



hwam *I30/55s*

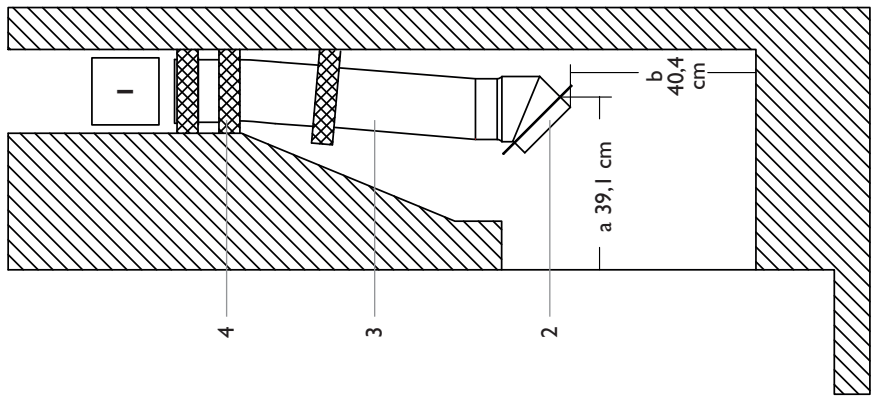
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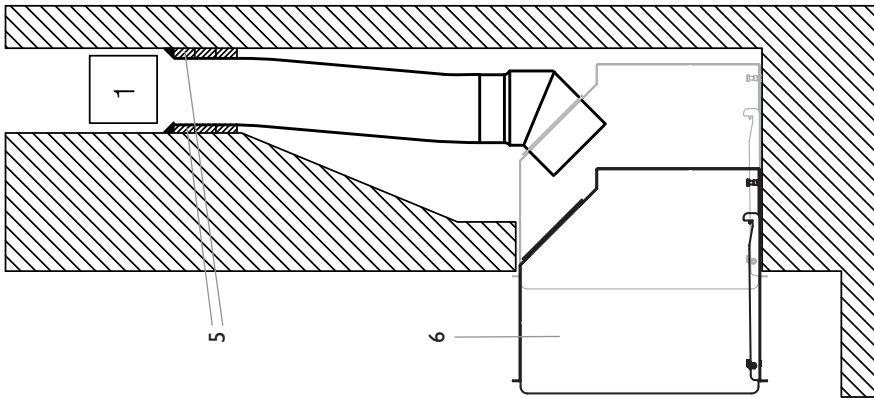
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