

# **USER MANUAL**

# PILAR 13 L PILAE 13 H



#### FIRE ENVIRONMENTALLY FRIENDLY!

3 Eco-friendly advices for sensible heating

- common sense both environmentally and economically.
- 1. Effective lighting. Use dry brushwood, kindling and possible a piece of newspaper.
- 2. Light the fire with only little wood at a time this gives the best combustion.
- 3. Use only dry wood ie wood with a humidity of 15 to 22 percent.

The oven is wrapped in packaging that is recyclable. This must be disposed of according to national rules regarding the disposal of waste.

The glass can <u>not</u> be reused.

The glass should be discarded along with the residual waste from ceramics and porcelain.

Pyrex glass has a higher melting temperature and therefore can not be reused.

If discarded you make an important positive contribution to the environment.

Revision: 1

Date : 8th january 2014

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#### Introduction

Thank you for purchasing a RAIS wood burning stove.

A RAIS wood burning stove is more than just a heat source: it also shows that you care about design and quality in your home.



To make the most of your wood burning stove it is important that you read the manual thoroughly, before installing and using it.

In the case of warranty coverage, and for general queries regarding your wood burning stove, it is important that you know the stove's production number. We therefore recommend that you note down the number in the table below. The production number is located on the back of the stove at the bottom.

#### Warranty

Your RAIS wood burning stove comes with a 5 year warranty. The warranty, however, does not cover heat-insulating materials, glass and seals.

Any alterations made to the stove will void the warranty.

Production number:
Produced by: RAIS A/S 9900 Frederikshavn, DK

Date:

Distributor:

# Specifications

	PILAR 13 L	PILAR 13 H
Nominal output (kW):	4.8	4.8
Min./Max. output (kW):	3 - 6	3- 6
Heating area (m²):	45-90	45-90
Stove's width/depth/height (mm):	Ø456-1530	Ø456-1800
Combustion chamber's width/depth/height (mm):	308-225-383	308-225-383
Recommended amount of wood when fuelling (kg). Distributed on 1-2 logs of wood of approx. 25 cm	1.1	1.1
Min. uptake / Min. draught (Pascal):	-13	-13
Weight (kg):	approx. 144 kg	approx.153 kg
Efficiency (%):	83	83
CO-emission at 13% O <sub>2</sub> (%)	0.071	0.071
NOx-emission at 13% O <sub>2</sub> (mg/Nm³):	84	84
Particles emission acc. to NS3058/3059 (g/kg):	1.897	1.897
Dust measured acc. to Din+ (mg/Nm³):	8	8
Smoke gas mass flow (g/s):	4.2	4.2
Smoke gas temperature (°C):	220°	220°
Intermittent operation:	Refuelling should be undertaken within 1½ hours	

#### Installation instructions

The following pages give instructions for the safe and proper installation of this heating appliance in the UK. These instructions cover the basic principles of installation, although detail may need slight modification to suit particular local site conditions. In all cases the installation must comply with current UK Building Regulations, Local Authority Byelaws and other specifications or regulations as they affect the installation of the stove. Please note that it is a legal requirement under England and Wales Building Regulations that the installation of the stove is either carried out under Local Authority Building Control approval or is installed by a Competent Person registered with a Government approved Competent Persons Scheme. HETAS Ltd operate such a Scheme and a listing of their Registered Competent Persons can be found on their website at www.hetas.co.uk.

It should be noted that the current Building Regulations requirements are given in Approved Document J. These requirements may also be met by adopting the relevant recommendations given in British Standards BS 8303 and BS EN 15287-1.

#### WARNING: Health and Safety Advice Notice

The installation of this heating appliance is governed by the Health and Safety at Work Act 1974. It is the responsibility of the installer to ensure that all requirements of this Act are met during the installation works. Attention is drawn in particular to the following:

#### Handling:

The appliance is a heavy item and adequate facilities must be available for loading, unloading and site handling.

#### Fire Cement:

Some types of fire cement are caustic and should not be allowed to come into contact with the skin. Protective gloves should be worn when handling fire cement. In case of contact with the skin wash immediately with plenty of water.

#### Asbestos:

This stove contains no asbestos. If there is a possibility of disturbing any asbestos in the course of installation then please seek specialist guidance and use appropriate protective equipment.

