

Operating instructions

+ FinTec ARNE
(12 - 24.3 kW)

Contents

Contents

Introduction.....	4
1. About this manual.....	5
1.1. Symbols in warnings.....	5
2. Scope of supply, packing, recycling.....	6
2.1. Scope of supply.....	6
2.2. Packing material and recycling.....	6
3. Safety instructions.....	7
3.1. Floor loading.....	7
Safety distances from combustible materials.....	7
3.2. General safety instructions.....	7
4. Technical data.....	8
4.1. General technical data.....	8
4.2. Switching diagram - 12 kW and 14.1 kW.....	9
4.2.1. Fitting the heating elements for a 12 kW sauna stove.....	9
4.2.2. Fitting the heating elements for a 14.1 kW sauna stove.....	9
4.3. Switching diagram - 18.0 kW to 24.3 kW.....	10
4.3.1. Fitting the heating elements for a 18.0 kW sauna stove.....	10
4.3.2. Fitting the heating elements for a 20.1 kW sauna stove.....	10
4.3.3. Fitting the heating elements for a 24.3 kW sauna stove.....	10
5. Product description.....	11
6. Installation.....	12
6.1. Safety instructions.....	12
6.2. Requirements for the sauna.....	12
6.3. Connecting leads.....	13
6.4. Ventilation diameters.....	13
6.5. Safety distances and sauna volumes:.....	14
6.6. Connecting the sauna stove.....	15
6.6.1. Operating the sauna stove with a control unit with no timer.....	15

6.7.	Functional check.....	16
6.8.	Recommendations when starting up the sauna stove for the first time.....	16
6.9.	Filling with sauna stones.....	17
6.10.	Stove safety guard.....	18
7.	Adding water.....	18
8.	Warnings.....	19
9.	Faults.....	19
10.	Unit plate.....	20
11.	Sales and contact.....	20
	Warranty.....	20

Introduction

Dear FinTec customer,

Many thanks for choosing a FinTec product. As a market-leading German manufacturer of wood sauna stoves, FinTec produces its stoves in Germany, and sets high standards for its products.

Please take a little time to read these user instructions carefully before embarking on the installation of your sauna stove. This manual contains important notices and instructions relating to the installation and maintenance of your new wood sauna stove.

FinTec sauna stoves guarantee an extended lifespan when:

- - the stove is correctly fitted to your chimney,
- - it is handled correctly,
- - the right fuel is used.

We wish you a lot of fun with your new sauna stove!

The FinTec Team

EN

1. About this manual

Read these installation and operating instructions carefully and keep them near the sauna stove. Like this, you can access information for your safety and the operation of the stove at any time.



1.1. Symbols in warnings

In these installation and operating instructions, a warning is given for activities which pose a hazard. Please make sure that you follow these warnings. This will help you avoid damage and injury which in the worst-case scenario can even lead to death.

Signal words are used in the warnings; these have the following meanings:



Danger!

... indicates an immediately dangerous situation which will lead to death or severe injury unless avoided.



WARNING!

... indicates a potentially dangerous situation which can lead to death or severe injury unless avoided.



CAUTION!

... indicates a possibly dangerous situation which can lead to minor or slight injuries if not avoided.



NOTE!

... indicates a possibly dangerous situation which can lead to minor or slight injuries if not avoided.

2. Scope of supply, packing, recycling

2.1. Scope of supply

The scope of supply comprises a sauna stove.

2.2. Packing material and recycling

The packaging for your high-quality unit is limited to the minimum necessary, and essentially consists of recyclable materials.

Packaging and unit components are labelled correspondingly within the scope of existing regulations/possibilities so as to enable subsequent sorted recycling and/or appropriate disposal.



Disposal of old devices!

Obsolete electrical and electronic devices contain a variety of valuable materials. These can also contain hazardous substances, however, which are necessary for their function and safety. These can be harmful to the environment if disposed of in household waste or if processed incorrectly. Please help to protect our environment! Under no circumstances should you dispose of your obsolete equipment in household waste. Dispose of your obsolete equipment in accordance with the regulations which apply locally.

3. Safety instructions

3.1. Floor loading

Ensure that the weight of the sauna stove does not exceed the maximum allowable load of your floor.

Safety distances from combustible materials

Observe the applicable safety distances in accordance with the declaration of performance.

