

Operating manual

Pallas



www.austroflamm.com

Operating manual 09/05/2023

Version: 5.0

#### LEGAL NOTICES

Owner and publisher AUSTROFLAMM GMBH Austroflamm-Platz 1 A- 4631 Krenglbach Tel: +43 (0) 7249 / 46 443 www.austroflamm.com info@austroflamm.com

Edited by: Olivera Stojanovic Illustrations: Konstruktion Text: Technical department (Austroflamm)

Copyright

All Rights reserved. The contents of these instructions may be reproduced or distributed only with the consent of the publisher! Printing, spelling and typographical errors reserved.

## Contents

1	Genera	l information	5
	1.1	Copyright	5
2	Purpose	e of the manual	6
	2.1	Storing the manual	6
	2.2	Structure of the manual	6
	2.3	Representations used	6
	2.4	Version control	6
	2.5	Abbreviations	7
3	Safety		8
	3.1	Importance of the safety instructions	8
	3.2	General safety instructions	8
	3.3	Special types of danger and personal protective equipment	9
4	Product	overview	10
	4.1	Intended use	
	4.2	Identification of the product	10
	4.3	Energy label	
	4.4	Positioning of the nameplates	12
5	Technic	al data	13
-	5.1	Technical data according to Regulation (EU) 2015/1185 and delegated Regulation (EU) 2015/1186	
	5.2	General specifications	
	5.3	Data for the chimney/flue dimensioning	
6		ort, handling and storage	
U	6.1	Transportation	
	6.2	Storage	
7			
7	7.1	ments at the installation location Safety distances to be observed	
	7.1	Combustion air	
	7.2	Chimney requirements	
	7.3	Floor load-bearing capacity	
	7.5	Floor condition	
	7.6	Room of installation	
8		iterial/-quantity	
0	8.1	Fuel	
	8.2	Fuel quantity	
9			
7	9.1	ion Risks and dangers	
	9.2	Execution	
	9.2.1	Mounting the steel side cladding	
	9.2.2	Mounting the ceramic side cladding	25
	9.2.3	Mounting the soapstone side cladding	26

	9.2.4 9.2.5	Installing the HMS Mounting the Keramott					
	9.2.6 9.2.7	Rearranging the flue pipe connection Installing the log drawer					
10							
10	10.1	Adjusting the door lock					
11		sioning					
	11.1	Initial Commissioning	34				
12	Operatio	on	35				
	12.1	Before heating up	35				
	12.2	Making fire correctly	35				
	12.3	Heating in the transition period	36				
13	Mainten	ance	37				
	13.1	Changing the seal on the door	37				
14	Cleaning	]	38				
	14.1	Cleaning the stove, flue gas ducts and flue pipe	38				
	14.2	Removing ashes	38				
	14.3	Emptying the ash box	38				
	14.4	Cleaning the door window	39				
	14.5	Cleaning surfaces	40				
15	Help		41				
	15.1	Firebox lining	42				
	15.2	What to do in the event of a chimney fire	42				
	15.3	What to do in the event of faults	42				
16	Accesso	ries	43				
17	Spare pa	arts	44				
18	Dismant	ling	48				
	18.1	Removing the steel cladding	48				
19	Disposa		50				
20	Guarant	ee / warranty	52				
21	Start up	log	53				
22	2 Service Report						

## 1 General information

You have decided in favor of an Austroflamm stove.

#### Congratulations on your decision and thank you for your trust.

Correct operation and care are essential for trouble-free operation and long service life.

The information in this manual is of a general nature. National and European standards, local and building regulations, together with fire regulations must be complied with.

Read these instruction through carefully before installation and operation. No liability or warranty claims apply for damage incurred by failure to follow this manual.

Please observe the instructions in the individual sections.

This manual is a component part of the stove. It includes all the important information for both the dealer and the customer.

Personally hand over this manual to the owner of the stove together with an introduction to the system (heating operations).

In the following list we give you an overview of which sections are important for whom:

Dealer	End customer
Complete instructions	General information [▶on page 5]
	Purpose of the manual [▶on page 6]
	Safety [▶on page 8]
	Product overview [▶on page 10]
	Technical data [▶on page 13]
	Requirements at the installation location [▶on page 17]
	Fuel material/-quantity [▶on page 19]
	Settings [▶on page 33]
	Commissioning [▶on page 34]
	Operation [▶on page 35]
	Maintenance [▶on page 37]
	Cleaning [▶on page 38]
	Help [▶on page 41]
	Accessories [▶on page 43]
	Spare parts [▶on page 44]
	Dismantling [▶on page 48]
	Disposal [▶on page 50]
	Guarantee / warranty [▶on page 52]
	Data processing
	Service Report [▶on page 54]

#### 1.1 Copyright

All Rights reserved. The contents of these instructions may be reproduced or distributed only with the consent of the publisher! Printing, spelling and typographical errors reserved.

## 2 Purpose of the manual

This manual is a component part of the stove and is intended to contribute to the stove being safely installed and maintained.

#### TIP

Please read this manual before using the stove for the first time.

#### 2.1 Storing the manual

Store this manual in case you need it. A current version of the manual can be found online at our homepage www.austroflamm.com.

#### 2.2 Structure of the manual

The table of contents can be found on page 3. Illustrations in this manual may differ from the delivered product.

#### 2.3 Representations used

The following representations are used in this manual:

#### Steps with mandatory adherence to the sequence

- ✓ Prerequisite
- 1) Step 1
- 2) Step 2
- 3) .....
  - ⇒ Intermediate result / additional information
- ⇔ Result

#### Steps and bullet points without mandatory sequence

- ....
- ....
- ....
- ....

#### **Cross-references**

See Technical Data [▶on page 13]

#### Useful tips

#### TIP

#### Fuel

Use only the recommended fuel!

#### 2.4 Version control

We update our manuals on a continual basis. The current version can be found at our homepage www.austroflamm.com.

### 2.5 Abbreviations

Abbreviation	Meaning
HMS	Heat Memory System
ST	Stoves

## 3 Safety

In this manual we give you numerous safety instructions for the safe operation of your stove. These instructions are characterized differently as follows, depending on their importance:

#### 3.1 Importance of the safety instructions

#### NOTICE

Particular behaviour and/or activities that are required for safe working. Failure to follow this can result in material damage.

## 

Possible dangerous situation (light or minor injuries and material damage).

## 

Possibly imminent danger to life and health of persons (severe injuries or death).

## 

Immediately imminent danger to life and health of persons (severe injuries or death).

#### 3.2 General safety instructions

- The information in this manual represents generally applicable standards and rules. National and European standards, local and building regulations, together with fire regulations must also be complied with.
- Before operating your stove, carefully read through the entire manual and observe the instructions and warnings.
- Austroflamm GmbH accepts no liability or responsibility for the connection of our heating appliances to shared exhaust pipes/chimneys - **multiple occupancy**. For more information consult a chimney sweep and check your national, regional and local building regulations.
- Only approved transport aids with sufficient load-bearing capacity may be used to transport your stove.
- Caution varnish is not an anti-rust protection!
- Burn only the fuel listed and approved in the section.
- It is strictly forbidden to burn or introduce highly flammable or explosive substances, such as empty aerosols and the like, into the firebox or to store them in the immediate vicinity of your stove due to the risk of explosion.
- No loose or easily flammable items of clothing should be worn when laying the fire.
- Please note that placing non-heat-resistant objects on, or near, the stove is forbidden.
- Do not place any items of laundry on the stove to dry. Laundry racks or the like must be placed at a sufficient distance from the stove. (Fire hazard!)
- This stove is not a slow-burn fire.
- While your stove is in operation, it is forbidden to process highly flammable or explosive substances in the same room or in adjoining rooms.
- The stove must only be operated with the doors closed.
- The door and all the stove's control devices must be closed when the stove is not in operation.

