

# KALFIRE

FIREPLACES

## Installation and user manual

 CLOSED WOOD FIRES

DON'T COMPROMISE.



<b>Product</b>	Kalfire W
<b>Product group</b>	Wood burning fireplaces with lifting door
<b>Application</b>	Open and closed
<b>Models</b>	Kalfire W45/48F Kalfire W60/51F Kalfire W65/38C Kalfire W66/48S Kalfire W70/33F Kalfire W71/62F Kalfire W80/52T Kalfire W85/40F Kalfire W90/47C Kalfire W90/47S Kalfire W100/61F Kalfire W105/47F Kalfire W105/47T Kalfire W120/38F

Version January 2018  
Language English



## Preface

Congratulations on purchasing your Kalfire W wood burning fireplace.

This manual describes the installation, daily use and maintenance of all the fireplaces from the Kalfire W series. Read this manual carefully before installing and using the fireplace.

Please complete the proof of guarantee (appendix C) and keep it with the invoice to verify the purchase date.

**Always keep this manual close to your fireplace**

An authorised installer will install the Kalfire W fireplace in compliance with the national or local applicable regulations. Check the fireplace for transport damage upon delivery. Report any transport damage to the supplier immediately. The supplier cannot be held responsible for any damage because of faulty installation.

In case any problems occur or if you have any questions concerning the operation of your fireplace, please contact your Kalfire dealer. Your dealer is also the person to contact during the duration of the guarantee period.

Kalfire BV has installed a telephone helpdesk, to support the technical department of her dealers, to make sure your dealer will be able to advise you in a professional way.

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Belfeld, the Netherlands



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## 1 Introduction

The wood burning, built in fireplace you have purchased is manufactured by Kalfire BV and is guaranteed to provide a lifetime of heating satisfaction.

This installation and user manual is relevant for the following models in the Kalfire W-series:

- Kalfire W45/48F
- Kalfire W60/51F
- Kalfire W65/38C
- Kalfire W66/48S
- Kalfire W70/33F
- Kalfire W71/62F
- Kalfire W80/52T
- Kalfire W85/40F
- Kalfire W90/47C
- Kalfire W90/47S
- Kalfire W100/61F
- Kalfire W105/47F
- Kalfire W105/47T
- Kalfire W120/38F

### Symbols used

In this manual Kalfire uses several symbols. These symbols indicate possible damage to the product and/or a life-threatening situation, if the procedures are not observed and followed carefully.



#### **WARNING**

of danger.



substances or a

#### **WARNING OF HIGH TEMPERATURES.**

## 2 Safety

### 2.1 CE-marking

The appliance has been approved according to the CE standard EN-13229-A2.

Every appliance that leaves the factory has been tested for functionality according to the Kalfire quality standards.

**⚠ National and local building and fire regulations apply to the installation of the fireplace. Both local and national requirements must be respected.**

**⚠ The relevant local authorities must be notified before adding the external elements to the fireplace insert in order to verify the quality of the installation.**

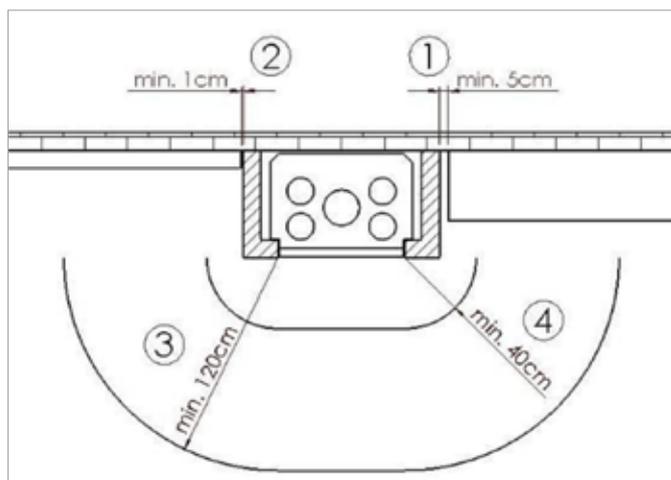
### 2.2 Safety instructions installer

- An authorised installer will connect the fireplace in compliance with the national and/or local applicable regulations.
- Check if the fireplace functions correctly immediately after the installation.
- Take the necessary preventive measures, by using non-combustible material, in order to prevent overheating of floor, boards or walls close to the fireplace.