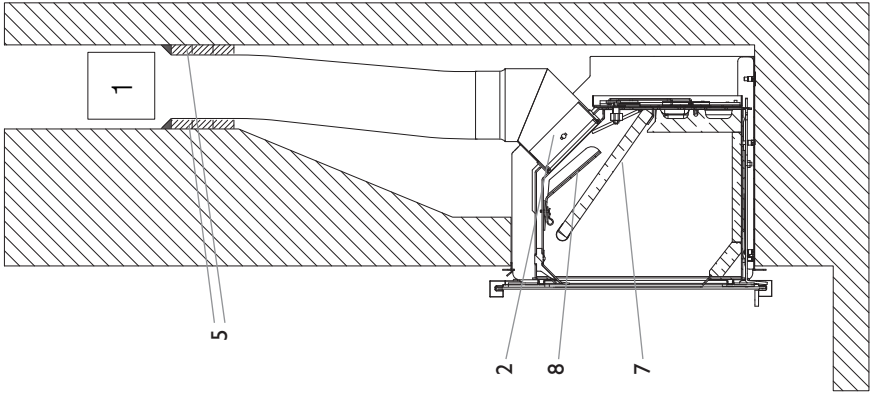
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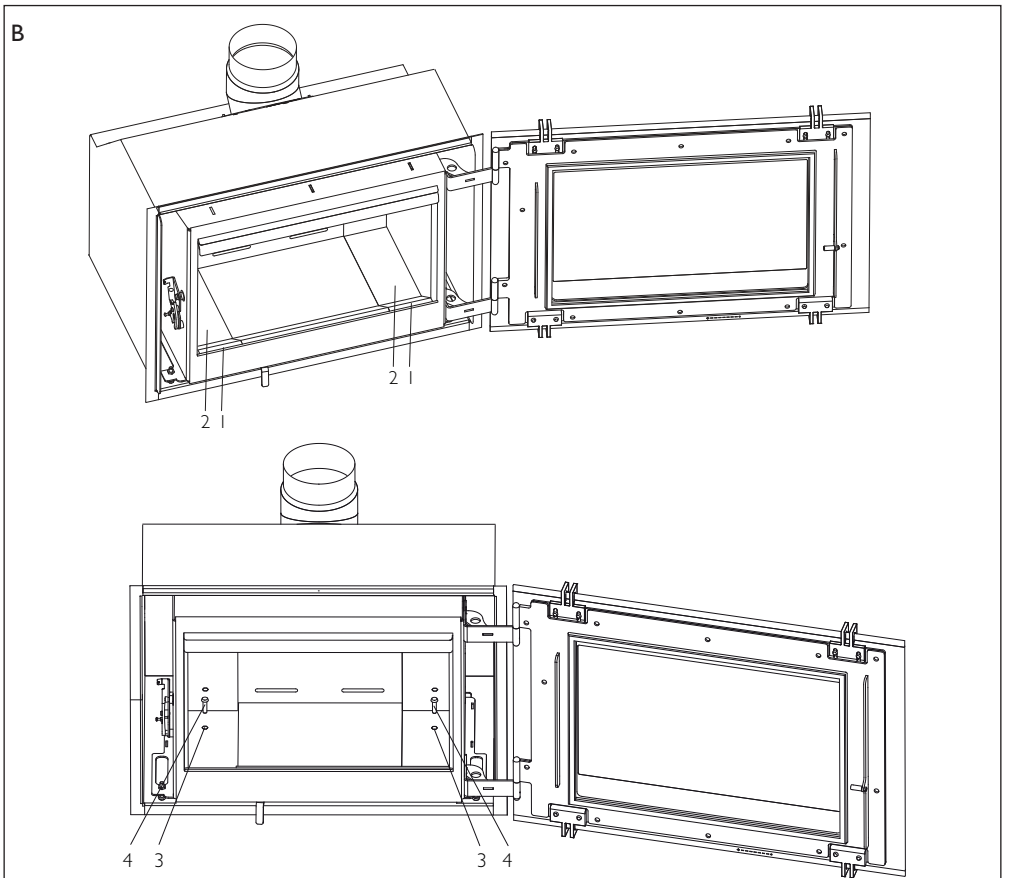
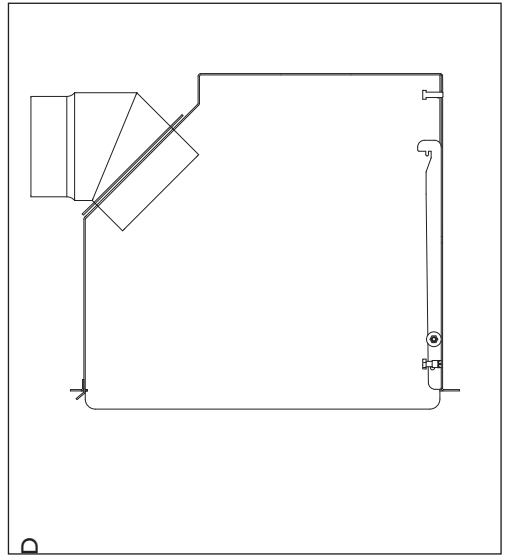
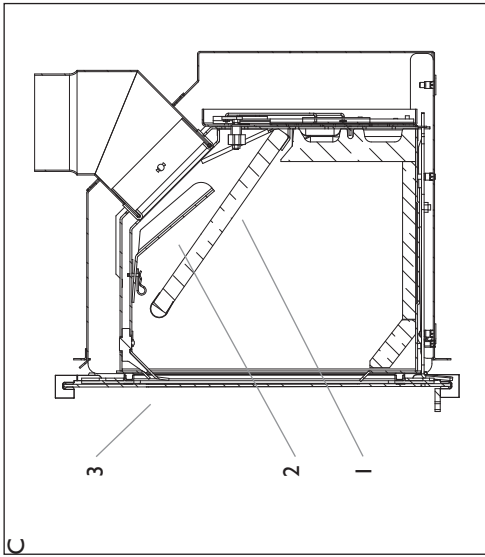