• Please note that the surfaces of this stove heat up considerably during operation. We recommend that you use the protective glove supplied to operate your stove.



• Please alert children to these dangers, and keep them away from the stove when it is operating.

#### \Lambda DANGER

#### Danger of overheating

To prevent damage you must **NEVER** operate your stove with a greater quantity of fuel than the quantity given in these instructions, either during its initial commissioning or every time you subsequently light it up again!

• Your stove is not suitable for use as a ladder or a stand.

#### 3.3 Special types of danger and personal protective equipment

For certain activities such as installation/dismantling, particular care must be taken that the following safety equipment is worn:

M2	Safety gloves
	Safety shoes

## 4 Product overview

#### 4.1 Intended use

The Austroflamm stove described in this manual is manufactured and tested with a type A1 self-closing and locking door under EN test EN 13240.

ΕN

## NOTICE

Operation is only permissible with closed/bolted door.

#### 4.2 Identification of the product

In the following illustrations we give an overview of the most important dimensions and the nameplate positioning.

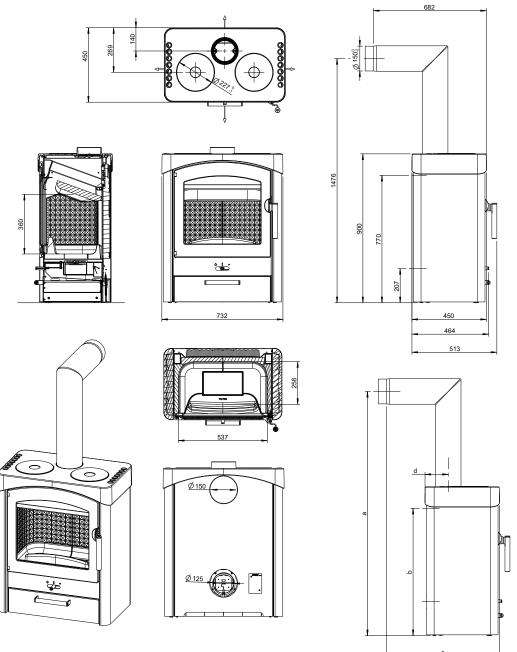
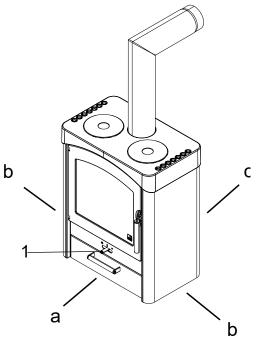


Fig. 1: Dimensions



*Fig. 2:* Safety distances (a, b, c) / air controller

#### 4.3 Energy label

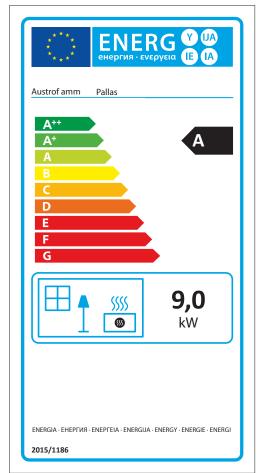
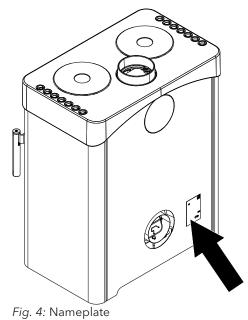


Fig. 3: Energy label

1) Open (+) and closed (-) (primary/secondary air controller)

## 4.4 Positioning of the nameplates



The type label is located on the rear of the stove.

## 5 Technical data

As a type 1 stove, a connection to a chimney already occupied with other solid-fuel stoves and ovens is possible provided that the chimney rating under DIN 4705 - part 3, does not contravene this.

# 5.1 Technical data according to Regulation (EU) 2015/1185 and delegated Regulation (EU) 2015/1186

#### Contact details for the manufacturer or their authorized representative

Manufacturer:	Austroflamm GmbH			
Contact:	-			
Address:	Austroflamm-Platz 1			
	4631 Krenglbach			
	Austria			

#### **Appliance details**

Model identification(s):	Pallas
Equivalent models:	-
Test reports:	RRF - 40 05 867
Applied harmonized standards:	EN 13240
Other standards/technical specifications applied:	-
Indirect heating function:	no
Direct heat output:	9.0 kW
Indirect heat output <sup>1</sup> :	-

#### Properties for operation with the preferred fuel

Space heating annual use efficiency $\eta_{s}$ :	68.7 %
Energy efficiency index (EEI):	104

#### Particular precautions for assembly, installation or maintenance

Described in the individual sections of the operating manual.

Fuel	Preferred fuel (only one) <sup>2</sup> :	Other suit- able fuel(s) <sup>3</sup> :	ηs [x%]:			Space heating emis- - sions at minimum heat efficiency <sup>4</sup> (*) (**)					
	(, -			PM	OGC	CO	NOx	PM	OGC	со	NOx
				[x] mg/Nm <sup>3</sup> (13% O2) <sup>5</sup>				[x] mg/Nm³ (13% O2) <sup>6</sup>			
Log, moisture content ≤ 25 %	yes	no	68.7	24	47	500	103	-	-	-	-
Compregnated laminated wood,	no	no	-	-	-	-	-	-	-	-	-
Moisture content < 12 %											
Other woody biomass	no	no	-	-	-	-	-	-	-	-	-
Non-woody biomass	no	no	-	-	-	-	-	-	-	-	-
Anthracite and dry steam coal	no	no	-	-	-	-	-	-	-	-	-
Coking coal	no	no	-	-	-	-	-	-	-	-	-
Semi-coke	no	no	-	-	-	-	-	-	-	-	-
Bituminous coal	no	no	-	-	-	-	-	-	-	-	-
Lignite briquettes	no	no	-	-	-	-	-	-	-	-	-

Peat briquettes	no	no	-	-	-	-	-	-	-	-	-
Briquettes made from a mixture of fossil fuels	no	no	-	-	-	-	-	-	-	-	-
Other fossil fuels	no	no	-	-	-	-	-	-	-	-	-
Briquettes made from a mixture of biomass and fossil fuels	no	no	-	-	-	-	-	-	-	-	-
Other mixture of biomass and solid fuels	no	no	-	-	-	-	-	-	-	-	-

(\*) PM = dust, OGC = organic gaseous connections, CO = carbon monoxide, NOx = nitrogen oxide

(\*\*) Only required when using correction factors F(2) or F(3).

Specification	Symbol	Value	Unit	Specification Symbol Value	Unit				
Heat output				Thermal efficiency (fuel efficiency) (based on the NCV)					
Nominal heat effi- ciency	Pnom	9.0	kW	thermal efficiency (fuel ef- ficiency) at nominal heat efficiency	%				
Minimum heat output (standard value)	Pmin	-	kW	thermal efficiency (fuel ef- ficiency) at minimum heat output (standard value)	%				
Auxiliary power co	onsumptio	on		Type of heat output/room temperature control					
At nominal heat efficiency	elmax	-	kW	single-level heat output, no room temperature control	yes				
At minimum heat output	elmin	-	kW	two or more manually adjustable levels, no room temperature control	no				
In standby condi- tion	elSB	-	kW	Room temperature control with mechanical ther- mostat					
Pilot flame power	requirem	ent		with electronic room temperature control					
Pilot flame power requirement	Ppilot	-	kW	with electronic room temperature control and day- time regulation	no				
(if present)									
				with electronic room temperature control and weekday regulation	no				
				Other regulation options					
				(Multiple answers possible)					
				Room temperature control with presence detec- tion					
				Room temperature control with open window de- tection					
				with remote control option	no				

#### Properties for exclusive operation with the preferred fuels<sup>7</sup>

<sup>1</sup>There is no entry for fireplaces without water-carrying components.

<sup>2</sup>Values for annual use efficiency and emissions must be given here for the preferred fuel.

