Prity K1 Optima

Prity K1 Optima Multi-fuel Wood Stove 8 kW

Instruction Manual

1. Introduction

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Prity K1 Optima Multi-fuel Wood Stove. Please read these instructions carefully before using the appliance to ensure proper function and to prevent potential hazards. This model is designed for heating residential premises using solid fuel such as wood or wood briquettes.
The Prity K1 Optima is a compact and efficient wood stove featuring a 2 mm thick steel sheet body and a 3-4 mm thick steel sheet top plate. Its combustion chamber is lined with refractory bricks for optimal heat retention and is equipped with heat-resistant ceramic glass. The stove includes a cast iron grate, wooden door handles, a front flap for air supply control, and an exhaust damper to regulate flame intensity. It comes in a matte black finish.

2. Safety Information

WARNING: Improper installation, adjustment, alteration, service, or maintenance can cause injury or property damage. Read the installation, operating, and maintenance instructions thoroughly before installing or servicing this equipment.

- Always ensure adequate ventilation when the stove is in operation to prevent carbon monoxide buildup.
- Only use recommended fuel types (dry wood or wood briquettes). Do not burn trash, plastics, or treated wood, as this can release toxic fumes and damage the stove.
- Maintain minimum clearances from combustible materials as specified below:
  - **Rear:** 400 mm
  - **Left and Right Sides:** 400 mm
  - **Ceiling:** 600 mm
  - **Front (in the entire radiation area of the glass):** 800 mm
  - **Floor:** 0 mm (if non-combustible)
- Ensure the stove is installed on a stable, non-combustible surface.

- Regularly inspect and clean the chimney and flue pipe to prevent creosote buildup and chimney fires.
- Keep children and pets away from the hot surfaces of the stove.
- Never leave a burning stove unattended.
- Do not store flammable materials near the stove.

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3. Product Overview

This image shows the Prity K1 Optima wood stove with its main door open, providing a clear view of the interior combustion chamber. The chamber is lined with light-colored refractory bricks designed to retain heat, and a robust cast iron grate is visible at the bottom for holding fuel.

A direct front view of the Prity K1 Optima wood stove with its main door securely closed. The matte black finish and the clean lines of the stove are prominent, along with the air intake control at the bottom.

Key Components:

- **Combustion Chamber:** Lined with refractory bricks for efficient heat storage and transfer.
- **Ceramic Glass Door:** Heat-resistant glass allowing view of the fire.
- **Cast Iron Grate:** Supports fuel and allows ash to fall into the ash pan.
- **Ash Pan:** Collects ash for easy removal.
- **Air Supply Control (Front Flap):** Regulates the amount of primary air entering the combustion chamber.
- **Exhaust Damper:** Controls the intensity of the flame and flue gas flow.
- **Flue Pipe Connection:** Located at the top for connecting to a chimney system.

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4. Setup and Installation

Installation of the Prity K1 Optima wood stove should be performed by a qualified professional in accordance with local building codes and regulations. Failure to do so may void your warranty and create a fire hazard.

Installation Steps:

1. **Location Selection:** Choose a location that adheres to the minimum clearances from combustible materials (refer to Section 2). The floor beneath the stove must be non-combustible or adequately protected.
2. **Chimney Connection:** Connect the stove to a suitable chimney system using a Ø 130 mm flue pipe. Ensure all connections are sealed properly to prevent smoke leakage. The chimney must be in good condition and capable of providing adequate draft.
3. **Leveling:** Ensure the stove is level and stable on its intended surface.

4. **Initial Inspection:** Before the first use, inspect the stove for any shipping damage or loose components. Ensure the door seals are intact and the air controls operate smoothly.

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5. Operating Instructions

5.1. Fuel Type

The Prity K1 Optima is designed to burn dry wood or wood briquettes. Using unseasoned wood or other materials can lead to inefficient burning, creosote buildup, and potential damage to the stove or chimney.

5.2. First Burn (Curing)

During the first few burns, the paint on the stove will cure, emitting an odor and possibly some smoke. Ensure the area is well-ventilated. Start with small fires and gradually increase the heat over several days to allow the paint to cure properly. Avoid very hot fires during this period.

5.3. Lighting the Stove

1. Open the front air supply flap completely.
2. Place crumpled paper or firelighters on the cast iron grate.
3. Place a small amount of kindling (small, dry wood pieces) on top of the paper/firelighters.
4. Light the paper/firelighters.
5. Once the kindling is burning well, add larger pieces of dry wood.
6. Close the combustion chamber door.