#### Metal Parts:

When installing or servicing this stove care should be taken to avoid the possibility of personal injury.

#### Important Warning – Preparatory Work and Safety Checks:

- This stove must not be installed into a chimney that serves any other heating appliance.
- It's recommended not have an extractor fan fitted in the same room as the stove as this can cause the stove to emit fumes into the room.
- If this appliance is installed into an existing chimney, the chimney must first be swept and examined for soundness and suitability before the appliance is installed (see also section headed "Chimney").

#### Convection

RAIS stoves are convection stoves. This means that the stove's back and side panels are not over-heated. Convection means that there is a circulation of air, which ensures that the heat is distributed more evenly throughout the entire room. The cold air is sucked in at the base of the stove up through the convection channel, which runs along the stove's combustion chamber. The heated air pours out at the top of the stove, which ensures a circulation of warm air throughout the room.

#### Chimney

The chimney is the driving force which makes the stove function. In order for the stove to perform satisfactorily the chimney height must be sufficient to ensure the correct draught of 14 to 18 Pa so as to clear the products of combustion and prevent problems of smoke emanating into the room when firing.

NOTE: A chimney height of not less than 4.5 metres measured vertically from the outlet of the stove to the top of the chimney should be satisfactory. Alternatively the calculation procedure given in BS 5854:1980 may be used as the basis for deciding whether a particular chimney design will provide sufficient draught.

The outlet from the chimney should be above the roof of the building in accordance with the provisions of Building Regulations Approved Document J.

If installation is into an existing chimney then it must be sound and have no cracks or other faults which might allow fumes into the house. Older properties, especially, may have chimney faults or the cross section may be too large i.e. more than 230 mm x 230 mm. Remedial action should be taken, if required, seeking expert advice, if necessary. If it is found necessary to line the chimney then a flue liner suitable for solid fuel must be used in accordance with Building Regulations Approved Document J.

Any existing chimney must be clear of obstruction and have been swept clean immediately before installation of the stove. If the stove is fitted in place of an open fire then the chimney should be swept one month after installation to clear any soot falls which may have occurred due to the difference in combustion between the stove and the open fire.

If there is no existing chimney then either a prefabricated block chimney in accordance with Building Regulations Approved Document J or a twin walled insulated stainless steel flue to BS 1856-1 can be used. These chimneys must be fitted in accordance with the manufacturer's instructions and Building Regulations.

A single wall metal fluepipe is suitable for connecting the stove to the chimney but is not suitable for using for the complete chimney. The chimney and connecting fluepipe must have a minimum diameter of 125 mm. Any bend in the chimney or connecting fluepipe should not exceed 45°. 90°bends should not be used.

Combustible material should not be located where the heat dissipating through the walls of fireplaces or flues could ignite it. Therefore when installing the stove in the presence of combustible materials due account must be taken of the guidance on the separation of combustible material given in Building Regulations Approved Document J and also in these stove instructions.

If it is found that there is excessive draught in the chimney then either an adjustable flue damper or alternatively a draught stabiliser should be fitted. The adjustable flue damper should not close off the flue entirely but should in its closed position leave a minimum continuous opening free area of at least 20 % of the total cross sectional area of the flue or fluepipe.

Adequate provision e.g. easily accessible soot door or doors must be provided for sweeping the chimney and connecting fluepipe.

You should also familiarise yourself with the draught conditions for chimneys with 2 flues.

The flue outlet spigot is either 150 mm (6") in diameter, or 129 mm (5") in diameter.

For strong draughts, the chimney or flue should be fitted with a draught stabiliser. In which case, it is important to ensure that there is a free flow-through area of minimum 20 cm² when the regulating gate is shut. Otherwise, the fuel energy may not be used optimally. If, at any time, you are unsure about the condition of the chimney, you should contact a chimney sweep.

Remember that access to the access door should be kept clear.

#### Installation

The PILAR 13 is a free standing stove. The stove can be delivered with a premounted swivel base

If the stove is delivered with a swivel base, it is preassembled to turn 66° (33° to each side). The swivel base can be changed to a 360° version by removing a locking screw at the bottom of the stove. Look at the instuctions on the next page

When installing the wood burning stove, there are some rules which MUST be followed:

The stove must be set up and installed in accordance with all current national and local rules and reulations. Local authorities and a chimney specialist should be contacted prior to set up.