### 2.3 Safety instructions user

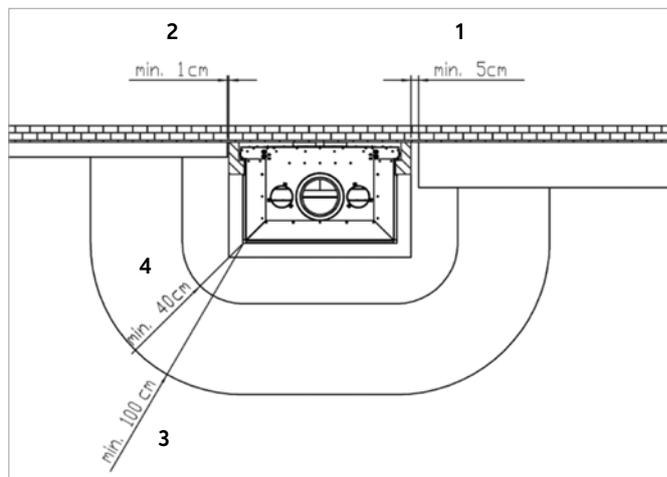
- ⚠ • The Kalfire wood fire is only intended for use as an additional heat source.
- Careful! The exterior of the fireplace can become hot during use.

#### 2.3.1 Kalfire front models



- Nr. 1: The distance between any built-in furniture and the fireplace, should be at least 5 cm.
- Nr. 2: The distance between any wall-, floor- and /or ceiling material should be at least 1 cm.
- Nr. 3+4: Make sure that curtains, furniture and/or other combustible materials are at least 120 cm removed from the fireplace. If a fireguard is used, this distance must be at least 40 cm.

#### 2.3.2 Kalfire corner-, 3-sided and tunnel models



- Nr. 1: The distance between any built-in furniture and the fireplace, should be at least 5 cm.
- Nr. 2: The distance between any wall-, floor- and /or ceiling material should be at least 1 cm.
- Nr. 3+4: Make sure that curtains, furniture and/or other combustible materials are at least 100 cm removed from the fireplace. If a fireguard is used, this distance must be at least 40 cm.

## 2.4 Safety precautions

- Insulation material must comply with the national applicable quality standards; this material should, amongst others, be resistant to high temperatures (minimum 700°C), in order to avoid strong odour development during combustion.
- Use ceramic fibre panels or hard panels made from mineral wool to prevent loose particles of insulation material circulating in the convection system.
- Prevent any insulation material covering the convection air inlet. Attach the insulation material firmly, to prevent it from slipping.

**Table 1: Prescribed insulation thickness to combustible materials**

Model	Inspection				Isorath 1000				Promasil				Mineral wool (AGI Q 132)			
	Rear panel (cm)	Side panel (cm)	Roof (cm)	Base (cm)	Rear panel (cm)	Side panel (cm)	Roof (cm)	Base (cm)	Rear panel (cm)	Side panel (cm)	Roof (cm)	Base (cm)	Rear panel (cm)	Side panel (cm)	Roof (cm)	Base (cm)
W45/48F	5	5	9	*	2,6	2,7	5,3	*	2,0	2,1	4,1	*	5	5	9	*
W60/51F	5	5	9	*	2,6	2,7	5,3	*	2,0	2,1	4,1	*	5	5	9	*
W65/38C	5	5	9	*	2,6	2,7	5,3	*	2,0	2,1	4,1	*	5	5	9	*
W66/48S	10	10	9	*	2,6	2,7	5,3	*	2,0	2,1	4,1	*	10	10	9	*
W70/33F	10	10	9	*	2,6	2,7	5,3	*	2,0	2,1	4,1	*	5	5	9	*
W71/62F	10	10	9	*	2,6	2,7	5,3	*	2,0	2,1	4,1	*	5	5	9	*
W80/52T	10	-	9	*	2,6	-	5,3	*	2,0	-	4,1	*	5	-	9	*
W85/40F	5	5	9	*	2,6	2,7	5,3	*	2,0	2,1	4,1	*	5	5	9	*
W90/47C	10	10	9	*	2,6	2,7	5,3	*	2,0	2,1	4,1	*	5	10	9	*
W90/47S	10	5	9	*	2,6	2,7	5,3	*	2,0	2,1	4,1	*	5	5	9	*
W100/61F	10	10	9	*	2,6	2,7	5,3	*	2,0	2,1	4,1	*	5	5	9	*
W105/47F	5	5	9	*	2,6	2,7	5,3	*	2,0	2,1	4,1	*	5	5	9	*
W105/47T	10	-	9	*	2,6	-	5,3	*	2,0	-	4,1	*	5	-	9	*
W120/38F	9.4	8.4	9.3	*	7.7	6.9	7.6	*	6	5.3	5.9	*	10	9	11	*



