

Brugsvejledning

Bedienungsanleitung

User Manual

UK (25-35)

Eldningsinstruktion

Mode d'emploi

FR (46-56)

Manual de usuario

ES (57-66)

Manuale d'uso e manutenzione

DK/NO (2-13)

DE (14-24)

UK (25-35)

SE (36-45)

FR (46-56)



Asgård/Baseline 1 & 2

EN13240 - NS3058

aduro.dk / aduro.no / adurofire.de / adurofire.com adurofire.se / aduro.fr / aduro.es / aduro.it

Congratulations on your new Asgard Stove!

To get the best possible experience and benefit from your new Asgård wood burning stove, it is important that you read the user manual thoroughly through before you install the stove and start using it. Errors or incorrect settings can cause hazardous conditions and/or poor operation.

For further information, please go to www.adurofire.com.

Production number

The wood stove has a production number on the rating plate on the back of the stove. We recommend that you note down this number in the box below before mounting the wood stove. For the purposes of the guarantee and for other enquiries, it is important that you are able to quote this number.



Enjoy!

HOW TO SUCCEED WITH YOUR NEW WOOD STOVE

On our YouTube channel "Aduro Fire" you will find tips and tricks on how to succeed with your new Asgård wood stove. We show you how to light to stove, how to check the moisture content of your firewood, and much more. Find us here and make the most of your Asgård wood stove.



1. General

1.1 Compliance

Asgård 1 & 2 complies with the EN13240 European standard as well as the NS3058 Norwegian standard and is thereby approved for installation and use in Europe. At the same time, the manufacturing process is subject to external quality control. DoP (Declaration of Performance) can be downloaded at www.adurofire.com/download.

1.2 Technical data

Asgård 1 & 2	Data
Nominal power	
·	5.0 kW
Flue outlet, diameter	Ø15 cm top
Measurements (HxBxD)	Asgård 1: 92 x 53.3 x 36 cm
	Asgård 2: 83.2 x 53 x 35.5 cm
Height exhaust branch above floor	75.2 / 66.7 cm (Asgård 2)
Distance from centre of exhaust branch to rear edge of stove	14 / 13.5 cm (Asgård 2)
Weight	70 / 58 kg (Asgård 2)
Material	Sheet iron
Fuel	Wood and wood briquettes
Max wood length	32 cm
Convection stove	✓
Primary, secondary, and tertiary air supply	✓
Air-wash system	✓
Ashpan	✓
Energy efficiency	80.5%
Energy efficiency index	110.2
Energy efficiency class	A+
Chimney draft	12 Pa
Maximum combustion amount per hour (wood)	Ca. 2.5 kg
Heat rating in buildings with	
- Optimum insulation	130 m2
- Average insulation	90 m2
- Inadequate insulation	50 m2

1.3 Transportation

When taking your wood burning stove home, please ensure that it travels in an upright position. If you wish to lay it flat, it is important that you remove all loose parts from the combustion chamber (cast iron grate and loose fireproof tiles) and remove the ashpan. Please use wood from the packaging for the first use. The plastic packaging should be discarded.

2. Installation of the stove

You are welcome to install your wood burning stove yourself – but we strongly recommend that you consult your chimney sweep before you begin the installation. It is important to ensure that all local rules and regulations, including ones relating to national and European standards, are complied with when installing this device. Your dealer can also provide you with installation advice. Remember, it is your responsibility that rules in force are complied with.



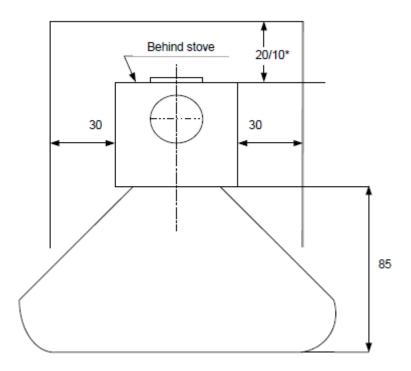
You may not begin to use the stove until it has been inspected and approved by your local chimney sweep.

2.1 Position of the stove / distance requirements

The wood burning stove must be installed in a suitable and physically possible position. You need to be sure that the position complies with local regulations. Distance requirements will only apply if the wood burning stove is to be placed close to flammable materials:

Distance to flammable material (see illustration below)				
Behind the stove	Behind stove with insulated flue pipe	To the sides	Above the stove	Distance to furniture
20 cm	10 cm	30 cm	75 cm	85 cm

^{*} When using an insulated pipe



If the stove is positioned against a brick wall or other non-flammable material, there are no minimum distance requirements. To facilitate cleaning and for the best use of the convection air, we recommend that you leave a distance of approximately 5-10 cm to the wall.

