

OTHER STYLES ARE AVAILABLE

Solid Fuel Stoves Manual. Issued - 18/07/22

portway

LX LUXIMA

SOLID FUEL HEATING STOVE

Multi-fuel version, and Wood-only version

PLXMF Multi Fuel Stove

PLXWB Wood Stove.

PLXMFT Multi-Fuel Deluxe Stove PLXWBT

Wood Stove

INSTALLATION AND OPERATING INSTRUCTIONS

LEAVE THIS DOCUMENT WITH THE HOUSEHOLDER !

This stove exceeds the safety and performance requirements of Harmonised Standards for Intermittent burning solid fuel roomheaters for installation with a single dedicated chimney.

Independent thermal and emissions testing by SGS Environmental Laboratory in 2019, CEN Notified Body EU0608 UK0120



Conforms to BS EN13240:2001+A2 2004,
Emissions tested and certified to BS EN16510-1, 2019

Fuel	Wood (Beech) Multi-fuel configuration with grate and ashpan	Wood (Beech) Wood-only configuration with flat fuel bed
Test Cycle	1.15kg over 0.75hrs	1.15kg over 0.75hrs
Settings	Primary 0, 2nd 1/3 open	Primary 0, 2nd 1/3 open
Flue Draught Pa (ins WG)	12 (0.05wg)	12 (0.05wg)
Efficiency %	75.4	74.3
Recommended Rating kW	4.9	4.9
Mean Flue Gas Temp Rise °C	292	261
Minimum air entry requirement	2700 mm ²	
Minimum Clearance to combustibles (allow min 150mm to non-combustibles)	500 mm	
Emissions as if O ₂ =13%	NOx mg/m ³	120
	CO %	0.07
	CxHy mg/m ³	52
	Gas flow g/sec	4.6
	Smoke Emission mg/m ³	37
Other fuels	Anthracite, manufactured smokeless fuels, peat, lignite	

Glyn Hughes

I declare that this information is true, these products meet the requirements of Harmonised Standards and are fit for sale.

Signed on behalf of the manufacturer by Glyn Hughes, Design Engineer, in the European Union and in Northern Ireland at

Room 76255, PO Box 1213, Belfast BT1 9JY and in the UK at Denver House, Winster DE42DH 22. Jun. 2021

Read these instructions ! Use only recommended fuel !

This document, when completed by the installer, constitutes part of a 'Hearth Notice' for purposes of Building Law. It must be left with the householder where it can easily be found.

INSTALLED AT LOCATION:

BY:

EMERGENCY CONTACT:

British Fire Manufacturers

Trentham Lakes, Stoke on Trent, Staffordshire, England ST4 4TJ

BFM Europe

BRITISH FIRE MANUFACTURERS

www.bfm-europe.com 01782 339000

These stoves may be used in smoke control areas when operated strictly in accordance with these instructions and with Soliftec Smoke Advice Sheet No1 (www.soliftec.com/smokeadvice.htm), when burning:

UK: Untreated wood logs or authorised smokeless fuels (*Exempted from s20 of the Clean Air Act 1993*)

Rol: Wood logs, smokeless fuels or peat briquettes, but not petroleum coke (*Control of Atmospheric Pollution Regulations, 1970*)

THIS APPLIANCE BECOMES EXTREMELY HOT AND CAN PRODUCE POISONOUS GASES.

A fire-guard should be used if children or the infirm are present. The installer is required to **EXACTLY** follow these instructions and to completely comply with all local, national and international standards.

INSTALLING a stove is a 'controlled service', the law expects that it is either supervised by a qualified installer or that the building inspector is informed. Check with your local authority.

ASBESTOS Your stove does not contain asbestos, but take care to avoid disturbing asbestos in an old installation.

WEIGHT Your stove is heavy - take great care when moving it and ensure that the intended fireplace can support the weight - consider fitting a load distributing plate.