3.2. General safety instructions

The safety distances given on the type plate are minimum distances for fire safety purposes. These distances do not take into account variations in materials due to stress cracks, discolouration or other issues.



WARNING!

To prevent fires, the stove must not be covered with textile or other materials.



WARNING!

Never use the sauna stove without sauna stones, as this can cause fires. Only use high-quality sauna stones from FinTec Sauna- and Wellnesstechnik GmbH.

Using the stove with lower quality stones may void the warranty.



WARNING!

Using the sauna stove for other purposes is prohibited.

4. Technical data

4.1. General technical data

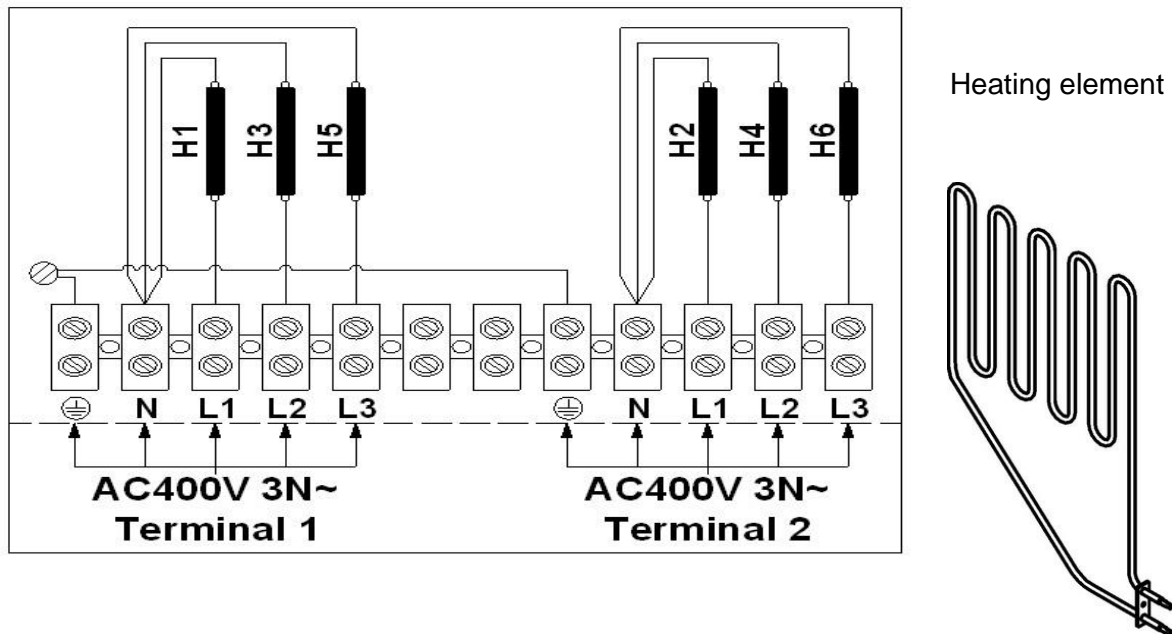
Model	Overall performance (kW)	Voltage 3N	Ampere (A)	Dimensions (mm)			Stone capacity (kg)
				L	W	H	
12.0 kW	12.0	400 V	3 x 20	480	560	660	40-50
14.1 kW	14.1	400 V	3 x 25	480	560	660	40-50
18.0 kW	18.0	400 V	3 x 35	700	560	660	80-90
20.1 kW	20.1	400 V	3 x 35	700	560	660	80-90
24.3 kW	24.3	400 V	3 x 35	700	560	660	80-90

Table 1: Sauna stove technical specifications

Power distribution						
Model	Total		Per circuit			
	Heating elements		Circuit I		Circuit II	
	Quantity	Power (kW)	Number of heating elements	Power (kW)	Number of heating elements	Power (kW)
12.0 kW	6	2	3 x 2.0 kW	6	3 x 2.0 kW	6
14.1 kW	3 / 3	2 / 2.7	3 x 2.0 kW	6	3 x 2.7 kW	8.1
18.0 kW	9	2	3 x 2.0 kW	6	6 x 2.0 kW	12
20.1 kW	6 / 3	2 / 2.7	3 x 2.7 kW	8.1	6 x 2.0 kW	12
24.3 kW	9	2.7	3 x 2.7 kW	8.1	6 x 2.7 kW	16.2

