm Fitted                                      | YES <input type="checkbox"/> | NO <input type="checkbox"/> |

Signature: ..... Print Name: .....

# Getting Started

## Welcome

*Stovax is partnered with a select number of high quality brands which are sold into the UK market place. However, because some of these products have been designed for markets that are not subject to the same standards and regulations, this supplement has been produced in order to ensure the installation of these appliances in the UK complies with the required safety recommendations and installation methods.*

## 1. General Points

- 1.1 Before installation and/or use of this appliance please read these instructions fully and carefully to ensure that you have fully understood their requirements.

**The appliance must be fitted by a registered installer\*, or approved by your local building control officer.**

- 1.2 All local regulations, including those referring to national and European Standards need to be complied with when installing the appliance.
- 1.3 Only use for domestic heating in accordance with these operating instructions.
- 1.4 You must burn only approved fuels. Do not use with liquid fuels or as an incinerator.

- 1.5 **Outer casings, fronts and glass panels become extremely hot during operation and will result in serious injury and burns if touched. It is therefore recommended that a fireguard† complying with BS 8423:2010 is used in the presence of young children, the elderly or infirm.**  
Stovax offer firescreens, sparkguards and hearthgate systems for protection. Your Stovax dealer can advise you about these products.

- 1.6 Do not place photographs, TV's, paintings, porcelain or other combustible items on the wall or near the appliance. Exposure to hot temperatures will cause damage. Do not place furniture or other items such as drying clothing closer than 1m from the front of this appliance.

**WARNING:** Extra fuel should not be stored on or next to the appliance. Only keep enough fuel for immediate use nearby and never leave the appliance unattended for long periods with any combustible material in close proximity.

- 1.7 Extractor fans or cooker hoods must not be placed in the same room or space as this can cause appliance to emit fumes into the room.
- 1.8 Do not obstruct inside or outside ventilation required for the safe use of this appliance.
- 1.9 Do not make unauthorised changes to the appliance.



†In the U.K. these products must conform to the latest edition of BS 8423.  
If appliance is operating unattended they must conform to the latest edition of BS 3248.

\*Registered on the Competent Persons Scheme (GB only see page 16/ INFO (Republic of Ireland)).

- 1.10 The chimney must be swept at least once a year. See Section 3.
- 1.11 Do not connect, or share, the same flue or chimney system with another appliance.
- 1.12 Do not use aerosols near the appliance when it is in operation.
- 1.13 **Use protected, gloved hand to operate.**

**DO NOT OPEN THE DOOR WITH BARE HANDS**

## 2. Smoke Control Exemption

- 2.1 Some of these appliances have been independently tested to PD6434 and have been exempt from the controls that generally apply in smoke control areas hence are considered suitable for use in Smoke Control Area when burning wood and ONLY when fitted with the relevant Smoke Control kit.

For details on how to modify and operate your specific appliance please contact your retailer for more information and the availability of a Smoke Control kit.

## WARNING



**Properly installed, operated and maintained this appliance will not emit fumes into the room but occasional fumes from de-ashing and refuelling may occur.**

**Persistent fume emission is potentially dangerous and must not be tolerated.**

**If fume emission persists:**

- **Open doors and windows to ventilate the room.**
- **Leave the room.**
- **Allow fire to burn out or safely dispose of fuel from the appliance.**
- **Check for chimney blockage and clean if required.**
- **Do not attempt to relight until the cause of the emission has been identified and corrected.**
- **If necessary seek expert advice.**
- **All open flued appliances can be affected by temporary atmospheric conditions which may allow fumes to enter the house. Because of this an electronic carbon monoxide detector conforming to the latest edition of BSEN50292 must be fitted in the same room as the appliance. The existence of an alarm must not be considered a substitute for ensuring regular servicing and maintenance of the appliance and chimney system.**

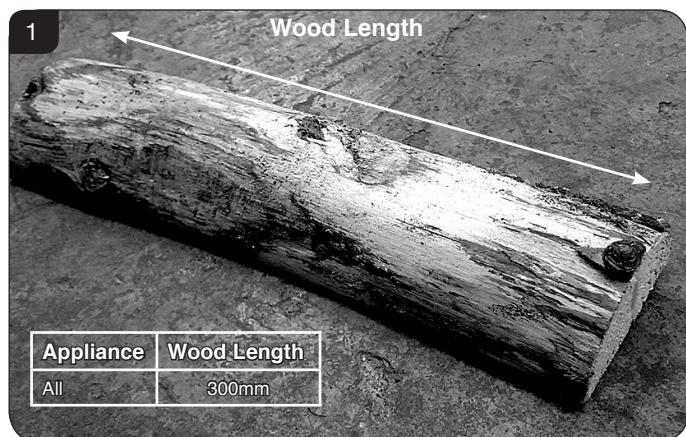
**IF THE ALARM SOUNDS FOLLOW THE INSTRUCTIONS GIVEN ABOVE.**

# Getting Started/User Instructions

## 3. Recommended Fuels

### 3.1 Wood Logs:

Burn only seasoned timber with a moisture content of less than 20%. To ensure this allow cut wood to dry for 12 to 18 months.



**Maximum diameter for all models: 100mm**

Poor quality timber:

- Causes low combustion efficiency.
- Produces harmful condensation.
- Reduces effectiveness of the airwash and life of the appliance.

**Do not burn construction timber, painted, impregnated / treated wood, manufactured board products or pallet wood.**

## 4. Lighting the Appliance

- 4.1 For best results fully open the air controls.
- 4.2 Place firelighters or paper and dry kindling wood on the base bricks.  
  
A successful fire initially requires plenty of kindling to establish a hot firebox and warm the chimney to aid flue performance.
- 4.3 Light the paper or firelighters.
- 4.4 Leave the door slightly open as the fire establishes and the glass warms to avoid build up of condensation.
- 4.5 Add larger pieces of wood.  
Do not use full sized logs at this stage, build up gradually in size. Too many logs may smother the fire.
- 4.6 Close the door and follow the instructions for Running the appliance.

Refuel as detailed in Section 5.