The floor, on which the fireplace is placed, must be made from non-combustible material, as hot ashes and sparks may fall onto the floor.

### 2.4.1 Installation of the Kalfire W front models in combination with combustible materials (e.g. a wooden wall)

When installing the fireplace, make sure to respect the recommended distance from any combustible building materials:

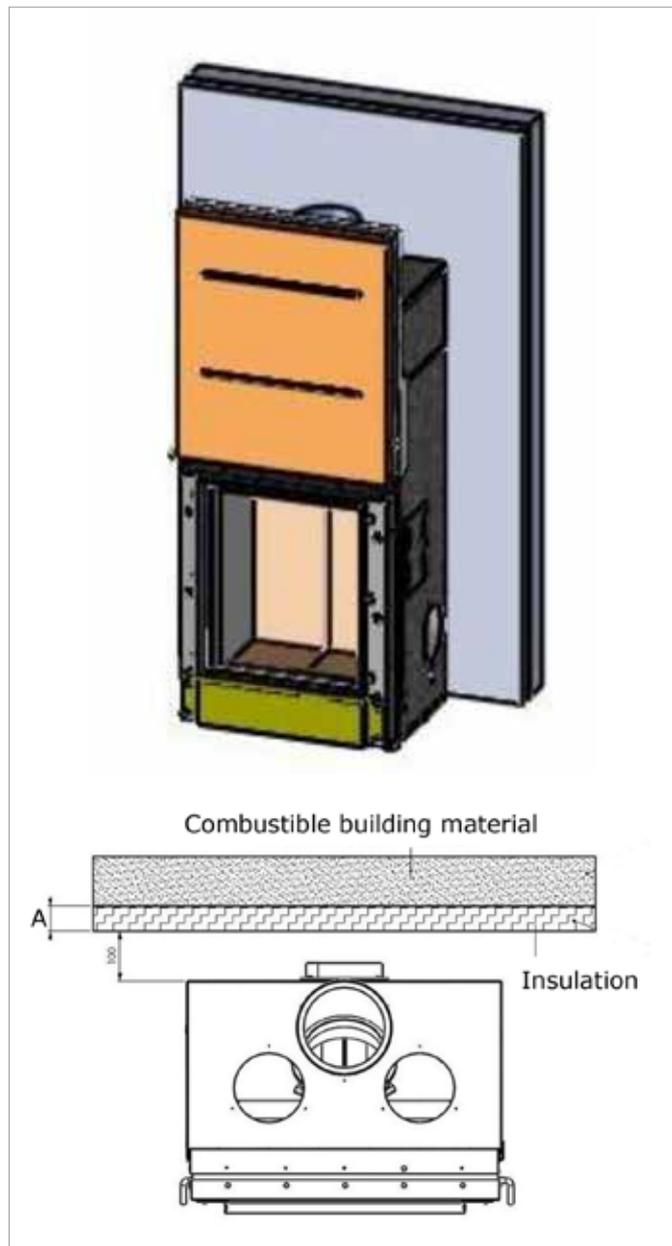


Image: Cross-section of a front model Kalfire W

Combustible building materials behind the fire must also be shielded or insulated by insulation material. The minimum thickness (A) of the insulation material depends on the model and type of fireplace. Refer to Table 1 for the required minimum insulation thickness.

The distance from the back of the fireplace (or the side if the fire is built into an alcove) to the insulation material must be a minimum of 10 cm.

 Ensure that windows are at a minimum distance of 100 cm from the appliance.

 Ensure that curtains, furniture and/or other combustible materials are at a minimum distance of 150 cm from the appliance.