<sup>3</sup>Values for annual use efficiency and emissions must be given here for all other suitable fuels.

<sup>4</sup> Corresponds to partial load heat output as per EN 16510

<sup>5</sup> Specification in mg/m<sup>3</sup> for heated filter method (in compliance with Annexe III, number 4, letter a, section i, point 1) or g/kg for measurement in dilution tunnel (in compliance with Annexe III, number 4, letter a, section i, point 2 and 3.)

<sup>6</sup> Specification mg/m<sup>3</sup> for heated filter method (in compliance with Annexe III, number 4, letter a, section i, point 1) or g/kg for measurement in dilution tunnel (in compliance with Annexe III, number 4, letter a, section i, point 2 and 3.)

<sup>7</sup> Specifications are made here for the preferred fuel only.

### 5.2 General specifications

Technical data	Basic appliance
Height [mm]	900
Width [mm]	732
Depth [mm]	450
Weight [kg] steel / ceramic / soapstone	170 / 205 / 265
Flue pipe outlet, diameter [mm]	150
Nominal heat efficiency [kW] as per EN test EN 13240	9
Heat output, minimum [kW]	4.5
Maximum heat output [kW]	13
Space heating capacity, at least (depending on the building insulation) [m³]	114
Maximum room-heating capacity (depending on the building insulation) [m³]	305
Minimum distance from non-flammable materials [mm]	50
Max. amount of fuel to be deposited [kg] (wood/briquettes)	2.7
Safety distances to combustible materials front / side / rear [mm]	800 / 200 / 200

### 5.3 Data for the chimney/flue dimensioning

Exhaust gas values for the multiple occupancy of the chimney (according to DIN 4705 Part 3) or rating of the chimney (according to DIN 4705 Part 2)		
Flue gas mass flow [g/s]	9.2	
Flue gas temperature [°C]	310	
Minimum feed pressure at nominal heat output [Pa] closed	12	
at 0.8 times nominal heat output [Pa]	10	

## 6 Transport, handling and storage

#### 6.1 Transportation



Immediately checked the goods delivered for completeness and damage in transit.

Before installing the stove, check that all movable parts are working. Any defects before the installation of the stove must be reported.

Transport is with a crate. The crate facilitates transport of the stove using a lifting truck or forklift.

Remove the crate and dispose of it appropriately.

Fig. 5: Crate

#### 6.2 Storage

The stove must be stored in a dry room/warehouse. Protect against dirt, heat and moisture. The following illustrations are attached to the crate and must be observed:



- Fragile always place upright protect against moisture and store dry.
- Remove and dispose of packing material in an environmentally friendly manner.



• The crate can be disposed of in the separate collection for packaging. Local disposal regulations must be observed.

## 7 Requirements at the installation location

## 7.1 Safety distances to be observed

Safety distances to be observed (minimum clearances - see also type plate).

- a) 800 mm (at the front in the radiation area)
- b) 200 mm (at the sides in the radiation area)
- c) 200 mm (rear)

ΕN

Fig. 6: Safety distances

#### 7.2 Combustion air

An adequate supply of combustion air must be provided during operation. With a modern very thick building shell it can happen that the combustion air supply is not guaranteed for balanced flue operation or that the draft behavior is impaired. In this case an adequate supply of combustion air must be provided. Your Austroflamm specialist dealer will be happy to advise you.

#### TIP

Ensure that combustion air openings are not closed!

## 7.3 Chimney requirements

When connecting the flue pipes to the chimney, national and/or local safety regulations must be complied with. Your Austroflamm stove is fitted at the factory with a flue pipe outlet at the top (diameter 150 mm). The connection can, as described in these instructions, be rearranged to the bottom. When connecting with other pipe diameters the approval of your responsible chimney sweep is required. The flue pipe connection and flue pipe transitions must be sealed accordingly. Your Austroflamm specialist dealer knows the guidelines and will be happy to advise you. For your own safety the connection of the flue pipe must be carried out by a technically competent person.

## 7.4 Floor load-bearing capacity

Before installing, verify whether the load-bearing capacity of the substructure can withstand the weight of your Austroflamm stove.

With regards to loading capacity, for floors with underfloor heating we refer you to your structural engineer responsible for statical calculations, builder, etc.

#### 7.5 Floor condition

Austroflamm stoves can be placed directly on the floor.

The fire protection regulations for operating a wood-burning or pellet stove vary depending upon the location and appliance. We recommend you obtain this information from your chimney sweep or the specialist dealer in your area.

#### 7.6 Room of installation

Note that the room in which the stove is installed must have at least one door / one window leading to the outside, or be directly connected to such a room. For balanced flue operation, other heating appliances and extractor hoods must not be operated together with this heating appliance as part of the room air system.

## 8 Fuel material/-quantity

#### 8.1 Fuel

#### Wood

Many of our native types of wood can, after being appropriately dried, be burnt CO2-neutral in heatproducing appliances. Wood stands out because it grows again, can be sustainably harvested, requires little or no extra external energy to be invested in the fuel, and has a short journey from the producer to the consumer, which provides an optimal climate balance.

The most common types of wood to use in the stove are beech, yoke elm, birch, larch, spruce and pine. The most important criterion for burning in a heat-producing appliance is that the fuel has been sufficiently dried through. For this purpose the prepared pieces of log should be stored for at least two years. The legislator stipulates a maximum water content of 20%. That is still however a lot of water sitting in the capillaries of the wood. A piece of firewood only becomes good when its water content comes to a maximum of 12 to 13%. The differences in combustion behaviour are striking and clearly detectable even by the layman.

Types of wood other than the ones referred to above are also suitable for burning. However each heatproducing appliance should be checked for how their use affects combustion behaviour. Oak for example burns with a rather shorter flame and more embers. Oakwood catches fire with greater difficulty, and due to hardness of the wood it is not split as well (small) as other types of wood, which again has a negative effect on combustion behaviour. It is however a good energy source, and, correctly processed, also suitable as firewood.

Softwoods (fir, pine, spruce) should if possible be mixed with hardwood. Softwoods have a higher proportion of tannin, which leads to more deposits in the heat-producing appliance, the connecting pipes and the chimney. If only softwood is burnt, this can lead more quickly to a build-up of shining soot. Mixing with hardwood (for example, beechwood) reduces this effect.

The size of your heat-producing appliance's combustion chamber will dictate whether your firewood is 25cm, 33cm or 50cm in length. 50cm pieces of log should preferably dry for somewhat longer (lain down for three years or more), because wood is dried out mainly by the leakage of water from the capillaries - and that simply takes time. And the path from inside to outside in a 50cm-long piece of log is twice as long as in a 25cm-long piece of log. The important thing is that the wood is well split. This means that the circumference of a piece of log (once all sides are measured around the cutting point) must be a maximum of 15-25cm. Pieces of wood cut to this size dry more easily - above all, however, they give the fire (the temperature) a greater attack area and thus make it easier to evolve gas and thus to burn. Also the quantity of fuel can be better measured out. Thanks to their outstanding levels of efficiency, modern heat-producing appliances require just a fraction of the amount of wood of earlier stoves. Here smaller pieces of log can be placed according to the manufacturer's specifications - large pieces of log often exceed the maximum specified quantity with just a single piece.

Not everyone has a hygrometer at home for determining the water content in wood, particularly when good reliable units cost several hundred euros. However you can make a good estimate of how suitable your fuel is by carefully observing combustion behaviour. A "good" wood fire will only smoke briefly in the ignition phase, hardly at all after that. It will burn with a light (yellow to orange-coloured) long flame. Little residue will occur in the combustion chamber, most of it disappearing again when the fire is fully developed. Another good criterion for assessing whether a piece of log is suitable for combustion is its weight. Most manufacturers also specify the amount to be laid in kg/weight. Example: a piece of beechwood 33cm in length with a circumference of approx. 20cm weighs approx. 1kg when it is suitable (dry enough) for burning. Therefore 25cm in length gives approx. 750 grammes, and 50 cm in length approx. 1.5kg.

