



The basics of starting a fire



Heating with wood environmentally friendly

Unlike oil and gas, wood is a renewable resource. It burns CO₂ neutral, because the resulting carbon dioxides during combustion correspond exactly to the amount, which the tree has absorbed during its growth over the air.

Freshly cut softwoods have a relative moisture content of up to 70% and hardwoods up to 100%, which corresponds to a water content of 50%. With such a high water content, a large part of the energy content contained in the wood is required to evaporate the water. Thus, moist wood barely releases usable heat for heating.

In addition condensate is produced during the combustion, that settles as shiny soot in the fireplace and causes odours. In order for wood to burn effectively, clean and with a high calorific value, its relative residual moisture should not exceed 20%. Properly stored, i.e. well ventilated and dry, wood reaches this value after approximately 2 - 3 years.

The strongly bound carbon in wood becomes gaseous only above a certain temperature. Only this gas burns, forms the flames and continuously generates the required temperature for the further combustion process. In order for wood to burn efficient and clean, a wood fire must be constantly supplied with sufficient oxygen. Depending on the burner technology and type of wood, temperatures of up to 900 ° C can be achieved.

The heating value per kilogram of wood is:



Lighting fire

Unlike a campfire, the fire in the fireplace is ignited on the top. Place on top of the logs as small split pieces of dry softwood as a lighting module. Open the combustion air slider to light the fire completely. Always use paraffin lighters or other firelighters to light fire - but never alcohol, gasoline, oil or other flammable liquids, but neither newspaper, cardboard or similar materials. Light the ignition aid on top of the logs.

To speed up the ignition of a cold fireplace, you can optionally open the loading door by a crack, until the fire is burning well. In this case, however, the fire may not be left unattended and the door shall be closed completely, once the logs are burning with a bright flame.

Wood burns best in its own ash bed. Therefore do not remove the ashes after each firing and heat several times in the ash bed.



How to proceed?

Preparation



For a low-emission start you should lay down at least four dry Fir logs with a diameter of approximately 3 x 3 cm and a length of about 20 cm along with a starter (i.e. wax-saturated wood-wool).

1.

Placing in the combustion chamber



Place the logs according to the size of your combustion chamber, as shown on the following pages.

2.

Placing of lighting module



You can simply make a so-called lighting module yourself. Place at least four starter logs crosswise on each other along with lighter inbetween. The lighting module is placed on top of the larger logs and can now be ignited with a match.

3.

How to fill the combustion chambers?

Fireplace inserts up to 55 cm chamber width



Place two logs on the chamber floor.

Fireplace inserts with a 60-80 cm chamber width



Place three logs on the chamber floor.

Fireplace inserts up to 80 cm chamber width



Place four logs on each ash grate on the chamber floor.

Masonry Inserts
7-11 kw



Place the wood amount as noted in user manual on the floor of the chamber.

Masonry Inserts
12 kw



Place the wood amount as noted in user manual on the floor of the chamber.



What can be burnt and what not?

- Wood logs and briquettes.
- The diameter of the log shall only be so big that it can be encircled with both hands (see figure).
- It is recommended to store firewood for at least one day in a heated room. Since cold wood burns poorly.

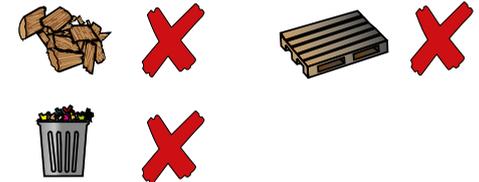
Fire starters are more suitable to light the fire than paper.

Because paper can lead to premature clogging of the exhaust channels. Also magazines, cardboard, wood from treated and non-returnable pallets, crates, wooden furniture, remnants of renovations and demolitions of construction sites do not belong in a fireplace.

Fumes of such materials will attack system parts and damage our health and the environment.



Wood logs and briquettes or wax-saturated wood-wool



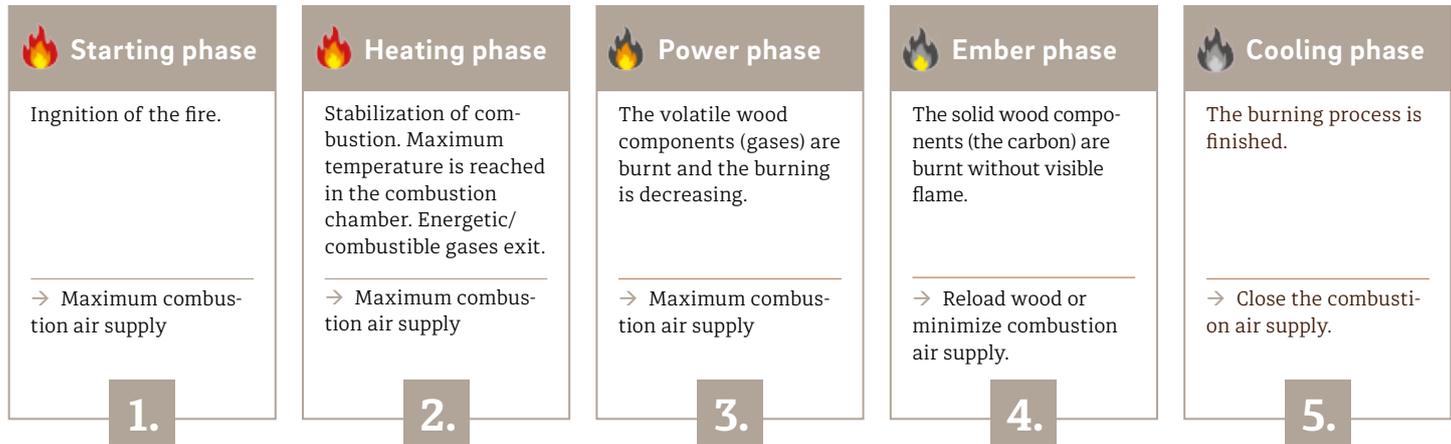
Wood chips, skids, waste or wastepaper

Further Information on Operation

Read the manual and make sure, that you do not overfill the combustion chamber. For the initial wood amount please load as recommended in the user manual. Cooled wood ash should be disposed regularly after 10 heating processes, but at the latest when the air supply is obstructed or when ashes are able to fall out. For further information, contact your local authority, chimney sweeper, your dealer or our websites www.schmid.st and www.camina.de.



