# GB

#### Installation and Operation Manual solid fuel heater FLENSBURG, FLENSBURG Top, FLENSBURG II tested according to the standard EN 13240

## 1. Installation Instruction

The heater has been designed to allow simple connection to an existing chimney by a single connecting piece. The connecting piece must be as short and straight as possible, in a horizontal position or slightly inclined. The piece must be tight.

Be sure that all local regulations, including those concerning both national and European standards on construction and fire prevention, are respected during installation. Inform the competent inspector prior to installation. Be sure that combustion air supply is sufficient; particularly in rooms where windows and doors are closed tight.

Chimney properties shall be calculated in accordance with DIN 4705 parts 1 and parts 2, eventually also part 3, with the three values stated in this manual.

The heater must stand on a hearth with adequate bearing capacity. If bearing capacity is too low, adequate measures must be taken (e.g. a board must be laid to split weight).

#### 2. General Safety Instructions

Fuel combustion emits calorific energy that heats the surface of the heater, combustion chamber door, door and control elements handles, safety glass, flue pipes, and eventually also the front of the heater. Do never touch those parts without adequate safety wear or elements (fireproof gloves etc.).

Warn children of such danger and make sure they do not stay close to heater when in operation.

## 3. Acceptable Fuel

Fuels acceptable for burning include wood logs of up to 30 cm in length and 30 cm in circumference, and lignite briquettes. Make sure that only air dried wood logs are used. Burning of waste, and plastics in particular, is forbidden by law on emissions. Besides, such fuel may cause damage to the fire place and chimney and subsequently may injure health and smell may annoy your neighbours. Air dried wood logs with 20% maximum humidity may be obtained after at least one year (soft wood) or two years (hard wood) of drying. Wood is not slow combustion fuel and thus, continuous heating throughout the night is not possible when burning wood. Liquid fuel is unacceptable.

## 4. Firing

During the first firing bad smell due to drying of protection paint is inevitable but the smell shall fade quickly. Make sure the room with the heater is well aerated when firing. Quick firing is essential because incorrect procedure may cause increased emissions.

Add more fuel as soon as firing fuel catches fire. Do never use alcohol, petrol or other flammable liquids for firing. Do always use some paper, wood chips, and a small amount of fuel for that. Make sure that primary and secondary air is supplied to heater when firing. Make sure that heater is under control during firing.

#### 5. Operating More than One Fireplace

Make sure that combustion air supply is sufficient when operating more than one fireplace in one room or within the same air system.

#### 6. Transition Season Operation

When exterior temperature rise during transition season draught can decrease at low burning capacity and flue gas may not be evacuated completely. In such case add only small quantities of fuel and open the slider of primary air supply so that loaded fuel burns more quickly (flame) and draught gets steady. Ash needs to be raked carefully more often to enhance air circulation below fireplace.

# 7. Cleaning and Checking

Heater flue pipes need to be checked for deposit and eventually swept at least once a year or more often, e.g. while sweeping chimney. Make sure your chimney is swept regularly by a chimneysweep. The frequency of sweeping shall be defined by competent inspector. Heater should be checked by an expert every year.

#### 8. Versions

Heaters with spring fireplace door can be connected to a chimney with multiple taking for other heaters and fireplaces provided that dimensions of the chimney are in compliance with DIN 4705 part 3.

The door of the heater with spring fireplace door must always be closed during operation, except for firing, fuel charging, and ash removing. Otherwise operation of other equipments connected to the chimney may be affected or flue gas may leak.

#### 9. Combustion Air

Since heaters are fireplaces depending on surrounding air and take combustion air from the room, adequate intake of combustion air is vital.

In rooms with tight windows and doors (e.g. as energy-saving measure) fresh air intake may be low and thus affect draught of the heater. Also your well-being may be affected; even your safety may be threatened. It may sometimes be necessary to assure adequate intake of fresh air e.g. by installing air shutter close to heater or by combustion air pipe leading to exterior or to a well aerated room (except boiler room). In particular it is vital that combustion air pipes are open during operation of fireplace. Steam flues located in the same room with fireplace may affect heater's operation (smoke may leak to inhabited room despite closed fireplace door) and therefore must never be operated parallelly with the heater.

# **10. Fire Protection**

Distance from flammable structures and furniture

To assure adequate heat protection, a minimum distance of 40 cm in the back and 40 cm on the sides is required between the heater and flammable structures and furniture: data applies to FLENSBURG and FLENSBURG Top.

For FLENSBURG II is minimum distance 10 cm in the back and 25 cm on the sides.

Fire protection within radiation perimeter

Make sure that no flammable structures or furniture are within radiation perimeter of glass door, which is 80 cm. The distance may be reduced to 40 cm if safety shade is installed between fireplace and flammable structures leaving enough space on both sides. Fire protection outside radiation perimeter

Minimum distances from flammable structures and furniture are stated on heater's label and must be observed.

<u>Heater</u>

For solid fuel heaters floor in front of fireplace's door made of flammable materials must be protected by a non-flammable hearth. Its minimum dimensions are 50 cm in the front and 30 cm on the sides of fireplace door.