INSTALLATION

YOUR CHIMNEY by becoming warm, makes the gas inside it rise, pulling fresh air into the stove to make it work. It must:

- Generate a draught in use of at least 12Pa (0.05ins wg)
- Be capable of withstanding the temperatures generated.
- Be absolutely incapable of leaking fumes into the dwelling

This may *commonly* be achieved by it:

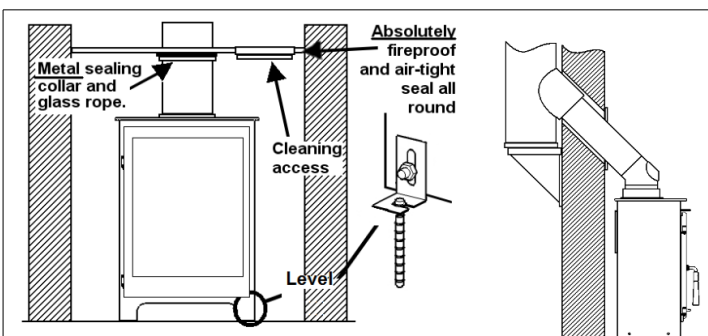
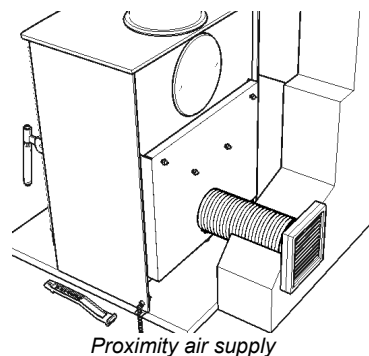
- Being at least 5m high.
- Terminating at least 1m above any roof ridge.
- Having an internal cross-section equivalent to not less than 125mm diameter and never more than 0.14m² (eg 375 x 375mm)
- Being free from even the slightest crack or source of leakage.
- Having no bends sharper than 45°.
- Being swept and entirely free of obstructions
- Being connected only to this one appliance.
- Being of thick masonry or otherwise adequately insulated.
- Conforming to local building regulations.

Special rules apply to installations through timber, thatch or other vulnerable materials, or in boats or cabins. Although it is possible to access the chimney through the fire with the baffle plate removed, fit hatches to provide access if needed. Seek advice.

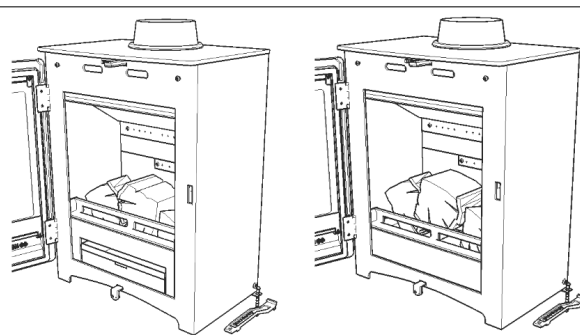
YOUR FIREPLACE Stoves become VERY hot, the installer must specify a fireplace which will completely protect the building against fire. A solid masonry hearth >12mm thick, extending at least 250mm in front of the stove, 100mm at the sides is likely to suffice, but other configurations are possible, or may be necessary, at the discretion of the expert installer. Even beyond the safety clearances given on the front page items may still become dangerously hot - take great care in siting wax, paper etc.

AIR SUPPLY Your stove needs air to breathe - there must be a permanent fresh air supply into the space in which it is installed equal to 550mm² for each kW of nominal output. This can often be provided by air leaking around door frames etc. (it is commonly accepted that this alone may suffice for appliances <5kW) but in any case of doubt, fit a purpose-made air vent. An extractor fan, or another fuel-using appliance in the same building, can remove this air.

Your stove has a built-in 'Proximity Air Supply' which can supply the required air for combustion and, when the fire is lit, also circulate warmed fresh air without draughts. To implement it, fix the rear connector to standard 100mm flexible tube and an open outside air grille to completely meet air supply requirements.