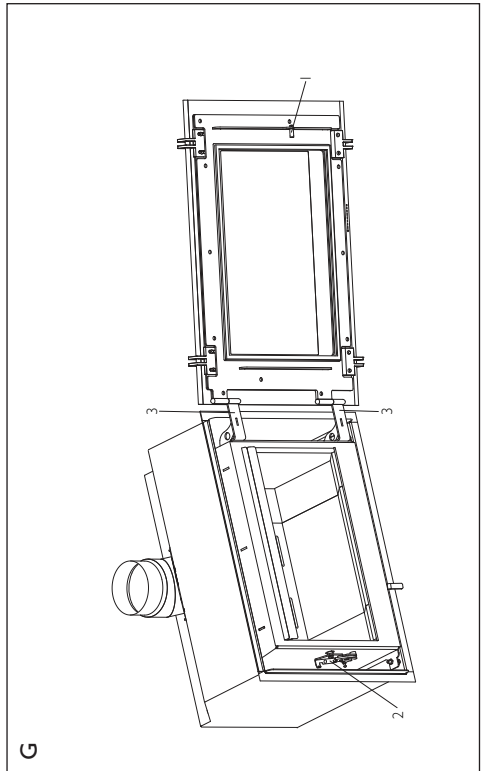
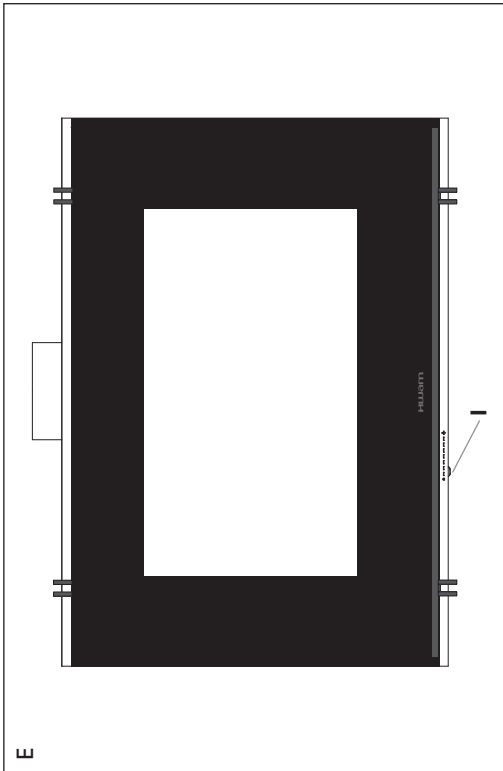
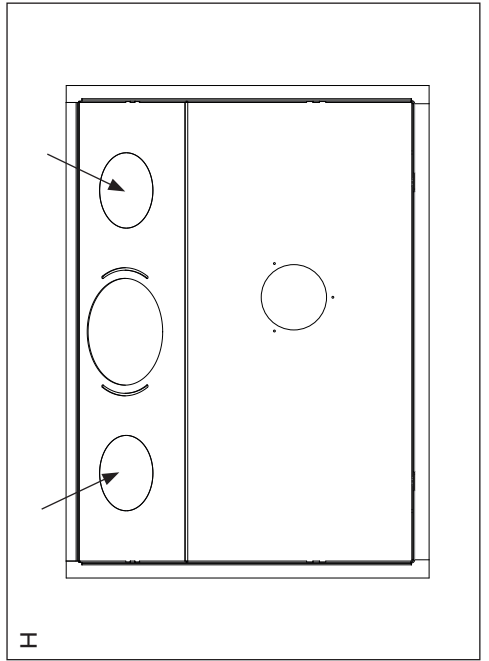
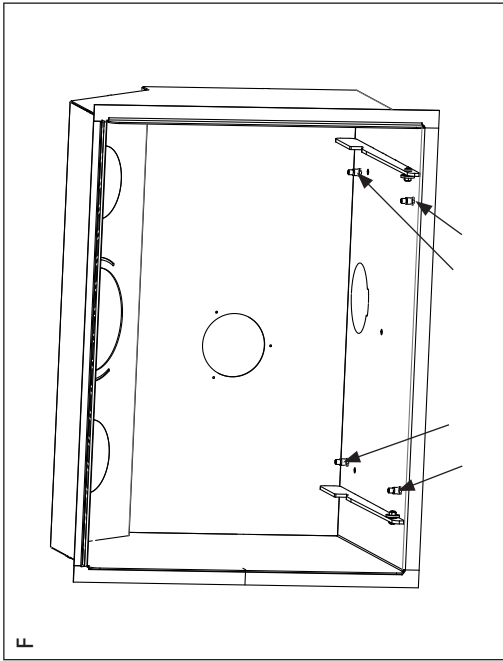
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A3