5.4. Air Control and Flame Intensity

- **Front Air Supply Flap:** This controls the primary air for combustion. Opening it increases the burn rate and heat output, while closing it reduces them. For starting a fire, keep it fully open. Once the fire is established, adjust it to achieve the desired burn rate.
- **Exhaust Damper:** This mechanism regulates the flow of flue gases and can be used to fine-tune the flame intensity. Adjust it carefully to optimize combustion and heat output.

5.5. Refueling

When the fire dies down and only embers remain, carefully open the door, add more dry wood, and then close the door. Adjust the air controls as needed to re-establish the fire.

This image displays the Prity K1 Optima wood stove in an operational setting within a room. A fire is actively burning in the combustion chamber, visible through the ceramic glass door. Below the stove, a compartment is used for storing firewood, demonstrating a typical installation.

6. Maintenance

Regular maintenance ensures the longevity and safe operation of your Prity K1 Optima wood stove.

6.1. Ash Removal

Empty the ash pan regularly, ideally before each use or when it is full. Ensure the ashes are completely cold before disposing of them in a non-combustible container.

6.2. Cleaning the Ceramic Glass

Clean the ceramic glass when the stove is cold. Use a damp cloth and a non-abrasive glass cleaner specifically designed for wood stove glass. Avoid harsh chemicals or abrasive pads that can scratch the glass.

6.3. Chimney and Flue Pipe Cleaning

Have your chimney and flue pipe inspected and cleaned by a certified chimney sweep at least once a year, or more frequently if you burn the stove heavily. This prevents creosote buildup, which can lead to chimney fires.

6.4. General Inspection

Periodically check the door seals for wear and tear. Replace them if they are cracked or hardened to maintain airtightness and efficiency. Inspect all components for any signs of damage or corrosion.

7. Troubleshooting

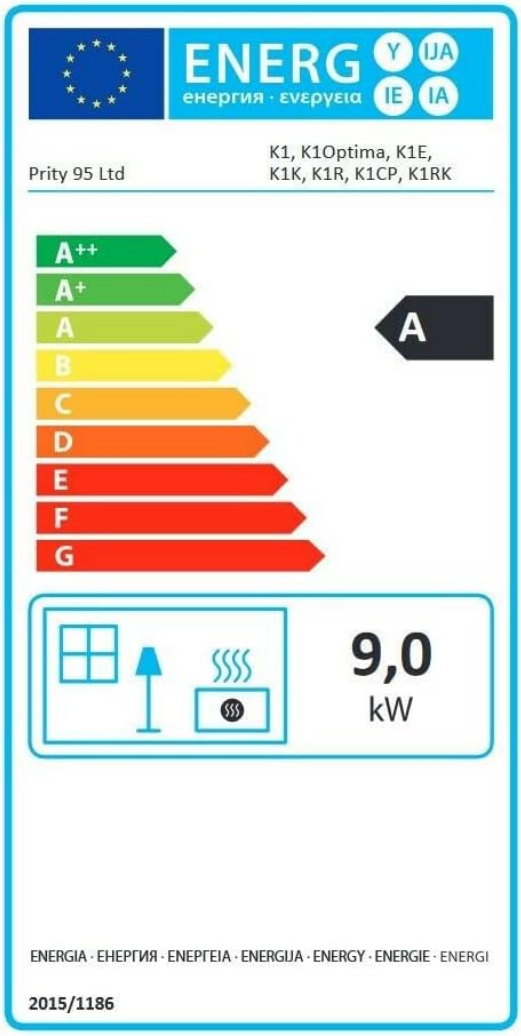
Here are some common issues and their potential solutions:

Problem	Possible Cause	Solution
Smoke coming into the room	Poor chimney draft, blocked flue, door opened too quickly, wet wood.	Check for chimney blockages. Ensure flue is clear. Open door slowly. Use dry, seasoned wood.
Low heat output	Insufficient air supply, wet wood, small fire.	Open air supply flap more. Use dry wood. Build a larger fire with appropriate fuel.
Excessive burn rate	Too much air supply, faulty door seal.	Close air supply flap partially. Check and replace door seals if necessary.
Glass blackens quickly	Wet wood, insufficient air wash, low burning temperature.	Use dry wood. Ensure adequate air supply. Burn at a higher temperature for a period to clean the glass.