Your stove can be sealed to the chimney using a *short* length of plain 125mm flue pipe in several ways, two of which are shown. (L) Through steel or concrete closure plate (with cleaning door) into old, sound, oversized, chimney. Steel sealing collar. Hearth fixings also shown. (R) 45° top outlet sleeved through wall into external insulated flue. Cleaning hatches on bends



The Luxima is available in two different firebox configurations:

(L) Multi-fuel version with grate and ashpan, can burn wood logs and the full range of authorised smokeless fuels.

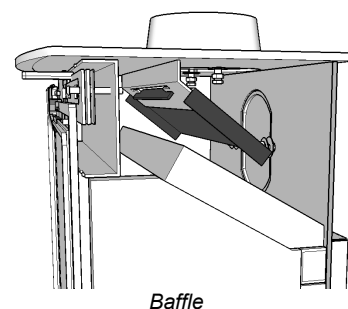
(R) Wood-only version, burns wood logs only

Make sure that the stove is fully assembled and sealed. Check that the **baffle** (shown dark on this cutaway diagram) is correctly and securely fitted in place.

CHECK THE INSTALLATION !

Once installed, light the fire, demonstrate it to the householder and check that:

- 1) It burns controllably and does not emit fumes to the room
- 2) The route for gases from the stove to the chimney terminal is **completely** airtight, unobstructed and able to be swept.
- 3) The entire construction is of durable fireproof materials. There is no risk of fire.
- 4) The flue presents a draught in use of at least 12Pa
- 5) **Fit a CO alarm!**



LIVING WITH YOUR STOVE

Every fuel, chimney and condition of use is different. Only experience will show which are the best settings for you.

LIGHTING If lighting after a period of non-use, do check that the flueways and chimney are completely clear. Empty the ashes if needed. Place two or three firelighters close together, or screwed-up paper, cover it with very dry thin sticks and light them. When they are burning well gently fill the fire with dry fuel, close the door and set the air control slides to the 'high' position. When the fire is burning well, move the controls to the lowest practical setting.

FILLING Don't fill above the level shown in the diagram.

CONTROL How fast the fire burns depends on how much air reaches the fuel. The stove has two air controls, one below the window ('primary' 1) and one above ('airwash control 2). Move the top slide to the left or right to adjust output. The lower control is 'in' for low and 'out' for high. They can get very hot, so move them only with the handle or glove supplied.

Our tests indicate best performance on wood with the primary (1) control closed and the airwash (2) at 1/3 open. For mineral fuels, have the control (1) a little open. The precise settings to suit your fuel and chimney can only be found from experience.

- Ensure fuel is *dry* (less than 20% moisture)
- Fill logs criss-cross, so air can circulate between.
- Fill 'little and often' (Wood – about once an hour. Mineral fuel – about once in 4 hours)
- When first lighting, or reviving a fire from embers, use only very small, thin, *dry*, sticks.

MULTIFUEL With the multi-fuel grate and ashpan fitted, this stove can burn a wide range of fuels, as recommended by your fuel supplier and permitted in your region.

SMOKE STOP The smoke stop screw (if fitted) prevents the stove being closed down to a point where it might emit excess smoke. It may be removed outside UK smoke control areas

EXTENDED BURNING Filled with hard mineral fuel, such as anthracite, and the controls set 'low', your multifuel stove can burn for up to 15 hours without attention. Wood is not suitable for extended burning.

EMPTYING ASHES Use the tool or glove to open the door and... **Mutifuel model:** Stir the fire with a poker. Use the tool to lift out the ashpan. Don't let ash to build up so as to touch the underside of the grate. **Wood-only model:** Empty excess ash using a scoop only when it is so full as to risk spilling over the firebars. **All:** Let ash cool before disposing in plastic sacks or bins.

KEEPING THE WINDOW CLEAN Open the Airwash control (2) when refuelling to help stop fumes touching the window. Severe stains can be removed when cold with a damp kitchen scouring pad. The ceramic window may develop tiny hairline cracks, these are harmless. Reduce the risk of staining by using *very dry fuel*.

OPENING THE DOOR This stove is designed to be operated only with the door closed. Open the door, using a glove, very slowly to minimise fume emission and prevent hot fuel falling out.