It is prohibited to carry out unauthorised alterations to the stove.

There must be plenty of fresh air in the room where the stove is being installed, in order to ensure proper combustion. Note that any mechanical exhaust ventilation - e.g. an extraction hood - may reduce the air supply. Any air grates must be placed in such a manner, that the air supply is not blocked.

The floor structure must be able to carry the weight of the wood burning stove, as well as the weight of a chimney, if necessary.

The stove is placed on fireproof material.

When you choose where to set up your RAIS wood burning stove, you should consider the heat distribution to the other rooms. This will enable you to get the best use out of your stove.

The stove should be set up at a safe distance from inflammable materials.

See the manufacturer's plate on the wood burning stove.

Upon receiving the stove must be inspected for defects.

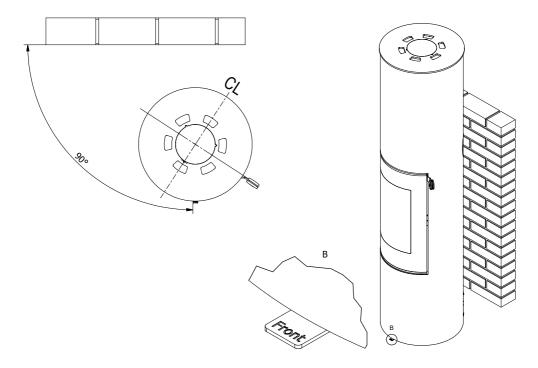
#### NOTF!!

RAIS A/S recommends that the stove is installed by a qualified/competent Rais dealer or a fireplace fitter recommended by an authorized RAIS dealer.

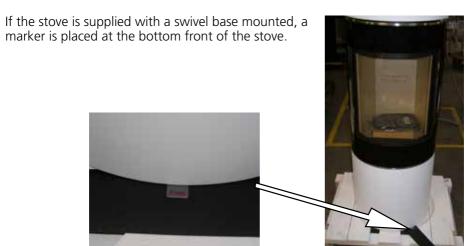
See www.rais.com for dealer list.

#### Installation of stove with swivel base

The stove is installed as shown in relation to the back wall. Make sure the marker (FRONT) is perpendicular to the rear wall (shown as 90°). The stove with its center line (CL) is now in its far left position (33°). The marker indicates the center line of the swivel range. The stove can rotate 33° to either sides of the center line.



Swivel base for 66° turning.

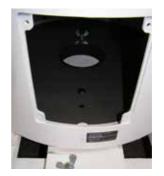


Remove the back side plate on the stove.



Remove the two thumbscrews (transport safety). Check the function of the swivel base. Mount the plate on the back again.





The stove can now be turned to both sides by 33  $^{\circ}$ 



The marker in front of the oven can be removed by pulling it.

Swivel base for 360° turning.

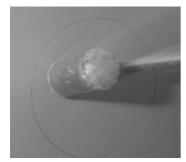
If the stove has to turn all the way around, remove the locking screw. Check the function of the swivel base.



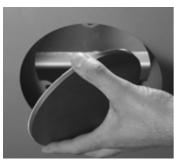
The marker in front of the oven can be removed by pulling it.

#### Change of chimney connection

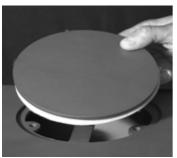
The stove is delivered ready for top outlet, but may be changed to back outlet in the following way:



Strike out the knock out plate at the rear of stove.



Remove the blanking plate and the packing, and position them in the hovle at the top. Ensure that the packing is positioned correctly. Screw all elements together with the three M6 nuts.



Mount the flue collar (supplied by the dealer) and the clamp for the upper smoke conductor with three M6x20 cylinder screws and M6 nuts.



Mount the parts in reverse order.

#### Installation distance in case of combustible wall

To determine whether the wall next to where the stove is going to be installed is flammable, you should contact your building contractor or the local building authorities.

The hearth should be able to accommodate the weight of the stove. The chimney must be independently supported by wall brackets or a ceiling support plate. The weight of the stove is indicated in the brochure.

The stove should always be installed on a non-combustible hearth of a size and construction that is in accordance with the provisions of the current UK Building Regulations Approved Document J.