\* The floor the fireplace is placed on must be made of non-combustible materials. The (combustible) floor in front of the door opening must be protected (30 cm on both sides and 50 cm in front of the appliance).

### 2.4.2 Installation of the Kalfire W65/38C in combination with combustible materials (e.g. a wooden wall)

When installing the Kalfire W65/38C pay attention to the distance to combustible building materials:

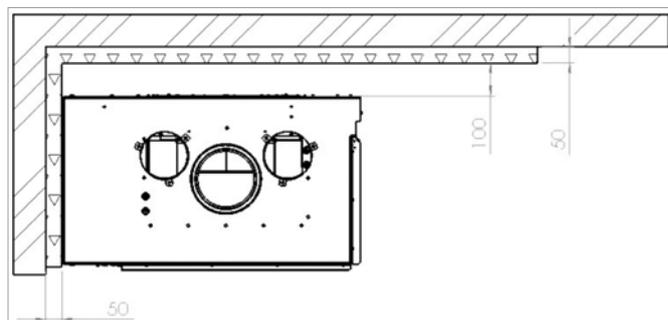


Image: Cross-section of a corner Kalfire W65/38C

Combustible materials must be shielded by insulation material with a minimum thickness of 5 cm. The distance from the back of the fireplace to the combustible material must be a minimum of 10 cm.

 \* The floor the Kalfire W65/38C is placed on must be made of non-combustible materials. The (combustible) floor in front of the door opening must be protected to a distance of at least 50 cm in front of the appliance (side/sides with a glass door).

### 2.4.3 Installation of the Kalfire W90/47C in combination with combustible materials (e.g. a wooden wall)

When installing the Kalfire W90/47C pay attention to the distance to combustible building materials:

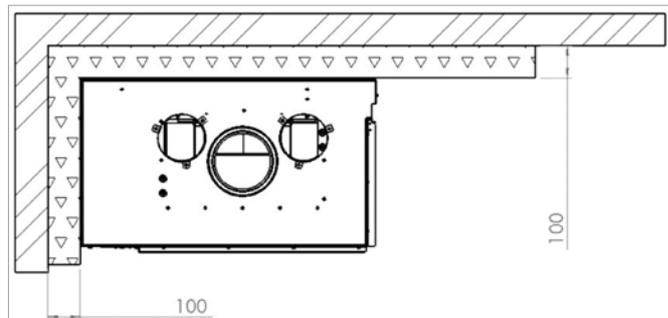


Image: Cross-section of a corner Kalfire W90/47C

Combustible materials must be shielded by insulation material with a minimum thickness of 10 cm.

 \* The floor the Kalfire W90/47C is placed on must be made of non-combustible materials. The (combustible) floor in front of the door opening must be protected to a distance of at least 50 cm in front of the appliance (side/sides with a glass door).

**2.4.4 Installation of the Kalfire W90/47S and W90/47S in combination with combustible materials (e.g. a wooden wall)**

When installing the Kalfire W90/47S or W90/47S pay attention to the distance to combustible building materials:

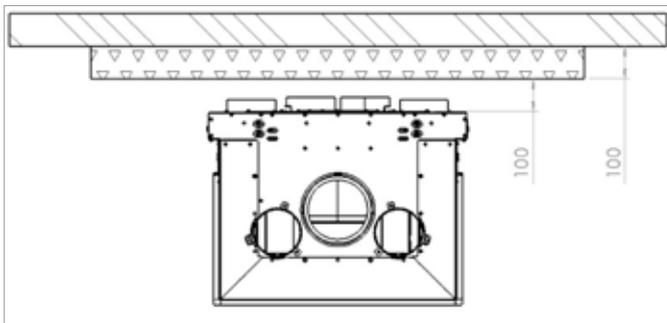


Image: Cross-section of a 3-sided Kalfire W

Combustible materials must be shielded by insulation material with a minimum thickness of 10 cm. The distance from the back of the fireplace to the combustible material must be a minimum of 10 cm.

 \* The floor the 3-sided fireplace is placed on must be made of non-combustible materials. The (combustible) floor in front of the door opening must be protected to a distance of at least 50 cm in front of the appliance (side/sides with a glass door).

