

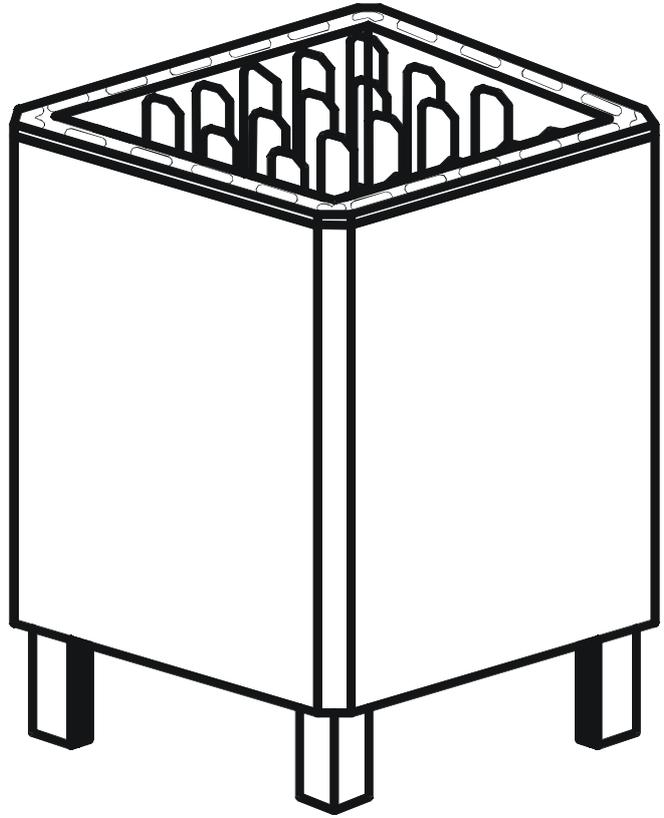
USER HANDBOOK

MODEL

NTSB-10

NTSB-12

NTSB-15



The Heater

Installation Operation

Please read the user handbook
BEFORE using the heater.

Thank you for choosing NTSB series SAUNA HEATER, with solid design, reliable performance, steady output and convenient installation. Sauna-bathing equipment is composed of SAUNAS HEATER and SAUNA ROOM. After SAUNA-bathing, the people feel the flow of spirits, excrete virus in body, release the muscle and also good for keeping healthy.

NTSB SAUNAS HEATER series is designed for the big SAUNA ROOM, the model as following: NTSB -10, NTSB -12, NTSB -15. which is equipped with suitable controller to control the temperature in SAUNA ROOM. (refer to table 1)

▲Warning: The Heater is forbidden to use the heat of any other purposes.

ATTENTION: This appliance is not intended for use by person (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

ATTENTION: Children should be supervised to ensure that they do not play with the appliance.

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Prior to installing heater, please refer to Installation handbook and check it as following points:

- Is the output power and type of the heater suitable for the SAUNA ROOM? See parameter table 1. (Technical parameter).
- Is the supply voltage suitable for the rated voltage of heater?
- The location of the heater fulfils the minimum requirements concerning the distances given in chart 1 and allow for safety and convenience.
- Is the controller suitable for the heater power and control requirements?
- Do not install the heater to the floor or wall recess.
- Choose the cable wire according to table 1 and the cable wire can bear high temperature 338°F (it is recommended to use rubber cable wire).
- Do not install more than one heater in a sauna room unless twin-heater installations. (Warning: there must be 16" between two heaters when install two).

The heater gets very hot when working. To avoid the risk of accidental contact with the heater, it is recommended that a heater guard be provided. The guard is made into many kinds of patterns in accordance with the location places, but some size must be made as the chart 1.

An electrical supply must do the installation of the heater to ensure safety and reliability. Improper electrical connection can cause fire or electric shock. Refer to chart 2 (Electrical connection chart).

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Do not use the heater without stones, otherwise it may cause a fire. Only use the original SAUNA stone or the stone for use in heater. Do not use ordinary stones, which may emit harmful substances, easily break and do not possess good heating capacity. Wash the stones to clear the dust before putting them into the heater. Stones of unspecified sizes should not be used.

Put the larger stones at the bottom of stove compartment and the smaller ones on top. Do not pile them tightly so that air can flow freely. NOTE: Too tightly placed stones decrease working time of the heater element, the stones should plainly cover the heater element (refer to chart 3). The diameter of stone is about 1.18"-3.15".

Rearrange the stones in the heater at least once a year or twice if it is in frequent use (maximum 500 hrs). To decide the correct volume of stones in heater, refer to Technical Data (table 1) provided.