Please observe at all times the maximum specified amount to be laid, even when putting on more wood! Otherwise your fire will not provide the desired efficiency - but above all considerable damage may be caused to your appliance, to gaskets and material and to the flue gas duct.

The wood may only be burnt untreated. NEVER burn treated woods, not even wood processed with natural substances or organic glazes. Wood waste does not belong in the stove!

#### Wood briquettes

Many people like wood briquettes as a fuel because they require less storage space than wood, can be stocked or sold in small quantities and - at least at first glance - make less work than wood. Within the scope of production, the quality of briquettes is consistent. Wood briquettes do not need to be stored for a long time to be dried out. Due to the raw material (unrefined chips) and the production process they have an already defined residual moisture.

If wood briquettes are designated as a suitable fuel, then this still only applies to this fuel, NOT for coal-, paper-, bark- or other pressed items, such as pellets.

In spite of various standardizations and many advertising promises, there are also considerable differences in quality in wood briquettes. But even with good fuel quality, combustion behaviour is different from that of unrefined log. And not every wood briquette burns equally well in every stove. Before you decide on a particular variety and perhaps even store this up in larger quantities, you should extensively test the wood briquettes under various draft conditions. Most suppliers keep "test packages" for this purpose that can be purchased at preferential prices to test out and compare with one another the various types offered.

#### TIP

When burning wood briquettes, the maximum quantity specified in these instructions must also be observed. The quantity must not be exceeded.

As the wood is pressed and thus has little spatial volume for the same weight, modern heat-producing appliances with a low placement quantity often have "little fire heaps" occur, leading one to wonder whether a fire can burn at all with so little fuel. Nevertheless you must never exceed the maximum placement, because that would cause damage. Many wood briquettes change during the temperature increase when burning, by "opening up". This should not worry you as it is normal. When inserting wood briquettes make sure that this expansion as far as possible does not press not in the direction of the window, as otherwise this will get very dirty.

In principle you should not insert wood briquettes as one piece, but rather break them at the layer thicknesses, which are usually visible in slices, and place smaller pieces in the combustion chamber, not in an interlocking manner, but randomly. This way you will ensure that the combustion air reaches more burning material and flows around it better. Wood briquettes require a stronger air current, an expert eye and perhaps a bit more patience, until you get the knack of it. Since less volume is available (although the same mass, it takes less space up), the fire is generally smaller and does not burn so high and vivaciously as when burning log. When wood briquettes alone are burnt, this therefore generally leads to haziness in the combustion chamber, as well as on the stove window. Not all areas of the combustion chamber have the same temperature applied to them as when unrefined wood is burnt, which is why these deposits occur. It may be that with one variety of wood briquettes more deposits occur, whereas with another variety none at all. This suggests trying out various varieties to determine the suitable fuel for your heat-producing appliance. If you would really like to use wood briquettes, but don't get on quite well with them, then it may also help to mix the fuel. That means: Burn wood briquettes and unrefined log in the mixture ratio that achieves a good burning result for your heat-producing appliance.

Wood briquettes must also be stored dry. In general it can be said that pressed items with a hole in the middle usually burn better. Soft wood briquettes are to be preferred and are often more suitable than hard wood briquettes.

#### Approved fuel

Dry, properly stored, unrefined log (preferably hard wood) is permitted as fuel for our stoves.

Round wood must be split at least once so that it lights better. The diameter of the split piece of wood must not exceed 7 cm.

#### Explosive substances

It is strictly forbidden to burn or introduce highly flammable or explosive substances (empty aerosols and the like) into the firebox or to store them in the immediate vicinity of your stove. Risk of explosion!

#### Fuel

Only burn the recommended fuel.

#### **Clean combustion**

The firewood must be dry (rel. wood moisture < 15 %) and untreated. Furthermore the correct quantity of firewood must be burnt in order to achieve a clean, low-emission combustion.

#### 8.2 Fuel quantity

#### Maximum fuel quantity

Your Austroflamm stove is designed for maximum efficiency: see Technical Data section. Too great a quantity of fuel can lead to overheating and damage to your Austroflamm stove!

Maximum amount of fuel to be deposited: 2.7 kg wood or briquettes.

#### NOTICE

#### Overheating

Too great a quantity of fuel can lead to overheating and damage to your Austroflamm stove

#### NOTICE

To avoid damage you must **NEVER** operate your Stove a greater quantity of fuel than that specified in this manual!

## 9 Installation

Installation must only be carried out by an authorized specialist company.

Before installing the stove, check that all movable parts are working. Any defects must be reported before the installation.

In the following sections we will give you information on

- the integration or attachment of appliance parts
- the rearrangement of the flue pipe connection
- The connection of the combustion air supply, and on
- other important facts relating to the installation.

## 9.1 Risks and dangers

## Protective equipment

The following protective equipment must be used:

Type of protective equipment				
M <sup>2</sup>	Safety gloves			
	Safety shoes			

#### 9.2 Execution

9.2.1 Mounting the steel side cladding

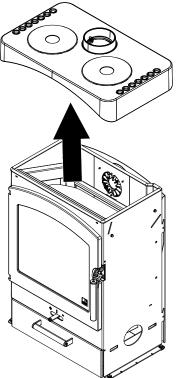
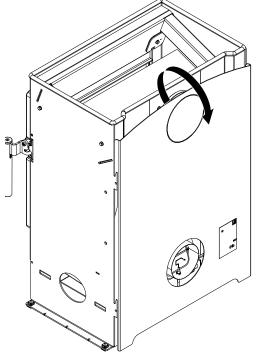


Fig. 7: Detaching the lid



*Fig. 8:* Lifting the rear panel upwards and removing it

1) Detach lid (if mounted).

2) Lift the rear panel upwards and remove it.

3) Open door.

ΕN

4) Removing the prefitted screws on the front side of the interior using an Allen key (SW 2.5).

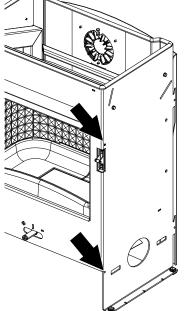


Fig. 9: Removing the prefitted screws

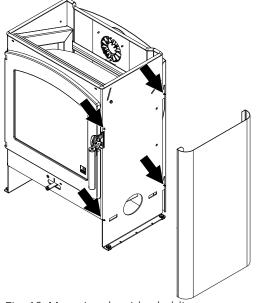
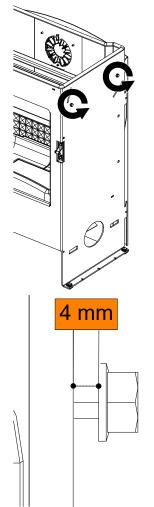


Fig. 10: Mounting the side cladding

- 5) Use the cross-point screwdriver and the self-tapping screws provided to mount the side cladding on the unit.
- 6) Repeat the steps to mount the side cladding on the left side.
- 7) Reattach rear panel and lids.

#### 9.2.2 Mounting the ceramic side cladding

- 1) If the steel cladding is mounted, it must first be dismounted.
  - ⇒ Proceed as described in the section Removing the steel side cladding [▶on page 48].
- 2) Unscrew hexagonal-head bolts at least 4 mm.



*Fig. 11:* Undoing the bolts

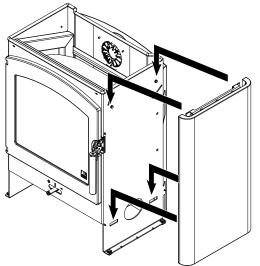
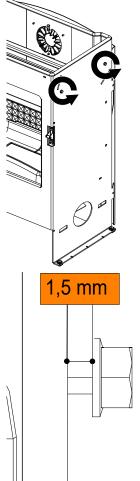


Fig. 12: Hanging the ceramic side cladding

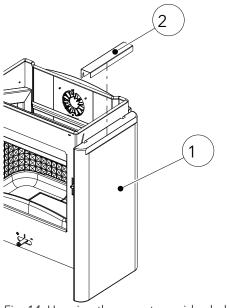
- 3) Hang the ceramic side cladding on the screws from top to bottom and simultaneously press the lower part of the ceramic side cladding towards the stove.
- 4) Repeat the stages on the other side of the stove to mount the ceramic side cladding.
- 5) Reattach rear panel and lid.

