

Installation and Safety Guide for



BOTNIA 81 / AURORA 81
GAS SAUNA HEATERS

Released 9 - 2026

Introduction

This installation manual contains the essential instructions for the safe installation, operation, and ventilation of FinSteam gas sauna heaters (Botnia and Aurora ranges).

FinSteam heaters are CE-certified gas appliances designed to deliver an authentic Finnish Löyly experience safely and reliably when installed in accordance with applicable gas, ventilation, and safety clearance requirements.

This manual is intended for:

- Distributors
- Retailers / Resellers
- Professional installers
- Sauna builders
- Sauna owners or the persons in charge of the sauna.

Intended Use

The FinSteam gas sauna heater may only be used for its intended purpose as specified by the manufacturer. The heater is designed exclusively for heating sauna rooms to bathing temperature and for outdoor cooking when used with FinSteam-approved accessories.

The heater must only be installed and operated in sauna rooms, sauna tents, or other sauna structures that fully comply with the installation, ventilation, safety distance, and other requirements specified in this manual.

The heater must not be used for heating residential buildings, living spaces, cabins, tents intended for accommodation, garages, workshops, storage areas, or any other indoor or outdoor spaces not specifically approved by the manufacturer for sauna use.

Operation of the heater in installations that do not meet the requirements stated in this manual is prohibited and may result in fire hazards, carbon monoxide exposure, personal injury, property damage, and loss of warranty coverage.

Any use of the appliance other than that described in this manual is considered misuse and is solely the responsibility of the user.

Installation

Before installing a FinSteam gas sauna heater, always ensure that the following requirements are met:

- The FinSteam gas sauna heater must be installed by a qualified and, where required by national or local regulations, authorized professional. All gas installations must comply with applicable laws, regulations, standards, and safety requirements in the country of installation.
- Before installation, it must be verified that the sauna room, sauna tent, or other installation location is suitable for the heater. Particular attention must be given to the room size, ventilation, safety clearances, and all other safety requirements specified in this manual.
- Prior to commissioning, it must be ensured that the type of gas, gas supply pressure, and local operating conditions are compatible with the heater's technical specifications and settings. The heater must not be installed or operated if the gas type, supply pressure, or other operating conditions do not meet the requirements specified for the appliance.
- Before installing the heater, verify that the appliance has not been modified and that all components are original FinSteam parts or components expressly approved by FinSteam. Do not install or operate a heater that has been modified, altered, damaged, or fitted with non-approved components or accessories. Unauthorized modifications may compromise the safety, performance, and regulatory compliance of the appliance and may result in fire, personal injury, property damage, or carbon monoxide hazards. The use of non-approved components or unauthorized modifications will void the product warranty.
- Before installing the heater, ensure that no combustible materials, packaging materials, loose objects, or other foreign items are located on, inside, underneath, or in the immediate vicinity of the heater. Verify that the installation location complies with the minimum safety clearances specified in this manual and that sufficient distances to combustible materials can be maintained on all sides of the heater. Do not install or operate the heater if the required safety clearances cannot be achieved.



FinSteam is a **non-electric, CE-marked, Type A flueless gas sauna heater**. FinSteam gas sauna heaters hold an EU Type Examination Certificate in accordance with the EU Gas Appliance Regulation (EU/2016/426).

Finsteam Type plate

Manufacturer:		FinSteam Ab Oy	
		FinSteam Heater Model: 2.0	
CAT.	I3B/P	GAS	G30 / G31
mbar	30	g/h	590 / 579
kW	8.1	serial nr.	085/2026
			
CE 0099-23			
Destination countries			
FI, SE, NO, DK, BE, EE, ES, HR, HU, LT, LV, NL, PL			

The heater type plate contains important technical and regulatory information required for the safe installation, operation, and servicing of the appliance.

The information on the type plate includes:

- Heater model designation
- Serial number
- Manufacturer information
- CE marking
- Appliance category (I3B/P or I3P)
- Approved gas types (G30 Butane and/or G31 Propane)
- Gas supply pressure (30 mbar or 37 mbar)
- Nominal heat input (kW)
- Gas consumption (g/h)
- Country codes and the countries where the heater is approved for use

Always verify that the gas type and supply pressure shown on the type plate correspond to the gas supply available at the installation site. Do not connect or operate the heater if the gas supply does not match the specifications stated on the type plate.

Heater Installation

Install the heater on a level, stable, and load-bearing surface capable of safely supporting the weight of the heater, sauna stones, and any accessories used with the appliance.

It is strongly recommended to always place the heater on a non-combustible and durable base made of fire-resistant material. **The protective base should have a minimum size of 300 × 300 mm and a minimum thickness of 30 mm.**

If the heater is installed on a wooden floor or any other combustible surface, the use of a non-combustible protective base is mandatory.