# INSTALLATION MANUAL

## n general

Congratulations on your new HWAM insert. We are pleased that you have chosen a HWAM insert and confident that it will give you much pleasure. To ensure optimum operation and safety, we recommend that the installation should be carried out by an authorised HWAM retailer or a fitter recommended by the retailer. For an overview of HWAM retailer, visit [www.hwam.com](http://www.hwam.com) under “Retailer locations”.

## Safety

The installation of your HWAM insert must always comply with all European, national and local building regulations. The installation must be carried out in accordance with the instructions in the installation and user manuals and subsequently registered with the local authorities. Upon installation, the chimney sweep must approve the installation before you can start using the insert. All HWAM insert packaging material must be handled in accordance with local waste management regulations.

## Room requirements

Always ensure a supply of fresh combustion air to the room where the insert is to be installed. The insert uses approx. 9-23 m<sup>3</sup> of air per hour (depending on the setting of the air control lever). A window that can be opened or an adjustable air valve will be sufficient. It must not be possible to block the adjustable air valve/grate. In newly built/airtight dwellings, we recommend that a fresh air system should be installed for the direct supply of external air to the combustion. This fresh-air system may be bought separately.

Before installing the insert, make sure that the floor can carry the insert, the chimney and any other parts required for the installation.

Please be aware that not all glass parts are heat-resistant. For this reason, a glass wall should sometimes be treated as a combustible wall, in which case we ask you to contact your local chimney sweep or glass producer to hear at what distance the insert should be kept from glass.

## Technical measures and data

<b>Test results from nominal test EN 13240</b>	
Nominal heating effect	7,0 kW
Flue gas temperature EN 13240 measurement point	275°C
Flue gas temperature measured in the outlet socket	296°C
Exhaust gas flow	5.51 g/s
Efficiency	80.7%
Annual efficiency (EcoDesign)	70.7 %
PM	26 mg/m <sup>3</sup>
OGC	76 mg/m <sup>3</sup>
NO <sub>x</sub>	121 mg/m <sup>3</sup>
CO at 13% O <sub>2</sub>	1125 mg/m <sup>3</sup>
CO at 13% O <sub>2</sub>	0.09 %
Energy efficiency index	107
Energy efficiency class	A+
<b>Test result based on NS 3058</b>	
Particle emissions	3.31 g/kg

The declaration of performance (DoP) can be downloaded from our website, [www.hwam.com](http://www.hwam.com).

Model	Weight	Height	Width	Depth
HWAM I30/55s	92 kg	53.4cm	73.8 cm	47.0 cm

### Floor plate

European, national and local regulations must be observed in terms of the size and thickness of a non-combustible floor covering the floor in front of the combustion chamber opening. Ask your HWAM retailer for assistance. The combustion chamber opening is 56.0 cm wide.

### Distance to combustible materials

Please refer to local building regulations to determine the size of the fireproof area in front of the fireplace. The insert must be positioned at least 30 cm above the floor if the floor is made of flammable material.

If there is combustible material around the outer casing, non-combustible insulation (Fire Batts) is required between the casing and the combustible material. The insulation must be 80 mm thick on both sides of the casing, 120 mm behind the casing and 60 mm thick beneath the bottom of the casing. The requirement for insulation above the top of the casing is 150 mm. The thermal conductivity of the insulation must be less than 0.1 W/m x K (as measured at 200 °C).

### Requirements for chimney and smoke pipe

The height of the chimney must ensure sufficient draught and prevent any smoke nuisance. As a general rule, satisfactory draught conditions are achieved if the chimney is 4 m above the stove and at least 80 cm above the ridge. If the chimney is placed at side walls, the top of the chimney should always be higher than the ridge or the tallest point of the roof. Always be aware of any national and/or local regulations applying to thatched roofs and the location of the chimneys.

The woodburning stove requires a minimum draught of 12 Pa (measured at EN 13240 measurement point). If measured just above the smoke flue socket, the chimney draught must be 18-20 Pa.

The chimney must have a minimum clearing of Ø 150 mm. The chimney must be provided with an easily accessible cleaning door. The chimney and flue duct must be of flue class T400 and be CE marked. Furthermore, it must have obtained the classification of G in soot fire testing. The required distance to combustible material must be complied with in accordance with the brand label. Ask your HWAM retailer for further information.

### Chimney

The chimney is the “engine” of the stove and it is crucial for the functioning of the woodburning stove. The chimney draft provides a partial vacuum in the stove. This vacuum removes the smoke from the stove, sucks air through the dampers for the so-called glass pane rinse which keeps the glass free of soot, and sucks in air through both primary and secondary dampers for the combustion.