**2.4.5 Installation of the Kalfire W80/52T and W105/47T in combination with combustible materials (e.g. a wooden wall)**

When installing the Kalfire W80/52T and W105/47T pay attention to the distance to combustible building materials:

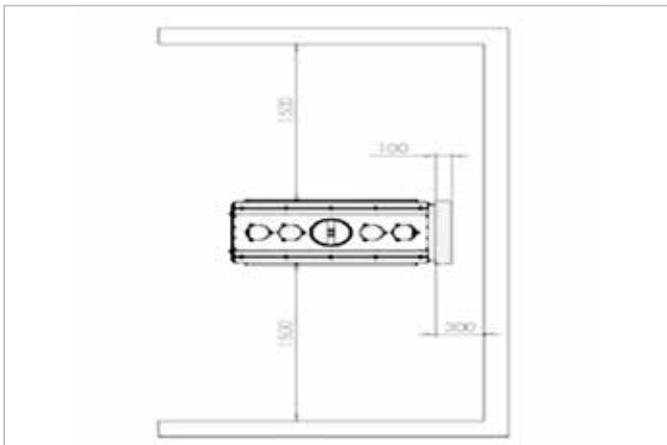


Image: Cross-section of a Kalfire W tunnel

Combustible materials must be shielded by insulation material with a minimum thickness of 10 cm. The distance from the back of the fireplace to the combustible material must be a minimum of 30 cm.

 \* The floor the Kalfire W tunnel is placed on must be made of non-combustible materials. The (combustible) floor in front of the door opening must be protected to a distance of at least 50 cm in front of the appliance (side/sides with a glass door).

**2.4.6 Prescribed materials**

**Insulation**

Use mats, plates or strips made from silicate insulation materials (stone, clinkers, ceramic fibres); construction class A1 according to DIN 4102 Part 1, with an upper limit temperature of at least 700°C, tested according to DIN 52271 and a nominal density of 80 kg/m.

These materials need to have a corresponding insulation material registration number, according to AGI-Q 132. This number may not include the combination "99".

For as far as this insulation layer is not kept away from walls, claddings or adjoining plates, attachments must be mounted at a mutual distance of max. 33 cm.

Other insulation materials, consisting of, for example, covering concrete or mineral base materials, must have a General Urban Development Permit of the German Institute of Building Technology (DIBt). For further details, see DIN 18895 resp. EN 13229/DIN 18160.

Replacement insulation materials have various heat index values, depending on the thickness of the insulation material. The required thickness of the insulation material can be calculated from the graph delivered by the manufacturer.

Some heat insulation materials can be used for preconstruction and heat insulation, in order to considerably reduce the built-in depth. Cover heat insulating materials made from stone and clinker fibre, so they are not subject to wear, otherwise loose particles may be blown by the airflow into the mounting area. Other heat insulation plates may be supplied wear proof from the factory.

**Floors**

The floor, on which the fireplace is placed, must have sufficient load bearing capacity (for the weight of the appliance, see table 5).