**i** \*Registered on the Competent Persons Scheme (GB only) see page 16/ INFO (Republic of Ireland).

## 5. Running the Appliance

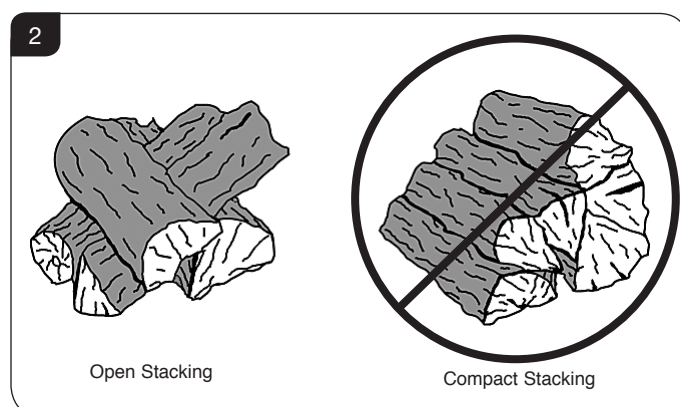
- 5.1 Close the **Air control** to a third and adjust to control the temperature in accordance with personal preference.

## 6. Refuelling the Appliance

- 6.1 Open the Air control fully.

**Rake the embers evenly over the firebed to establish a glowing firebed. If the firebed is low add a small amount of kindling wood to help re-establish the fire.**

Stack the logs in an open arrangement, see Diagram 2.



Open stacking allows oxygen to easily reach every part of the fire.

Compact stacking will make the wood burn slower as fire can only reach the outside of the wood. This will cause the fire to smoulder and produce smoke.

- 6.2 After refuelling:  
**Burn the new logs at a high temperature for a few minutes before adjusting the burn rate using the Air control.**  
  
**Do not close the Air control until the fire is burning well.**
- 6.3 Experience establishes settings to suit personal preferences.
- 6.4 **Do not** burn large amounts of fuel with the **Air control** closed for long periods of time. This reduces the glass cleaning effect, causes tars and creosotes to build-up in the appliance and flue system and will produce excessive amounts of smoke.
- 6.5 When in use, running the appliance at a high temperature for a short period also reduces tars and creosote.
- 6.6 When running the appliance **refuel little and often for clean, efficient burning.**
- 6.7 Wood burns best on a bed of ash (approx 1" deep).

**A bright and clean firebox indicates the appliance is burning well.**



# User Instructions/Care & Maintenance

## Fuel Overloading

The maximum amount of fuel specified in this manual should not be exceeded, overloading can cause excess smoke.

- 6.8 **Do not burn continuously with the door open.**

## 7. Burning Tips

### 7.1 Fuel Quality (Wood)

Use wood with a moisture content of less than 20%. Seasoned logs have the bark beginning to lift and peel away and cracks radiating from the centre. They feel lighter than fresh cut wood of a similar size and sound hollow when struck against each other. Logs should not feel damp or have moss and fungal growths.

Symptoms related to wet wood:

- Difficulty starting and keeping a fire burning well.
- Smoke and small flames.
- Dirty glass and/or firebricks.
- Rapid creosote build-up in the chimney.
- Low heat output.
- Short burn times, excessive fuel consumption and blue/grey smoke from the chimney.

**Run at a high temperature for a short period each day to avoid large build-ups of tars and creosote within the appliance and the flue system.** Use Stovax Protector chimney cleaner to reduce this problem.

## 8. Chimney Sweeping

- 8.1 To maintain safe and efficient use of the appliance, the chimney/flue must be inspected and swept at least once a year by a qualified chimney sweep\*.

If the appliance is used continuously throughout the year, or it is used to burn wood, more frequent sweeping is recommended.

The best time to have the chimney swept is at the start of the heating season.

- 8.2 The chimney, any connecting flue pipe and the appliance flue ways, if incorporated, must be regularly cleaned.
- 8.3 Ensure adequate access for cleaning where it is not possible to sweep through the chimney.
- 8.4 If the chimney is believed to have previously served an open fire it must be swept a second time within a month of regular use after installation.

## 9. Annual Service

- 9.1 Before the start of the heating season strip, inspect and clean the appliance as detailed:

— Allow appliance to cool.

— Remove all internal parts. Take care handling firebricks (if applicable) as they can become fragile after a period of use.

— Sweep the appliance chimney/flue at this point if necessary.

— Vacuum clean any remaining ash and debris from the inside of the appliance. Stovax offer a filter/collection attachment for vacuum cleaners to protect them from fire ash: Ash Clean (Stovax Part No. 2091).

— Check the parts for any damage. Replace any damaged parts using only genuine replacements parts.

— Check and clean the firebricks (if applicable) with a soft brush.

Some surface damage will occur during use. The life of the bricks will depend on the type of fuels burnt and the level of use. **Replace damaged bricks as soon as possible.**

— Re-fit cleaned internal parts.

- 9.2 **On appliances with printed glass do not use cleaning agents that have a high alkaline or acidic content, for example Stovax Gel Cleaner, these are aggressive cleaning agents designed to be used with heavily stained clear glass.**  
**On printed glass surfaces, only use Stovax Glass Cleaner (Stovax No.4103) which is better formulated for this application.**

— Before applying a cleaning agent remove any dust and loose soot with a damp cloth.

— Use an appropriate glass cleaner. Apply the cleaning fluid to a cloth before rubbing onto the glass.

Apply carefully and do not apply excessively. Try to prevent any run off which could soak into the rope seals around the edge of the glass.

Soot can also contain acidic particles that can cause corrosive damage to printed glass.

— Remove dirt with a moist cloth and buff dry.

— Before relighting the appliance ensure the glass is fully dried.

If the rope seal has absorbed excess cleaning agent it is advisable to replace the rope as soon as possible to preserve the printed finish of the glass.

- 9.3 **Some types of wood and solid fuel can cause a white residue to form on the glass.**  
**If this occurs it should be cleaned off at least once a week during periods of heavy usage.**  
**If the liquid cleaning agents recommended do not remove this residue use a dry cleaning pad which will help remove these white marks.**

- 9.4 Check door rope seal and replace if required.

## Care & Maintenance

- 9.5 Lightly oil the door catch mechanism and hinge pins. Avoid getting oil onto the door seals and glass.
- 9.6 To refresh painted finishes a touch up spray is available. Contact your retailer quoting the model and serial number found on the appliance date badge.
- 9.7 Use genuine replacement parts to keep the appliance in safe, efficient working order:  
  
These products, along with regular maintenance and use of correct fuels, will keep the appliance in the best possible condition.
- 9.8 For more information about the Stovax Group products please visit our web site at **www.stovax.com**.
- 9.9 Burn at a low temperature for the first day of use after any maintenance. This allows the seals, fixing glues and paint to fully cure.
- 9.10 During this time the appliance may give off some unpleasant odours. Keep the room well ventilated to avoid a build-up of fumes.
- 9.11 Your retailer can carry out service and maintenance if required.