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The door, ceiling and walls of sauna room must be insulated. 10.76 ft² (1m²) of un-insulated surface choose the heater input (refer to table 1), take following as example: 1 unit volume increases to approximately 1.2 unit volume.

Chart 1 The location of heater

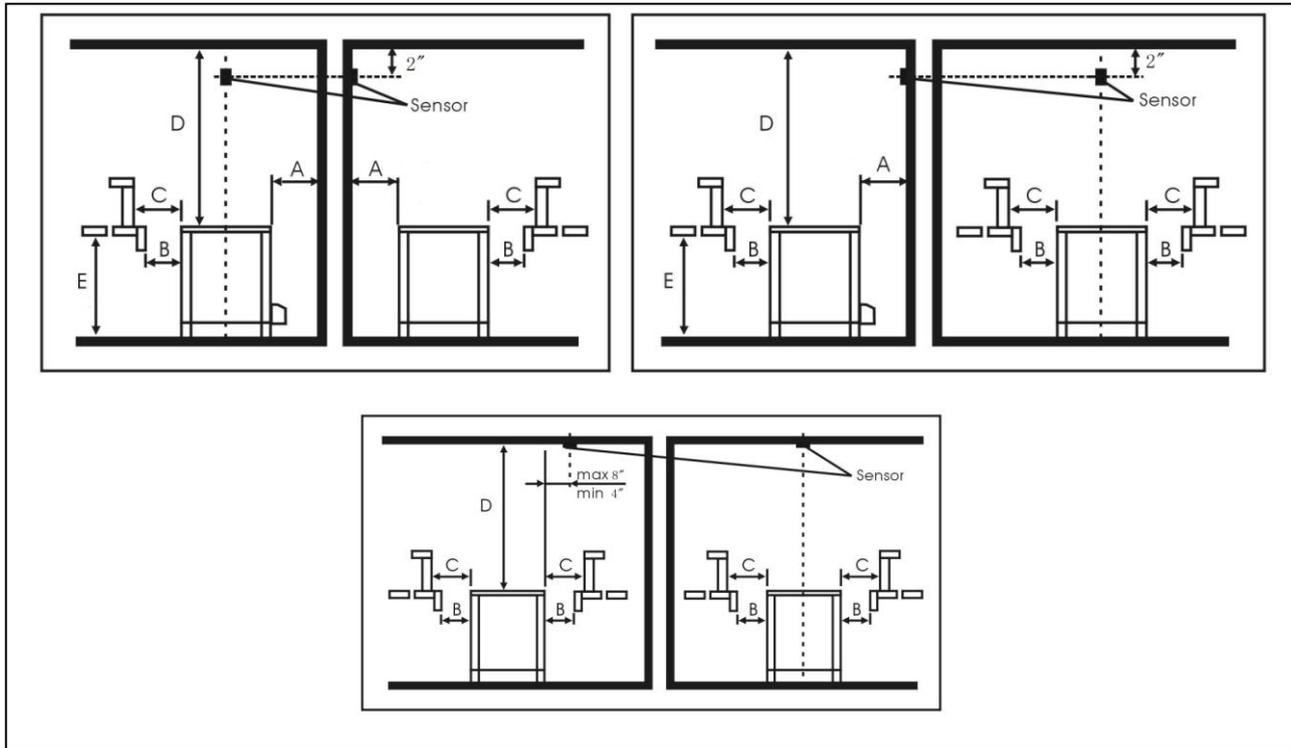


Table 1 Technical parameter

Heater model	Power kW	Heating element n*kW	Sauna room volume ft ³	Current and size of wire 240V60Hz	Cable (From control box to stove)	Arrangement stones lb.
NTSB-10	10.5	3*1.5 +3*2.0	318-530	43.8A 3*6AWG	6*12AWG	88-110
NTSB-12	12.0	6*2.0	353-636	50A 3*6AWG	6*12AWG	88-110
NTSB-15	15.0	6*2.5	460-812	62.5A 3*6AWG	6*12AWG	130-160

Table 2 Safety distance

Model	Safety distance (inch)				
	A	B min	C min	D min	E max
NTSB-10	4.7-8.7	6	8	55	26.8
NTSB-12	4.7-8.7	6	8	55	26.8
NTSB-15	6.3-10.2	6	8	55	26.8