## 11. Spare Parts

Only spare parts approved or provided by the manufacturer may be used. For inquiries, please, contact a specialized vendor. No modifications to heater are allowed!

# 12. Warning in case of fire in chimney

Deposit in chimney may catch fire if unsuitable or humid fuel is used. In such case close all heater air holes immediately and call the fire brigade. After fire is extinguished chimney should be inspected by an expert for cracks or untight places.

# 13. Nominal heating capacity, combustion air adjustment, and fuel burning time

Nominal heating capacity of heater is 7.0 kW and it is obtained at minimum supply pressure of 12 Pa.

Fuel	Wood logs (30 cm length, 30 cm circumference)	Lignite briquettes
Maximum dose	2.12 kg	1.55 kg
Turning rosette of primary air	closed	fully open
Slider of secondary air - lower	fully open	fully open
Slider of secondary air - upper	fully open	fully open
Burning time	1.0 hour	1.0 hour

The primary combustion air flows to the fire chamber through a turning rosette that is on the ashtray door (lower door).

Secondary combustion air flows to the fire chamber through sliders placed on the upper and lower part of the frame of the firing door (upper door with glass).

Quantity and adjustment of combustion air for moderate operation:

Fuel	Lignite briquettes
Maximum dose	approx. 1.55 kg
Turning rossete of primary air	position 2.5
Slider of secondary air - lower	closed
Slider of secondary air - upper	closed
Burning time	approx. 2 hours

# 14. Space Heating Capacity

For rooms with insulation non-conform with calorific insulation regulations space heating capacity should be determined pursuant to DIN 18 893 for nominal heating capacity of 7 kW: - 190 m<sup>3</sup>

- in favourable heating conditions:

- in poor heating conditions:

- 120 m<sup>3</sup> - in unfavourable heating conditions: - 82 m<sup>3</sup>

For occasional heating – interrupted for more than 8 hours – space heating capacity is reduced by 25%.

### 15. Technical Data

Capacity:	7,0 kW
Weight:	FLENSBURG = 61 kg, FLENSBURG Top = 61 kg, FLENSBURG II = 75 kg
Upper flue gas outlet:	FLENSBURG, FLENSBURG II = Ø 120 mm rear, FLENSBURG Top = Ø 114 mm top

#### Data for chimney properties calculation (at nominal heating capacity):

Fuel	Wood logs	Lignite briquettes
Flue gas flow [gs <sup>-1</sup> ]	7.4	11.1
Average temperature of flue after draught shaft [°C]	310	294
Min. draught at nominal heating capacity [Pa]	12	10

## Guarantee

Shall any failure, malfunction, or surface defect occur on your heater within the guarantee period do never repair it by yourself. Aftersale service can be done only by the manufacturer or distributor.

We guarantee the quality, function, and construction of the heater for 2 years from the day of purchase: defects definitely occurred as a consequence of manufacturing defect will be remedied within short time at our cost under the condition that the heater

- has been operated in conformity with operating instruction,
- has been connected to the chimney in conformity with applicable standards,
- has not been damaged mechanically by force,
- has not been subject to modifications, repairs and incompetent handling.

When making a complaint give your exact address and circumstances when the dysfunction occurred. We will deal with the complaint if you deliver the warranty certificate with the date of purchase and the sales point stamp along with the complaint.

Ask for legible warranty certificate at purchase. Our company will decide on method and place of reparation to be carried out.

Upon purchase, check for integrity of the firing door glass. This is under guarantee for 15 days after the purchase.

It is unacceptable to operate the appliance at extreme conditions, which means:

- fuel quantity exceeds the recommended quantity,

- air supply exceeds the recommended quantity,

- unacceptable fuel types are used.

Heat overcharge shows in the following ways:

- fireplace ceiling deflection,

- firing door damage

- grille has burnt over,

- refractory-bricks and vermiculittes plates have cracked,

- change of colour tone of the heater surface

The complaint will not be accepted by the manufacturer if the appliance has not been operated correctly.

Exchange of the product or making the purchase contract void is subject to applicable dispositions of the Civil Code and the Complaints Order.

# WARRANTY CERTIFICATE

Product name and model:	SOLID FUEL HEATER		
FLENSBURG FLENSBURG Top FLENSBURG II	model No F 1459 E model No F 1459 F model No F 1459 G	*) *) *)	
Serial number:	*) Quality class		*)
Standards: EN 13240			
Date of production, seal and signature of technical inspection:			*)
Sales point seal, purchase date, signature:			
* Put corresponding seals,	fill in, or cross out if not applica		
The warranty certific	cate is invalid without data m		
The product was repaired under guarantee:		Seal and signature of repair shop:	
from:	to:		
from:	to:		
from:	to:		
THORMA Výroba, k.s.			

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SUPPLEMENTARY CLAUSE:

The manufacturer recommends disposing the different parts of the packaging as follows:

- take the plastic stripe and the cardboard to a collecting point,

- wooden parts can be burnt.

Once the service life of the product has expired the manufacturer recommends disposing it at a collection point, and the refractory blocks and vermiculittes parts at a waste deposit.