If the wood burning stove is to be placed close to flammable material such as a wooden floor or carpet, it must be placed on a non-flammable base. The floor plate should extend for at least 30 cm in front of the wood burning stove and 15 cm on each side measured from the opening of the combustion chamber.



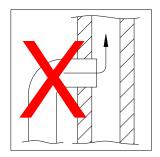
The wood burning stove must be installed on a floor with the adequate loadbearing capacity. If the existing construction does not meet this requirement, appropriate adaptation measures must be taken (e.g. a load-distributing plate).

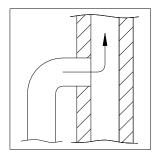
2.2 Pipe connection

Asgård 1 & 2 leaves the factory with the flue outlet mounted on the top. A flue pipe with an internal diameter of 150 mm should be used for Asgård stoves.

2.3 Connection to a brick chimney

If the stove is being connected to a brick chimney, the rear outlet or a curved flue pipe via the top outlet should be used. After measuring, a hole is made in the chimney in which the pipe sleeve is placed and stove mortar is used to seal it in place. The stove is placed in position and the flue pipe is put in place. A thin gasket is placed between the flue pipe and the pipe sleeve to seal the joints. The flue pipe should protrude into the pipe sleeve, but must not block the opening in the chimney (see the illustration below):





The stove can be connected to a chimney to which other heat sources are connected.

3. Lighting the stove

Important safety information

- The wood burning stove will become warm during use and therefore it should be treated with all necessary caution.
- Never keep easily combustible fluids such as petrol in the vicinity of the wood burning stove.
- Never use easily combustible fluids to light the fire in the wood burning stove.
- Never empty the ashpan when the wood burning stove is warm. Embers may still be found in the
 ashpan for up to 24 hours after the fire has gone out. Please wait to empty the ashpan until you
 are sure that there are no embers in the ash.
- The door should be kept closed while the wood burning stove is in use. While lighting the fire, the door can stand ajar for the first few minutes.
- In the event of a chimney fire: Close all the dampers on the wood burning stove and call the firefighting service.

3.1 Damper

The stove is equipped with different dampers, which regulates the combustion air: primary, secondary, and tertiary air supply. The primary air is used at the beginning to get the fire going, the secondary air keeps the fire burning evenly, and the tertiary air ensures that flue gasses are burned. You must always add secondary and tertiary air, while firing the stove.

3.1.1 Secondary damper

The secondary damper should always be open while the wood burning stove is in use. This damper allows you to adjust the wood burning stove to the chimney draft and the heat output you require. In normal circumstances, the wood burning stove should be working with this damper open between 60% and 100%. You should never close the air intake so far that the flames are extinguished. There should always be visible flames in order to achieve clean and efficient combustion. The air-wash system, that minimizes soot collecting on the glass panes, is also adjusted by this damper.

If you wish to fire the stove with the lowest effect possible – around 3 kW – you must close the secondary damper almost completely 45 minutes after the wood has been put in. At this point there are only few flames and the stove can burn clean by using the tertiary air from behind in the stove.

3.1.2 Primary damper

When you add a new log, the primary air intake/damper should be opened until the fire is burning properly. In order to utilize the fuel to the fullest extent, the embers should have burnt for so long that it is necessary to open the primary air intake for approx. 2 minutes to get the new log to burn. In order to reduce the risk of ash falling from the stove when the door is opened to add more fuel, it is a good idea to open the primary air intake/damper for approx. 1 minute before the door is opened. This increases the draught through the stove and reduces the risk that ash will drop on the floor.



If you overload the wood burning stove and burn more than approx. 2.5 kg wood/hour, there is a risk that the lacquered surface of the stove will become discoloured and eventually fall off. The stove can be resurfaced, but this is not covered by the manufacturer's guarantee. In the same way, any other damage to the stove caused by overloading will not be covered by the guarantee.

3.3 Ventilation / fresh air supply

In order for the wood burning stove to function at optimum efficiency, air is needed for the combustion process. There must be sufficient fresh air coming into the room containing the wood burning stove. In very well-insulated houses, or houses with powerful cooker hoods and/or air conditioning systems, a vacuum can be created around the wood burning stove, leading to smoke leakage and poor combustion. In these circumstances, it might be necessary to open a window to provide air for combustion and to equalize the vacuum. Alternatively, you could fit an air vent in the room containing the wood burning stove. The amount of air needed for combustion is 25 m³/h. Air vents must be positioned where they cannot be blocked.

3.4 How should I use my wood burning stove?

The wood burning stove is intended for *intermittent* combustion. This means that each stoking should burn down to embers before new logs are added. Please respect the max load line when adding wood logs.

To obtain the best possible combustion, you should regulate the effect/heat output with the fuel. Burning small logs provides more powerful combustion than burning large logs as the surface area is greater and more gas is released. The amount of wood in the combustion chamber is another factor that affects combustion. The optimum combustion is achieved by placing two logs in the stove. If you want an enhanced effect, you can add more logs. The ideal heat output is reached by burning approx. 1.3 kg per hour.