The chimney draft is created by the differences in temperature inside and outside the chimney. The higher the temperature within the chimney, the greater the draft. It is crucial, therefore, that the chimney is warmed up properly before closing the damper and limiting the combustion in the stove (a brick chimney takes longer to warm up than a steel chimney). On days where the weather and wind conditions create insufficient draught inside the chimney, it is even more important to warm up the chimney as quickly as possible. The trick is to quickly get some flames going. Split the wood into extra fine pieces, use an extra firelighter, etc.



If the stove has not been used for a longer period, it is important to check that the chimney pipe is not blocked. It is possible to connect several devices to the same chimney. However, it is important to first check the applicable rules.

### **Chimney sweeping**

To prevent the risk of chimney fires, the chimney must be cleaned every year. The flue duct and the smoke chamber above the baffle plate must be cleaned together with the chimney. If the chimney is too tall to be cleaned from above, it must be equipped with a soot door.

In case of a chimney fire, close all dampers and call the firefighters. Before any further use, have the chimney checked by the chimney sweeper.

# MOUNTING AND CONNECTION

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The HWAM I 30/55s consists of a moveable, external brickwork casing, as well as an insert that is pushed into place and connected once the brickwork casing has been assembled.

## **The HWAM I 30/55s can be connected in two ways:**

1. Mounting and connecting in an existing fireplace.
2. New construction around the insert, possibly including heat ducts to other rooms.

### **1. Mounting and connecting in an existing fireplace (Drawing A1-A3).**

Before mounting the insert in a brick-built fireplace, the regulating damper in the existing chimney must be removed and the smoke neck, if any, should be widened so that the fire tube from the insert can be connected directly to the chimney. Any bricks positioned on edge at the bottom of the fireplace should also be removed.

In advance, decide with a specialist or the chimney sweep where a soot door **(1)** should be placed, so that the fire tube can be cleaned from above while the door of the insert remains closed.

### **Mounting the smoke pipe (Drawing A1)**

First mount the joining flange **(2)** with a suitable length of fire tubing or flexible tubing **(3)**. Push the inner pipe into the connector. The inner pipe must be turned so that the handle goes as far as possible into the connector.

Trim approximately 3 fireproof batts of 50 mm each **(4)** so that they fit tightly into the chimney space and cut a hole in the centre to fit tightly around the tube.

Place the fire tube in the chimney so that the joining flange corresponds to the given measurements.

- a. Distance from front edge of the brick hole, if the insert must be flush with the brickwork.
- b. Height over the bottom of the insert.

Now push the three batts up around the fire tube and press them up into the chimney thereby achieving a compact and tight-fitting seal.

### **Installing the outer casing (Drawing A2)**

If you would like to mount hoses in order to distribute a portion of the convection heat to other rooms, push the two plates on each side of the smoke outlet hole on the casing outwards **(see drawing H)**.

Push the outer casing **(6)** into place at the bottom of the fireplace. Carefully ensure that the outer casing is level and that its front edge is flush with the brickwork. The three adjustment screws in the bottom of the casing can be used for fine adjustment so that the casing is completely level **(drawing F)**. Screw the connector to the building-in cassette with the help of the self-tapping screws supplied.

If the gap between the fireplace aperture and the outer casing is to be closed with brickwork, there must be a minimum distance of 5 mm around the outer casing. The brickwork above the outer casing must therefore be self-supporting. Attach the casing to the masonry with 1-3 screws in the base.

### **Mounting the insert (Drawing A3)**

Remove the smoke shelf **(7)** from the insert. Remove the smoke deflector plate **(8)** from the insert. Attach an Ø6 mm seal to the bottom the smoke outlet bushing. Then push the insert into place in the

brickwork casing. Push the inner pipe all the way into the liner's smoke outlet connector. Afterwards, remount the smoke deflector plate **(8)** and smoke shelf **(7)**.

### **Securing the insert to the cassette (Drawing B)**

Remove the Skamol front **(1)** and the Skamol bottom section **(2)** on each side of the insert's combustion chamber. Break off the two pre-cut blocks **(3)** in the bottom of the insert. Insert the two screws supplied **(4)**, so that they engage with the thread at the bottom of the cassette. Tighten the screws manually and replace the pieces of Skamol in the combustion chamber.

### **(Drawing A3)**

Seal between fire tube and chimney on top of the batts using heatproof mortar **(5)**. This can be done through the soot door **(1)** of the chimney, and should only be done when the insert is assembled.