If the stove is to be installed on a wooden floor, it must be covered with a non-combustible material at least 12 mm thick, in accordance with UK Building Regulations Approved Document J, to at distance of 300 mm in front of the stove and 150 mm to each side measuring from the door of the combustion chamber.

The clearance distances to combustible material beneath, surrounding or upon the hearth and walls adjacent to the hearth should comply with the guidance on the separation of combustible material given in UK Building Regulations Approved Document J and also in these stove instructions.

#### Installation distance in case of combustible wall

#### Normal set-up - corner setting

#### Uninsulated flue

A. Distance to furniture (min.) 850 mm

Distance to flammable materials (min.)

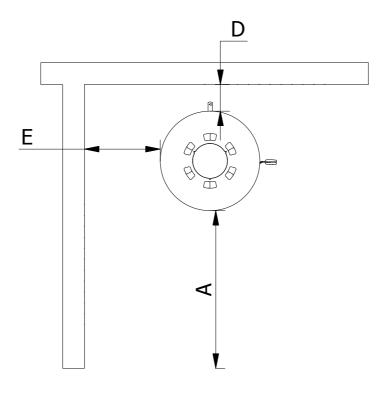
B. in front (floor) - if distances are not shown, national/local regulations are followed

C. to the side (floor) - if distances are not shown, national/local regulations are followed

D. to the rear (wall) 50 mm E. to the side of the wall 350 mm

#### Stove with swivel base (66°)

D. to the rear (wall) 50 mm E. to the side of the wall 600 mm



#### Corner setting 45°

#### Uninsulated flue

A. Distance to furniture (min.) 850 mm

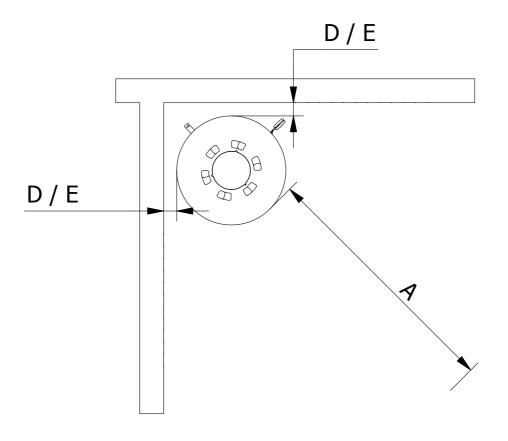
Distance to flammable materials (min.):

- B. in front (floor) if distances are not shown, national/local regulations are followed
- C. to the side (floor) if distances are not shown, national/local regulations are followed

D. to the rear (wall) 50 mm

#### Stove with swivel base (66°)

E. to the side of the wall 600 mm

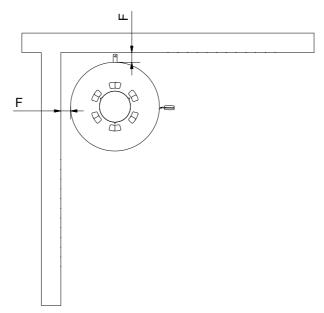


#### Installation distance in case of non-combustible wall

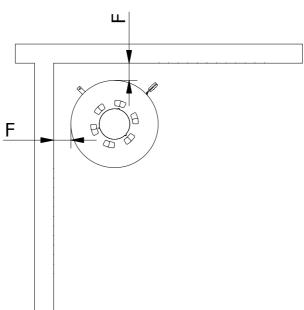
We recommend a minimum distance to non-combustible material of 50 mm (F) for cleaning considerations.

It should always be possible to access the access door.

Normal corner setting and with swivel base (66°)



Corner setting 45° and with swivel base (66°)



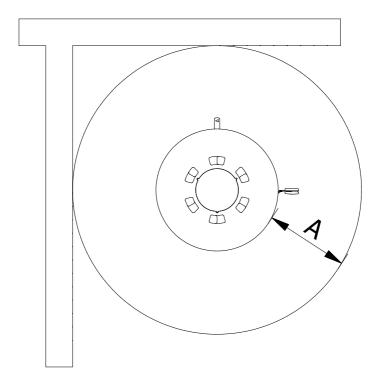
#### 360° swivel base

#### Uninsulated flue

A. Distance to furniture (min.) 850 mm

Distance to flammable materials (min.)