Use of dry wood of the right size is important to achieve optimum combustion.

3.5 The first time a fire is lit

The wood burning stove is packed in recycling packaging. The wood from the packaging can be sawed into smaller pieces and used the first few times a fire is lit. The plastic packaging must be disposed according to national rules regarding disposal of waste.

The first few times the wood burning stove is used, there may be some smoke and unpleasant odours from the wood burning stove, which is fairly normal. This is caused by the heat-resistant paint hardening. Make sure there is sufficient ventilation during this stage. It is also important not to let the fire burn too fiercely the first 2-3 times, so that the wood burning stove has time to expand slowly.

You should also be aware that the stove may make some clicking sounds as it heats up and cools down – like pouring boiling water into a sink. These are caused by the great differences in temperature to which the materials are being exposed.



During the first firing, which should be carried out using approximately 1 kg of wood, the stoking door must be left slightly open and must not be closed until the stove is cold. This is to prevent the sealing rope sticking to the stove.

3.6 Lighting a fire in the wood burning stove

The fire lighting method is very important for starting combustion quickly and efficiently.

- 1. Open the primary damper at the bottom of the door and the secondary damper at the top of the door. The illustration below shows the stove seen from the front with the dampers indicated.
- 2. Place a log of wood crosswise in the combustion chamber and put 2 firelighters close to the log. Light the firelighters and quickly put a new log close to the firelighters and several small logs at an angle above it. Air must be able to reach the firelighters, but the logs should be touching to "warm" each other.
- 3. Keep the door approx. 1 cm ajar, until the glass is too hot to touch. Then close the door. When there are distinct, visible flames and the fire has taken hold, close the primary air intake/damper (see section 3.1.2).



The control handles will get warm when the wood burning stove is in use. Please use the glove provided when you operate the wood burning stove.

3.7 Recommended fuels

Wood and wood briquettes. We recommend the use of split hardwood that has been stored outdoors under cover for at least 1 year. Wood that has been stored indoors has a tendency to become too dry and will burn too quickly. We recommend that you fell the wood during the winter when a lot of the moisture in the wood will have been drawn down into the roots. In order to achieve optimum combustion, the wood's moisture level should not exceed 18 %, which roughly corresponds to storing the wood under cover outdoors for one year. The moisture level of the wood can be measured using a moisture meter or by applying dishwashing liquid to one end of the log and blowing air in the other end. If the wood is dry enough, soap bubbles will appear. The wood should be chopped into logs with a diameter of approx. 10 cm and a log length of max. 32 cm. Firing with wet fuel will reduce the energy efficiency and increase the particle emission.

Burning varnished wood, impregnated wood, chipboard, paper, and other waste is strictly forbidden. Burning these materials will damage the environment, the wood burning stove, and your own health. Fossil fuels must not be used.

4. The chimney

The optimum combustion is achieved at a constant chimney draft of 10-14 Pascal (Pa) measured in the flue pipe above the stove (when having a smoke exhauster). However, with natural draft (chimney without smoke exhauster) the draft in the chimney will be between 18-25 Pa when conditions are optimum. There are many factors that affect the chimney draft, including the outside temperature, wind strength, and surrounding buildings. There are no requirements with respect to specific chimney heights, but a chimney must be tall enough to provide a good draft. If the recommended chimney draft is not achieved, there may be problems with smoke out of the door by firing.

Data for chimney calculation	Wood
Flue temperature at [20°C]	367
Chimney draft at testing power [mbar]/[Pa]	0.12 / 12
Flue gas mass flow [g/s]	4.0

4.1 Inadequate draft in the chimney

If the chimney is too short, leaks, or is inadequately insulated, there may be problems with the chimney draft (let the chimney sweep assess this). The draft should be sufficient during the ignition phase when the stove/chimney is cold to provide a clean combustion and prevent smoke leakage. Therefore, we recommend a chimney draft around 5 Pa in the ignition phase.

Once the ignition is a success and the smoke temperature is rising, it is important that the chimney draft reaches a stable area around 18-25 Pa in operation (1 hour after ignition) when the chimney/stove is hot. The draft in the area of 18-25 Pa when the stove is hot is essential in order to achieve an optimum and clean combustion. Therefore, we recommend that you measure your chimney draft when the chimney is cold and when it is hot after 1 hour in operation.

In practice, the chimney draft will differ – especially in cold condition. Therefore, the best indication of the chimney draft is to measure the draft when it is hot. If the chimney sweep judges the draft to be sufficient, but you still have problems lighting a fire, try extending the fire lighting phase by using more thin pieces of kindling and 1-2 firelighters, so that the chimney gets thoroughly warm. The chimney will not draw at optimum effect until it is warm. When a layer of embers has been formed, add 2-3 dry logs.