### **Connecting external supply of fresh air**

The HWAMI 30/55s can be connected to fresh air systems. The fresh air system can be purchased separately.

## **2. Restructuring of brickwork around insert**

During the reconstruction, the outer casing should be carefully levelled off at a suitable height. As the reconstruction progresses, there should be a gap of min. 5 mm between the brickwork and the outer casing. The frame of the outer casing has a width of 25 mm, though only 20 mm at the top. Any brickwork stretching across the outer casing must be self-supporting. Attach the casing to the masonry with 1-3 screws in the base.

Fire tubes and any convection ducts to other rooms should be fitted to the outer casing during the reconstruction.

The outer casing is not load-bearing. Therefore, fire tubes exceeding 2 m in length and, possibly, the chimney, must be secured (using hangers) thus avoiding putting any load on the outer casing.

When the reconstruction has been completed, mount the insert as described in point 1.

### **Fitting the loose parts (Drawing C)**

Before you start using the insert, you must ensure that all loose parts are fitted correctly.

- a. Smoke plate **(1)**. Must lie on the rear plate and on the slanting side plates. It must fall into position in the track on the rear plate.
- b. Steel smoke deflector plate **(2)**. Is mounted on two hooks. To mount the plate, lift it up and lead to the right until it is hanging on the two hooks.

# FIRING MANUAL – WOOD

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## Your first heating session

The lacquer will be fully hardened after the stove has been used, and the door and the ashpan should be opened very carefully as there will otherwise be a risk that the gaskets will stick to the lacquer. In addition the lacquer may initially give off an unpleasant odour, so make sure that the room is well ventilated.

## Tips about fuel:

### Approved fuel types

The insert is EN approved for combustion of wood only. It is recommended to use dried chopped wood with a water content of a maximum of 18%. Stoking a fire with wet wood results in soot, environmental problems, and a less efficient fuel economy.

### Recommended wood types

All types of wood, for instance birch, beech, oak, elm, ash, conifers, and fruit trees can be used as fuel in your insert. The great difference is not in the fuel value, but in the weight of the wood types per cubic metre. Beech weighs more per m<sup>3</sup> of wood than common spruce, for instance. This is why more common spruce is required, in terms of volume, to obtain an amount of heat similar to that of beech. Heavy types of wood such as ash, beech, oak and elm are generally not that easy to light up. In addition, they burn more slowly and give off more embers. Light types of wood such as birch, maple, spruce and pine are more easy to light up. They burn faster and give off fewer embers. You may therefore take advantage of the light types of wood for lighting and use the heavier types of wood to ensure a longer burning time..

### Banned fuel types

It is not allowed to stoke a fire with the following: printed matter, plywood, plastic, rubber, fluid fuels, and rubbish such as milk cartons, lacquered wood or impregnated wood and fossil fuels. The reason that you should not apply any of the above is that during combustion they develop substances that are health hazardous and harmful to the environment. These substances could also damage your insert and chimney, rendering the product warranty void.

### Storage of wood

A moisture content of 12-18% is achieved by storing recently felled wood outdoors under a lean-to for at least one year, preferably 2 years. Wood stored indoors has a tendency to become too dry and combust too quickly. However, it might be advantageous to store fuel for lighting a fire indoors for a few days prior to use.

It is recommended to purchase a wood moisture meter to continuously check that the firewood has the correct moisture content before using it for firing. Split the wood and measure the moisture content of the split surfaces.

### Recommended dimensions

The dimensions of the fuel are important to good combustion. The dimensions should be as follows:

Fuel type	Length in cm	Diameter in cm
Wood for kindling a fire (finely chopped)	25-35	2-5
Chopped wood	30-40	7-9

## Regulating the insert (Drawing E)

The air control lever (I) is located behind the glass. The HWAM® Autopilot™ is set to maximum when the air control lever is set to the rightmost position, and minimum when the bar is set to the leftmost position.

## Lightning the insert

A successful combustion process requires that the wood is lit in the right way. A cold insert and a cold chimney challenge the combustion process. Be careful to make a good lighting with suitably dry wood, using kindling and lighting the fire in the top layers of kindling. It is important to achieve a high flue gas temperature quickly.