### 10. Seasonal Use

- 10.1 Clean and service the appliance if not used during the warmer months, as detailed in the Annual Service section.
- 10.2 Set the air controls open to 50% to keep the appliance ventilated and stop the build-up of any moisture inside.
- 10.3 Before re-lighting the appliance:
  - Remove the baffles.
  - Clear any debris that may have accumulated.
  - Check the flue is clear of any blockages.

### 11. 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 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.**

# Freestanding Stoves

## 1. Installation Checklist

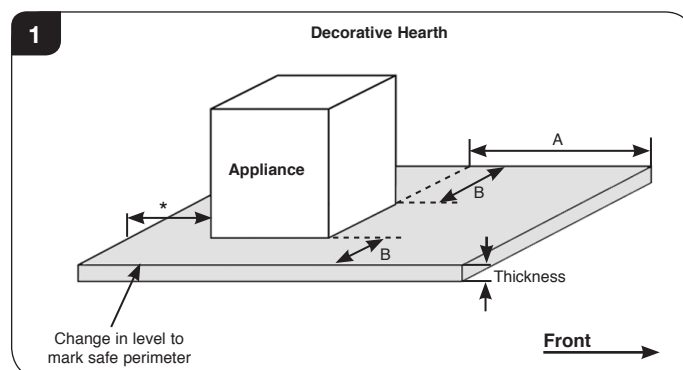
Before installation it is essential to ensure that a proper overview of the product performance and essential information required for installing a freestanding appliance is undertaken.

## 2. Essential Information

| Model                                                                | Type               | Output kW |
|----------------------------------------------------------------------|--------------------|-----------|
| Bergen                                                               | Freestanding Stove | 5.0       |
| Duo                                                                  | Freestanding Stove | 5.0       |
| Uno                                                                  | Freestanding Stove | 4.0       |
| Smarty                                                               | Freestanding Stove | 4.0       |
| Quadro                                                               | Freestanding Stove | 6.2       |
| Orion                                                                | Freestanding Stove | 6.8       |
| Recommended Fuels: Seasoned Wood (less than 20% moisture content)    |                    |           |
| As tested to the requirements of EN 13240 for intermittent operation |                    |           |

## 3. Minimum Dimensions - Hearth

- 3.1 Nordpeis appliances do not raise the floor temperature enough to require a constructional hearth. These appliances can stand on a superficial hearth which is a minimum of 12mm thick, see Diagram 1. This is also referred to as a Floor Protector Plate or Floor Protector.



- 3.2 If this appliance is installed in an elevated setting it is recommended to increase the front hearth depth to safely contain any falling logs or embers. The higher the appliance is installed the deeper the hearth should be to avoid scorched floor coverings.

| Model  | Hearth    |           |            |
|--------|-----------|-----------|------------|
|        | Thickness | Front (A) | Side (B)** |
| Bergen | 12mm      | 225mm     | 150mm      |
| Duo    | 12mm      | 225mm     | 150mm      |
| Uno    | 12mm      | 225mm     | 150mm      |
| Smarty | 12mm      | 225mm     | 150mm      |
| Quadro | 12mm      | 225mm     | 150mm      |
| Orion  | 12mm      | 225mm     | 150mm      |

\*See section 4.2 for non-combustible materials.  
See section 4.3 for combustible materials

\*\*Check total hearth dimensions width are greater than minimum 840mm default values shown in ADJ.



# Freestanding Stoves

## 4. Clearances

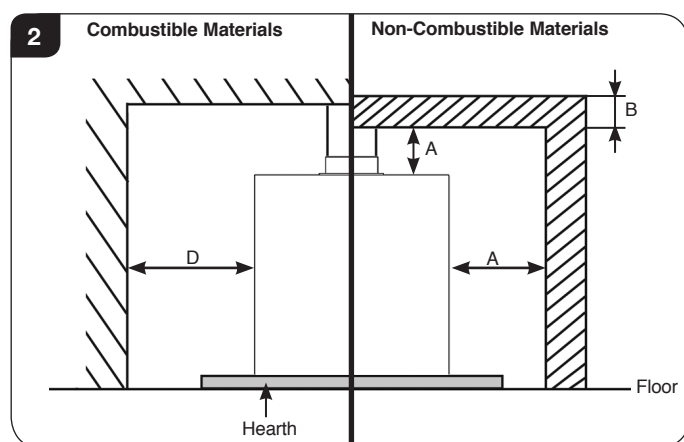
**IMPORTANT: INSTALLATION MUST COMPLY WITH CURRENT BUILDING REGULATIONS**



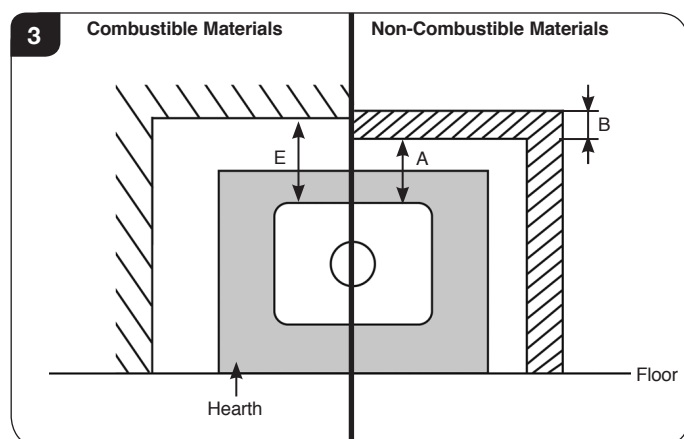
**ENSURE THAT SUFFICIENT CLEARANCES ARE PROVIDED BETWEEN THE FLUE PIPE AND ANY COMBUSTIBLE MATERIALS IN THE FIREPLACE IN ACCORDANCE WITH THE RULES IN FORCE.**

- 4.1 When installing a freestanding stove it is important to observe the following clearances to both **combustible** and **non-combustible** materials.  
Also ensure that a clearance of 1 meter is maintained in front of the appliance when operating.

### Fireplace: Minimum Clearances Above & to the Sides



### Fireplace: Minimum Clearances to the Rear



### Non-Combustible Materials

- 4.2 All appliances will require some clearance between them and any non-combustible materials to allow for either:
- Installation, servicing or accessing controls.
  - Convection in order for the appliance to function properly.