If it is impossible to establish a sufficiently natural chimney draft, the chimney can be fitted with a smoke exhauster, e.g. Aduro DraftOptimizer.

4.2 Chimney and Smoke

If you experience smoke coming out of the stove or the start section of the smoke pipe, it could be due to certain weather conditions. On stormy or cold winter days or if the chimney has not been used in a while, a cold plug can be created in the chimney, meaning the natural draft will be at its minimum.

If the chimney is cold and cold plugs are created, you may experience smoke leaks during the ignition and startup phase. In this situation there can be more smoke than usually in the combustion chamber and some of it might leak out of the stove. Therefore, if you have a cold chimney that has not been used for a while, we recommend that you use some wood sticks to heat the chimney and eliminate the cold plug.

5. Maintenance and cleaning of the stove



All maintenance and cleaning of the stove should be carried out when it is cold.

Combustion chamber

The fireproof tiles in the combustion chamber eventually wear out and should be replaced when the cracks are more than 0.5 cm. The durability of the tiles depends on how often and how intensively the stove is used. You can change the tiles yourself. They are available as a ready-to-use set. For further information, go to www.aduroshop.com.

Glass

Wet wood, unsatisfactory chimney draft, and wrong use of the stove can leave soot stains on the glass pane. They can easily be removed using a damp cloth that you dip in cold ash and rub on the sooty glass. Special cleaning agents are also available to remove soot from glass, e.g. the Aduro Easy Clean pad. The pad neither scratch nor damage the glass and is for multiple usage. Water or other cleaning agents are not necessary.

It is common maintenance to tighten the glass fittings shortly after the stove has been installed as well as to check if the gaskets are properly placed.

Gaskets

With time, gaskets around glass and door will wear. We recommend that you inspect them regularly. If leakages appear, they must be replaced.

Ashes

Empty the ashpan before it gets completely full. Always leave a layer of ashes in the stove because it insulates and makes it easier to light a fire.

Cleaning the stove

The stove's surface is treated with a heat-resistant Senotherm® paint, which will stay at its best just by being vacuumed with a small, soft mouthpiece or dusted with a soft, dry cloth. Do not use spirit or other solvents, as they will remove the paint.



Do <u>not</u> clean the stove with water. If the stove is exposed to moisture, the stove may develop rust.

The inside of the stove and the flue pipe can be cleaned through the door or alternatively through the cleaning aperture in the flue pipe/chimney. The upper fireproof tile (the exhaust deflector) can be removed. To allow free access to the top of the stove and the flue pipe, remove the exhaust deflector in steel. The flue pipe can be removed from the stove and cleaned. Cleaning of the inside of the stove and the flue pipe should be undertaken at least once a year, or more frequently if necessary, depending on how often the stove is used. This work can also be carried out by the chimney sweep or your local Aduro GO partner.

Repairing the surface

Asgård stoves are painted with a heat-resistant paint that can withstand temperatures up to 500 degrees. If the surface of the stove gets scratched or worn, it can easily be renewed using this type of paint. Everybody can repair the surface and obtain a perfect result. The paint is available in black metallic from your local dealer or at www.aduroshop.com.

Spare parts and unauthorized alterations

You may only use original spare parts for your stove. All forms of unauthorized alterations to the stove are strictly forbidden, as the stove will no longer comply with the approved specifications. At www.aduroshop.com you can buy original spare parts for your stove.

6. Accessories

For Asgård stoves we offer a wide product range of accessories to fulfil the experience: Companion sets, firewood baskets and buckets, fireplace grid, briquette buckets, floor hearths in glass and steel, flue pipes, Aduro Easy Firelighter, and Aduro Easy Clean pad. For further information, go to www.adurofire.com/accessories.

7. Right of complaint

In accordance with the Danish Sale of Goods Act, you have a two-year right of complaint from the date of purchase of the wood burning stove. The dated receipt will be sufficient proof. The right of complaint does not cover damages caused by faulty installation and use of the stove. The right of complaint also does not cover loose and wearing parts (fireproof tiles, glass, gaskets, slides, cast iron gate, and handles) as they are subject to wear during normal use. These parts can be bought as spare parts in our webshop www.aduroshop.com.

In addition, the right of complaint does not cover:

- Damages resulting from incorrect installation and use of the stove, e.g. overheating and wrong or missing maintenance of the stove.
- Damages caused by electrical surcharge, (condensation) water in and around the chimney, too
 much or too little draft in the chimney and missing maintenance/cleaning.
- · Mounting or demounting relating to repairs.

- Transportation costs relating to repairs.
- Damages to the stove caused by external influences or damages caused by the stove on other objects.