Push the air control lever all the way to the right to set the HWAM® Autopilot™ to maximum effect. Put split kindling, corresponding to two to three pieces of wood (about 2 kg), into the insert. Put two fire lighters in between the upper layer of kindling. Light them and allow the flames to spread slowly. Keep the door ajar until no more condensation forms on the glass (for a maximum of 5 min.). Close the door. When the kindling is burning well, push the output regulating rod into middle position. If the fire goes out, this has been done too early. Push the regulating rod to the right again until the fire is burning properly. Allow the kindling to burn out until flames are no longer visible.

**Important!** The door may only be opened when lighting the insert, adding fuel to the fire or removing ash.

## Stoking

When there are no more visible yellow flames, and a right ember is there, you can fire again. The layer of embers is suitable when the pieces of wood begin to disintegrate and the bottom of the insert is covered by embers. Put two or three pieces of wood weighing up to 1 kg each into the insert. The HWAM® Autopilot™ manages the regulation of air supply.

The temperature can, however, be set up or down by pushing the regulation bar either to the right or left, respectively. If the air control lever is set farther to the left, combustion is reduced and the burning time is prolonged. By pushing it to the right, combustion is increased and burning time is shortened. Do not add new firewood to the fire until the layer of embers is sufficiently low.

## When burning is complete

When the insert is not in use, turn the air control lever all the way to the left.

## Cleaning the glass

We recommend wiping the glass after a fire. This is best done using a paper towel.

## Fuelling with coal or pet coke

The insert is not approved to use coal or pet coke as a fuel.

# FIRING IN GENERAL

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## Quick or strong heat

Quick or strong heat is obtained by burning many small pieces of wood.

## Maximum Firing Amount

Fuel	Maximum Amount per Hour
Wood	3.5 kg

**Warning:** Should these limits be exceeded, the insert will no longer be covered by the factory guarantee, and it may be damaged due to excessive heat. The insert has been approved for intermittent use.

## Normal re-firing interval for nominal firing

Fuel	Kg	Normal Firing Interval
Wood	Ca. 1.54	48 min

## Prolonged burning time

Prolong the burning time by burning a few (at least 2) very large pieces wood whilst at the same time regulating the damper down.

## Insufficient firing

If the fireproof materials in the combustion chamber are blackened after a heating session, the insert is polluting, and thHWAM® Autopilot™ is not functioning properly. The bar must therefore be pushed to the right. Also, it may be necessary to burn more wood.

## How to achieve the best combustion

- **Use clean and dry wood.**

Wet wood results in inefficient combustion, plenty of smoke, and soot. Furthermore, the heat will dry the wood, not heat up the room.

- **The fire should only be stoked with a little wood at a time.**

You achieve the best combustion by starting up a fire often and using only a little wood. If you use too much firewood, it will take some time before the temperature reaches a level where you achieve a good combustion.

- **Make sure there is the right amount of air.**

You should also make sure that there is plenty of air – especially in the beginning - so the temperature in the insert climbs quickly. In this way the gasses and particles released during the combustion will be consumed by the fire. Otherwise they build up soot in the chimney (constituting a chimney fire risk) or will be released in a non-combusted state into the environment. The wrong amount of air supply creates inefficient combustion and a modest effect.

- **Don't savour the fire during night time**

We advise against adding fire wood to your insert and reducing the air supply at night in an attempt to still have some embers left in the morning. If you do so, large amounts of hazardous smoke will be emitted, and your chimney will be exposed to unnecessarily large amounts of soot with the risk of a chimney fire.

# CLEANING

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## **External cleaning**

Cleaning of the insert should only be performed when it is not in use/cool. Daily maintenance is limited to a minimum. It is easiest to vacuum the outside of the insert with a tiny nozzle with soft brushes.

If the glass door is grimed with soot, it can be cleaned with slightly dampened paper that has been dipped in the ashes. The outside of the glass can be cleaned with ordinary cleaning solvent used to polish surfaces. We recommend wiping down the window pane when the insert is not in use/cool.

## **Ash**

We recommend removing ash from the combustion chamber with an ash suction device.

Ash can be disposed of through daily refuse collection. Be aware that embers in the ash can remain hot up to 24 hours after the fire in the insert has gone out!

# MAINTENANCE

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## Maintenance

Regularly ensure that the air slit for the pane air rinse function (**drawing C, 3**) is free of ash and soot particles. Regularly check to make sure that seals in the door are complete and soft. If not, they should be replaced. Use only original spare parts.

The insert should be thoroughly cleaned once a year. Ash and soot must be removed from the combustion chamber. Door and fittings should be lubricated using a copper-based grease (drawing G, 1+2).