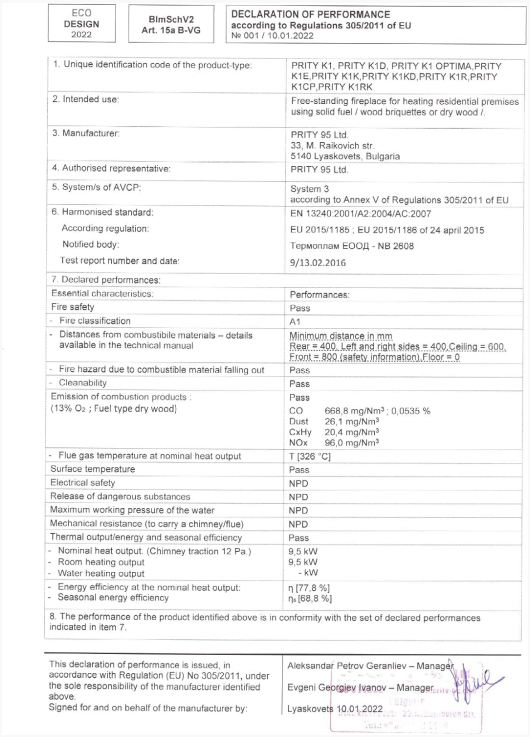
8. Specifications

The following table details the technical specifications for the Prity K1 Optima Multi-fuel Wood Stove:

Feature	Specification
Brand	Prity
Model	K1 Optima
Total Dimensions (W x D x H)	390 x 390 x 760 mm
Combustion Chamber Dimensions (W x D x H)	310 x 320 x 460 mm
Weight	60 kg
Nominal Heating Power	8 kW
Efficiency	75-80%
Flue Pipe Diameter	Ø 130 mm
Heating Area (approx.)	45.5 m^2
Heating Capacity (approx.)	123 m^3
Standards	EN 13240:2001 and EN 13299:2001
Material	Steel construction, refractory bricks, ceramic glass, cast iron
Fuel Type	Wood
Color	Matte Black
Energy Class	A (based on energy label for K1 series)



An energy label for Prity K1 series wood stoves, indicating an energy class of A and a nominal heat output of 9.0 kW. This label provides information on the stove's energy performance.



ECO DESIGN 2022 | BImSchV2 Art. 15a B-VG | **DECLARATION OF PERFORMANCE according to Regulations 305/2011 of EU** № 001 / 10.01.2022

1. Unique identification code of the product-type:	PRITY K1, PRITY K1D, PRITY K1 OPTIMA,PRITY K1E,PRITY K1K,PRITY K1KD,PRITY K1R,PRITY K1CP,PRITY K1RK
2. Intended use:	Free-standing fireplace for heating residential premises using solid fuel / wood briquettes or dry wood /.
3. Manufacturer:	PRITY 95 Ltd. 33, M. Raikovich str. 5140 Lyaskovets, Bulgaria
4. Authorised representative:	PRITY 95 Ltd.
5. System/s of AVCP:	System 3 according to Annex V of Regulations 305/2011 of EU
6. Harmonised standard:	EN 13240:2001/A2:2004/AC:2007
According regulation:	EU 2015/1185 ; EU 2015/1186 of 24 april 2015
Notified body:	Термоплам ЕООД - NB 2608
Test report number and date:	9/13.02.2016
7. Declared performances:	
Essential characteristics:	Performances:
Fire safety	Pass
- Fire classification	A1
- Distances from combustibile materials – details available in the technical manual	Minimum distance in mm Rear = 400, Left and right sides = 400,Ceiling = 600, Front = 800 (safety information) Floor = 0
- Fire hazard due to combustible material falling out	Pass
- Cleanability	Pass
Emission of combustion products : (13% O_2 ; Fuel type dry wood)	Pass CO 668,8 mg/Nm³ ; 0,0535 % Dust 26,1 mg/Nm³ CxHy 20,4 mg/Nm³ NOx 96,0 mg/Nm³
- Flue gas temperature at nominal heat output	T [326 °C]
Surface temperature	Pass
Electrical safety	NPD
Release of dangerous substances	NPD
Maximum working pressure of the water	NPD
Mechanical resistance (to carry a chimney/flue)	NPD
Thermal output/energy and seasonal efficiency	Pass
- Nominal heat output. (Chimney traction 12 Pa.) - Room heating output - Water heating output	9,5 kW 9,5 kW - kW
- Energy efficiency at the nominal heat output: - Seasonal energy efficiency	η [77,8 %] η_s [68,8 %]

8. The performance of the product identified above is in conformity with the set of declared performances indicated in item 7.

This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.
Signed for and on behalf of the manufacturer by:

Aleksandar Petrov Geranliev – Manager
Evgeni Georgiev Ivanov – Manager
Lyaskovets 10.01.2022

This document is a Declaration of Performance (DoP) in English, outlining the essential characteristics, performance, and compliance with

Regulation (EU) No 305/2011 for the Prity K1 series of wood stoves.

9. Warranty and Support

For warranty information, please refer to the documentation provided at the time of purchase or contact your retailer. Spare parts availability information is currently unavailable through standard product specifications.

Manufacturer Contact:

Manufacturer: Prity 95 LTD
For technical support or inquiries, please contact your authorized Prity dealer or the point of purchase.