B. in front (floor) - if distances are not shown, national/local regulations are followed
C. to the side (floor) - if distances are not shown, national/local regulations are followed



#### For the Installer

Finally before firing the stove for the first time a check should be made to ensure that the assembly and stove installation has been satisfactory and that there are no leaks in any seals in the appliance and appliance connections to the chimney.

Ensure that the appliance and chimney flue are functioning correctly before finally handing over to the user. If necessary read the later parts of this manual for guidance on care required when first lighting.

Inform the user that the appliance has been commissioned and ready to use and give instruction on the safe operation of the stove.

These Instructions must be left with the user and the user should be instructed to keep them in a safe place.

#### Operating instructions

Please note that HETAS Ltd Appliance Approval only covers the use of dry seasoned wood logs on this appliance. HETAS Ltd Approval does not cover the use of other fuels either alone or mixed with the wood logs, nor does it cover instructions for the use of other fuels.

#### Fuel

The stove is designed and approved in accordance with EN 13240 and NS 3058 for stoking split, dried firewood. The firewood must have a water content of 15-22% and its max. length should be the width of the combustion chamber minus 50-60 mm.

Stoking with wet firewood causes both soot, environmental pollution and bad fuel economy. Freshly cut wood contains approx. 50-70% water and is thoroughly unsuitable for stoking. Count min. 1 year of storage time for newly cut wood before using. Wood with a diameter of more than 100 mm should be split. Regardless of wood size, it should always have at least one surface area free of bark.

We do not recommend stoking with painted, laminated or impregnated wood, wood with a synthetic surface, painted refuse wood, chipboard, plywood, domestic waste, paper briquettes and pit coal, as this will produce malodorous smoke, which could be poisonous.

When firing with the above-mentioned items and amounts larger than those recommended, the stove is subjected to a larger amount of heat, which results in a higher chimney temperature and lower efficiency. This can result in the stove and chimney becoming damaged and would void the warranty.

The calorific value of the firewood is closely connected to the moisture level of the firewood. Moist firewood has a low heat value. The more water the wood contains, the more energy it takes for this water to vaporise, resulting in this energy being lost.

#### **ONLY USE RECOMMENDED FUELS**

The following table shows the calorific value of different types of wood, which have been stored for 2 years, and which have a residual moisture of 15-17%.

Wood	Kg dry wood pr. m <sup>3</sup>	compared to beech/oak
Hornbeam Beech and oak Ash Maple Birch Mountain pine Fir	640 580 570 540 510 480 390	110% 100% 98% 93% 88% 83% 67%
Poplar	380	65%

<sup>1</sup> kg of wood yields the same heat energy irrespective of wood type. 1 kg beech merely takes up less space than 1 kg of fir.

#### Drying and storage

Drying wood takes time. Proper air drying takes approx. 2 years.

#### Here are some tips:

- Store the wood sawn, split and stacked in an airy, sunny place, which is protected against rain (the south side of the house is particularly suitable).
- Store the firewood stacks at a hand's breadth apart, as this ensures that the air flowing through takes the moisture with it.
- Avoid covering the firewood stacks with plastic, as this prevents the moisture from escaping.
- It is a good idea to bring the firewood into the house 2-3 days before you need it.

#### Room ventilation and stoves

There must not be an extractor fan fitted in the same room as the stove as this can cause the stove to emit smoke and fumes into the room.

The stove requires a permanent and adequate air supply in order for it to operate safely and efficiently.

In accordance with current Building Regulations the installer may have fitted a permanent air supply vent into the room in which the stove is installed to provide combustion air. This air vent should not under any circumstances be shut off or sealed.

#### Automatic regulation of combustion air

This stove is equipped with an independent and self-regulating air damper. Hence there is no damper handle.

When the stove is cold the damper is fully open (full primary and full secondary air). Upon heating the damper gradually closes the primary and secondary air, but opens up the tertiary air.

The primary air is added to the primary combustion zone at the bottom of the burning chamber, i.e. the bed of glowing embers.

This cold air is only used in the lighting stage.

Secondary air is air added in the gas combustion zone, i.e. air which contributes to the combustion of the pyrolysis gasses (preheated air, which is used for the cleaner glass system and combustion). This air is sucked through the damper and is pre-heated through the side channels and then emitted as hot scavenging air onto the glass. The hot air rinses the glass and keeps it soot-free.