Recommended: Minimum clearances for installation/servicing/convection is:

|             |               |             |
|-------------|---------------|-------------|
| Rear - 25mm | Sides - 50mm* | Top - 100mm |
|-------------|---------------|-------------|

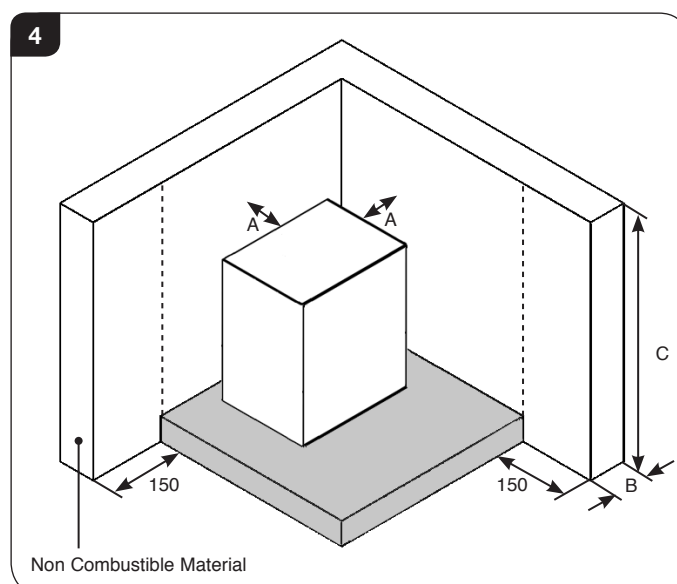
**NOTE: If the non-combustible surface is less than 200mm thick additional clearances may be required.** This requirement ensures that the non-combustible material does not transmit excessive heat through the wall onto combustible material which might be placed against it.

\* See 4.3 for additional space required for Multi-fuel appliances.

See Diagrams 2 & 3 (Fireplaces) & Diagram 4 (Freestanding) and table below.

| Distance to Non-combustible Materials |                               |                                                                                |
|---------------------------------------|-------------------------------|--------------------------------------------------------------------------------|
| Distance of Appliance to Wall (A)     | Minimum Thickness of wall (B) | Minimum Height of Wall (C)                                                     |
| 0mm - 50mm*                           | 200mm                         | Height of appliance + 300mm OR 1200mm from the hearth (take largest dimension) |
| 51mm - 300mm                          | 75mm                          |                                                                                |
| 300mm+                                | No requirement                | No requirement                                                                 |

### Freestanding Installation



# Freestanding Stoves

## 4. Clearances continued

### Combustible Materials

4.3 It is essential for safety to ensure the following clearances to combustible materials are maintained.

See Diagrams 2 & 3 and table below.

| Model  | Clearances to Combustible Materials |          |
|--------|-------------------------------------|----------|
|        | Side (D)                            | Back (E) |
| Bergen | 400mm                               | 200mm    |
| Duo    | 400mm                               | 100mm    |
| Uno    | 500mm                               | 150mm    |
| Smarty | 500mm                               | 250mm    |
| Quadro | 550mm                               | 200mm    |
| Orion  | 600mm                               | 600mm    |

## 5. Flue

The table below shows the minimum requirements for the flue conditions. See Page 15 of the Technical Appendix for more detailed information regarding flue conditions.

|            | Diameter Minimum (mm) | Height Minimum (M) | Draught Optimum (Pa) |
|------------|-----------------------|--------------------|----------------------|
| All Models | 150mm                 | 4.5m               | 12                   |

## 6. Ventilation

In the UK depending on the age of the building construction it will be necessary to provide additional ventilation to the room housing the appliance. The table below shows the required ventilation for each Nordpeis model. For full details on ventilation see the Technical Appendix on Page 16.

| VENTILATION | A) Traditionally Built Homes                                                                                    |                        |       | B) Modern Construction Homes                                                                 |       |       |        |        |       |
|-------------|-----------------------------------------------------------------------------------------------------------------|------------------------|-------|----------------------------------------------------------------------------------------------|-------|-------|--------|--------|-------|
|             | • Where leakage is greater than 5m³/hour/m².<br>• Ventilation normally required = 550mm² per kW output over 5kW |                        |       | • Where leakage is less than 5m³/hour/m².<br>• Ventilation normally required = 550mm² per kW |       |       |        |        |       |
|             | Model                                                                                                           |                        |       | Bergen                                                                                       | Duo   | Uno   | Smarty | Quadro | Orion |
|             | A                                                                                                               | Additional Ventilation | mm²   | N/R                                                                                          | N/R   | N/R   | N/R    | 660    | 990   |
|             |                                                                                                                 |                        | cm²   | N/R                                                                                          | N/R   | N/R   | N/R    | 6.6    | 9.9   |
|             | B                                                                                                               | Additional Ventilation | mm²   | 2750                                                                                         | 2750  | 2200  | 2750   | 3410   | 3740  |
| cm²         |                                                                                                                 |                        | 27.50 | 27.50                                                                                        | 22.00 | 27.50 | 34.10  | 37.40  |       |

# Inset Fires

## 1. Installation Checklist

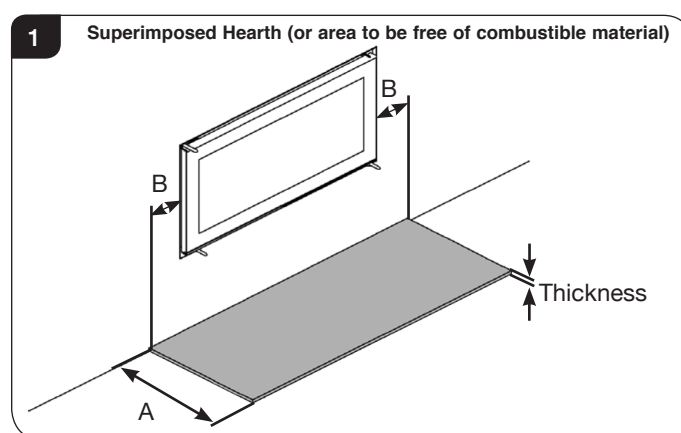
Before installation it is essential to ensure that a proper overview of the product performance and essential information required for installing an Inset appliance is undertaken.

## 2. Essential Information

| Model                                                                | Type       | Output kW |
|----------------------------------------------------------------------|------------|-----------|
| NI-22                                                                | Inset Fire | 6.0       |
| NI-25                                                                | Inset Fire | 8.0       |
| S-31A                                                                | Inset Fire | 6.0       |
| X-25F                                                                | Inset Fire | 6.6       |
| X-20F                                                                | Inset Fire | 4.0       |
| N-20F                                                                | Inset Fire | 7.4       |
| Q-23                                                                 | Inset Fire | 6.0       |
| Q-34                                                                 | Inset Fire | 7.0       |
| Recommended Fuels: Seasoned Wood (less than 20% moisture content)    |            |           |
| As tested to the requirements of EN 13229 for intermittent operation |            |           |

## 3. Minimum Dimensions - Hearth

- 3.1 Nordpeis appliances do not raise the floor temperature enough to require a constructional hearth. These appliances only a superficial hearth which is a minimum of 12mm thick, see Diagram 1. Note some hearth dimensions are greater than the default values shown in Approved Document J.  
This is also referred to as a Floor Protector Plate or Floor Protector.



