

OPERATION AND INSTALLATION MANUAL

OPUS TEMPO

OPUS
FIRED BY DESIGN

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Attention

Check the stove before installation to ensure that there has been no damage to the functional parts (air regulators, seals, door, chimney connector, etc.) during transportation.

If you have noticed damage, please contact your dealer. The stove must not be modified in any way.

“The Clean Air Act 1993 and Smoke Control Areas”

Under the Clean Air Act local authorities may declare the whole or part of the district of the authority to be a smoke control area. It is an offence to emit smoke from a chimney of a building, from a furnace or from any fixed boiler if located in a designated smoke control area. It is also an offence to acquire an "unauthorised fuel" for use within a smoke control area unless it is used in an "exempt" appliance ("exempted" from the controls which generally apply in the smoke control area).

In England appliances are exempted by publication on a list by the Secretary of State in accordance with changes made to sections 20 and 21 of the Clean Air Act 1993 by section 15 of the Deregulation Act 2015. Similarly in Scotland appliances are exempted by publication on a list by Scottish Ministers under section 50 of the Regulatory Reform (Scotland) Act 2014.

In Northern Ireland appliances are exempted by publication on a list by the Department of Agriculture, Environment and Rural Affairs under Section 16 of the environmental Better regulation Act (Northern Ireland) 2016.

In Wales appliances are exempted by regulations made by Welsh Ministers.

Further information on the requirements of the Clean Air Act can be found here:
<https://www.gov.uk/smoke-control-area-rules>

Your local authority is responsible for implementing the Clean Air Act 1993 including the designation and supervision of smoke control areas and you can contact them for details of Clean Air Act requirements”

The Opus Tempo 70 SE, Tempo 70i SE, Tempo 70f SE has been recommended as suitable for use in smoke control areas. These have been factory fitted with a modification to prevent the secondary air to close beyond 14mm open.

Disposal of packaging

The packaging protects the stove from damage during transportation. The packaging materials can be recycled. The wooden parts of the packaging can be used as firewood.

Introduction

Congratulations on your purchase of this Opus stove.

This manual will introduce you to the functions and correct operation of the stove. It is important that your installer takes you through the operation of this stove during their handover.

Our guarantee is valid only if the guidelines in this manual are carefully followed.

Please keep this manual, in order to remind yourself how to operate the stove before the winter months.

1. Description

The stove is constructed of welded steel. In the centre is the firebox which is lined with firebricks. In the 80 and 100 models there is a grate in the firebox base through which part of the primary air enters and which allows ash to be cleared into the ashpan below. The Tempo 70, which is designed to receive all of its primary air from the front, has a plate which covers the grate which must be in place during use. The stove tool enables the plate to be moved when the stove is not being used to allow ash to be cleared into the ashpan below.

This stove works on the principle of convection, in which cool air is drawn up from the floor and warmed between the inner and outer walls of the stove. This warm air is then spread by convection around the room.

2. General

National and European standards, local construction regulations, fire protection law and regulations must be observed.

It must be ensured that the installation room is adequately supplied with fresh air.

If extractor fans are present in the same or connecting rooms as the stove, additional ventilation should be given to allow for this.

Calculation of the chimney set up should be done according to EN 13384-1 and EN 13384-2 with specific values which can be seen in this manual under the section 4.

The stove can be equipped with a connection for an external air supply (see image 1). The round disc on the back should be removed and the 80mm spigot supplied with the stove should be connected using the self tapping screws. A direct air ducting kit is available to connect to the exterior.

If the combustion air is being supplied from the outside, the duct size will need to be increased for any duct over two metres long or any run containing 90 degree bends. The duct length should not be longer than 6 metres with no more than three 90 degree bends. The chimney must be able to overcome the additional resistance of the air intake ducting.

When the stove is out keep the air regulators closed, in order for cold air not to be able to circulate throughout the chimney. However it can be advantageous to open the door some while before lighting the stove to allow warmer air to begin going up the chimney.