Table 2: Active power

4.2. Switching diagram - 12 kW and 14.1 kW



12 kW and 14.1 kW sauna stoves

Figure 1: Switching plan - 12 kW and 14.1 kW

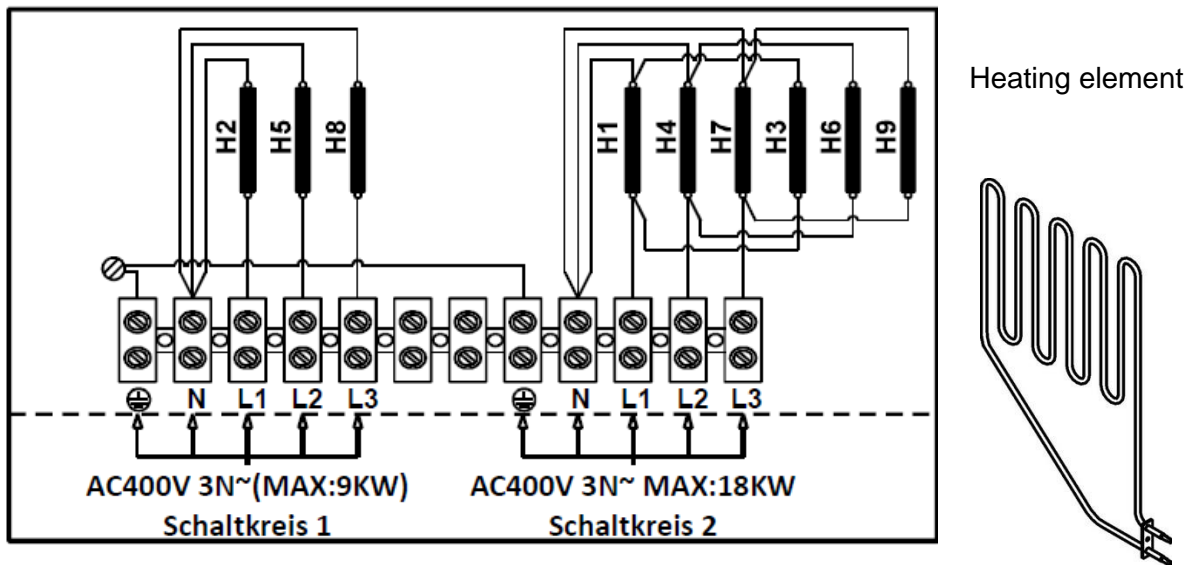
4.2.1. Fitting the heating elements for a 12 kW sauna stove

Heating	HE 1	HE 2	HE 3	HE 4	HE 5	HE 6	Σ
Clamping strip	X1:1	X2:1	X1:2	X2:1	X1:3	X2:1	
2,000 W	x	x	x	x	x	x	12 kW

4.2.2. Fitting the heating elements for a 14.1 kW sauna stove

Heating	HE 1	HE 2	HE 3	HE 4	HE 5	HE 6	Σ
Clamping strip	X1:1	X2:1	X1:2	X2:2	X1:3	X2:3	
2,000 W	x		x		x		6 kW
2,700 W		x		x		x	8.1 kW

4.3. Switching diagram - 18.0 kW to 24.3 kW



18.0 kW - 24.3 kW sauna stoves

Figure 2: Switching plan - 18.0 kW to 24.3 kW

4.3.1. Fitting the heating elements for a 18.0 kW sauna stove

Heating	HE 1	HE 2	HE 3	HE 4	HE 5	HE 6	HE 7	HE 8	HE 9	Σ
Clamping strip	X2:1	X1:1	X2:1	X2:2	X1:2	X2:2	X2:3	1:3	X2:3	
2,000 W	x	x	x	x	x	x	x	x	x	18 kW

4.3.2. Fitting the heating elements for a 20.1 kW sauna stove

Heating	HE 1	HE 2	HE 3	HE 4	HE 5	HE 6	HE 7	HE 8	HE 9	Σ
Clamping strip	X2:1	X1:1	X2:1	X2:2	X1:2	X2:2	X2:3	X1:3	X2:3	
2,000 W	x		x	x		x	x		x	12 kW
2,700 W		x			x			x		8.1 kW

4.3.3. Fitting the heating elements for a 24.3 kW sauna stove

Heating	HE 1	HE 2	HE 3	HE 4	HE 5	HE 6	HE 7	HE 8	HE 9	Σ
Clamping strip	X2:1	X1:1	X2:1	X2:2	X1:2	X2:2	X2:3	X1:3	X2:3	
2,700 W	x	x	x	x	x	x	x	x	x	24.3 kW