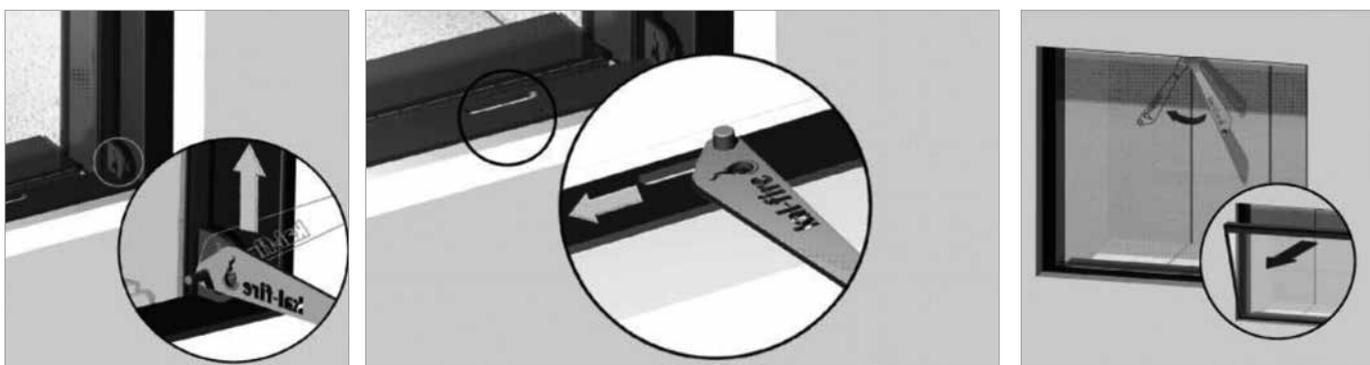
### 3 Mounting and installation

Before installing the appliance, check if the load bearing capacity of the floor is sufficient to bear the weight of the appliance and the intended surround (see table 5) for a long period of time. If this is not the case, please take the necessary precautions (e.g. distributing the pressure points by using a dimensionally stable, fire resistant sheet).

#### 3.1 Check before building in/mounting

##### 3.1.1 Kalfire front and tunnel models

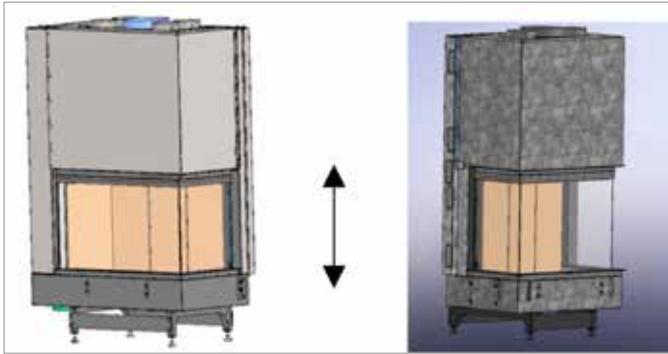
1. Check immediately upon arrival, if the products supplied are complete and undamaged. Report any damaged or missing items to the supplier immediately.
2. Remove the transport security (screws with yellow sticker on the front of the convection casing).



3. Check the following parts for correct working:
  - Lifting door up and down.
  - Forward tilting action of door for cleaning.
  - Air control.
  - Adjustment feet.
  - Any damper with control button (accessories).
  - Any aeration valves (accessories).
4. Hand the installation/user manual personally to the user of the fireplace.
5. Test the internal fresh air valve for correct working. This valve is situated on the rear of the fireplace, behind the fresh air connection. When the door is closed, the fresh air flows into the combustion chamber via the air slide valve. When the door is opened, the fresh air flows into the combustion chamber via the convection casing and outlet openings.

### 3.1.2 Kalfire W65/38C, W66/48S, W90/47C and W90/47S

1. Check immediately upon arrival if the products supplied are complete and undamaged. Report any damaged or missing items to the supplier immediately.
2. Remove the transport security (Two screws in the convection duct with yellow sticker on the rear of the convection casing).



Kalfire corner model

Kalfire 3-sided model

3. Check the following parts for correct working:
  - Lifting door up and down.
  - Opening and closing the design doors.
  - Forward tilting action of door for cleaning.
  - Air control.
  - Adjustment feet.
  - Any damper with control button (accessories).
  - Any aeration valves (accessories).
4. Hand the installation/user manual personally to the user of the fireplace.
5. Test the internal fresh air valve for correct working. This valve is situated on the rear of the fireplace, behind the fresh air connection. When the door is closed, the fresh air flows into the combustion chamber via the air slide valve. When the door is opened, the fresh air flows into the combustion chamber via the convection casing and outlet openings.

### 3.2 Check flue

In order to guarantee correct functioning, we advise you to test/ignite the fireplace at the earliest possible opportunity (before it has been completely built-in) (see Chapter 5 Lighting the fireplace). Why?

- This will allow you to decide if an external damper is necessary.
- The enamel can also cure before the surround is finished. Allowing the enamel to cure will also cause less nuisance for the end user.
- This gives you the chance to find out in an early stage, whether or not the fireplace-flue combination is working correctly.

### Checklist (to be executed) when using the fireplace

1. Check the flue for proper functioning; minimum required draught (suction) is 12 Pa.
2. Test the air slide valve for proper functioning; this will work after the fire has burnt for 50 minutes: (see chapter 3.3.1).
  - Extreme right position = Maximum supply of combustion air.
  - Extreme left position = Air supply closed; the flames will slowly extinguish.