The burning phases

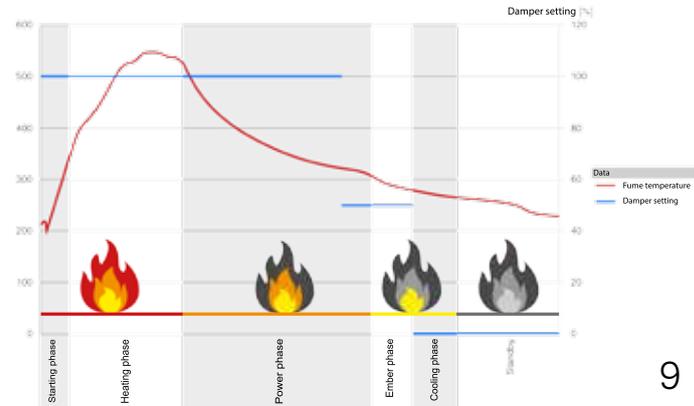


Further notes

A fireplace requires dry wood, a good handling and adequate supply of air during the fire.

When regulating the combustion air manually leave the air damper fully open until reaching the ember phase. To optimize the fire, we recommend using the SMR - Schmid Multi-Regulation.

This regulates the supply of combustion air continuously, thus reducing emissions and increasing the burning time and the efficiency.



The electronically controlled fire

In addition to the safe operation of the fireplace the SMR regulates - Schmid Multi regulation- the optimal burning process.

The regulation guarantees an optimum energy yield and a high economic viability. The display informs you about all data relevant burning processes.



After igniting the fire the burning process is regulated without any interaction from you.

The combustion can be optimally matched to each Combustion system. Place the wood in the firing chamber and ignite it - The rest is done by the SMR - Schmid Multi-regulation.

The combustion air is controlled perfectly via a servomotor.

Part-time and continuous use fireplaces

All fireplaces of the brand Schmid / Camina are for part-time operation.

Wood fires are part-time fireplaces and therefore the heating process is not burning continuously. The duration of the combustion depends on the amount of wood loaded and air quantity. There is no time limitation on operating time. Part-time fireplace are operated with logs.

Continuous burning fireplaces are operated continuously. The continuous operated fireplaces are fueled by coal.

A continuous burning function with logs is due to the shorter combustion time difficult to achieve.







Cleaning and Maintenance

Signs of use on the glass of your fireplace doors are unavoidable. But you can greatly limit this through proper operation:

- When starting a fire in a cold fireplace keep the door slightly open but not unattended.
- Make sure that the fireplace is always supplied with combustion air.
- Only operate your fireplace with dry wood.
- Never use paper or newspaper when lighting a fire.
- Light the fire always from the top (see page 4 ff). When starting the fire from ontop you will help to evenly spread the fire with a minimal amount of smoke. This considerably reduces the sooting of your glass.
- Only lock the air supply in the ember phase of your fireplace. So the airwash system of your fireplace remains in tact as long as possible.
- You can easily clean off light sooting on your glass, prior to the next fire with a paper or cloth towel. Stronger sooting can be easily removed with a fireplace glass cleaner.

What if? Problem, causes and solution.

Soot build-up on glass or combustion chamber	
Cause	Solution
Wood is too wet.	Use wood with a water content of max. 20%.
Chimney draft is either too low or too high.	Adjust chimney draft with: → either Schmid Draft System (SNV) → or Smoke exhaust
Door does not seal.	Check sealing cord.
Air supply closed.	Open air supply completely.
False fire ignition.	Place large wood logs on the bottom and small ones on top. Ignite from ontop (p. 4).
Wood amount not sufficient.	Place recommended wood amount according to the size of combustion chamber as explained in user manual.

Smoke escapes into the room when opening the door	
Cause	Solution
The door is opened too fast.	First unlock the door to create a pressure equalization and then open slowly.
Air control open.	Close the air control completely and then open slowly.
Wood is too wet.	Use wood with a water content of max. 20%
Chimney draught is not working.	Smoke should rise visibly out of the chimney.

Wood logs are burning too fast	
Cause	Solution
Chimney draught too high.	Install draught regulator system - for testing you can try to open the chimney cleaning door, but only when fumes enter the chimney above the door.

Poor burning of wood

Cause	Solution
Wood is too wet.	Use wood with a water content of max. 20%.
Wood too thick.	Only use split wood.
Air supply closed .	Open air supply completely.
Chimney draught too low.	Preheat the chimney with a small pilot fire.

Refractory lining has cracks

Cause	Solution
Rough use when placing wood	Wood must be placed with care and not thrown.
Normal wear and tear due to the high temperatures in the combustion chamber.	Should larger pieces break off, replace lining. Otherwise continue to heat normal.

Questions?

Should you have any questions or problems then please consult your dealer, professional craftsman or other authority. service@schmid.st.

For more useful tips and information, visit our website www.schmid.st.

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We would be happy to offer you our advice!

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