3. Installation of the Stove

The building work must be finished in such a way that the wood burner can expand during operation: the brickwork must never be supported on or against the sides of the appliance. Leave a minimum expansion joint of 5mm on each side and at least 10mm above the front



3.1 Flue pipe connection

The stove will not burn correctly and efficiently unless it is connected to a properly working chimney.

The chimney draught must be a minimum of 12 pascals.

Recommendations:

- Minimum chimney height: 4.5 meters
- Maximum chimney diameter:
 - Tempo 70 and 80 160mm
 - Tempo 100 220mm
- An existing masonry chimney should be lined with an insulated flexible liner

All flue pipe that is used to connect the stove to the chimney must comply with national regulations.

All connections from the stove into the chimney must be firm, tightly connected and overlap at least 25mm.

Be careful that flue pipe does not enter into the free section of the chimney.

Maintain the correct distances specified by building regulations between the flue pipe and combustible material.

This appliance must never be connected to a shared flue system.

If the chimney pressure is too low or too high this may cause problems with the working of the stove.

3.2. Safety rules

During the installation of the stove, all the building regulation and safety requirements must be complied with, with particular reference to the recommendations of Approved Document J.

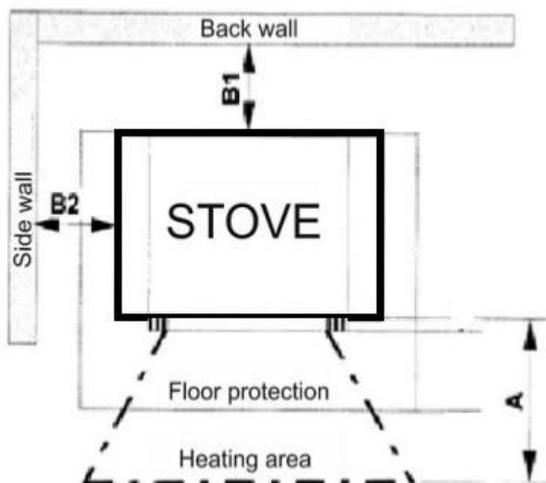
The appliance must be installed on a floor with an adequate load-bearing capacity. If an existing construction doesn't meet these prerequisites then suitable measures (e.g. a load distribution plate) shall be taken to achieve it.

Pay attention to minimum distance required from combustible materials.

A wooden mantelpiece should not be used above an insert stove.

3.3 Minimum distances to combustibles

- A 1600mm In the area of thermal radiation
- B1 200mm Back space between the wall and stove
- B2 500mm Side space between wall and stove



4. Technical specifications

Stove Model	Tempo 100
Nominal Output	9.3 kW
Efficiency	78%
Weight	120 kg
Mean flue gas temperature	324 °C
Maximum firewood load	3.6 kg
Flue gas mass flow	7.8 g/s
Diameter of flue pipe	200 mm
Diameter of the connection to the outdoor air supply	100mm
Fuel	Wood
Average refuelling interval at nominal output	48 minutes

Stove Model	Tempo 80
Nominal Output	8 kW
Efficiency	78.5 %
Weight	95 kg
Mean flue gas temperature	305 °C
Maximum firewood load	3.4 kg
Flue gas mass flow	6.8 g/s
Diameter of flue pipe	150 mm
Diameter of the connection to the outdoor air supply	100mm
Fuel	Wood
Average refuelling interval at nominal output	48 minutes

Stove Model	Tempo 70
Nominal Output	4.9 kW
Efficiency	76.3 %
Weight	85 kg
Mean flue gas temperature	199 °C
Maximum firewood load	3.6 kg
Flue gas mass flow	7.33 g/s
Diameter of flue pipe	150 mm
Diameter of the connection to the outdoor air supply	100mm
Fuel	Wood
Average refuelling interval at nominal output	45 minutes

5. General information about the working of the stove

Always use a glove

Do not use any flammable liquid fluids for lighting the fire. The door of the firebox should be opened only when adding fuel, apart from leaving the door slightly ajar during the lighting phase.