SUMMER SHUT DOWN Before a long period of non-use, empty fuel and ash, remove the baffle plate and leave all the air controls open to allow ventilation to reduce condensation.

FUELS

Do avoid dusty materials like sawdust, they can burn far too violently.

SMOKE CONTROL In certain areas special rules apply to reduce smoke nuisance. Check with your local authority.

WOOD Trees are simply made from water and air, and, ideally burned, will turn back into just water and air to feed the next tree. Wood only emits as much carbon to the atmosphere as the tree took in when growing, so wood is considered both 'carbon neutral' and, in Europe where we plant far more trees than we use, entirely renewable.

When wood is cut down its cells are full of water. Such wet or 'green' wood wastes heat in making steam and produces acidic tars which will rapidly damage your stove and chimney. Split logs typically take two years to become reasonably dry, round logs very much longer. Cracks in the ends, a hollow sound when tapped and bark falling away are all signs that a log may be ready for use. The fine, white residue produced when wood burns is not ash, but largely the remains of wood cells which can burn if kept hot enough, so don't de-ash the wood fire until absolutely necessary.

For best performance, split logs lengthways for drying and use logs no bigger than about 100mm x 250mm. 'Ready to burn' kiln-dried logs are ideal. *Really dry* wood not only burns better and cleaner, it is much more efficient and economical.

JOINERY WASTE Dry offcuts burn well, but softwood waste won't burn as cleanly or as long as hardwood logs.

ANTHRACITE is a naturally-occurring smokeless fuel, it is difficult to light but burns with great heat and for very long periods.

BRIQUETTES of wood, cotton, nut shells etc, are very variable – only experience will show if one of them is right for you.

OVOIDS are, usually egg-shaped, coal-type compressed fuels which can burn long and clean. Although smoke-less, many types are not smoke-free and require fast burning when first lit to prevent smoke. Take care to obtain only approved types.

PEAT and LIGNITE can burn well, if very dry, and if permitted in your area, but will require frequent ash removal.

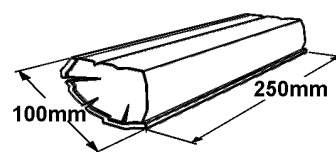
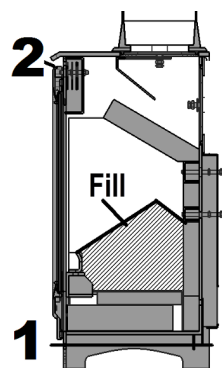
HOUSEHOLD WASTES Plastics give off toxic fumes and batteries and aerosols explode! The stove is not an incinerator, so only ever use the recommended fuels and NEVER use liquid fuels in any form.

DO NOT USE non-authorised 'smokeless fuels' or 'petcoke' - these are often made with high-sulphur oil waste and will rapidly damage your stove. Don't use bituminous 'housecoal'.

PROBLEMS ?

We test our stoves very thoroughly, and problems are rare. Those listed here are usually due to some difficulty with the installation, chimney or fuels, so please check back through this leaflet carefully. Seek specialist advice.

SMOKE FROM THE CHIMNEY It is quite normal for a little smoke, mainly harmless water vapour, to be emitted from the chimney when the fire is first lit. Use only *very dry* wood or smokeless fuels and read the accompanying 'Smoke Advice' leaflet.



DAMAGED FIREBOX LINERS The stove gets very, very hot inside, it is quite usual for the replaceable liners to crack or craze. They need only be renewed when they begin to disintegrate. Help them last by using only *very dry fuel*.

POOR HEAT OUTPUT A stove can heat a typical room of *about* 12m³ volume for each kW of output, so a 5kW model can heat up to (12x5 = 63m³) about 5m x 5m square. The actual size depends on the insulation, dampness and air-change ratio of the room. To attempt to heat a larger room will result in excessive fuel consumption and damaging overheating.

CONDENSATION onto cool surfaces inside the stove can be severe if fuel is in any way damp. Use only *very dry fuel*.