## Service inspection

At least once every other year, the insert should receive a thorough, preventative service inspection. Among other things, the service inspection covers:

- A thorough cleaning of the insert.
- Check the spring in the HWAM® Autopilot™ and replace if necessary.
- Checking gaskets. Replace gaskets if they are not intact or are no longer soft.
- Inspection/possible replacement of heat insulation material.
- Lubricating the hinges with copper grease (drawing G, 3).

**The inspection must be performed by a qualified professional.**

**Use only original spare parts.**

## Cleaning

Before chimney sweeping can be performed, the air control lever must be set all the way to the left to prevent soot and ash from entering the HWAM® Autopilot™.

Drawing C:

Remove the smoke shelf **(1)**. Push the plate forward and lift it up a bit to the side. Tilt one side downward. The plate is now free and can be removed from the combustion chamber. Lift the steel smoke deflector plate **(2)** off of the hooks so that it can be removed.

## Insulation

The efficient, but porous insulation of the combustion chamber may, in time, be worn and damaged. Cracks in the insulation are irrelevant to the efficiency of the stove. However, it should be replaced, if there are actual holes due to parts of the lining falling off or when, due to wear and tear, it has been reduced to less than half its original thickness.

## HWAM® Autopilot™

On a cold stove, the starting point of the feeler is controlled. The starting point on a cold stove is about 30° above horizontal. It should feel easy going and bouncy when you push it, no matter if the stove is cold or hot. By rising or falling temperatures it must not move at a bound. The damper plates must be dry and clean and slide together unhindered. Control bars and slide gates may have to be smeared with WD40 (never oil).

## Surface

The surface does not normally require any treatment. Any damage to the coating may be remedied using a Senotherm spray.

## Guarantee

The guarantee does not cover damage due to insufficient maintenance!



## OPERATIONAL PROBLEMS

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### **Blackened glass**

- The wood is too damp. Only use wood stored for at least 12 months under cover and with a moisture level not exceeding 12-18% RH.
- Faulty seal in door. Fit new seal.

### **Smoke in the room when opening door**

- The grate in the chimney may be closed. Open the grate.
- Insufficient chimney draft. See section on chimney or contact chimney sweep.
- Soot door leaking or dislodged. Replace or refit.
- Never open the door when there are still flames on the wood.

### **Uncontrollable combustion**

- Faulty seal in door or ash pan. Fit new seal.
- If there is an excessive chimney draft, it may be necessary to set the air control knob to its minimum position. Also do this all when the stove is not in use.
- If the steel plates in the combustion chamber develop scales or become deformed, this is due to excessive heat. Stop using the stove and contact the retailer.

**At interruptions that you cannot yourself rectify, you should contact the retailer.**

# DECLARATION OF PERFORMANCE

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The DoP can be downloaded from our website via the following link:  
[www.hwam.com/dop/i30-55s](http://www.hwam.com/dop/i30-55s)

**Product information on solid fuel local space heaters  
according to Commission regulation (EU) 2015/1185**

<b>Model</b>	HWAM I 30/55
<b>Direct heat output [kW]</b>	7,0
<b>Indirect heating functionality</b>	No
<b>Indirect heat output [kW]</b>	-
<b>Type of heat output/room temperature control</b>	Two ore more manual stages, no temperature control

Space heating performance at nominal heat output		
Fuel	Preferred fuel	Seasonal space heating energy efficiency [%]
Wood logs with moisture content 12-18 %	Yes	70,7
Emissions		mg/m <sup>3</sup> (13% O <sub>2</sub> )
Particulate matter (PM)		26
Organic gaseous compounds (OGC)		76
Carbon monoxide (CO)		1125
Nitrogen oxides (NO <sub>x</sub> )		121

Characteristics when operating with the preferred fuel only	
Nominal heat output [kW]	7,0
Electric power consumption nominal heat output [kW]	-
Electric power consumption minimum heat output [kW]	-
Electric power consumption standby mode [kW]	-
Useful efficiency at nominal heat output [%]	80,7
Energy efficiency index	107
Energy efficiency class	A+

**Specific Precautions during Assembling, Installing & Maintenance:**

See installation instructions for more information

**Product End-of-Life/Recycling:**

To dispose of the stove after the product life has expired, please observe the following information

- Dispose of the items correctly i.e. separate the parts to be disposed of in material groups
- Always dispose of items in a way that is as sustainable as possible and that is in line with the current environmental protection, reprocessing/recycling and disposal technology