Use only suitable fuels (see section 5.2.).

Check that there is enough fresh air coming into the room. Stoves should only be used by adults. All parts of the appliance, especially the external surfaces will be hot to touch when in operation and due care will need to be taken. Make sure that children are never alone near the stove. Never leave the stove for a long period of time without surveillance.

The stove should be used only according to the instructions in this manual.

5.1. Starting the stove

Please pay attention to the minimum space between the stove and flammable objects when lighting a fire.

1. Primary and secondary controls should be fully open.

If the flue pipe has a flue damper it should also be fully open.

2. Remove enough ash from the grate (on 80 and 100 models) to let air through but leave some of the ash there. Place a couple of logs down first, followed by smaller pieces of wood and then kindling on top. Put 1-2 firelighters on top.

3. Light the firelighters and leave the door slightly open as it prevents condensation on the cold glass. Do not leave the stove unattended when the door is ajar.

4. After approximately 5 to 10 minutes, when the fire is burning fully, close the door.

5. When all the fuel is properly burning, and the working temperature of the stove is achieved (after approximately 20-30 minutes), gradually move the primary air regulator backwards, but ensure that there is still a visible flame.

When the stove is up to temperature and the fire burning well then the primary regulator can be completely closed.

6. The door should only be opened again when the fuel has burned right down and you want to put new fuel in.

If there is insufficient burning material in the fire bed to light a new fuel charge, excessive smoke emission can occur. Refuelling must be carried out onto a sufficient quantity of glowing embers and ash that the new fuel charge will ignite in a reasonable period. If there are too few embers in the fire bed, add suitable kindling to prevent excessive smoke.

It is recommended that the secondary air regulator is kept fully open in order for the "glass cleaning" to be most efficient, and to avoid the glass "fogging".

7. Use the amount of fuel you place in the stove to regulate the room temperature.

Nominal heat output can be achieved by closing the primary air control, and leaving the secondary air control open 28mm from the fully closed position.

To achieve a slow combustion, the primary air control must be fully closed, and the secondary air control lever must be opened 14mm from the fully closed position or to the DEFRA kit stop if the stove is an SE model.

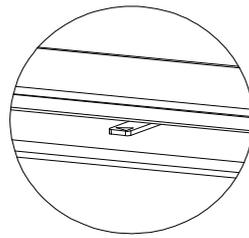
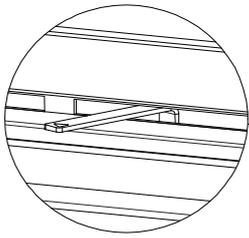
8. When adding larger wood it is good practice to put in a couple of smaller bits first as the larger logs then light faster, so producing less smoke. When adding wood, the primary air control must always be opened, and left open until the new logs have caught fire. At that point close the primary control and leave the secondary air to facilitate the combustion.

THE STOVE SHOULD NEVER BE FILLED EXCESSIVELY. EXCESSIVE AMOUNTS OF WOOD OR AIR FOR COMBUSTION CAN CAUSE OVERHEATING AND DAMAGE THE STOVE.