- 3.2 If this appliance is installed in an elevated setting it is recommended to increase the front hearth depth to safely contain any falling logs or embers. The higher the appliance is installed the deeper the hearth should be to avoid scorched floor coverings.

| Model | Hearth    |           |          |
|-------|-----------|-----------|----------|
|       | Thickness | Front (A) | Side (B) |
| NI-22 | 12mm      | 225mm     | 150mm    |
| S-31A | 12mm      | 225mm     | 150mm    |
| X-25F | 12mm      | 225mm     | 150mm    |
| X-20F | 12mm      | 225mm     | 150mm    |
| N-20F | 12mm      | 225mm     | 150mm    |
| Q-23  | 12mm      | 225mm     | 150mm    |
| Q-34  | 12mm      | 225mm     | 150mm    |

## Inset Fires

### 4. Fitting to A Masonry Chimney

Many fireplace openings have a supporting lintel. Do not remove without supporting the remaining structure of the building. **Do not support the structure with the appliance or the flue system.**

Stovax recommend the use of a flue liner when installing into a masonry chimney. Alternative methods can be used if the chimney is sound and correctly sized, however access may be required to make an effective seal - ie Using a sump adapter.

### 5. Alternative Installation Methods



**IMPORTANT: THE INSTRUCTIONS SHOW ALTERNATIVE CONSTRUCTION METHODS USING CALCIUM SILICATE INSULATION BOARD. IF THIS MATERIAL IS USED IT MUST BE AGREED WITH THE LOCAL BUILDING CONTROL INSPECTOR BEFORE USE.**

**AT PRESENT THESE METHODS ARE NOT DETAILED IN BS8303 OR HETAS TECHNICAL DOCUMENTATION.**



**ALL FEATURED INSET APPLIANCES MUST BE INSTALLED IN A NON-COMBUSTIBLE BUILDERS OPENING**

# Inset Fires

## 6. Flue

The table below shows the minimum requirements for the flue conditions. See Page 15 of the Technical Appendix for more detailed information regarding flue conditions.

|            | Diameter Minimum (mm) | Height Minimum (M) | Draught Optimum (Pa) |
|------------|-----------------------|--------------------|----------------------|
| All Models | 150mm                 | 4.5m               | 12                   |

## 7. Ventilation

In the UK depending on the age of the building construction it will be necessary to provide additional ventilation to the room housing the appliance. The table below shows the required ventilation for each Nordpeis model.

For full details on ventilation see the Technical Appendix on Page 16.

| VENTILATION | A) Traditionally Built Homes                                                                                                                                                                         |                        |                 | B) Modern Construction Homes                                                                                                                                                      |       |       |       |       |       |       |       |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|
|             | <ul style="list-style-type: none"> <li>Where leakage is greater than 5m<sup>3</sup>/hour/m<sup>2</sup>.</li> <li>Ventilation normally required = 550mm<sup>2</sup> per kW output over 5kW</li> </ul> |                        |                 | <ul style="list-style-type: none"> <li>Where leakage is less than 5m<sup>3</sup>/hour/m<sup>2</sup>.</li> <li>Ventilation normally required = 550mm<sup>2</sup> per kW</li> </ul> |       |       |       |       |       |       |       |
|             | Model                                                                                                                                                                                                |                        |                 | NI-22                                                                                                                                                                             | NI-25 | S-31A | X-25F | X-20F | N-20F | Q-23  | Q-34  |
|             | A                                                                                                                                                                                                    | Additional Ventilation | mm <sup>2</sup> | 550                                                                                                                                                                               | 1650  | 550   | 880   | N/R   | 1320  | 550   | 1100  |
|             |                                                                                                                                                                                                      |                        | cm <sup>2</sup> | 55.0                                                                                                                                                                              | 16.5  | 55.0  | 88.0  | N/R   | 132.0 | 55.0  | 110.0 |
|             | B                                                                                                                                                                                                    | Additional Ventilation | mm <sup>2</sup> | 3300                                                                                                                                                                              | 4400  | 3300  | 3630  | 2200  | 4070  | 3300  | 3850  |
|             |                                                                                                                                                                                                      |                        | cm <sup>2</sup> | 330.0                                                                                                                                                                             | 44.0  | 330.0 | 363.0 | 220.0 | 407.0 | 330.0 | 385.0 |

# General -Technical Appendix

## 1. Legal Requirements

Before installation and/or use of this appliance please read these instructions carefully to ensure that all requirements are fully understood.

**The appliance must be fitted by a registered installer\*, or approved by your local building control officer.**

It is very important to understand the requirements of the national Building Regulations† and standards‡, along with any local regulations and working practices that may apply. Should any conflict occur between these instructions and these regulations then the regulations must apply.

Your local Building Control Office can advise regarding the requirements of the regulations.

† England and Wales – Document J / Scotland - Part F / Document J (Republic of Ireland only)  
‡ the latest edition of BS 8303, BS EN 15287

\*Registered on the Competent Persons Scheme (GB only) see page 7/ INFO (Republic of Ireland).

Works must be carried out with care to meet the requirements of Health and Safety† and comply with the Health and Safety rules, and any new regulations introduced during the lifetime of these instructions. Particular attention should be drawn to:

- **Handling:** The appliance is heavy. Adequate facilities must be available for loading, unloading and on site handling.
- **Fire Cement:** Some fire cement is caustic and must not come into contact with the skin. Protective gloves must be worn. Wash hands thoroughly with plenty of water after contact with skin.
- **Asbestos:** This appliance contains no asbestos. If there is the possibility of disturbing any asbestos in the course of installation seek specialist guidance and use appropriate equipment.
- **Metal Parts:** Take care when installing or servicing the stove to avoid personal injury.