Tertiary air at the back of the burning chamber at the top (2 rows of holes) ensures the combustion of the final gas residues.

The pilot nozzles are placed in the back plate of the upper combustion chamber. They ensure that the bed of glowing embers is fed with air and therefore holds a high temperature. It provides a quick start when refuelling and reduces the risk of fire going out.

A clean combustion is indicated by clear yellow flames.

#### First usage

A careful start pays off. Start with a small fire, so that the wood burning stove can get accustomed to the high temperature. This gives the best start and any damage is avoided.

Be aware that a strange but harmless odour and smoke concoction may emanate from the surface of the stove, the first time you fire up. This is because the paint and materials need to harden. The odour disappears quickly, but you should check the ventilation and draught, if possible. See also, the IMPORTANT warning notice below about persistent fumes.

During this process you must be careful not to touch the painted surfaces, and it is recommended that you regularly open and close the door to prevent the door seal from sticking.

The stove may also produce "clicking noises" during heating and cooling, caused by the large temperature differences which the material is subjected to.

Never use any type of liquid fuel for kindling or maintaining the fire. There is a danger of explosion.

The stove gets very hot when in use always wear protective gloves when tending the stove.

If the stove has not been used for a while, follow the steps as if you were using it for the first time.

#### IMPORTANT - Warning Note!

Properly installed, operated and maintained this appliance will not emit fumes into the dwelling. Occasional fumes from de-ashing and re-fuelling may occur. However, persistent fume emission is potentially dangerous and must not be tolerated. If fume emission does persist, the following immediate actions should be taken:

- 1. Open doors and windows to ventilate room.
- 2. Let the fire out or eject and safely dispose of fuel from the appliance.
- 3. Check for flue or chimney blockage, and clean if required.
- 4. Do not attempt to relight the fire until the cause of the fume emission has been identified and corrected. If necessary seek expert advice.

#### IMPORTANT - Warning Note!

Do not use an aerosol spray on or near the stove when it is alight.

#### IMPORTANT - Safety advice!

When using the stove in situations where children, aged and/or infirm persons are present a fireguard must be used to prevent accidental contact with the stove. The fireguard should be manufactured in accordance with BS 8423:2002 (Replaces BS 6539).

#### Lighting and fuelling

NOTE: If airsystem is connected, the valve must be open.

#### TIPS before firing up:

Open a door or window close to the wood burning. If there is a "storm" in the stove coming from the chimney, it is advisable to place a screwed-up piece of newspaper between the upper baffle plate and the chimney, set the paper on fire, and wait until you hear a "rumbling" noise in the chimney. This means that there definitely is a draught in the chimney and you avoid smoke in the room.

"Top-Down" lighting (see back of manual)

- Open the door fully until it is locked in the open position.
- Start by placing approx. 1 kg of wood (i.e. 2 pcs. of split logs) at the bottom of the combustion chamber. Place approx. 1.2 kgs of dry firewood, split into kindling sticks, on top the logs and a couple of alcohol briquettes or similar (1).
- Light the fire (2-3)
- Close the door and leave it ajar by pulling the door handle.



• Close the upper convection plate of the stove. (turn handle clockwise). This ensures a faster heating of the stove.



- When the fire has caught the kindling wood (4) close the door completely (after approx. 3-10 min., depending on the draft conditions in the chimney).
- When the last flames are extinguished and there is a nice layer of embers (5), add
   1-2 pieces wood about 1-1 ½ kg.
- Close the door completely.
- If necessary keep the door open for a few minutes to start the fire.
- The upper convection can now be opened again (turn handle counterclockwise). Hereby more warm air will emit to the dwelling.



#### NOTE!

If the fire has burned down too low (too small an ember), it may take longer time to get the fire going again.

When re-lighting it helps to close the upper convection. This ensures a faster heating of the stove.

When firing the smoke out of the chimney should be almost invisible; just a 'flicker' in the air is opserved.

When refueling, open the door carefully to avoid smoke escaping. Never add wood while it is burning (flames!) in the stove.

RAIS recommends to refuel with 1-2 pieces wood - approx. 1-1  $\frac{1}{2}$  kg - within  $\frac{1}{2}$  hours (intermittent operation).