If the gas sauna heater is operated continuously for extended periods (more than 2 hours) and floor material is sensitive to heat, such as wood, composite decking, or decking tiles, we recommend installing a **10–30 mm thick fire-resistant or fire protection board** underneath the protective base.

If fire-resistant mineral/rock wool is used, a heat-resistant material, such as a metal sheet or concrete slab, must always be installed on top of it.

Suitable materials include, for example:

- A concrete slab
- A concrete paving stone
- A platform or pedestal covered with stainless steel
- Fire-resistant and moisture-resistant construction boards, such as cement boards, fibre cement boards, calcium silicate boards, equivalent non-combustible building boards or rigid fire-resistant mineral/rock wool
- Other non-combustible materials with equivalent fire resistance, durability, and load-bearing capacity



Safety Distances to combustible materials

The minimum safety distance to combustible materials is **200 mm on all sides of the heater**, including the front, rear, and both sides. All safety distances are measured from the outer edge of the heater burner body, including the side where the control and ignition unit is located.

When installing the heater, **ensure that the control and ignition unit remains easily accessible and can be operated safely.** The control unit must be positioned so that it does not create a tripping hazard and cannot be stepped on, damaged, or obstructed during normal use.

The minimum safety distance **above the heater is 1000 mm**, measured vertically from the highest point of the chimney cap to the nearest combustible material. The specified safety distances must be maintained at all times during the installation and operation of the heater.

SAFETY DISTANCES

	Combustible	Non - Combustible
Sides	200mm	50mm
Ceiling	1000mm	1000mm
Side with NJORD	50mm	50mm



Where walls are constructed from wood or other combustible materials, the minimum safety distance to the sides and rear of the heater may be reduced from 200 mm to **100 mm by using a single non-combustible protective cover.** When a double non-combustible protective cover is used, the minimum safety distance may be **reduced to 50 mm.**

When using the **FinSteam NJORD Heat Shield**, the minimum safety distance between the heat shield and the combustible material behind it is 50 mm.

FinSteam HALO Safety Rail

The use of the FinSteam HALO Safety Rail is recommended and may be required by local regulations applicable in the country of installation. The safety rail helps prevent accidental contact with the hot heater surfaces and improves overall bathing safety around the heater.

The FinSteam HALO Safety Rail is manufactured from carefully selected alder wood and is designed to withstand the demanding conditions of sauna use.

The safety rail is intended to reduce the risk of burns and accidental contact with the heater. No part of the safety rail should be permanently removed while the heater is in operation.

The safety rail does not provide complete protection for young children, persons with reduced mobility, or individuals who require supervision. Children and vulnerable persons must always be supervised when the heater is in use.

Sauna Stones

The FinSteam gas sauna heater must not be used in a sauna without sauna stones. Fill the stone basket preferably up to its upper edge. You may also place sauna stones on top of the chimney cap to cover the visible metal parts of the chimney as much as possible. **The recommended stone size is 5–10 cm. Do not pack the stones too tightly, as adequate airflow between the stones is essential for proper heater performance.**

SAUNA STONE CAPACITY

STONE CAGE	STONE AMOUNT MAX.
ORBIS O	15-18kg
ORBIS R11	22-25kg
ORBIS R14	30-33kg

Always wash new sauna stones thoroughly with clean water before installation to remove stone dust, dirt, and loose particles.

For the best sauna experience, we recommend traditional angular split-surface sauna stones. They store heat efficiently, produce better steam, and allow improved airflow between the stones.

Smooth, rounded, ceramic, or soapstone sauna stones may also be used. However, they may not provide the same heat storage capacity, steam generation performance, or airflow characteristics as traditional split-surface stones.

The table shows the estimated amount of sauna stones required for different FinSteam stone basket models.

IMPORTANT: Never place objects, materials, fragrances, containers, or any substances among or on top of the sauna stones that could melt, ignite, release harmful fumes, or otherwise create a fire or safety hazard.

Natural ventilation requirements for FinSteam Gas Sauna Heaters

Air Inlet Ventilation

Importance of Fresh Air Ventilation

Proper fresh air ventilation is essential for the safe and efficient operation of a FinSteam gas sauna heater. Unlike electric heaters, gas heaters consume oxygen and therefore require a continuous supply of fresh outdoor air.

Insufficient ventilation may result in incomplete combustion, poor air quality, reduced heater performance, activation of the ODS (Oxygen Depletion Sensor), and automatic heater shutdown.

To maintain a comfortable, oxygen-rich, and safe sauna environment, the air inside the sauna should be renewed **at least 6–8 times per hour**.