#### 9.2.3 Mounting the soapstone side cladding

- 1) If the steel cladding is mounted, it must first be dismounted.
  - ⇒ Proceed as described in the section Removing the steel side cladding [▶on page 48].
- 2) Unscrew hexagonal-head bolts 1-1.5 mm.



*Fig. 13*: Undoing the bolts



3) Hang the soapstone cladding (1) on the screws from top to bottom; while at the same time pressing down towards the stove and attaching the top cover (2).

- 4) Repeat the stages on the other side of the stove to mount the soapstone side cladding.
- 5) Reattach rear panel and lid.

*Fig. 14:* Hanging the soapstone side cladding

#### 9.2.4 Installing the HMS

Fig. 15: Fixing the HMS holders

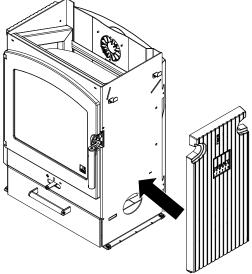


Fig. 16: Mounting HMS brick

- First the lid must be removed and the side cladding detached. Proceed as described in the section Removing the steel side cladding [▶on page 48].
- 2) Fix the four HMS holders top and bottom on the side of the stove.

3) HMS brick can now be mounted on the holders.



ΕN

4) To mount the HMS brick on the left hand side of the stove, repeat the last two stages.

5) Fix the HMS holders as shown on the rear of the stove

and mount the HMS brick on the holders.6) Remount steel side cladding and attach cover.

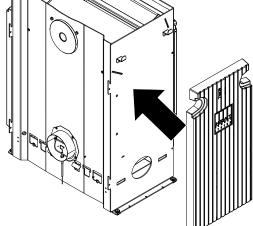


Fig. 17: Mounting HMS brick

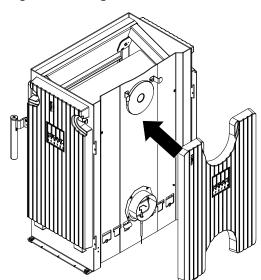
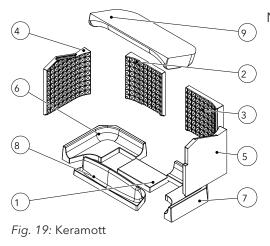


Fig. 18: Mounting HMS brick at the rear

#### 9.2.5 Mounting the Keramott

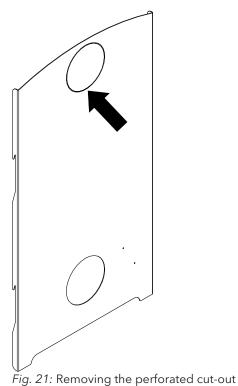


Numbering = installation sequence

#### 9.2.6 Rearranging the flue pipe connection

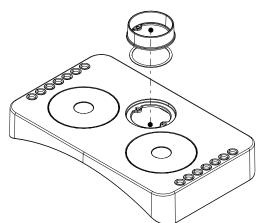
- 1) First remove the lid.
- 2) Then press the rear panel upwards and remove it.

Fig. 20: Removing the lid and rear panel



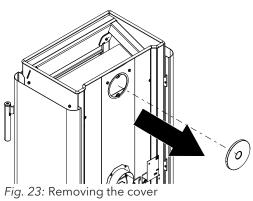
3) Use a saw to remove the perforated cut-out on the rear panel.

ΕN



4) Detach the bracket and the seal from the lid.

Fig. 22: Detaching the bracket and seal from the lid



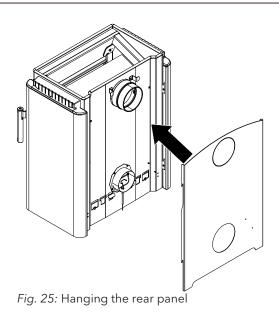
- Fig. 24: Fitting the bracket at the rear

5) Remove cover on the back.

ΕN

6) Fit the bracket in the place of the cover at the rear.

6999999



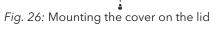
 $\frown$ 

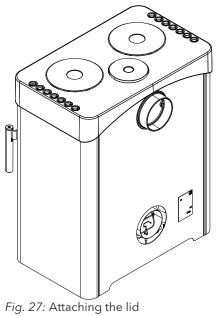
699999<sup>6</sup>

T

7) Hang the rear panel from top to bottom.

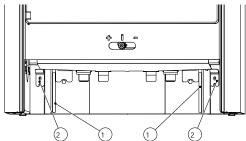
8) Mount the cover from the rear on to the lid.





9) Attach lid.

#### 9.2.7 Installing the log drawer



*Fig. 28:* Installing the log drawer

- 1) Glue the two bump stops (1) from inside to the rear wall.
  - ⇒ Only fix the two stop plates (2) with two screws each if necessary.
- 2) The log drawer can now be slid into the stove.

## 10 Settings

## 10.1 Adjusting the door lock

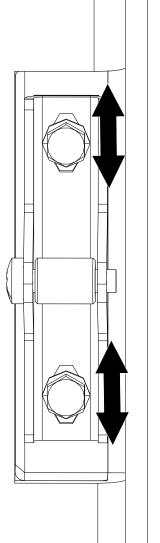


Fig. 29: Adjusting the door lock

- 1) Open door.
- 2) The door lock can be adjusted using the marked screws.

## 11 Commissioning

#### 11.1 Initial Commissioning

#### NOTICE

During the initial commissioning and in the following 2-3 combustion cycles, only approx. 2/3 of the maximum fuel quantity is to be used.

#### NOTICE

To avoid damage you must **NEVER** operate your Stove a greater quantity of fuel than that specified in this manual!

During the first 3-4 combustion cycles at nominal heat output, odors may develop. The odors are caused by the evaporation of sheet metal greases and binding agents from the varnishing. Although unpleasant, these fumes are completely non-toxic. We therefore recommend that you well ventilate the room for the first few fires.

- 1) Remove all enclosed documents and appliance parts from the fireplace.
- 2) Read the operating manual through carefully before the initial commissioning.
  - ⇒ For optimally lighting we refer you to the section Making fire correctly.

#### Removing the ash box cover

This step is only necessary if you have ordered your stove with the "ash box" accessory.

Otherwise this step can be skipped.

- ✓ Before the stove is operated for the first time, it is absolutely vital to remove the cover of the ash box from the stove. Proceed as follows: (for a better understanding, see also steps 1 and 2 in the section Emptying the ash box).
- 1) Open the door.
- 2) Taking out the grate.
- 3) Take off the cover and lift it up.
  - ⇒ Cover is inserted incorrectly when delivered.
  - $\Rightarrow$  You need the cover when you empty the ash box.
  - $\Rightarrow$  To empty the ash box we refer you to the section Emptying the ash box.

## 12 Operation

#### 12.1 Before heating up

The stove can only function properly if there is sufficient combustion air coming to the room of installation (the appliance), specially if several firing installations are being operated at the same time. Ensure sufficient air supply before heating up. Open the combustion air flap on the stove and keep it open for the entire combustion period.

Devices for the supply of combustion air must not be modified.

#### 12.2 Making fire correctly

To ensure the stove operates correctly and safely, it is important that the chimney generates the required draft. This must be checked in particular for each initial commissioning (e.g. after summertime) and in the transitional periods (e.g. when the wind is strong). If there is insufficient required draft, then paper or softwood chips can first be burnt in order to bring stove and chimney flue to temperature.