Chart 2 Electrical connection

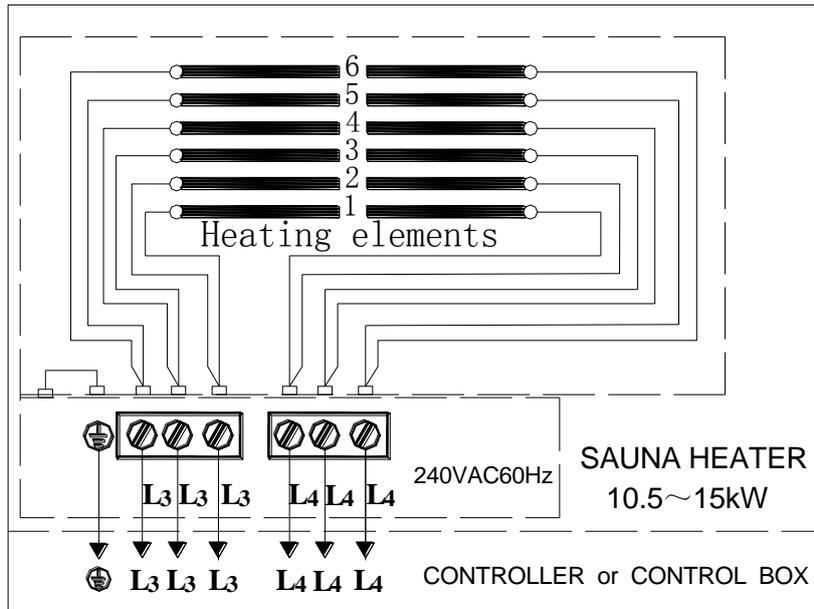


Chart 3 Pile stones

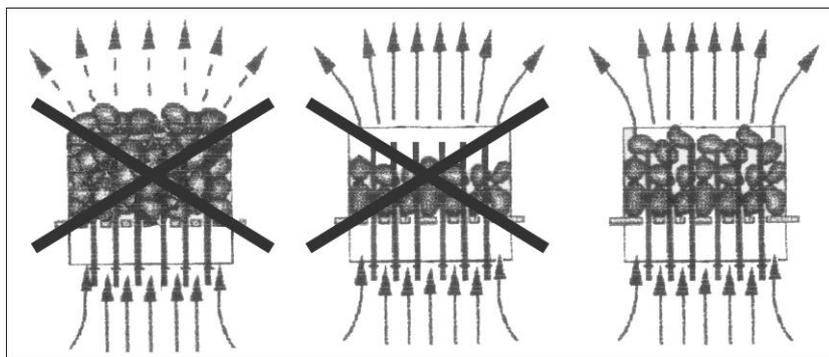
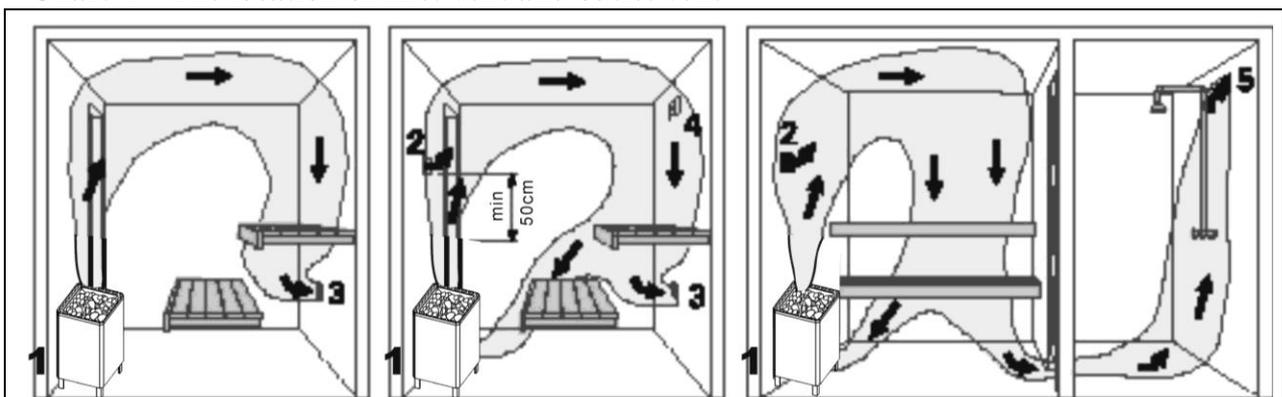


Chart 4 The location of inlet vent and outlet vent



- 1、 Air supply vent;
- 2、 optional air supply vent if mechanical exhaust ventilation is used, the opening is located 50cm above the heater;
- 3、 exhaust air vent;
- 4、 Drying vent, which is closed during heating and bathing, the sauna room can also be dried by leaving the door open after bathing;
- 5、 If there is only an exhaust vent in washing room, leave an opening (MIN SCM). Under the sauna door (Mechanical ventilation is recommended)

Chart 5 Dimension of sauna heater