FinSteam gas sauna heaters are not suitable for mechanically ventilated saunas.

Air Inlet Vent Location

The fresh air inlet vent should be located as close as possible to the heater to ensure an adequate supply of combustion air.

- The lower edge of the air inlet opening should be positioned approximately 50–150 mm above the finished floor level.
- The inlet vent must always draw fresh air directly from outside the building or structure.
- Fresh air must not be supplied from adjacent rooms, corridors, utility rooms, garages, storage areas, or other enclosed indoor spaces.

IMPORTANT:

The fresh air intake vent and exhaust air vent must never be closed, blocked, or covered while the heater is in operation. Adequate airflow is essential for safe combustion, proper heater performance, and maintaining a safe sauna environment.

Air Inlet Vent Size

The required fresh air supply can be provided through one larger vent or multiple smaller vents with an equivalent free opening area.

The air inlet vent should preferably be:

- Adjustable
- Closable when the sauna is not in use
- Constructed from materials suitable for sauna environments

Minimum Free Opening Area

The **adjustable free opening area** of the air inlet ventilation system must be at least:

350 cm²

The free opening area refers to the actual unobstructed airflow area after accounting for grilles, insect screens, meshes, and other vent structures.

Examples of suitable vent dimensions:

Vent type: Size:

Rectangular 200 × 175 mm

Rectangular 235 × 150 mm

Circular Ø 210–215 mm

Exhaust Air Ventilation

Importance of Exhaust Air Ventilation

Proper exhaust ventilation is essential for safe and efficient sauna operation. While the fresh air supply vent provides oxygen and fresh air for both sauna users and the FinSteam gas sauna heater, the exhaust air vent removes warm, humid, and stale air from the sauna.

Together, the fresh air supply vent and exhaust air vent create balanced airflow, improving air circulation, reducing excess humidity, and maintaining a comfortable, oxygen-rich sauna environment.

Exhaust Air Vent Size

The exhaust air vent must provide an **adjustable free opening area** must be at least:

250 cm²

The free opening area refers to the actual unobstructed airflow area after accounting for grilles, screens, dampers, and other vent structures.

Examples of suitable vent dimensions:

Vent type: Size:

Rectangular 200 × 125 mm

Rectangular 160 × 160 mm

Circular Ø 180 mm

Exhaust Air Vent Location

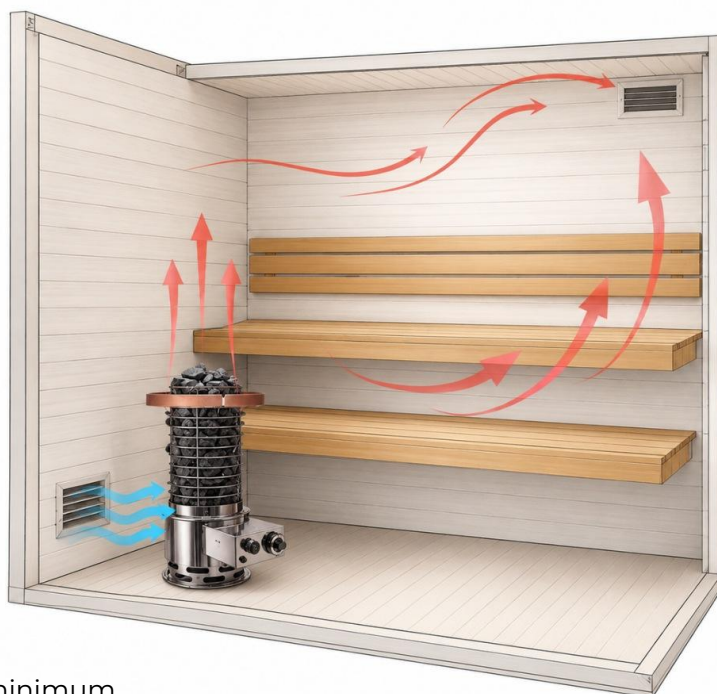
The exhaust air vent must be installed on the side opposite the sauna heater.

The exhaust vent may be installed:

- On the wall, close to ceiling level in the corner opposite the heater, or
- On the ceiling in the corner opposite the heater.

The exhaust air must always be discharged directly outdoors. Exhaust air must never be discharged into adjacent rooms, attics, crawl spaces, wall cavities, or other enclosed spaces within a building.

An exhaust air vent with a minimum size of 250 cm³ must be installed on the opposite corner of the FinSteam gas sauna heater.



A fresh air inlet with a minimum size of 350 cm³ must be installed close to the FinSteam gas sauna heater.

Recommended Sauna Size

The FinSteam BOTNIA 81 and FinSteam AURORA 81 gas sauna heaters are recommended for sauna rooms with a volume of 4–14 m³.