#### ATTENTION!!!

Keep an eye on the stove when lighting. During operation the door should always remain shut.

#### Control

Look for signs that indicates a correct firing in the stove:

- ash is white
- the walls of the combustion chamber is free of soot
- the wood is sufficiently dry

#### Warning!!

If the firewood is only burning slowly without flames or is smoking, and too little air is added, unburned exhaust gasses are developed.

Exhaust gasses can be ignited and explode, leading to damage to material and possibly personal injury.



# If there are only a few embers remaining you must light the fire again.

If you just add firewood the fire will not be lit, but unburned exhaust gasses will develop.



Here firewood has been added to an ember layer which is too small, and the air flow is too small - smoke is developed.



# Avoid heavy smoke - danger of exhaust gas explosion.

In case of very heavy smoke, open the door and light the fire again.

#### Cleaning and care

#### Glass

Most woodstoves use a ceramic glass product which is resistant to heat but requires cleaning to keep its appearance.

Soot or opaque marks can easily cleaned if the marks are fresh, however If you leave the glass dirty for any length of time the acid from the wood can etch the surface of the glass permantley (wet unseasoned wood, soft wood such as used in the building industry, pallet wood should be avoided).

Only clean when cold.

Use only stove glass cleaners to re-move heavy tar/ soot deposits.

All other marks can normally be removed with a damp cloth, then dry with a clean cloth or newspaper, do not let the glass dry before applying a dry clean cloth.

With more stubborn marks i.e. opaque areas/frosting, you need put a small amount of wood ash on a clean damp cloth. If the opaque mark/frosting doesn't come out, contact your dealer for a special remover.

#### Paint finish

The appliance has been coated with a high temperature paint which can last for years. Do not clean with a damp cloth or any cleaning products as they can cause rust or discolouration. Only clean when cold use a brush with soft bristles or dust with a lint free cloth. Only re-spray when necessary.

The wood burning stove and the chimney must be serviced by a chimney sweep twice a year. During cleaning and care, the stove must be cold.

#### Prolonged period of non-use:

If the stove is to be left unused for a prolonged period of time then it should be given a thorough clean to remove ash and unburned fuel residues. To enable a good flow of air through the appliance to reduce condensation and subsequent damage, leave the air controls fully open.

Prior to a new heating season, it should be checked that the chimney and smoke gas connector are not blocked.

#### Cleaning the combustion chamber

Scrape/shovel the ash out and store it in a non-flammable container until it has cooled down. You can dispose of ash with your normal household waste.

REMEMBER!! Never remove all the ashes from the combustion chamber - the wood will burn at its best with a layer of ashes of approx. 20 mm. Remove gently the steel dome and the small front glass (ash stop).

#### Cleaning of flue ways

In order to acces the flue way remove the smoke converter plate (vermiculite) og smoke chikane (steel plate with vermiculite).

Gently remove the smoke converter plate (vermiculite) by tilting it to one side and turning it a little slantwise.

Pull out the plate carefully.



The smoke chikane is lifted, tilted to one side, lowered and removed.



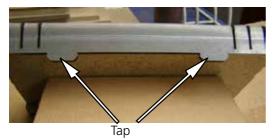


Remove dirt and dust, and mount the parts in reverse order.



#### NOTE!!

Be careful when replacing the smoke converter plate and smoke chikane Make sure that the tabs from on the smoke chikane 'catches' the holes in the stove.



Holes



Front of stove-bottom view

#### Interruption of operation

#### Smoke spillage around door:

could be due to too low draught in the chimney <12Pa

- check whether the flue or chimney is blocked
- check whether the extraction hood is switched on; if it is, switch it off and open a window/door in the proximity of the stove for a short while.

#### Soot on glass:

could be caused by the firewood is too wet.

• make sure that the stove is heated properly when firing up, prior to closing the door

#### Stove is burning too strong:

could be caused by:

- leak around the door seal
- chimney draught too large >22 Pa, draught control regulator should be installed.

#### Stove is burning too weakly:

could be caused by:

- too small amount firewood
- too little air supply for room ventilation
- unclean smoke channels
- leaky chimney
- leakage between chimney and flue

If your stove continues to malfunction, we recommend that you contact your RAIS distributor or chimney sweep.