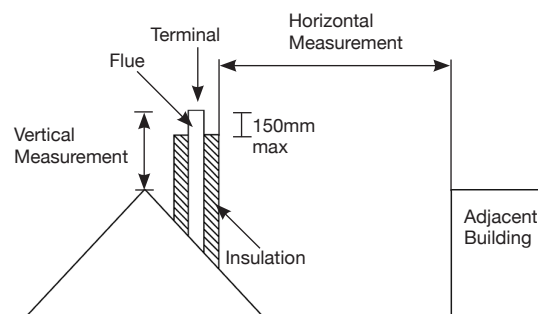
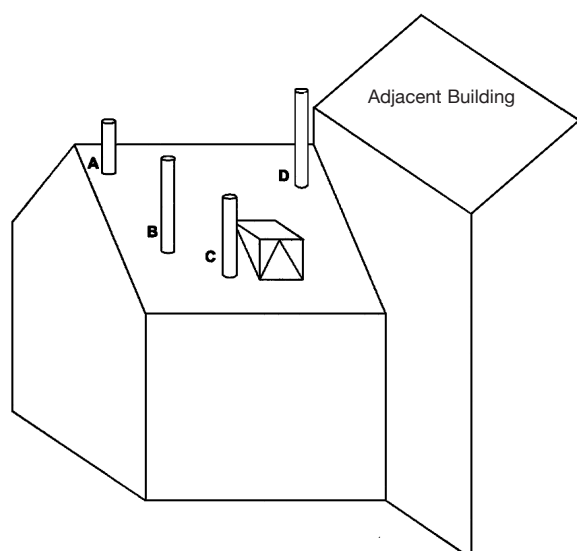
**A faulty installation can cause danger to the inhabitants and structure of the building.**

**For users of this appliance:**

Your building insurance company may require you to inform them that a new heating appliance has been installed on your property. Check that your cover is still valid after installing the appliance.

## 2. Flue Outlet Positions

These positions are defined by Document J of the Building Regulations.



The datum for vertical measurement is the point of discharge of the flue from either the point of discharge of the flue or 150mm above insulation, whichever is the lower.

**IMPORTANT:** Seek specialist advice if installing in a dwelling with a thatched roof

| Point where the flue passes through weather surface (Notes 1 & 2) |                                                                                                                         | Clearances to flue outlet                                                                                                                                                                                                     |
|-------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A                                                                 | At or within 600mm of the ridge                                                                                         | At least 600mm above ridge                                                                                                                                                                                                    |
| B                                                                 | Elsewhere on roof (whether pitched or flat)                                                                             | At least 2300mm horizontally from the nearest point on the weather surface and:<br>a) at least 1000mm above highest point of intersection of the chimney with and the weather surface; or<br>b) at least as high as the ridge |
| C                                                                 | Below (on a pitched roof) or within 2300mm horizontally to openable rooflight, dormer window, or other opening (Note 3) | At least 1000mm above the top of opening                                                                                                                                                                                      |
| D                                                                 | Within 2300mm of an adjoining or adjacent building, whether or not beyond the boundary (Note 3)                         | At least 600mm above any part of the adjacent of building within 2300mm                                                                                                                                                       |

- 1) The weather surface is the building external surface, such as it's roof tiles or external walls.
- 2) A flat roof has a pitch less than 10°.
- 3) The clearance given for A or B, as appropriate, will also apply.
- 4) A vertical flue fixed to an outside wall should be treated as equivalent to an inside flue emerging at the nearest edge of the roof.



# Flues & Chimneys -Technical Appendix

## 3. Flue or Chimney

- 2.1 The flue or chimney system must be in good condition. It must be inspected by a competent person and passed for use with the appliance before installation.

Products of combustion entering the room can cause serious health risks.

- 2.2 The following must be checked:

- The construction of the masonry chimneys, flue block chimneys and connecting flue pipe system must meet the requirements of the Building Regulations†.
- A flexible flue liner system can be used if certified for use with solid fuel systems and installation complies with manufacturer's instructions and Building Regulations†. The flue liner must be replaced when an appliance is replaced, unless proven to be recently installed and in good condition.
- If it is necessary to fit a register plate it must conform to the Building Regulations†.
- The minimum height of the flue or chimney must be 4.5m from the hearth to the top of the flue, with no horizontal sections and a maximum of 4 bends. Bends must have angles of less than 45 degrees from the vertical.
- There should be at least 600mm of vertical flue pipe above the appliance before any bends are introduced.
- Ensure the connecting flue pipe is kept a suitable distance from any combustible material and does not form part of the supporting structure of the building.
- The installer must ensure the flue pipe diameter is not less than the diameter of the outlet of the appliance and does not narrow to less than the size of the outlet at any point in the system.
- Make provision to remove the appliance without the need to dismantle the chimney.
- The flue/chimney system should not be supported by the appliance.
- Any existing flue must be confirmed as suitable for the new intended use as defined in the Building Regulations†.
- The flue or chimney systems must be inspected and swept to confirm the system is structurally sound and free from obstructions\*\*.
- If the chimney is believed to have previously served an open fire it must be swept a second time within a month of regular use after installation to clear any soot falls that may have occurred due to difference in combustion levels.
- The flue exit from the building must comply with local building control rules†.
- Do not connect or share the flue or chimney system with another heating appliance.

- 2.3 Do not connect to systems containing large voids or spaces over 230mm square.
- 2.4 Suitable access must be provided to enable the collection and removal of debris.
- 2.5 The flue must be swept and inspected when the appliance is installed.

### Flue Draught

The flue draught must be checked with all windows and doors closed and any extraction fans in this, or adjoining rooms, running at maximum speed (see Installation Checklist for ventilation requirements).

## Twin Wall Flue System

**If this appliance is to be used in conjunction with a twin wall flue system then Stovax recommend the use of their Professional XQ range. Details of this product are available from your Stovax retailer.**



### In the U.K:

**\*BS EN 15287-1, and the requirements of Building Regulations**

**\*\*This should be done by a NACS registered (UK only)/INFO registered (Eire only) chimney sweep, who will issue you with a certificate.**

### † Building Regulations Document J

### Flue Plate:

**Where a hearth, fireplace, flue or chimney is provided or extended (including cases where a flue is provided as part of refurbishment work), information essential to the correct appliance and use of these should be permanently posted in the building, to meet Requirement J4 of the Building Regulations (England and Wales), F3.12 (Scotland).**

### Additional:

**A new factory made system that complies to EN 1856; Part 1 can be used providing installation is to the requirements of:**

- i) BS 7566 Parts 1 -4**
- ii) the manufacturer's instructions**
- iii) Building Regulations.**

### For a guide containing information on Chimneys and Flues contact:

**The British Flue & Chimney Manufacturers' Association,  
FETA  
2 Waltham Court  
Milley Lane  
Hare Hatch  
Reading  
Berkshire RG10 9TH**