The actual heating performance and suitability of the heater depend not only on the sauna volume but also on the thermal insulation and overall heat loss characteristics of the sauna structure. The most significant factor is the building envelope's thermal transmittance (U-value).

Recommended Sauna Volume by Sauna Type

Sauna tents, lightweight log saunas, barrel saunas and non-insulated timber-frame saunas

- Typical U-value: > 2.0 W/m²K
- Recommended sauna volume: 4–10 m³

Log wall saunas and lightly insulated timber-frame saunas

- Typical U-value: = 0.7 - 2.0 W/m²K
- Recommended sauna volume: 4–12 m³

Massive log saunas and well-insulated timber-frame saunas

- Typical U-value: < 0.7 W/m²K
- Recommended sauna volume: 4–14 m³

Large windows, glass walls, and other uninsulated surfaces significantly increase heat loss and may reduce the effective sauna volume that the heater can efficiently heat. When evaluating sauna size suitability, the amount of glazing and other heat-transmitting surfaces should always be taken into account. The size of the sauna must always comply with the regulations in force in the country where the sauna heater is used.

Gas Installations

All gas installations must comply with national and local regulations applicable in the country of use.

A gas cylinder may only supply gas to a single appliance. The pressure regulator must be connected directly to the gas cylinder valve.

Use only certified low-pressure gas regulators and ensure that the regulator pressure matches the heater appliance category:

- **I3B/P30:** 30 mbar (butane, propane, or their mixtures)
- **I3P37:** 37 mbar (propane)

Using incorrect gas pressure may result in incomplete combustion, excessive gas consumption, unstable flame operation, carbon monoxide emissions, reduced heater performance, or damage to the appliance.

High pressure regulators must not be used in connection with appliances for domestic use.

WARNING:

There is a risk of CO poisoning in case of incorrect installation and/or incorrect use of the appliance.

The most common symptoms of CO poisoning are headache, dizziness, weakness, upset stomach, vomiting, chest pain, and confusion.

If you or someone you're with develops signs or symptoms poisoning, get into fresh air immediately. Shut down the appliance and open doors and windows.

Gas Hose

Use only certified LPG (liquefied petroleum gas) hoses, fittings, and connections approved for use in the country where the heater is installed.

The gas hose must:

- Have an internal diameter of 8-10 mm, or comply with the applicable national regulations.
- Comply with national regulations regarding hose type and maximum length. The recommended maximum hose length is 1200-1500 mm (1.2 - 1.5 m).
- Be securely fixed with hose clamps at both ends
- Remain free from kinks, tension, and mechanical stress
- Remain fully visible and accessible for inspection

FinSteam recommends using a stainless steel braided gas hose for maximum durability and heat resistance.

If a standard LPG gas hose is used, the first 300 mm of the hose from the heater connection must be protected with a suitable fire-resistant aluminium protective sleeve or equivalent heat protection.

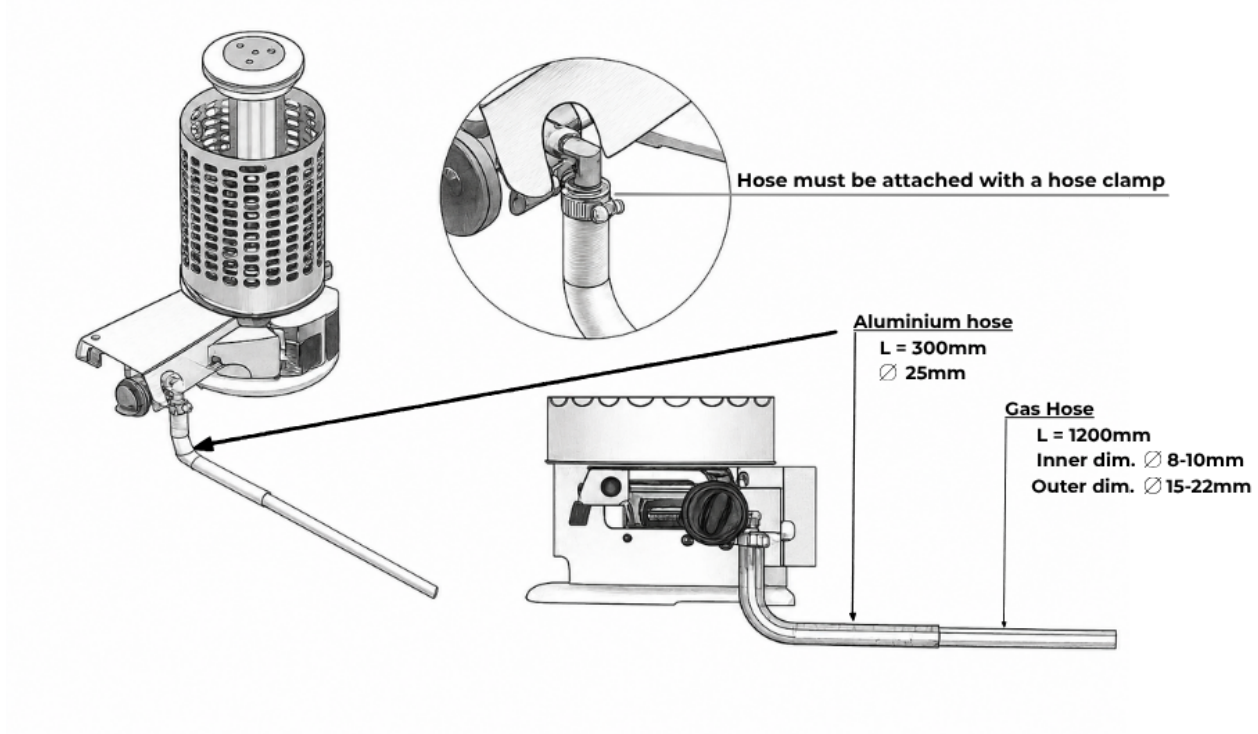
The gas hose must not:

- Be routed underneath the heater
- Come into contact with hot surfaces
- Pass over sharp edges
- Be exposed to mechanical damage
- Be placed in walkways without suitable protection

Inspect the gas hose, regulator, and connections regularly.

Flex the hose periodically and check for cracks, wear, or other signs of deterioration. Check all gas connections for leaks using a soap-water solution. Never use an open flame to check for gas leaks.

Always close the gas cylinder valve and regulator valve after use.



Gas Cylinder (Gas bottle)

The LPG gas cylinder must always be positioned in accordance with local regulations and safety requirements. The gas cylinder must not be placed inside the sauna room or near the heater, fireplace, open flame, or any other heat source.

The gas cylinder must always be placed outside the sauna room.

The gas hose must be routed so that it cannot come into contact with hot surfaces of the heater or chimney. The gas cylinder and hose must not be exposed to temperatures exceeding 80°C.

Use only gas cylinders that comply with the applicable national gas regulations in the country of installation, including any requirements concerning cylinder type and size. Do not use a gas cylinder if its installation with the heater would result in non-compliance with any local gas regulation, for example regarding the permitted gas hose length.

FinSteam recommends using gas cylinders with a capacity of less than 25 kg.

Always close the gas cylinder valve and pressure regulator valve when the heater is not in use.

Heat and Sunlight Protection

The Gas Cylinder must not be exposed to excessive heat.

As a general safety guideline, the cylinder temperature should be kept below 50°C. High temperatures increase the internal pressure of the cylinder and may increase the risk of overpressure. Prolonged exposure to direct sunlight should be avoided, especially in hot climates. In direct sunlight, the surface temperature of the cylinder may rise significantly above the surrounding ambient air temperature.

If the Gas Cylinder is installed in a location exposed to strong and prolonged direct sunlight, the cylinder must be protected with suitable shading or other protective measures that prevent the cylinder from overheating. Any protective cover or shading must not restrict ventilation around the cylinder or interfere with the cylinder valve, regulator, hose connections, or safe inspection of the installation.

Gas Cylinder Replacement

Before replacing the gas cylinder, close the cylinder valve and ensure that there are no ignition sources nearby. Do not smoke or use open flames during the replacement procedure. If the cylinder is replaced indoors, ensure adequate ventilation.

After connecting the new gas cylinder, verify that the pressure regulator is correctly and securely attached to the cylinder valve. Check all connections for leaks using a soap-water solution. Never use an open flame to test for gas leaks. If bubbles appear during the leak test, immediately close the gas cylinder valve and correct the leak before operating the heater.

Do not use the heater until all gas connections have been verified as leak-free.

Before using the sauna

Before each sauna session, visually inspect the heater, gas hose, regulator, and all gas connections. Ensure that the gas hose is free from cracks, cuts, excessive wear, or other damage and that it is positioned away from hot surfaces of the heater and chimney.

A leak test must always be performed:

- When connecting a new gas cylinder
- After replacing any gas component
- After the heater has been out of use for an extended period

Leak Test Procedure

1. Ensure that all heater control knobs are in the OFF position.
2. Connect the pressure regulator to the gas cylinder.
3. Prepare a leak detection solution by mixing 1 part liquid soap with 3 parts water.
4. Open the gas cylinder valve and pressurize the system.
5. Apply the soap solution to all gas connections, including:
 - Gas cylinder valve
 - Pressure regulator
 - Gas hose and hose connections
 - Valves and fittings

IMPORTANT: If bubbles appear, a gas leak is present. Immediately close the gas cylinder valve and do not use the heater until the leak has been repaired and all connections have been verified as leak-free.