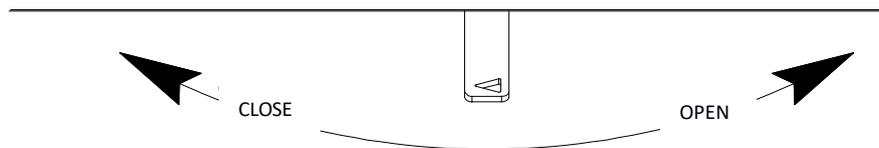
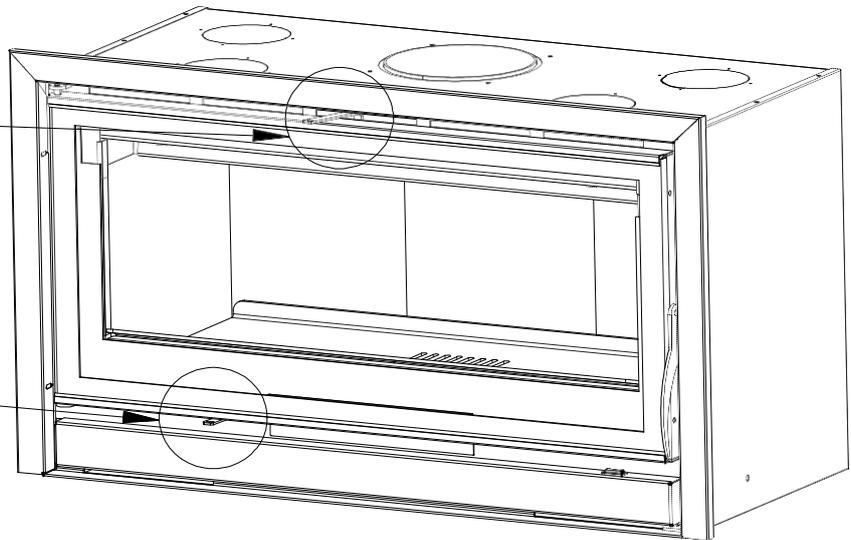
During the first few times the stove is used, it is possible that it can produce a slight smell while the paint is curing. This will disappear after a short while. If the smell appears, open the windows of the room for ventilation.

5.2 Layout and usage of air regulators

SECONDARY AIR INLET REGULATION



PRIMARY AIR INLET REGULATION



5.3 Suitable materials for lighting

The stove should be used for the combustion of natural wood and wood briquettes.

Some of the best wood for the stove is beech and birch. These types of wood have the highest burn temperature, and they burn the cleanest, as long as they have been stored in a dry place for a sufficient length of time.

If the glass window blackens excessively during burning it is usually an indication that the moisture content of the firewood is too high.

Do not use any of the following:

- Damp wood or treated wood
- Cardboard
- Bark or plywood
- Plastic or other waste

Fresh wood should be cut up and stored for 12 to 18 months in open storage, but protected from rain. According to the manual, any wood used should have a maximum humidity of 20%.

5.4 Emptying the ashpan

It is recommended to clean out the ash every day. Keep a certain amount of ash on the base of the firebox as it assists slow burning.

Be careful that too much ash is not accumulated otherwise there is the danger that, if the ash reaches up to the grate, it will not cool sufficiently and may get damaged.

Before emptying the ashpan, check if there are any embers left in the ashtray.

Even though the ash is cold from the outside, it is possible that there are embers within the ash which can lead to a fire in the waste bin.

5.5 Cleaning and maintenance

The chimney must be swept and the stove serviced at least once a year.

The stove can only be cleaned when it is cold.

Pay attention while cleaning your stove not to damage, scratch or break essential parts.

For cleaning steel parts use non-abrasive detergents and a soft rag, and after cleaning wash it well to avoid the deposit of detergent which can damage material.

Cleaning the glass should be done when the stove is cold, using normal detergent for washing the glass. In the case of solid deposits that need to be removed, we recommend using a stove glass cleaner that is intended for that use. Alternatively a damp rag dipped in a little bit of ash can be just as effective. After washing, wipe over with clean water.

Attention: The stove paint only achieves its ultimate strength after reaching its rated temperature a few times.

To avoid damaging the paint, it is important to clean the stove surface only after the paint achieves its ultimate hardness.

It is important to have the chimney regularly checked and cleaned by a qualified chimney sweep.

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In case of chimney fire

If the wrong or unseasoned wood is used, it is possible that a chimney fire can occur due to the accumulation of deposits inside the chimney.

Immediately close all air regulators on the stove and call the fire brigade.

If a chimney fire was to occur, an experienced professional should be employed to check the entire flue system.

6. Malfunction and service

In the event of a product malfunction please contact your supplier. If the stove is under warranty your supplier will take care of the warranty claim.

