## Lighting Instructions





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# Lighting in the right way

It is important that the correct amount of wood is used, especially when lighting. If you are lighting the fire for the first time you should use a set of scales to see how much 2.0 kg kindling is. Also check what the normal and maximum weights look like. The stove may only be lit with the hatch closed.

Always open the hatch carefully and slowly to prevent blow back because of the changing pressure in the stove.

The function of the stove differs depending on the draft conditions in the chimney. Achieving the correct setting for the combustion air damper, suitable size and amount of wood usually takes a few attempts.

#### Correctly sized wood

Note that if too little kindling is used when lighting, or if the wood is too thickly cut, the firebox will not reach the correct operating temperature. Incorrect lighting can lead to poor combustion with heavy sooting and may result in the fire going out when the hatch is shut.

Kindling: Finely chopped wood Length: 25-30 cm Diameter: 2 - 5 cm Amount per firing: 2.0 kg (approx. 10-12 finely chopped pieces)



Feeding Wood: Chopped wood Length: 25-30 cm Diameter: 7 - 9 cm Normal amount: 1.3 kg/hour (2 pieces) Max amount: 2.4 kg/hour (max 3 pieces per insertion. Max 1.8 kg per insertion)





### Important!

It is important that the wood catches fire quickly. Quick lighting is achieved by opening the combustion air damper fully or by leaving the hatch ajar for a moment.

Pyre lighting produces a lot of smoke and can cause quick gas ignition in the worst instance resulting in hearth damage.

#### Lighting

If the house has mechanical ventilation, open a window near to the fireplace prior to lighting. Leave the window open for a few minutes until the fire has caught properly.

#### NOTE!

#### The left hand handle that controls the grate disc must be closed during lighting.

- 1. Open the control for the combustion air fully.
- 2. Insert paper or firelighters and about 2.0 kg of thinly chopped kindling into the firebox. Stack the wood crosswise.
- 3. Light the fire.
- Set the hatch to the lighting position, that is with the lower hook against the lock roller to create a sufficient gap (see figure).
- 5. When the fire has caught fully after approx 5-10 minutes, close the hatch completely.
- 6. A slight amount of soot may build up on side glass during the start-up fire. This is normal and vanishes after a period.
- 7. A fresh load of logs should not be put on until the start-up fire has become a glowing bed of embers.



#### Adding wood

- 1. Open the hatch a few centimetres and allow the vacuum in the firebox to equalise for a few seconds before opening the hatch fully.
- 2. Add 2-3 logs of a combined weight of approx 1.2–1.5 kg. Lay the logs diagonally on each other so that the flame can take easily. Then close the hatch.
- 3. The combustion damper must be completely open for 3-5 minutes or until the logs turn black and catch fire. If slower combustion is then required, the supply of combustion air can be reduced. The conditions for controlling combustion vary depending on the temperature in the firebox and the draft in the chimney.
- An average energy output of 5 kW is achieved when the combustion air damper is 40% open and 2 logs weighing about 1.3-1.5 kg are added once per hour.
- 5. The lowest output of 3-4 kW is obtained when the combustion air damper is 30% open. In this operating position it is important that the combustion air damper is fully open for the first 3-5 minutes so that the wood has time to ignite properly before the supply of combustion air is reduced. A condition for regulating the output is a thick bed of embers and high temperature in the firebox. When the fire has died down to embers more wood should be added.

#### Choosing fuel

All types of wood, such as birch, beech, oak, elm, ash, conifers and fruit trees can be used as fuel in the stove. Different types of trees have different densities, the greater the density of the wood the greater the energy value. Oak, beech and birch have the highest density.



## The wood's moisture content

Fresh wood is about 50 per cent water. Some of the water circulates freely between the fibres and some of the water is bound in the cells. The wood must always be dried so that the free water evaporates. The timber is ready for use when the moisture content has fallen below 20%. If wood with a higher moisture content is lit, a large part of the energy content of the wood is used boiling off the water. If the wood is damp, the combustion is also poor, layers of soot and tar build up in the chimney and could, at worst, lead to a chimney fire. In addition, it causes the glass of the stove to soot and may cause discomfort to those living nearby.

To ensure thoroughly dry wood, the wood should be cut in the winter and stored, well aired, under a roof. Never cover the woodpile with a tarpaulin to the ground. The tarpaulin will then act as a sealed cover and the wood will be prevented from drying. Always store a small amount of wood indoors for several days before use, so that the surface moisture has time to evaporate.

#### Do NOT burn the following

Under no circumstances whatsoever may fossil fuels, pressure impregnated wood, painted or glued wood, chipboard, plastic or colour brochures be used as fuel. All these materials can create hydrochloric acid and heavy metals that are damaging both to the environment and the hearth. Hydrochloric acid can also attack the steel in the chimney or the mortar in a stone built chimney. Also avoid using bark, woodchips or other extremely finely chopped wood except for lighting. Fuel of this type causes flashover resulting in too high output.

#### Candles

Do not use old candle stubs as fuel. Melted wax runs down into the stove's damper system and makes the stove unusable. Repairs for this are very expensive.