Heating the sauna

Before switching on the heater, always ensure that there are no objects, materials, or other items on top of the heater or within the specified safety distances.

When the heater is used for the first time, both the heater and the sauna stones may emit temporary odors. These odors are caused by residual oils, greases, protective substances, and other manufacturing residues on the metal surfaces burning off during the initial heating cycles. To minimize odors, ensure that the sauna is well ventilated during the first heating cycle.

When using the heater for the first time or after replacing the gas cylinder, the gas hose and system may need to be filled with gas before ignition. In this case, it may be necessary to hold the control knob in the ignition position for approximately 30–60 seconds before the pilot flame ignites.

The sauna should be preheated for approximately 15–25 minutes before use. The required heating time depends significantly on the initial temperature of the sauna. The colder the sauna is before heating, the longer the preheating time will be.

In a properly insulated sauna, the desired sauna temperature is typically reached in 15 minutes, depending on the sauna size, insulation, ventilation and environmental conditions.

FinSteam gas sauna heaters can also be used in freezing conditions when operated with propane gas (G31). Propane remains vaporized and functional at temperatures as low as -40°C (-40°F), making it suitable for year-round sauna use even in very cold climates.

We do not recommend staying in the sauna continuously for more than 30 minutes at a time. Always listen to your body and leave the sauna immediately if you feel uncomfortable, dizzy, or unwell.

Remember to drink plenty of water before, during, and after sauna bathing. Sweating can cause significant fluid loss, and adequate hydration is important to prevent dehydration and maintain a safe and enjoyable sauna experience.

WARNING: The heater becomes hot during operation. Do not touch any parts of the heater except the control knob and ignition controls.

Lightning Instructions

The FinSteam gas sauna heater control has four settings:

OFF

Pos.1 - Start

Pos.2 - Maximum

Pos.3 - Minimum



Starting the Heater

1. Open the gas supply by turning the gas cylinder regulator to the ON position.
2. Turn the heater control knob to the Pilot Ignition Position (Position 1) and press the knob down. Wait approximately 10–15 seconds before pressing the ignition button. If you are starting the heater for the first time or have recently replaced the gas cylinder, keep the control knob pressed down for approximately 30–60 seconds to allow the gas to fill the hose and gas system before ignition.
3. While holding the control knob down, repeatedly press the ignition button (PIEZO) until the pilot flame ignites.

4. Continue holding the control knob down for approximately 10–15 seconds after ignition.
5. Release the control knob. If the pilot flame remains lit, the heater is ready for operation. If the pilot flame goes out, repeat the ignition procedure.

Adjusting the Heat Output

After the pilot flame is stable, adjust the heater output by turning the control knob.

- Turn the control knob counterclockwise to increase the heat output.
- Turn the control knob clockwise to decrease the heat output.

Select the desired heating level according to sauna size, ambient conditions, and personal preference.

Shutting Down the Heater

1. Turn the control knob to the OFF position.
2. Close the gas cylinder valve or regulator valve completely.

IMPORTANT: Always close the gas supply at the gas cylinder after use, even when the control knob is in the OFF position.

Integrated Safety Timer (FinSteam AURORA 81)

All FinSteam AURORA 81 heaters are equipped with an integrated safety timer as a standard safety feature. The timer limits the maximum continuous operating time of the heater to 60 minutes.

When the timer reaches the end of the selected operating period, it will activate an audible alarm and automatically shut down the heater. If you wish to continue sauna bathing after the heater has been shut down by the timer, simply restart the heater following the normal ignition procedure described in this manual.

IMPORTANT: The safety timer is an additional safety feature designed to reduce the risk of unattended operation. It does not replace the user's responsibility to supervise the heater during use.

Sauna Bathing Instructions

Throwing water on hot sauna stones

To increase humidity and create a more comfortable sauna experience, **water may be poured onto the heated sauna stones.**

The effect of heat and steam varies from person to person. Experiment with different temperatures and amounts of water to find the sauna conditions that are most comfortable for you.