**Tel: 0118 9403416**

**e-mail: info@feta.co.uk**

# Ventilation - Technical Appendix

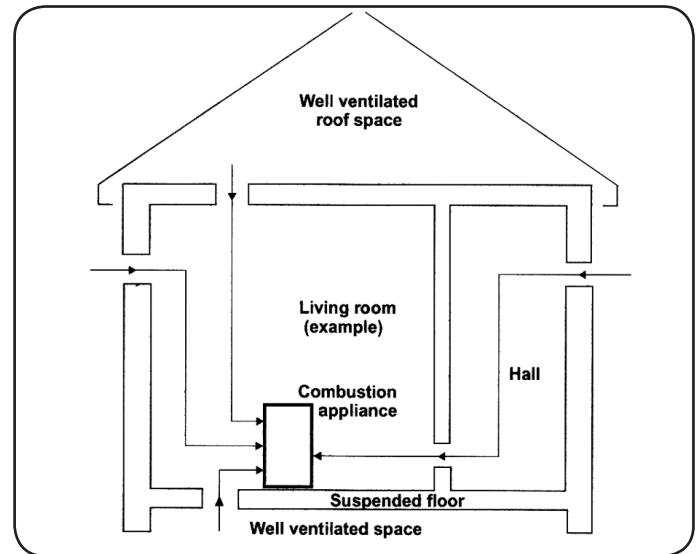
## 4. Ventilation

- 4.1 Many older buildings are sufficiently ventilated by natural leakage of air to provide suitable air supply for an appliance of 5kW output or less.

Modern building techniques have reduced the amount of air that leaks in or out of a house. A modern construction with an air tightness of less than 5m3 per hour per m2 requires an air vent for **ALL** solid fuel appliances including those with a rated heat output of less than 5kW.

NOTE: The air leakage of a modern house is tested at the completion of construction and a certificate issued confirming this.

- 4.2 This appliance requires a constant supply of air to maintain proper combustion and effective flue performance.
- 4.3 An inadequate air supply can result in poor combustion and smoke entering the room which is potentially dangerous.
- 4.4 This supply of air can come from either:
- Purpose provided ventilation, see chart below for specifications.
  - Some appliances can also be fitted with an optional outdoor air kit which allows air to be drawn in from the outside.
- 4.5 The amount of air required must comply with local building regulations and the rules in force.
- 4.6 If spillage is detected during commissioning then there may be insufficient natural ventilation and an additional air supply will be necessary.
- 4.7 Permanent air vents should be non-adjustable and positioned where they are unlikely to become blocked.
- 4.8 If vents open into adjoining rooms or spaces there must be an air vent of at least the same size direct to the outside.
- 4.9 Site the vents where cold draught is unlikely to cause discomfort. This can be avoided by placing vents near ceilings or close to the appliance (See diagram).
- 4.10 Extractor fans or cooker hoods must not be placed in the same room or space as this can cause the appliance to emit fumes into the room.
- 4.11 Increase air supply provisions where a room contains multiple appliances.
- 4.12 **If any checks reveal problems do not proceed with the fitting of the appliance until they have been rectified.**



### Organisations authorised to certify competence in the installation of domestic solid fuel appliances (Competent Persons Scheme):

APHC - Association of Plumbing and Heating Contractors (Certification) Ltd.  
[www.aphc.co.uk](http://www.aphc.co.uk)

BESCA - Building Engineering Services Competence Accreditation Ltd.  
[www.besca.org.uk](http://www.besca.org.uk)

HETAS - Heating Equipment Testing and Approval Scheme Ltd.  
[www.hetas.co.uk](http://www.hetas.co.uk)

NAPIT - National Association of Professional Inspectors and Testers Ltd.  
[www.napit.org.uk](http://www.napit.org.uk)

NICEIC - NICEIC Group Ltd.  
[www.niceic.org.uk](http://www.niceic.org.uk)

### HETAS Approved Chimney Sweeps:

NACS - The National Association of Chimney Sweeps  
[www.chimneyworks.co.uk](http://www.chimneyworks.co.uk)

APICS - The Association of Master Chimney Sweeps Ltd.  
[www.apics.org](http://www.apics.org)

The Guild of Master Chimney Sweeps -  
[guildofmasterchimneysweeps.co.uk](http://guildofmasterchimneysweeps.co.uk)

# Technical Appendix

## 5. Hearth

- 5.1 These appliances require a 12mm thick superimposed (decorative) hearth.  
This is also referred to as a Floor Protector Plate or Floor Protector in the appliance instructions.
- If the appliance can be installed in an elevated setting it is recommended to increase the hearth depth to safely contain any falling logs or embers. The higher the appliance is installed the deeper the hearth should be to protect the floor.
- 5.2 The building must have a suitable load-bearing capacity for the hearth and appliance. Consult a structural engineer for advice before proceeding.
- 5.3 When fitting into an existing hearth check that the appliance complies with current construction regulations and is at least the minimum sizes shown.
- 5.4 If there is no existing fireplace or chimney it is possible to construct a suitable non-combustible housing and hearth setting. The flue must be installed in accordance with all local and national regulations and current rules in force.
- 5.5 Check if adding a new chimney to your property requires planning permission.
- 5.6 Some houses are built using a timber frame construction with high levels of thermal insulation. Isolate the appliance from combustible materials, and provide sufficient ventilation to maintain the heating efficiency.

## 6. Clearances to Combustible Materials

- 6.1 When fitting the appliance use the minimum clearances detailed in the instructions between any point of the appliance and any combustible material.
- 6.2 Use of combustible materials near the appliance should conform to the requirements of the national Building Regulations - Approved Document J.  
For detailed dimensional clearance information refer to the Appendix contained in the specific product installation instructions, or product data plate.
- 6.3 Ensure any flue pipe connected to the appliance has adequate clearances to combustible materials:  
Unless stated by the manufacturers instructions single wall flue pipe requires a minimum of 3 x Diameter.  
For example 150mm pipe will need a clearance of 450mm.
- 6.4 Do not place photographs, TV's, paintings, porcelain or other combustible items on the wall or near the appliance. Exposure to hot temperatures will cause damage. Do not place furniture or other items such as drying clothing closer than 1m from the front of this appliance.
- WARNING:** Extra fuel should not be stored on or next to the appliance. Only keep enough fuel for immediate use nearby and never leave the appliance unattended for long periods with any combustible material in close proximity.

## 7. 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 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

## Commissioning

### 1.1 To commission:

- Refit the internal components removed when fitting.
- Check the door alignment and catch operation.
- Check the soundness of door seals, castings and joints.
- Check the operation of the air controls.

### 1.2 Now carry out a final smoke draw test:

- Warm the flue with a blowlamp, or similar, for about 10 minutes.
- Place a smoke pellet on the centre of the grate, with the air controls open.
- Close the door. Smoke should now be drawn up the flue and be seen to exit from the flue terminal.
- Complete test with all doors and windows closed in the room where the appliance is fitted.
- If there are any extractor fans in adjacent rooms the test must be repeated with the fans running on maximum and with interconnecting doors open.
- Check the effect of ceiling fans during the test.