#### Not too big fires

Fires should not be too big. Large fires are uneconomical and they give off high flue gas temperatures that can damage the stove and the environment. Recommended amount of wood for normal use is 1.3 kg/hour, with the maximum permitted amount of 2.4 kg/hour and covers lighting with chopped birch wood or other broad leaf wood with a moisture content of about 18%. When lighting with the same wood amounts as above but with, for example, conifer wood, higher fireplace temperatures are achieved. The service life of the stove can be cut short if the fire is left at full combustion for long periods, and if the maximum permitted amount of wood is exceeded, parts in the stove can become damaged thus annulling the warranty.

#### When the stove is new

When new, the stove may emit an odour due to excess paint and oil coating that may remain on the panels. The odour will disappear completely after several fires.

#### Maintaining the stove

The glass may become sooty with use, even if the stove is lit with dry wood with a moisture content of 15 – 20%. Regular cleaning with dry paper is usually sufficient to keep it clean. If the soot has been on the glass for a prolonged period use a cleaning agent or a special soot removal agent to remove it. Such agents can be purchased from regular hardware stores or from your local stove dealer. Never use cleaning agents that contain any abrasives, these can damage the glass.

- When emptying the ash-pan, ensure that there are no glowing embers. The ash must be stored in a fireproof container with a lid for at least one week before being disposed of.
- Also clean inside the area where the ash-pan is located, otherwise spilled ash can prevent the ash-pan from being fully inserted and prevent the fireplace door from being closed properly.
- The grate and other cast iron components in the firebox can be cleaned using a wire brush.
- It is important from a combustion point of view to check gaskets, as worn gaskets hinder combustion when the stove draws "extra air".
- Painted parts on the stove can be cleaned using a damp cloth, with a small amount of detergent, if necessary. Damage to painted parts, e.g. small scratches, can be rectified with Contura touch-up paint. Contact your dealer.
- As there is a constant large flow of air through the stove, as cold room air is drawn in and hot air released, dust can collect behind and under the stove. Therefore, the areas under and behind the stove should be regularly cleaned.
- Parts located near the actual seat of the fire may require replacing. Examples of such parts are the hearth surround and grate. The service life of these parts depends on how much and how the stove is used.

#### Managing waste

The stove packaging is cardboard, wood and a small amount of plastic. The materials must be sorted and recycled.



#### Poor draft in the stove after new installation

- Check the dimensions of the chimney so that they correspond to the ones stated in the installation instructions.
- Check that there is nothing in the chimney to restrict the smoke and that no nearby buildings or trees affect the winds around the chimney.

## It is difficult to light the fire and the fire dies after a short time

- Check that the wood is sufficiently dry.
- Too great a negative pressure in the house, for example when using a kitchen extractor fan or other mechanical ventilation.
   Open a window near the hearth before lighting the fire. Also try lighting some newspaper and holding it up inside the firebox to get the draft going.
- The supply air duct from outdoors can be partially or totally blocked. Remove the hose and try test lighting with combustion air from the room.
- Check that the combustion air damper is open.
- The smoke outlet of the stove may be blocked with soot, which can occur after sweeping.
  - Lift the smoke baffle out and check.
- Finally, go through the lighting instructions again.
  Perhaps the amount of kindling was too small and therefore the base embers were too weak and cold to light the next load of wood.

#### Abnormal amounts of soot form on the glass

There is always a certain amount of soot on the glass and this is added to with each lighting. Soot on the glass is caused by three things:

- The wood is damp, which causes poor combustion and generates a lot of smoke as a result.
- Too low temperature in the firebox, which causes incomplete combustion and poor draft in the chimney.
- Handling is not correct, for example the hatch was not in the lighting position for 5-10 min.

Check the moisture content of the wood, ensure that you have good base embers and go through the lighting instructions one more time.

#### Smoke odour around the stove for periods

This can occur when wind blows down the chimney and most often occurs when the wind is from a particular direction. Another reason could be that the hatch was opened when there was a lot of flame.

#### Painted parts have become discoloured

If painted parts have discoloured it is due to excessive temperature in the firebox. The reason for the excessive temperature can be that the maximum amount of wood has been used or that inappropriate fuel has been used (for example building waste, large quantities of finely chopped off cuts). The warranty does not cover damage of this type. If a problem occurs that you cannot rectify yourself, contact the dealer or a chimney sweep. We hope that these lighting tips give you enjoyable, economical and problem free use of your Contura stove.



#### Sweeping

Sweeping the chimney ducts and chimney connections should be carried out by a chimney sweep. Sweep the stove by scraping and/ or brushing. A soot vacuum cleaner is most appropriate however. If a chimney fire occurs or is suspected, the combustion damper and the door must be closed. If necessary, contact the fire brigade to extinguish it. The chimney must always be inspected by a chimney sweep after a chimney fire.

#### Warning

- During operation, the surfaces of the stove become very hot and can cause burn injury if touched.
- Be aware of the strong heat radiated through the hatch glass.
- Placing flammable material closer than the safe distance indicated may cause a fire.
- Pyre lighting can cause quick gas ignition with the risk of damage to property and personal injury.



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