#### WARNING!!

In case of chimney fire:

- shut off all air supply from outside (if installed) to the stove
- contact the fire department
- never attempt to put out fire with water!
- afterwards, you should ask your chimney sweeper to check the stove and chimney

#### IMPORTANT!!

- to ensure safe burning there must be clear yellow flames or clear embers at all times.
- the firewood should not be smouldering.

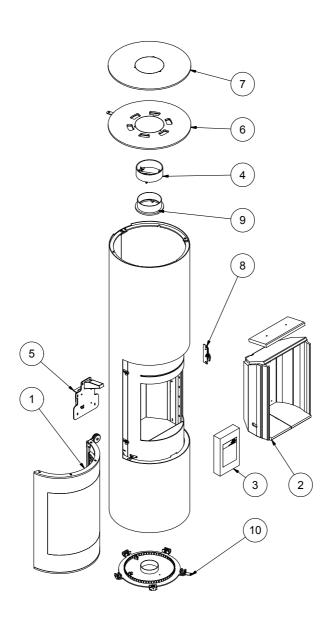
#### Spare parts

If spare parts other than those recommended by RAIS are used, the warranty is voided. All replaceable parts can be bought as spare parts from your RAIS distributor.

For reference see spare parts drawing (next page).

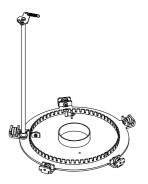
Pos.	Quantity	Part no.	Description	
1	1	1511090	Glass door	
2	1	1512200	Fire brick set	
3	1	1015500	Seal set for glass door	
4	1	61-00	Flue collar 6"	
5	1	1510990	Air damper	
6	1	251060180	Top plate w. convection (stainless steel)	
	1	251060190	Top plate w. convection (black)	
7	2	251061190	Top plate	
8	1	1311890	Closing mechanism	
9	1	61-105	Flue collar 5"	
10	1	2511590	Swivel base	

# Spare parts drawing PILAR 13



#### Accessories PILAR 13

Swivel base - complete



Air kit 24 (wall 000651724xx (xx: optional color code)

Air kit 25 (floor) 00065172590



#### **DECLARATION OF PERFORMANCE**

#### Regulation (EU) 305/2011 No. 0001 — CPR-2013/07/01

No.: 151

1. Unique identification code of the product-type

RAIS PILAR 13 L RAIS PILAR 13 H ATTIKA PILAR 13 L ATTIKA PILAR 13 H

Room heater burning solid fuel without hot water supply

3. Intended use

Domestic room heater

4. Manufacturer

RAIS A/S

+45 98 47 90 33 Telephone

Industrivej 20, Vangen DK-9900 Frederikshavn,

Telefax Webmail Homepage +45 98 47 92 91 kundeservice@rais.dk www.rais.com

Denmark

5. Authorised representative System of assessment

AVCP 7. Notified body System 3

The notified laboratory

Danish Technological Institute - Identification no. 1235 Teknologiparken, Kongsvang Allé 29, DK-8000 Århus C

performed the determination of the product type on the basis of type testing under system 3 and issued test report

a. 300-ELAB-2006-EN

8. Declared performance

Harmonized technical specification

EN 13240:2001/A2:2004/AC:2007

Essential characteristics	Performance	
Fire safety		
Reaction to fire	A1	Uninsulated flue
Distance to combustible materials	Rear	50
Minimum distances [mm]	Sides	350
For other installation settings	Ceiling	
see instruction manual	Front	850
	Floor	- 50
Risk of burning fuel falling out	Pass	
CO-emission of combustion products	0.0706 %	
Surface temperature	Pass	
Electrical safety	Pass	
Cleanability	Pass	
Maximum operating pressure	- bar	
Flue gas temperature T at nominal heat output	220 °C	
Mechanical resistance (to carry a chimney/flue)	NPD	
Thermal output		
Nominal heat output	4.8 kW	
Room heating output	4.8 kW	
Water heating output	- kW	
Energy efficiency 7	83 %	

9. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

Place

FREDERIKSHAVN, DENMARK

Date

13/9-2013

Henrik Nørgaard, Managing Director

Signature





RAIS A/S Industrivej 20 DK-9900 Frederikshavn www.rais.dk