5. Product description

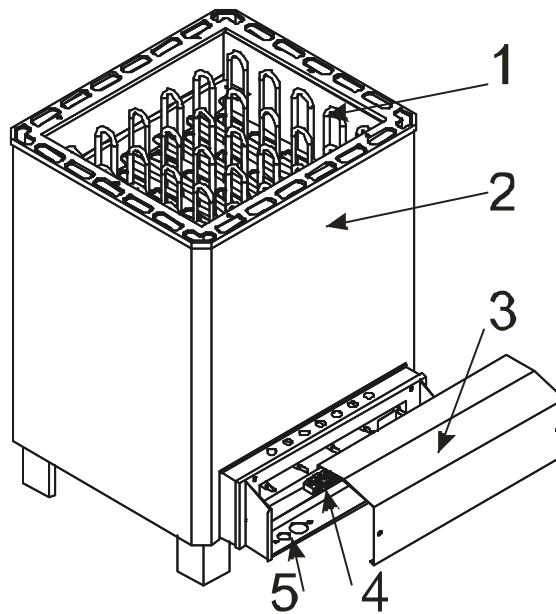


Figure 3: Sauna stove

No.	Designation
1	Heating elements
2	Sauna stove
3	Cover plate
4	Connection box
5	Cable bushing

Table 3: Description of sauna stove

6. Installation

6.1. Safety instructions

The electrical connection of the sauna stove, the control unit and other electrical equipment must be performed by a specialist. DIN VDE 0100 Part 703 must be observed.



Note!

Please check that the stove that you have chosen fits the cabin of your sauna. Note in particular the table on the next page.



Note!

Ensure that the necessary minimum safety distances as well as the size of the sauna and ventilation cross-sections are strictly adhered to.



Note!

The stove may not be used as a wall-mounted model, and must stand firmly on the floor.

6.2. Requirements for the sauna

The sauna stove may only be used in a sauna cabin made from appropriate, low-resin and untreated material (e.g. Nordic spruce).

6.3. Connecting leads

Only heat-resistant SIHF-type silicon hoses may be used to connect to the sauna stove.

The following cable diameters are applicable

Output	Cable diameter (minimum diameter)	
	Connector clamp X1	Connector clamp X2
12.0 kW	5 x 2.5 mm ²	5 x 2.5 mm ²
14.1 kW	5 x 2.5 mm ²	5 x 2.5 mm ²
18.0 kW	5 x 2.5 mm ²	5 x 4.0 mm ²
20.1 kW	5 x 2.5 mm ²	5 x 4.0 mm ²
24.3 kW	5 x 2.5 mm ²	5 x 6.0 mm ²

Table 4: Cable diameters

EN

6.4. Ventilation diameters

The sauna cabin must be fitted with ventilation openings. The air supply opening must be behind the sauna stove, approx. 5-10 cm above the floor. The minimum diameters for the air supply and extraction openings are given in the table below:

Output	Ventilation diameter (minimum diameter)
12.0 kW	400 x 50 mm
14.1 kW	410 x 55 mm
18.0 kW	420 x 60 mm
20.1 kW	430 x 65 mm
24.3 kW	440 x 70 mm

The air extraction opening must always be mounted diagonal to the sauna stove, in the lower part of the rear wall of the sauna. The air power supply and extraction openings may not be closed. Observe the instructions of the sauna cabin supplier in this regard.