The air inlet of the stove must not be closed.

- Fig. 30: Primary/secondary air controller



Fig. 31: Before kindling

- 1) Clean grate.
- 2) If necessary empty ash box (beware of embers).
- Completely open the primary/secondary air control (1).
  - ⇒ Position "UP"

- 4) Lay 2-3 pieces of log (1) (beech, oak, birch) across the bottom of the firebox.
- 5) Finely split softwood above it (2).
- 6) Place a firelighter (3) in the middle and light it.
  - ⇒ Never use petrol, spirit or similar for ignition!

1	Log	
2	Softwood	
3	Firelighter	

- 7) Close the door.
  - ⇒ It is best to allow the first layer of wood to combust without altering the air damper setting.
  - ➡ If only the bed of embers is left (no more flames), you can place another layer of log.
- 8) When stoking up, proceed as for heating up:
  - $\Rightarrow$  Open combustion air supply.
  - $\Rightarrow$  Carefully open stove door.
  - ⇒ Put wood on.
  - ⇒ Close door.



Fig. 32: Flame pattern

- 9) As soon as the pieces of firewood are burning well all around (light, high flames), you can control the air supply with the controller.
  - ⇒ Control at maximum setting left = maximum heat output
  - ⇒ the flames should always burn yellow and never blue or with black flame tips (otherwise feed more air in).

blue = too much air black = too little air

⇒ During combustion doe not totally close the air supply (danger of deflagration!).

#### 12.3 Heating in the transition period

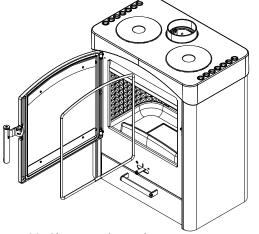
In the transition period, i.e. during high external temperatures, a sudden temperature rise can disrupt the chimney draft so that the fuel gases are not completely drawn off. In this case the appliance must be filled with smaller quantities of fuel and operated with the air damper/-controller on a higher setting so that the available fuel combusts more quickly (with a flame developing) and the chimney draft stabilized as a result.

#### TIP

To prevent resistance in the firebed, the ashes should be removed more frequently.

# 13 Maintenance

# 13.1 Changing the seal on the door



- 1) Remove old seal from the door.
- Glue in new seal with a suitable adhesive (e.g. silicon B310).

Fig. 33: Changing the seal

# 14 Cleaning

### 14.1 Cleaning the stove, flue gas ducts and flue pipe

The stove, the flue gas ducts and flues should be annually - possible even more often, e.g.

- after the chimney has been cleaned
- checked for deposits
- cleaned as necessary.

### TIP

The chimney must likewise be regularly cleaned by the chimney sweeper. Your master chimney sweep will inform you of the necessary intervals. The stove should be inspected annually by a specialist

### 14.2 Removing ashes

### NOTICE

Please note that when removing the ashes, embers may still be present. Only remove the ashes from the firebox when the stove is in the cold state.

- On a regular basis and in good time (at least 1 x per week) remove the ashes from the firebox.
  - If the firebox is not regularly cleaned of ash then there is a danger that the combustion air openings become blocked and the appliance suffers damage.

To remove the ashes from the firebox, proceed as follows:

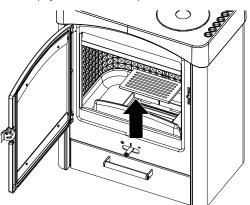
- 1) Open the door.
- 2) Remove the ashes appropriately.

## 14.3 Emptying the ash box

This step is only necessary if you have ordered your stove with the "ash box" accessory.

- On a regular basis and in good time (at least 1 x per week) remove the ashes from the firebox and empty the ash box.
  - If the firebox is not regularly cleaned of ash then there is a danger that the combustion air openings become blocked and the appliance suffers damage.

To empty the ash box, proceed as follows:



1) Open the door.

2) Taking out the grate.

*Fig. 34:* Taking out the grate

handle engages.

4)

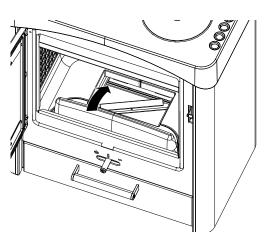


Fig. 35: Putting the lid on the ash box

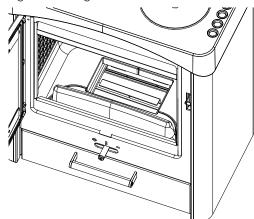
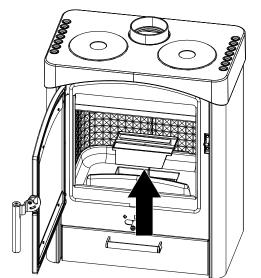


Fig. 36: Closing the lid



5) Remove the ash box from the stove and empty it.

3) Take the supplied lid and use it to cover the ash box.

Turn the handle of the cover clockwise until the

- 6) Reinsert the ash box after emptying it.
- 7) Turn the handle of the cover anticlockwise.
- 8) Take the lid off the ash box.
- 9) Close the grate again.

Fig. 37: Removing and emptying the ash box

### 14.4 Cleaning the door window

Spray window with glass cleaner and leave it for a moment to take effect.

- We recommend cleaning the glass with our Austroflamm glass cleaner or a commercially available window cleaner.
- Prevent door- or window seals from coming into contact with water or cleaner, since these will otherwise harden and in doing so lose their function. Only intact seals ensure that your stove functions flawlessly.

### 14.5 Cleaning surfaces

- Varnished surfaces may only be cleaned with a soft cloth (if necessary damp).
- Soak up dissolved dirt with absorbent cloths or household paper.
- For stainless steel surfaces there are also special cleaners.

# 15 Help

Problem	Cause	Solution
The glass window is sooty	Insufficient draft	from time to time (depending on use) the window must be cleaned with glass cleaner
		Clarification with chimney sweeper (poss extend chimney/measure draft)
	incorrect operation of the air control	It is imperative that the air controlle is operated in accordance with the instructions (if secondary air is close too far, the glass pane will become sooty very quickly)
	excessively large pieces of firewood firewood too damp	Comply with quantity and size ac- cording to the instructions
	Operating temperature has not been reached	Use more fuel, dry wood (< 15 % re sidual moisture), pay attention to ai regulation
The chimney is too small	The chimney draft is insufficient	Ask your chimney sweep to carry or a draft measurement
	Exhaust ducts and combustion chamber sooted up	Use more fuel, dry wood (< 15 % re sidual moisture), pay attention to ai regulation
The stove emits a strong odor and smokes externally	Stove-enameling phase of the var- nish	During the first heating cycles, the varnish hardens and smells in the process
	The stove surface is dusty/soiled	Keep the surfaces of the stove clea
		Keep the floor area clean around th stove
Flue gas escapes when stoking up and during the heating phase	Chimney draft too low, flue pipe con- nection leaky	Check connection points and if ne- cessary reseal
		Check chimney draft
	Door opened before combusted down to embers	Only stoke up when only embers an present (no more visible flames)
The fire is too weak and/or goes out	Air control closed (-)	Air control open (+)
	Wood too damp	Are you using dry wood (< 15 % re- sidual moisture)?
	External temperature too high (>15 °C)	
The room is not warm enough	Convection air grille closed	Open convection air grille
	Chimney draft too high	Clarification with chimney sweeper (poss shorten chimney/measure draft)
The fire burns down too quickly and uncontrollably	Air control open (+)	Throttle combustion air supply afte the operating temperature has bee reached in the firebox (+ / -)
	Seals worn	Check whether the seals on the in- side of the door are continuous and in working order, if necessary re- place
	Firebox door not closed properly	Close firebox door
	Chimney draft too high	Clarification with chimney sweeper (poss shorten chimney/measure draft)
Ceramic windows become sooty very quickly	Unsuitable wood used	Use dry unrefined wood. See inforr ation about this in the Fuel section

Problem	Cause	Solution
	Operating temperature not reache	Bring stove to the operating temper- ature
		Sooting up of the window after 8- 10 hours of fires is normal
	Chimney draft too low	Contact chimney sweep

## 15.1 Firebox lining

The lining of your stove consists of Keramott, a high-quality material with special combustion properties and an attractive appearance. During or after operation this lining may have superficial hairline cracks, which do not however affect functioning. Replacement of such parts is not required!

