

Prity FM E

Prity FM E 12KW Wood Stove with Oven Instruction Manual

Model: FM E | Brand: Prity | Power: 12KW

1. INTRODUCTION AND PRODUCT OVERVIEW

The Prity FM E is a robust 12KW wood stove featuring an integrated oven, designed for efficient heating of residential spaces. This appliance is certified to EN standards, including CE, BlmSchV2, and ECO design, ensuring compliance with European safety and environmental regulations. It is constructed from durable steel, with a 2mm thick body and a 3-4mm thick top plate. The combustion chamber is lined with firebricks to accumulate heat and enhance burning efficiency, and is equipped with heat-resistant ceramic glass. The integrated oven includes a tempered glass pane and a thermometer for convenient cooking.

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Prity FM E wood stove with oven.



Image 1: Front view of the Prity FM E 12KW Wood Stove with Oven.

2. SAFETY INFORMATION

Please read all safety instructions carefully before installing or operating the Prity FM E wood stove. Failure to follow these instructions can result in property damage, bodily injury, or even death.

- **Fuel Type:** Only use dry wood or wood briquettes with a moisture content **less than or equal to 20%**. Do not burn treated wood, trash, plastics, or any other unauthorized materials, as this can produce toxic fumes and damage the stove.
- **Minimum Clearances to Combustible Materials:** Maintain the following minimum distances from combustible materials to prevent fire hazards:
 - **Rear:** 400 mm
 - **Sides (Left and Right):** 400 mm
 - **Front:** 800 mm
 - **Ceiling:** 600 mm
- **Ventilation:** Ensure adequate ventilation in the room where the stove is installed to prevent the buildup of carbon monoxide.

- **Chimney:** The stove must be connected to a suitable, properly installed, and regularly maintained chimney system. The flue diameter required is 130 mm.
- **Professional Installation:** Installation should be performed by a qualified professional in accordance with all local and national building codes and regulations.
- **Hot Surfaces:** The exterior surfaces of the stove become extremely hot during operation. Use appropriate protective gloves when operating the stove and keep children and pets away.
- **Ash Disposal:** Dispose of ashes in a metal container with a tight-fitting lid, away from combustible materials.
- **Fire Extinguisher:** Keep a fire extinguisher readily available near the stove.

1. Eindeutiger Kenncode des Produkttyps:	PRITY FM,PRITY FME,PRITY FMSRM,PRITY FMRK,PRITY FMD,PRITY F-RK
2. Verwendungszweck:	Raumheizer für feste Brennstoffe (Zeitbrand),Raumheizung in Gebäuden
3. Hersteller:	PRITY 95 Ltd. 33, M. Raikovich str. 5140 Lyaskovets, Bulgaria
4. Bevollmächtigter:	PRITY 95 Ltd.
5. System zur Bewertung und Überprüfung der Leistungsbeständigkeit des Bauproduktes:	System 3 NachAnhang V, EU-BauPVO 305/2011
6. Harmonisierte Norm: Gemäß der Verordnung : Notifizierte Stelle: Prüfberichtsnummer und -datum:	EN 13240:2001/A2:2004/AC:2007 EU 2015/1185 ; EU 2015/1186 vom 24 april 2015 Термоплам ЕООД - NB 2608 12/08.02.2016
7. Erklärte Leistungen:	
Wesentliche Merkmale:	Leistungen:
Brandsicherheit	Erfüllt
- Brandverhalten	A1
- Abstände zu brennbaren Materialien – Details im technischen Handbuch	Hinten = 400, Linke und rechte Seite = 400,Nach oben = 600,Vorne = 800 (im gesamten Strahlungsbereich der Scheibe),Boden = 0
- Brandgefahr durch Herausfallen von brennendem Brennstoff	Erfüllt
- Reinigbarkeit	Erfüllt
Emission von Verbrennungsprodukten (13% O ₂): Brennstoffart trockenes Holz	Erfüllt CO 733,8 mg/Nm ³ ; 0,0587 % Dust 24,0 mg/Nm ³ CxHy 17,6 mg/Nm ³ NOx 104,7 mg/Nm ³
- Abgastemperatur bei Nennwärmeleistung	T [227 °C]
Oberflächentemperatur	Erfüllt
Elektrische Sicherheit	NPD
Freisetzung von gefährlichen Stoffen	NPD
Maximaler Betriebswasserdruck	NPD
Mechanische Festigkeit (Zum tragen eines Schornsteins)	NPD
Wärmeleistung/Energie und jahreszeitbedingte Effizienz	Erfüllt
- Nennwärmeleistung (Schornsteinzug 12Pa)	12,1 kW
- Raumwärmeleistung	12,1 kW
- Wasserwärmeleistung	- kW
- Wirkungsgrad bei Nennwärmeleistung :	η [77,7 %]
- Raumheizungs-Jahresnutzungsgrad	η _s [68,7 %]
8. Die Leistung des oben identifizierten Produkts entspricht den in Punkt 7 angegebenen erklärten Leistungen.	

Diese Leistungserklärung wird gemäß der Verordnung (EU) Nr. 305/2011 unter der alleinigen Verantwortung des oben genannten Herstellers ausgestellt.

Unterzeichnet für und im Namen des Herstellers von:

Aleksandar Petrov Geranliev – Manager

Evgeni Georgiev Ivanov – Manager

Lyaskovets 10.01.2022



Image 2: CE Mark and product barcode (3800215096211) indicating compliance with European standards.

3. SETUP AND INSTALLATION

Proper installation is critical for the safe and efficient operation of your wood stove. It is highly recommended that installation be carried out by a certified professional.