6.5. Safety distances and sauna volumes:

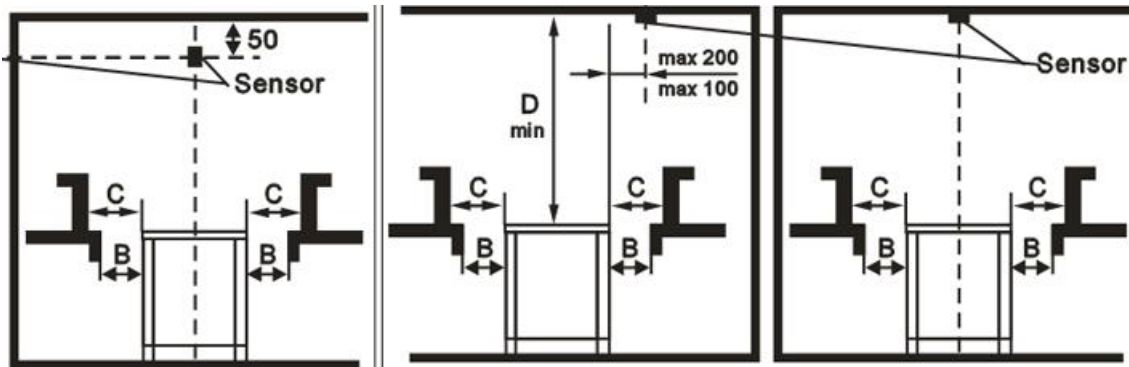


Figure 4: Safety distances 1

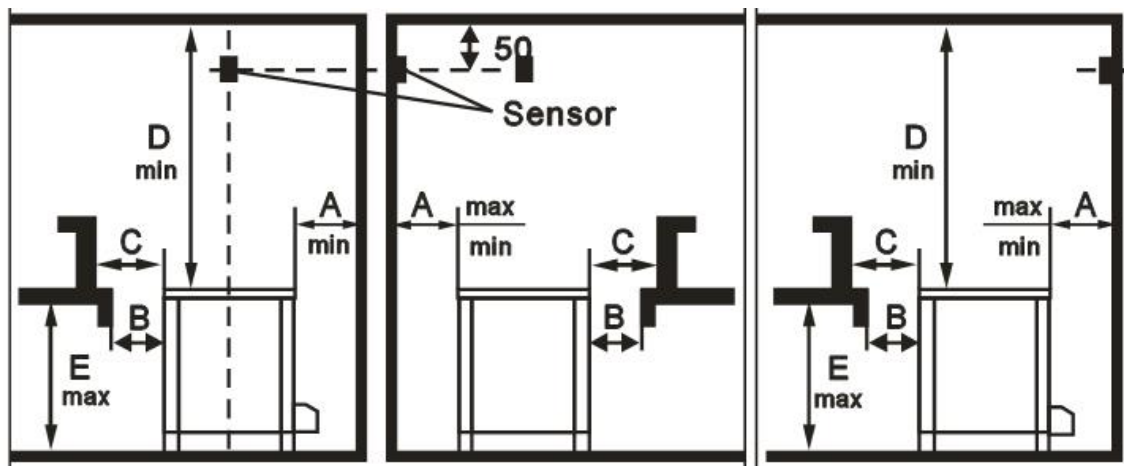


Figure 5: Safety distances 2

Model	Sauna sizes		Safety distances					
	Volume (m ³)		A	A	W	C	D	E
	MIN	Max	Min in mm	Max in mm	Min in mm	Min in mm	Min in mm	Min in mm
12.0 kW	10	15	120	220	100	200	1200	630
14.1 kW	13	18	160	260	100	200	1200	630
18.0 kW	15	20	160	260	100	200	1200	630
20.1 kW	18	23	160	260	100	200	1200	630
24.3 kW	22	30	160	260	100	200	1200	630

Table 5: Distances

6.6. Connecting the sauna stove

Before starting the installation, ensure:

- That the power supply is sufficient to satisfy the requirements of the sauna stove.
- That the stove as well as all power supply lines are disconnected from the power.
- If the sauna stove is operated via a residual current circuit breaker (RCCB), no other electrical consumption units should be protected by this residual current circuit breaker. Incidentally, we recommend the use of a residual current circuit breaker (RCCB).

Open the terminal box on the underside of the heating unit and connect the five-pin electrical cable to the terminal block. Please refer to the connection sketch at the back of this manual. Pass one end of the electrical cable through the recess in the stainless steel base so that the cable is in the middle of the heating element housing. Secure the other end of the cable to the control unit, and connect this to be sauna stove control unit as shown in the manual.



Note!

Incorrect electrical connections can cause electric shock or fire. The table must be SIHF type or equivalent.

The use of PVC insulated cable is prohibited because of thermal brittleness.



Note!

It must be ensured that the sauna stove is correctly earthed. The earth connection should have a wider diameter than the power supply.

6.6.1. Operating the sauna stove with a control unit with no timer

The operation of the sauna stove with no timer is only allowed in public saunas. An indicator light must be installed in the supervisor's room in order to provide a clear and unambiguous indication of the operating status of the sauna stove to the technical personnel.