Regular maintenance of the stove and flue should be carried out by a competent engineer.

Use only replacement parts as recommended by the manufacturer.

7. Common fault finding

Please be aware that in the event of your stove not performing properly, you should always consult your installer or a qualified professional. Below is a list of potential problems and possible causes:

Problem	Possible cause
Fire hard to light	<ul style="list-style-type: none">• Kindling too large or not dry enough• Bad quality or wet wood• Logs too thick• Insufficient time with door ajar (needs 5-10 minutes) Insufficient time with primary air (needs 20 minutes)• Cold flue pipe (open stove door 20 minutes before lighting)
Fire lights but won't keep burning	<ul style="list-style-type: none">• Insufficient chimney draught (consult installer)• Primary air closed before stove up to temperature• Bad quality, oversize or wet wood• Insufficient embers to ignite new load of wood• Insufficient chimney draught (consult installer)
Glass blackens up	<ul style="list-style-type: none">• Wood has too high a moisture content• Secondary air closed down too far• Slow burning periods too long
Fire won't turn down	<ul style="list-style-type: none">• Wood pieces too small

- Chimney fire
 - Ashpan not properly closed (ash build up behind ashpan)
 - Ashpan or door rope seal needs replacing
 - Moisture content of wood too high causing excessive build up of tar in the chimney
- Insufficient heating
 - Chimney draught too strong
 - Stove sized incorrectly
- Stove smoking
 - Moisture content of wood too high
 - Flue pipe obstructed
 - Flue damper is closed
 - Insufficient chimney draught (consult installer)
 - Soot build up in chimney or flue (sweep chimney)
 - Obstruction in chimney (sweep chimney)
 - Chimney height or termination insufficient
 - Downdraft (puffs of smoke occurring in particular wind conditions – install an anti-downdraft cowl)
 - Insufficient air getting into the room or extractor fans present

Always ensure that all firewood used is good quality and has a maximum moisture content of less than 20%.

8. Warranty

The warranty cover is effective from when the unit is handed over to the buyer.

In case the commissioning does take place within 3 months from the date of purchase then the warranty period starts on the day of purchase of the product, which must be demonstrated by proof of purchase such as a sales receipt or paid invoice from the seller.

OPUS declines all liability for any accidents due to failure to observe the specifications contained in the use and maintenance manual accompanying the device. Furthermore, OPUS declines all liability deriving from improper use of the product by the user (including heat-shock, overload or misuse of the firebox), unauthorised modifications and/or repairs, and the use of non-original spare parts or spare parts not designed for use on this product model.

Duration of warranty is five years on the stove body and moving parts (hinges, handle, and fittings). Please note that the warranty does not cover glues, seals, ceramic glass and firebricks.

Firepower Heating, Flightway, Dunkeswell, Honiton, Devon EX14 4RD

sales@firepowerheating.co.uk

Opus commissioning checklist

General information

Stove purchased from _____

Telephone number _____

Stove installed by _____

Telephone number _____

CPS registration with (e.g. HETAS) _____

CPS registration number _____

Installation date _____

Stove model _____

Physical checks

Installation is in accordance with the design, including material specification, flue length and diameter	
The installation instructions have been followed	
There is no damage to any components	
Joints between the appliance and chimney and within the chimney system are secure and in good condition	
The separation of components from combustible materials conforms to this code of practice	
The appliance and chimney can be fully cleaned, once the installation is complete	
Components for weatherproofing are installed correctly	
Smoke spillage test has been carried out	
CO Alarm fitted and tested	

Handover

At handover all user instructions should be given to the user and an explanation of the appliance operation and safety issues should be given. Additionally an explanation of the correct removal, relocation, and any sealing of the removable/hinged section of the chimney should be given and all safety issues explained.

Commissioning engineer's signature* _____

*By signing this you confirm that all commissioning checks above have passed, and that operation and maintenance of the appliance have been explained to the customer in full in line with this user manual.