OVER-FIRING Leaving the fire too long with the controls set too high can cause 'over firing', excessive chimney temperature and risk of parts failing or chimney fires. Always set controls to the lowest practical setting. A chimney thermometer can help.

SMOKE COMING INTO ROOM Fumes are poisonous. A tiny amount of smoke may be emitted when the door is opened, but regular smoke emission must NEVER be tolerated, causes might be:

NEW STOVE There is often a smell and some fumes as the paint cures. This normally stops after an hour or so.

SEALS Are all flue pipes and connectors *absolutely* gas-tight? Even the tiniest crack or gap can spoil the draught.

BLOCKED BAFFLE PLATE Has soot and ash collected above the inner back part of the firebox?

UNSUITABLE OR BLOCKED CHIMNEY The first requirement for correct operation is a sound chimney. Check the requirements earlier in this document and in any case of doubt engage a professional sweep.

POOR AIR SUPPLY is a common cause of smoking and poor performance. Air supply problems may be worse in certain wind conditions where air can be *sucked out* of the room. The Proximity Air Supply is highly recommended.

DOWNDRAUGHT Wind can blow down a chimney if there is something higher nearby such as a tree, hill or high building. Fitting an anti-downdraught cowl (one which can be swept through) to the chimney top can cure this.

CHIMNEY DRAUGHT Chimney draught in use must be at least 12Pa. Much higher draught may result in somewhat fiercer burning - use less fuel and refuel more often. This stove remains safe and controllable up to 40Pa.

CHIMNEY FIRE In the rare event of deposits inside the chimney igniting (roaring sound + dense smoke and sparks from the chimney) immediately close the stove door, shut all air controls and call the fire brigade. Prevent fires by using *very dry fuel* and having your chimney swept regularly.

MAINTENANCE

MONTHLY With the fire cold, check that the flueways are clear and unblocked, and that the door seals are sound.

ANNUALLY - SWEEP THE CHIMNEY The entire length of the chimney from stove to outlet should be swept annually, by a qualified sweep, more often if smoky fuels are used.

NEW PARTS Your stove has been extensively tested for safety - please don't modify it and always use genuine spare parts.

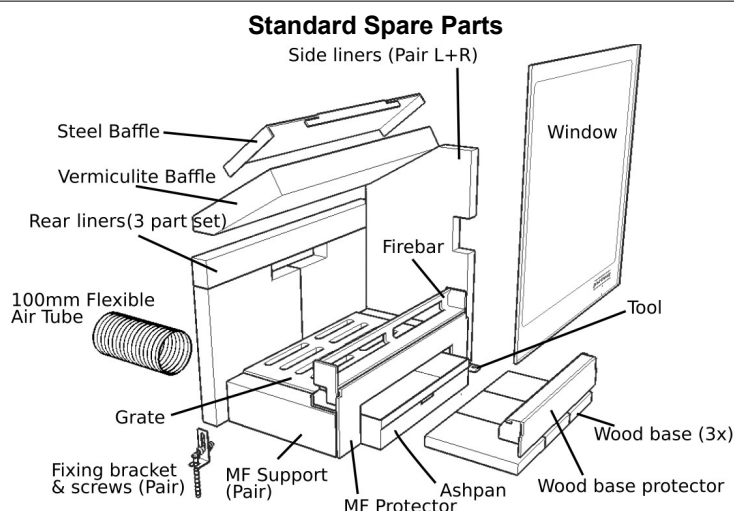
SURFACE FINISH Wipe the stove body with a slightly damp cloth when cool. NEVER use aerosol spray or wax near the hot fire – they can ignite. Painted steel parts can easily be refurbished using special spray stove paint.

INTERNAL PARTS Your stove gets VERY hot. Eventually the internal parts will require replacement. Help parts to last by:

- Using only recommend, *very dry*, fuels.
- Cleaning the baffle plate regularly.
- Avoiding 'over-firing'

PARTS AND ACCESSORIES

When ordering parts, specify the version of the Portway Luxima stove you have, wood-only or multifuel
Portway spares Tel. 01782 339034



BFM Europe
BRITISH FIRE MANUFACTURERS

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