(Cf.: DIN EN 60335-2-53 / Art. 7.12.1)

6.7. Functional check

Check whether all of the heating elements work correctly by switching on the sauna stove briefly. If all of the heating elements work, you can close the cabinet. If one or more of the heating elements do not work or any other fault occurs, please get in touch with the manufacturer's Technical Customer Service.



Note!

When starting up for the first time, an odour may be released due to evaporation from the previously unused materials. Ensure thorough ventilation when heating for the first time.

EN

6.8. Recommendations when starting up the sauna stove for the first time

It is well-known that heating rods are hygroscopic, meaning that they can absorb moisture, which can cause the residual current circuit breaker to trip even though there is no actual fault.

In this case, the sauna stove must be heated up by a specialist under supervision, with the RCCB protection disabled. Once the moisture has escaped from the heating elements after approximately 10 minutes, the RCCB can be reactivated.

The likelihood of the heating elements absorbing moisture and tripping the RCCB increases if the sauna stove is not used for extended periods. For this reason, it is recommended that the sauna stove be heated up regularly for a couple of minutes.

6.9. Filling with sauna stones



Note!

Connect the power cable to the sauna stove before loading the sauna stones.

Ensure that the safety distances are observed. Stone dust should be removed from the stones before coating.

The sauna stones should be laid evenly in the stove between the heating rods. Under no circumstances should large spaces be left empty. The stones should support each other. The weights of the stones should not be borne by the heating elements.

EN

The stones should not be layered so densely that they obstruct air circulation.

They should be prevented from wedging between the heating elements. Very small stones should be removed. The stones must completely cover the heating elements. The stones wear out over time through use. For this reason, the stones should be relaid at least once a year, and more often when used frequently. You should take this opportunity to also remove dust and stone fragments from the lower part of the sauna stove, and replace damaged stones.

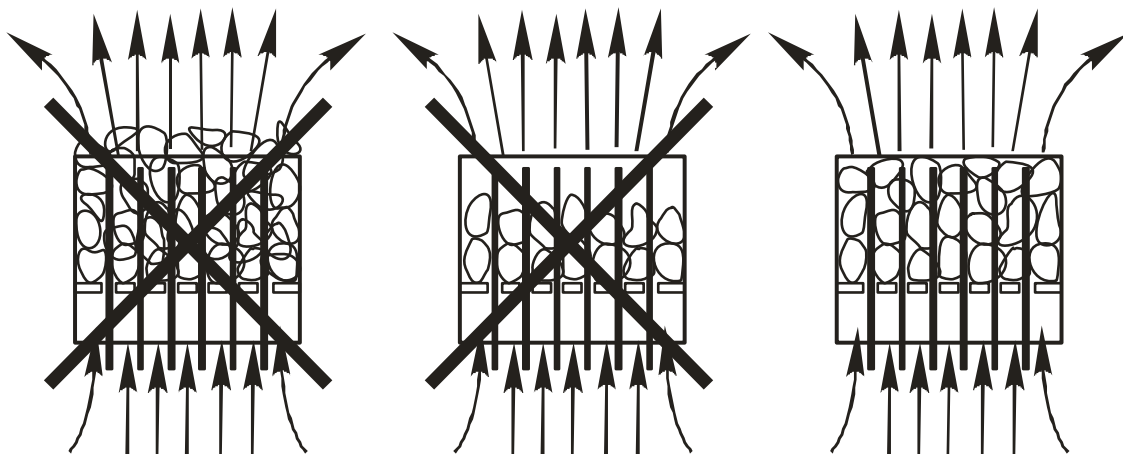


Figure 6: Filling with sauna stones



WARNING!

Never use the sauna stove without sauna stones, as this can cause fires. Only use high-quality sauna stones from FinTec Sauna- and Wellnesstechnik GmbH.

Using the stove with lower quality stones may void the warranty.

6.10. Stove safety guard

To prevent burns, we recommend surrounding the sauna stove with a wooden safety guard. Depending on where the sauna stove is positioned, it should be surrounded on two or three sides by the safety guard. To ensure that the stove safety guard does not come into contact with the hot sauna stones, make sure that the guard ends approx. 25 mm below the upper edge of the stove. Safety guards are available from specialist retailers, and are fitted to the sauna cabin.