## 15.2 What to do in the event of a chimney fire

If fuel used is incorrect or too moist, then due to deposits in the chimney this may lead to a chimney fire.

- 1) Call the fire department and the district master chimney sweep!
- 2) Close the combustion air.
- 3) Enable access to the cleaning openings (e.g. basement and attic).
- 4) Remove all flammable material from the chimney.
- 5) Inform your district master chimney sweeper before recommissioning of your stove and have your chimney checked for any damage.

## 15.3 What to do in the event of faults

Should faults occur, your dealer will require the following details:

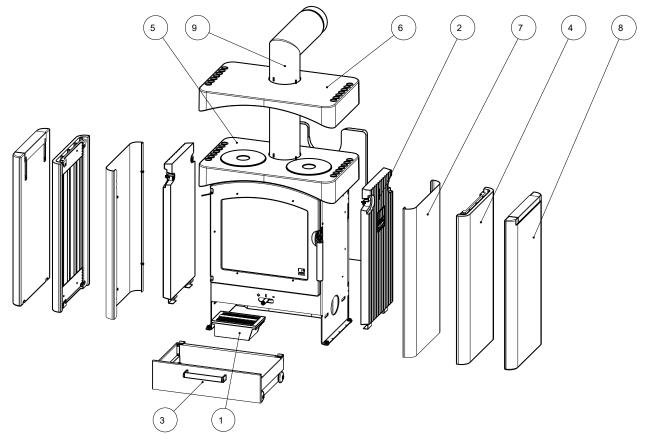
- Serial number and appliance model as per the nameplate
- Original invoice (date of sale)

# 16 Accessories

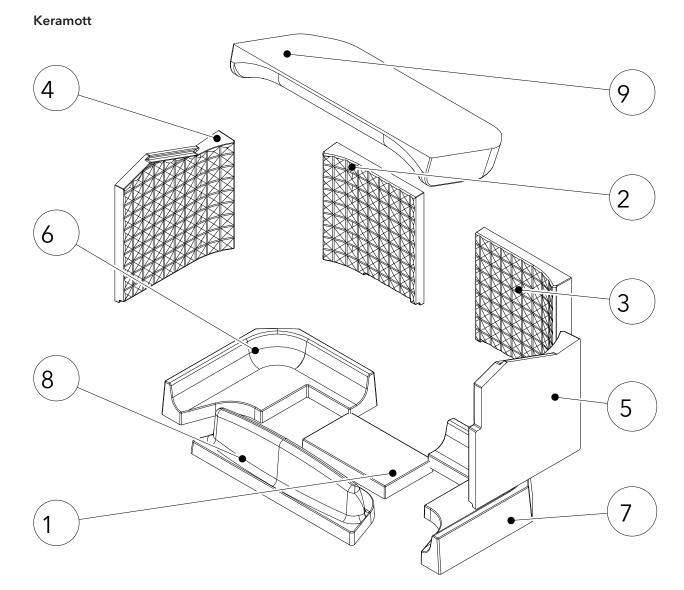
Have defective parts (accessories, spare parts) replaced by your specialist stove dealer. This guarantees that stove is and remains safe and functional.

# 17 Spare parts

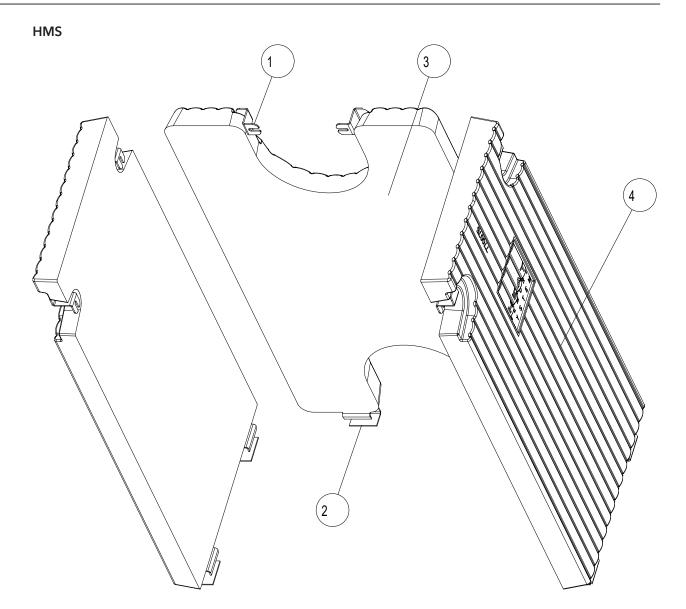
### Accessories



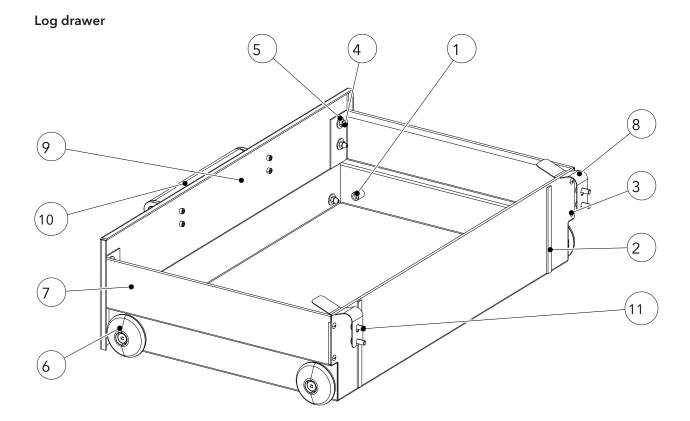
ltem no.	Quantity	Item	ltem no.
1	1	Ash pan set	350035
2	1	HMS complete	051011
3	1	Log drawer, complete	051012-29
4	1	Pallas ceramic cladding, complete	051004-XX
5	1	Pallas, complete	051001
6	1	Pallas, complete	051005
7	1	Pallas Steel cladding, complete	051008-29
8	1	Soapstone case, complete	051009
9	1	150 elbow pieces - set	620067



ltem no.	Quantity	ltem	Item no.
1	1	Keramott floor plate, middle	712760
2	1	Keramott back left	712761-A
3	1	Keramott back right	712761-B
4	1	Keramott left	712762
5	1	Keramott right	712763
6	1	Keramott floor left	712766
7	1	Keramott floor right	712767
8	1	Keramott wood retainer	712765
9	1	Tension plate	712764



ltem no.	Quantity	ltem	ltem no.
1	6	HMS holder	712784
2	6	HMS parts	7126665
3	1	HMS rear	770074
4	2	HMS side	770075



ltem no.	Quantity	Item	ltem no.
1	4	Blind rivet nut M8-UT/FEF 3	712712-93
2	2	Gasket 8x2x120	710096
3	4	Mushroom head blind rivet 4.0x7.6	718358-91
4	6	Head nut M5 pattern	718215-91
5	6	Large diameter washer for M5	718214-91
6	4	Running wheel, complete	712794
7	1	Log drawer	712791-95
8	2	Shutter lock	712816-15 6
9	1	Shutter screen	712789-29
10	1	Shutter handle, complete	712792
11	4	Taptite hexagon screw M6x12	718107-92

# 18 Dismantling

For correct uninstallation and dismantling of the stove, contact your Austroflamm specialist dealer.

ΕN

# 18.1 Removing the steel cladding

1) Detach lid (if mounted).