If the test fails, re-check the suitability of the flue system and ventilation. An inadequate air supply to the room is potentially dangerous.

- Light the appliance and slowly increase the temperature.
- Ensure no combustion products enter the room.
- Open the main fire door when the appliance reaches operating temperature and carry out a spillage test with a smoke match or pellet around the door opening.

### 1.3 If excessive spillage occurs allow the appliance to cool and re-check the flue system and ventilation.

### 1.4 Finally:

- Explain to the user the safe operation of the appliance, use of the controls and the importance of only using suitable fuels.
- Ensure that a CO alarm has been fitted and make the user aware of its operation and importance, referring them to the Warning section on page 5 of the User Instructions.
- Explain the cleaning and routine maintenance requirements.

- Explain the requirement to use a suitable fireguard when children, elderly or infirm persons are near the appliance.

- Record retailer/supplier and installer details in Appliance Commissioning Checklist (page 2).

- Record the appliance make/name/product code/serial number in Appliance Commissioning Checklist (page 2).

This number is required when ordering spare parts and making warranty claims.

- **Give this instruction manual to the customer.**

# Certificate Of Compliance

Upon completing the installation, the form below must be filled in by your installer to comply with the requirements of HETAS and the building regulations. The installer must give these details, including their HETAS registration number, for the purposes of any insurance details that may change as a result of the appliance being installed.

## HETAS LTD - CERTIFICATE OF COMPLIANCE

PLEASE TICK APPROPRIATE BOXES OR ENTER DETAILS IN BOXES BELOW



|                                                                |   |  |                           |                                           |
|----------------------------------------------------------------|---|--|---------------------------|-------------------------------------------|
| Record ID (HETAS Use Only)                                     |   |  |                           | (*indicates that this data must be given) |
| Customer Name                                                  | * |  |                           |                                           |
| Installation Address                                           | * |  |                           |                                           |
| Installation Address                                           |   |  |                           |                                           |
| Installation Address                                           |   |  |                           |                                           |
| Installation Address                                           |   |  |                           |                                           |
| Town                                                           | * |  |                           |                                           |
| Postcode                                                       | * |  | Work Completion Date      | *                                         |
| Local Authority Name (*Must be given if no postcode available) |   |  |                           |                                           |
| Installing Company Name                                        | * |  | Company's HETAS Reg. No.  | *                                         |
| Installing Engineer's Name                                     | * |  | Engineer's HETAS Reg. No. | *                                         |

| Description of Work                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Location:</b>                                                                                                                                   | Lounge <input type="checkbox"/> Dining Room <input type="checkbox"/> Kitchen <input type="checkbox"/> Utility Room <input type="checkbox"/> Bedroom <input type="checkbox"/> Other, Specify <input type="text"/>                                                                                                                                                                                                     |
| <b>Appliance:</b>                                                                                                                                  | Dry Open Fire <input type="checkbox"/> Open Fire with Boiler <input type="checkbox"/> Dry Cooker <input type="checkbox"/> Cooker with Boiler <input type="checkbox"/><br>Dry Roomheater/Stove <input type="checkbox"/> Roomheater/Stove with Boiler <input type="checkbox"/> Independent Boiler <input type="checkbox"/><br>Make <input type="text"/> Model <input type="text"/> Heat Output <input type="text"/> kW |
| <b>System:</b>                                                                                                                                     | New Heating and Hot Water System <input type="checkbox"/> Updated Existing Heating and Hot Water System <input type="checkbox"/> Dry System Only <input type="checkbox"/>                                                                                                                                                                                                                                            |
| <b>If Wet System:</b>                                                                                                                              | Is the Hot Water System Unvented? <input type="text"/> Y / N                                                                                                                                                                                                                                                                                                                                                         |
| <b>Chimney:</b>                                                                                                                                    | New Insulated Factory Made Chimney System Installed <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                         |
| <b>Relining of existing chimney:</b>                                                                                                               | Twin Wall Flexible Liner (for Class 1 Appliance) <input type="checkbox"/> Cast In-situ Liner <input type="checkbox"/><br>Rigid Sectional Liner Metal <input type="checkbox"/> Rigid Sectional Liner Other <input type="checkbox"/>                                                                                                                                                                                   |
| <b>Hearth:</b>                                                                                                                                     | New Hearth/Surround fitted <input type="checkbox"/> Existing Hearth Surround Updated <input type="checkbox"/>                                                                                                                                                                                                                                                                                                        |
| Additional Information                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Connecting fluepipe:</b>                                                                                                                        | Diameter <input type="text"/> mm Socket joints upward and gas tight <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                         |
| Provision for sweeping chimney/fluepipe: Yes <input type="checkbox"/> No <input type="checkbox"/> Chimney Data Plate Location <input type="text"/> |                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Air supply:</b>                                                                                                                                 | Has a permanently open air vent been fitted: Yes <input type="checkbox"/> No <input type="checkbox"/><br>Is vent opening at least 50% of cross sectional area of throat/flue <input type="text"/> or State total free area of air vent <input type="text"/> mm <sup>2</sup><br>Confirm an approved Carbon Monoxide alarm has been fitted <input type="checkbox"/>                                                    |
| Testing & Commissioning to Approved J Appendix E                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Confirm you have commissioned and tested the appliance & associated work for safe and efficient operation <input type="checkbox"/>                 |                                                                                                                                                                                                                                                                                                                                                                                                                      |

**Declaration of completion** As the competent person responsible for the work described above, I confirm that the appliance and associated work has been installed in accordance with the HETAS rules of registration, and that the work complies with Regulations 4 and 7 of the Building Regulations, and Approved Documents J, G & L as applicable.

Signed: \_\_\_\_\_ Print name: \_\_\_\_\_ Date: \_\_\_\_\_

COPIES OF THIS COMPLETED CERTIFICATE MUST BE (WHITE COPY) SENT TO HETAS LTD AT THE ADDRESS GIVEN BELOW (PINK COPY) GIVEN TO THE CUSTOMER FOR RETENTION (YELLOW COPY) RETAINED BY THE INSTALLING COMPANY

**THIS CERTIFICATE SHOULD BE RETAINED BY THE PROPERTY OWNER  
WHO MAY BE REQUIRED TO PRODUCE IT IN ANY FUTURE SALE OF THE PROPERTY.**

HETAS Ltd, Unit5, Newton Trading Estate, Green Lane, Tewkesbury, Glos. GL20 8HD

HETAS Ltd © (Oct 2010)

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