EN

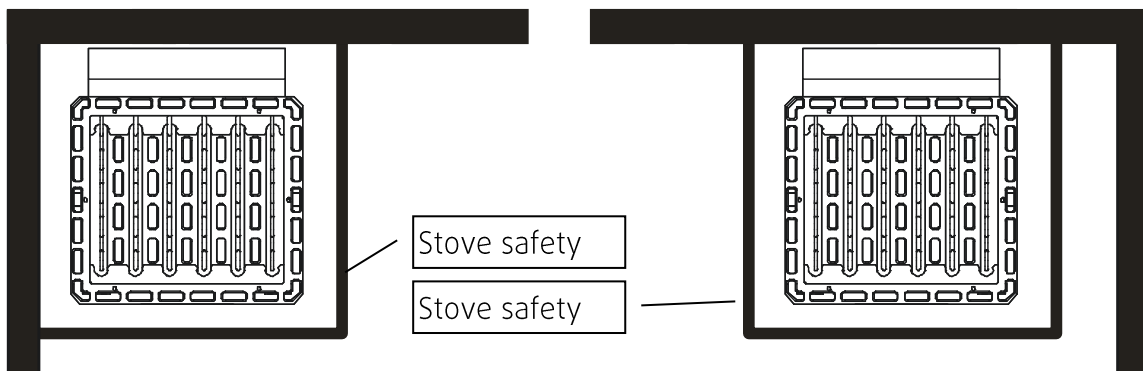


Figure 7: Stove safety guard



Note!

Please note that stove safety guards must end 25 mm below the upper edge of the sauna stove. Under no circumstances must they come into contact with the radiant heat of the sauna stones.

7. Adding water

Water can be added to the hot stones in the sauna stove to increase the humidity. The humidity is determined by the amount of water. It is recommended that only a small amount of water be added to the stones at first, so that the effect of the humidity on the skin can be observed. Excessively high temperatures and humidity will feel uncomfortable. Staying too

long in a sauna that is too hot will cause your body temperature to increase, which can be dangerous.



WARNING!

Do not add water to the stones if anyone is in their immediate vicinity. The hot steam poses a scalding hazard.

Only water which meets the household drinking water quality criteria should be used. Only fragrances intended this purpose may be used in this water.

8. Warnings

EN

- A marine climate can cause the metal surfaces of the sauna stove to rust.
- Never use the sauna to dry clothes because of the risk of fire.
- Be careful of the sauna stove when hot. Stones and metals services are very hot, and can cause contact burns.
- Never add an excessively large amount of water to the hot stones. The steam that this generates can cause scalding.
- Never leave children, the disabled, the elderly or the weak unattended in the sauna.
- Always consult your doctor in the event of health problems.
- Move carefully inside the sauna as the humidity can make the benches and floors slippery.
- Never enter the sauna when under the influence of narcotics (medication, drugs, alcohol, etc.).

9. Faults

If your sauna stove does not warm up, first of all check the following items:

- Is the sauna stove connected to the power supply?
- Is the fuse intact?
- Is the thermostat set to a higher temperature than permitted in the sauna?
- Is the timer on the control unit active?

10. Unit plate

The unit plate lists the type-specific technical specifications. The unit plate can be found on the lower left side of the unit.

11. Sales and contact

FinTec Sauna- und Wellnesstechnik GmbH
Ottostraße 15
95213 Münchberg
Germany

Tel: +49 (0) 9251 / 899 78 50
Fax: +49 (0) 9251 / 899 78 59
eMail: kontakt@fintec.de
Internet: <http://www.fintec.de>

EN



WEEE Reg no.:
DE55434464

Warranty

Warranty or guarantee period

- **Standard Line**

For our Standard Line, we provide a warranty period of 2 years for private use, and 1 year for commercial use for our sauna stoves. This warranty excludes consumables such as heating elements and sauna stones.

- **Premium Line.**
For our Standard Line, we provide a warranty period of 3 years for private use, and 2 years for commercial use for our sauna stoves. This warranty excludes consumables such as heating elements and sauna stones.
- **Prerequisites**
- **Improper use**
All warranty and guarantee claims are avoided in case of improper use of our sauna stoves, for example, when used outside of a traditional sauna or when salt water is added.
- **Proper installation by an electrician**
Sauna stoves are electrical appliances which normally operate with 400 V. All warranty and guarantee commitments which we enter into are compulsorily subject to a correct installation by an approved electrician in compliance with all statutory regulations and local requirements.

EN

We hereby confirm that we have installed the sauna stove in accordance with the currently applicable regulations.

Place, date

Signature and stamp of the installing electrician