IMPORTANT:

- Only clean household water should be used on the sauna stones. **The water used on the sauna stones should be warm whenever possible.** Do not use boiling water or water that is so hot that it may create a burn hazard for sauna users.
- Throw approximately one ladle (0.2 litres) of water onto the stones at a time. Remember that the heater and stones temporarily cool down whenever water is applied.
- Preferably use a long-handled sauna ladle when throwing water onto the stones.
- Never pour water directly onto the heater from a bucket, container, or other large vessel.
- Never place your hands directly above the heater while pouring water onto the stones. Hot steam generated from the stones can cause serious burns.
- Never throw water onto the stones when someone is standing close to the heater, as hot steam can cause burns.
- Never place or throw any objects, materials, fragrances, containers, or other substances onto the sauna stones unless they are specifically designed for sauna use. Sauna fragrances may only be used according to the manufacturer's instructions

OTHER IMPORTANT SAUNA INSTRUCTIONS:

- Move carefully inside the sauna at all times. To reduce the risk of falls, burns, or accidental contact with the hot heater, it is recommended that only one person moves around the sauna at a time, especially near the heater.
- Do not touch the pilot flame, auxiliary burner, heater body, stone basket, chimney, or other hot parts of the heater during operation or before they have cooled sufficiently.
- We do not recommend staying in the sauna continuously for more than 30 minutes at a time. Always listen to your body and leave the sauna immediately if you feel dizzy, weak, nauseous, overheated, or otherwise unwell.
- Remember to drink plenty of water before, during, and after sauna bathing. Sweating can cause significant fluid loss, and adequate hydration is important to prevent dehydration and ensure a safe and enjoyable sauna experience.

Maintenance

Regular maintenance is essential to ensure safe operation, optimal performance, and a long service life of your FinSteam gas sauna heater.

Keep the heater, burner, and all air openings clean and free from dust, dirt, insects, leaves, and other debris. Particular attention should be paid to the burner openings and flame outlets, which must remain unobstructed at all times.

When the heater is not in use for extended periods, we recommend covering it with a suitable protective cover to protect it from dust, moisture, and environmental contamination.

Annual Inspection

The heater should be inspected and serviced at least once per year by a competent person.

The annual inspection should include:

- Verification of burner operation and flame quality
- Inspection of valves, controls, and safety devices
- Inspection and cleaning of burner openings
- Inspection of gas connections and fittings for leaks

Gas Hose Replacement

The LPG gas hose should be inspected regularly and replaced at least every two years, or sooner if signs of wear, cracking, hardening, or damage are detected.

Combustion adjustment procedure

Venturi Tube Burner with Adjustable Inner Tube

1. Scope

This document defines the procedure for fine adjustment of combustion in burners equipped with a Venturi system featuring an adjustable inner tube.

2. System Description

The burner consists of:

- Gas nozzle
- Venturi tube
- Adjustable inner tube secured by a fixing screw

Combustion quality is adjusted by varying the distance between the gas nozzle and the inner tube.

3. Operating Principle

The distance between nozzle and inner tube regulates primary air intake:

- Increased distance → increased primary air flow
- Reduced distance → decreased primary air flow

4. Safety Requirements

Adjustment shall be performed:

- With the burner in operation
- In a properly ventilated environment
- By qualified personnel only

Personal protective equipment (PPE) must be used.

5. Adjustment Procedure

1. Ignite the burner
2. Allow flame stabilization
3. Loosen the fixing screw
4. Adjust the inner tube position
5. Retighten the screw
6. Verify flame condition

6. Adjustment Procedure

6.1 Yellow or luminous flame

Cause: insufficient primary air

Action: Increase the distance between nozzle and inner tube

6.2 Lifting or unstable flame

Cause: excessive primary air

Action: Reduce the distance between nozzle and inner tube

6.3 ODS activation

Cause: improper combustion and/or incorrect air-gas mixture

Action:

- Check for obstructions in the Venturi
- Slightly increase the distance
- Repeat verification

7. Fine Adjustment

Perform small incremental changes and allow stabilization after each adjustment.

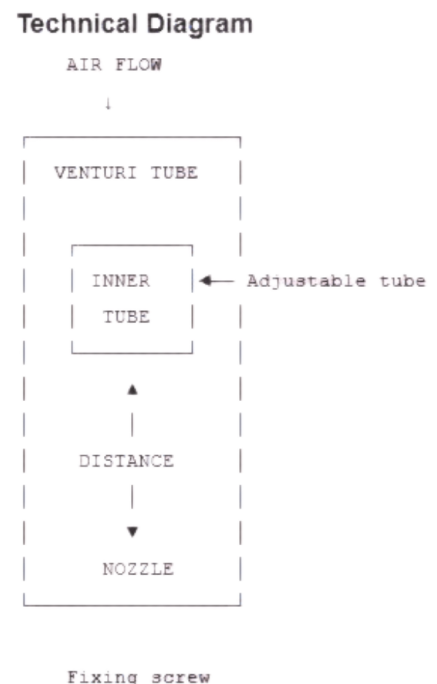
8. Final Verification

The adjustment is compliant when:

- Flame is fully blue
- Flame is stable
- No lifting or flashback occurs
- ODS system does not activate

9. Final Locking

- Fully tighten the fixing screw
- Ensure mechanical stability
- Perform extended operation test



Burner Cleaning

To clean the burner:

1. Ensure that the heater is completely cool and disconnected from the gas supply.
2. Clean accessible burner surfaces using a mild soap-and-water solution and a damp cloth.
3. Carefully clean burner openings using a thin wire or suitable non-damaging tool.
4. Remove any dust, dirt, insects, or other debris from the burner area.