3.1 Site Selection

- The stove is designed for central placement within a room.
- Ensure the floor beneath the stove is capable of supporting its weight (99 kg) and any additional load from fuel. If necessary, install a non-combustible floor protector that extends beyond the stove's footprint according to local regulations and the specified clearances.
- Adhere strictly to the minimum clearances to combustible materials as outlined in Section 2.

3.2 Chimney Connection

- Connect the stove to a dedicated chimney flue with a diameter of 130 mm.
- Ensure all flue pipe connections are sealed properly to prevent smoke leakage.
- The chimney system must be clean, in good repair, and provide adequate draft (minimum 11 Pa).

3.3 Dimensions

The overall dimensions of the Prity FM E stove are 490 mm (Width) x 460 mm (Depth) x 1050 mm (Height).



Image 3: Dimensional diagram of the Prity FM E wood stove, showing height, width, and depth.

4. OPERATING INSTRUCTIONS

4.1 Initial Firing (Curing)

The first few fires should be small and moderate to allow the paint and materials to cure. During this process, some smoke and odor may be emitted, so ensure good ventilation. Avoid high temperatures during the first 2-3 uses.

4.2 Loading Fuel

- Open the combustion chamber door carefully.
- Place dry wood or briquettes onto the cast iron grate. Do not overfill the combustion chamber.
- Close the door securely after loading.

4.3 Air Supply Control

- The **front flap** located below the combustion chamber controls the primary air supply, which is essential for ignition and maintaining a strong fire. Open it fully for starting a fire and adjust as needed.
- The **smoke damper** (flue damper) allows for adjustment of the flame intensity and heat output. Opening it increases draft and burning rate, while closing it reduces them. Use this to fine-tune your fire.

4.4 Using the Oven

- The integrated oven is located above the combustion chamber.
- Monitor the oven temperature using the built-in thermometer.
- Adjust the fire's intensity using the air supply controls to achieve the desired oven temperature.
- The oven door features tempered glass, allowing you to view your food without opening the door.

4.5 Ash Removal

Regularly remove ashes from the ash pan located below the grate. Do not allow ashes to build up and touch the bottom of the grate, as this can restrict airflow and damage the grate.

5. MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your Prity FM E wood stove.

- **Ash Pan Cleaning:** Empty the ash pan regularly, ideally before each use or when it is full. Ensure ashes are completely cool before disposal.
- **Glass Cleaning:** Clean the ceramic glass of the combustion chamber and the tempered glass of the oven with a specialized glass cleaner for wood stoves when the stove is cold.
- **Chimney Cleaning:** Have your chimney inspected and cleaned by a certified chimney sweep at least once a year, or more frequently depending on usage, to prevent creosote buildup and reduce the risk of chimney fires.
- **Firebrick Inspection:** Periodically inspect the firebricks lining the combustion chamber for cracks or damage. Replace any severely damaged bricks to maintain efficiency and protect the stove body.
- **Door Seals:** Check the door seals for wear and tear. Worn seals can lead to air leaks, reducing efficiency. Replace them as needed.
- **Wood Storage:** The stove features an integrated compartment to store and dry wood, ensuring it is ready for use.

6. TROUBLESHOOTING

If you encounter issues with your wood stove, consider the following common troubleshooting steps:

- **Poor Draft / Smoke Backing Up:**
 - Check if the chimney is blocked by creosote or debris.

- Ensure the smoke damper is open.
- Verify that there is adequate air supply to the room.
- Ensure the fuel is dry and properly seasoned.
- **Low Heat Output:**
 - Confirm the fuel is dry and of good quality.
 - Check if the air supply (front flap) is sufficiently open.
 - Ensure the chimney is clean and providing good draft.
 - Inspect door seals for leaks.
- **Excessive Smoke:**
 - This often indicates wet fuel. Use only dry wood.
 - Ensure sufficient primary air is entering the combustion chamber.
 - Check for chimney blockages.

If problems persist, contact a qualified technician or the retailer for assistance.

7. SPECIFICATIONS



Image 4: Energy label for Prity FM E, showing energy efficiency class A and 12.1 kW output.

Prity FM E Product Information

Feature	Value
Model	FM E
Type of Fuel	Dry woods with a moisture content of ≤20%
Energy Efficiency Class	A
Energy Efficiency Index (EEI)	104
Seasonal Space Heating Energy Efficiency (ηs)	69%

Feature	Value
Room Heating Output	12.1 kW
Flue Gas Temperature at Nominal Heat Output	227 °C
Energy Efficiency at Nominal Heat Output	77.7%
CO Emission (at 13% O ₂)	734 mg/Nm ³
PM Emission (at 13% O ₂)	24 mg/Nm ³
NO _x Emission (at 13% O ₂)	105 mg/Nm ³
OGC Emission (at 13% O ₂)	18 mg/Nm ³
Exhaust Gas Mass Flow Rate	9.3 g/s
Minimum Chimney Draft	11 Pa
Flue Diameter	130 mm
Fuel Consumption	3.9 kg/h
Overall Dimensions (L x B x H)	490 x 460 x 1050 mm
Combustion Chamber Dimensions (L x B x H)	410 x 365 x 315 mm
Oven Dimensions (L x B x H)	345 x 370 x 190 mm
Net Weight	99 kg
Body Material	Steel (Body 2mm, Top 3-4mm)
Estimated Heating Area	68 m ²
Estimated Heating Capacity	185 m ³

8. WARRANTY AND SUPPORT

For warranty information, please refer to the terms and conditions provided by your retailer at the time of purchase. Keep your proof of purchase for any warranty claims.

For technical support, spare parts, or further assistance, please contact your authorized Prity dealer or the retailer from whom you purchased the product. Provide your model number (FM E) and purchase details when seeking support.