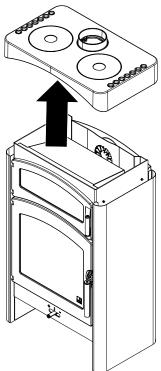
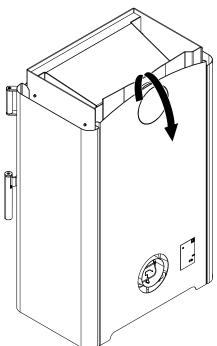


Fig. 38: Detaching the lid



*Fig. 39:* Lifting the rear panel upwards and removing it

2) Lift the rear panel upwards and remove it.

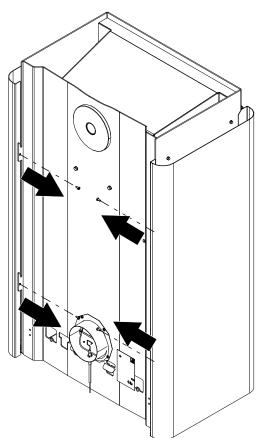
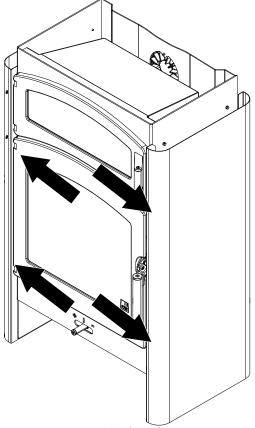


Fig. 40: Unscrewing the screws at the rear



*Fig. 41:* Removing the front four screw

3) Use a cross-point screwdriver to unscrew the screws at the rear from the steel side cladding.

ΕN

- 4) The front four screws must be removed.
  - ➡ The top two screws are located in the interior of the stove.
- 5) Left and right steel cladding can be removed.

# 19 Disposal

## NOTICE

To dispose of the stove properly, get in touch with the local (possibly municipal) waste disposal company.

# NOTICE

We recommend that you remove those components of the stove which have been in contact with fire such as window, combustion chamber, grates, firebox lining (Keramott), ceramic, sensors and baffle plates and dispose of them in the household waste.

## NOTICE

For correct uninstallation and dismantling of the stove, contact your Austroflamm specialist dealer.

### Electric and electronic components

Remove the electric and electronic components from the appliance by dismounting them. These components must not be disposed of via non-recyclable waste. Disposal should be carried out professionally via the electrical and electronic waste return system.

### Keramott

Remove Keramott components. If present, fastening elements must be removed beforehand. Keramott components that have been in contact with fire or flue gas must be disposed of. Reuse or recycling is not possible. Local disposal options must be observed.

### Steel sheet

Disassemble steel-sheet components of the appliance by mechanical crushing. If present, remove seals beforehand. Dispose of steel sheet parts as metal scrap. Local disposal options must be observed.

### Cast iron

Disassemble cast-iron components of the appliance by unscrewing or flexing them from one another, or alternatively by mechanical crushing. If present, remove seals beforehand. Dispose of the cast-iron parts as metal scrap. Local disposal options must be observed.

### Natural stone

Mechanically remove any natural stone present from the appliance and dispose of it as construction waste. Local disposal options must be observed.

### Fittings etc. (for water-carrying appliances)

Disassemble the components for carrying water by unscrewing and removing them and dispose of them as metal scrap. Local disposal options must be observed.

### Seals (glass fiber)

Mechanically remove the seals from the appliance. These components must not be disposed of via non-recyclable waste.as glass fiber waste cannot be destroyed through burning. Dispose of seals as glass- and ceramic fiber waste (artificial mineral fibers (AMF)). Local disposal options must be observed.

#### Handles and decorative elements made of metal

If present, disassemble or remove handles and decorative elements made of metal and dispose of as metal scrap. Local disposal options must be observed.

# 20 Guarantee / warranty

1) **Warranty statement:** For your AUSTROFLAMM stove, we guarantee the flawless performance of the body for six years, and of all other steel and cast iron components for two years from the date of first sale.

Steel and cast-iron parts that manifest material- and or processing defects during the guarantee period (warranty case) will be replaced for new parts provided that the warranty case has been asserted to the best of the holder's knowledge within the statutory warranty period. Functional problems with electronic accessories (e.g. AIR+ automatic air control, etc.) shall only justify a warranty claim for the particular accessory.

Our warranty only covers the free delivery of the new parts: work- and travel times are not recorded.

2) **Exceptions:** We do not provide a guarantee on wear parts (e.g. Keramott, seals), surface coatings, varnish, glass and ceramics. In the case of such defects no warranty case has occurred .

When heating up, during operation and when cooling down, your stove may produce some noise (crackling, soft clicking, etc.). This is caused by the various materials expanding and contracting under the influence of temperature in your stove. Noise of this kind does not constitute a warranty claim and do not constitute a warranty claim.

The territorial scope of validity of our guarantee covers Austria and Germany. In all other countries, separate conditions of the importer apply to the respective country. No warranty case occurs if your Austroflamm stove is not located within the territorial scope of validity, which does not change if it is transported or dispatched by Austroflamm."

3) **Requirements:** A warranty case shall only then be replaceable if your Austroflamm stove has been operated, maintained, installed and commissioned by a specialist authorized by Austroflamm, all in compliance with the user handbook. For the replaceability of the warranty case the start-up log must be received by Austroflamm within one month at the latest of the initial commissioning. In order to make a claim on the warranty, repairs to your stove must only be carried out by a service engineer authorized by Austroflamm.

The warranty claim is asserted with the invoice and serial number with the Austroflamm specialist dealer via whom the purchase was made. An unjustified warranty claim will be charged back to you.

4) **Guarantee:** This guarantee does not affect your statutory warranty rights towards us. Should your Austroflamm stove already be defective at the point of handover, you can always connect us within the framework of the statutory warrant regardless of whether there is a warranty claim or the guarantee is claimed.

# 21 Start up log

Operator / Customer	Dealer / Engineer
Name	Company
Street	Street
Town and postal code	Town and postal code
Telephone	Telephone
Email	Email

Stove	Working	Comments
Model		
Serial number		
Technology		
Visuals		
Accessories		

On-site conditions	
Type of chimney [ ] brick [ ] stainless steel [ ] firebrick	Flue pipe diameter:
Chimney diameter:	Draft: Actual value: Target value: >12 Pa
Chimney height:	Outside temperature during draft measurement:
Chimney flue - Approved by chimney sweep [ ] yes [ ] no	External air supply conduit [ ] yes [ ] no
Controlled living space ventilation [ ] yes [ ] no	Length:

Instructions for Operator / Customer			
Instructions for handling the appliance explained clearly and comprehensibly		Appliance test heated together with the customer	
Guarantee conditions and warranty		Cleaning and maintenance interval explained	
explained			
[] glove [] operating manual handed over			

The customer confirms that the stove has been handed over in a fully functional state and free of defects.

Place, c	late
----------	------

Signature Operator / Customer

Signature Technician

# 22 Service Report

Date	Technicians	Notes	Work carried out, replacement parts installed

Date	Technicians	Notes	Work carried out, replacement parts installed
			replacement parts installed

· · · · · · · · · · · · · · · · · · ·	

<b>Endkontrolle</b> Final inspection Controllo finale Contrôle final	Typenschild (Duplikat) Type plate (duplicate) Targhetta (duplicato) Plaque signalétique (duplicata)
Technische Funktion technical function / funzione tecnica / fonction technique	
Lackierung / paint / vernice / peinture	
Vollständigkeit / completeness / completo / complet	
Geprüft von / checked by / controlled da / contrôlé par	
Datum / date / data / date	
Rualitä	

AUSTROFLAMM GMBH Austroflamm-Platz 1 A- 4631 Krenglbach

Tel: +43 (0) 7249 / 46 443 www.austroflamm.com info@austroflamm.com

945029