Do not use abrasive cleaning products, steel brushes, or aggressive chemicals that may damage burner components.

Any burner components showing excessive corrosion, damage, deformation, or wear must be replaced immediately.

- All repairs affecting the operation or safety of the heater must be carried out by an Authorised Service Centre or qualified service technician.
- Use only original FinSteam spare parts and approved replacement components.
- For service, repairs, or technical support, contact an authorized service provider or local distributor.

Manufacturer's Warranty

The manufacturer grants a twelve (12) month warranty for the product from the date of purchase, covering defects in materials and workmanship.

This manufacturer's warranty is a voluntary commercial warranty and does not limit or reduce the buyer's statutory rights under consumer protection legislation, including EU law and the mandatory consumer protection provisions of the country of purchase.

In the event of a warranty claim, the manufacturer's liability shall, at its sole discretion, be limited to the repair, replacement, or refund of the defective product or its component.

The warranty does not cover:

- defects caused by incorrect installation or installation contrary to the installation instructions
- neglect of operating, maintenance, or safety instructions
- misuse, negligence, accidents, impact damage, or unauthorized modifications
- use of non-original or non-approved spare parts and accessories
- normal wear and tear or cosmetic damage that does not affect functionality
- improper storage, transport, or handling
- unsuitable operating environment, such as corrosion, freezing, limescale buildup, or other conditions exceeding the product's technical specifications
- use outside the product's intended purpose, capacity, or technical limits

The warranty also does not cover downtime, business interruption, loss of income, or any other indirect or consequential damages.

Warnings

Read this manual carefully before installing, operating, or servicing the heater.

- This appliance is a gas-fired sauna heater designed exclusively for heating sauna rooms. It must not be used continuously or for any purpose other than sauna heating.
- The heater must not be used in basements, bathrooms, bedrooms, caravans, motorhomes, recreational vehicles, or other living spaces.
- The heater must only be operated in a sauna that complies with the installation, ventilation, and safety requirements specified in this manual.
- Always perform the leak test described in this manual before first use and after replacing the gas cylinder, pressure regulator, gas hose, or any gas component.
- Use the heater only in a properly ventilated sauna and always comply with the ventilation requirements specified in this manual.
- This appliance requires an approved gas hose and pressure regulator suitable for the gas category and country of use.
- In the event of a gas leak, immediately shut down the heater and close the gas cylinder valve.

Burn Hazard

- During operation, only touch the control knob and ignition controls.
- Do not touch the pilot flame, burner, stone basket, chimney, heater body, or other hot surfaces.
- The sauna stones, chimney, and exterior surfaces of the heater become extremely hot and may cause severe burns.
- Keep a safe distance from the heater while it is hot.
- Keep children away from the heater at all times.

Fire Safety

- Do not install or operate the heater near combustible materials except as permitted by the safety distances specified in this manual.
- Do not hang clothes, towels, or other items for drying inside the sauna.
- Never place objects, materials, containers, fragrances, or other substances on the heater or sauna stones unless specifically intended for sauna use.
- Always keep the safety distances around the heater clear and unobstructed.

Health and Safety

- Prolonged exposure to high temperatures may be harmful and can cause overheating or dehydration.
- We do not recommend staying in the sauna continuously for more than 30 minutes
- Leave the sauna immediately if you feel dizzy, weak, nauseous, overheated, or otherwise unwell.

- Drink plenty of water before, during, and after sauna bathing.
- Never use the sauna under the influence of alcohol, narcotics, or medication that may impair judgment or physical ability.
- Never sleep in a heated sauna.
- Children, elderly persons, persons with disabilities, and individuals with medical conditions should not use the sauna without appropriate supervision.
- Consult a physician regarding any health-related limitations to sauna bathing.
- Consult child healthcare professionals before taking infants into a sauna.

General Safety

- Move carefully inside the sauna, as benches, platforms, and floors may become slippery.
- Salt air, high humidity, and harsh environmental conditions may accelerate corrosion of metal components.
- When the heater is not used for extended periods, protect it from dust and contamination with a suitable cover.
- Repairs and servicing affecting the safe operation of the heater must only be performed by qualified personnel using original FinSteam spare parts.

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