If the flames do not react, or do not react enough, to the change in the air slide position, it may be worthwhile considering installing an external damper on the fireplace.
3. After a while close all windows and doors and ensure that all appliances that remove air from the home, such as cooker hoods, fans etc. are switched off. Check if the appliance can be used with an opened door (no smoke trickles back into the room), (see chapter 3.3).
4. Use a little smoke to check for correct supply and exhaust of convection air.

### 3.3 Placing the appliance



The appliance may not be placed in the following situations:

- in stairwells, with the exception of buildings with no more than two dwellings;
- in entrance halls with public access;
- in rooms where flammable or explosive substances or mixtures are processed, stored or manufactured;
- in rooms or dwellings where air is extracted by air-conditioning or with air heating using fans, with the exception of the following cases where a risk-free functioning of the fireplace is safeguarded:
  - the installation only circulates air in the room;
  - the installation has reliable safety precautions, so that over pressure is automatically created in the room where the fireplace is installed;
  - the combustion air flow of the fireplace and the volume flows of ventilating installations in the room and the rooms connected by ventilation ducts, create an under pressure that remains below 0.04 mbar. ATTENTION: This situation must also be safeguarded if easily accessible control equipment used for the ventilating installation is moved or removed.
- a supply of fresh air is ensured by the air intake system, allowing the smoke extraction system to function (e.g. by means of an open window or a fresh air supply system).

### 3.3.1 Working combustion air

If used with a closed door, the Kalfire W takes the combustion air directly from the connection at the rear (A) or base (A') of the appliance. This combustion air is guided into the combustion chamber via de air control (B) and the primary thermostat (C), where it is used as primary or secondary combustion air.

#### Primary combustion air (p)

The thermostat regulates this air flow automatically. When the fireplace is cold the thermostat ensures that air enters the combustion chamber via the lower spoiler. As the fireplace warms up, the air flow will gradually decrease.

After approximately 50 minutes, the fireplace is so warm, that this air flow stops altogether.

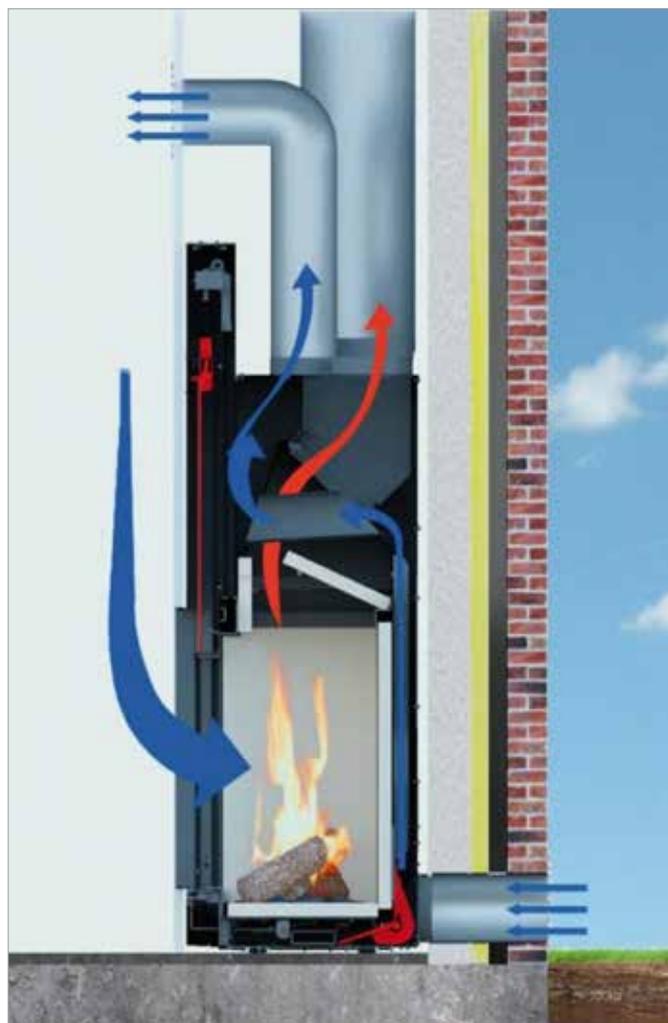
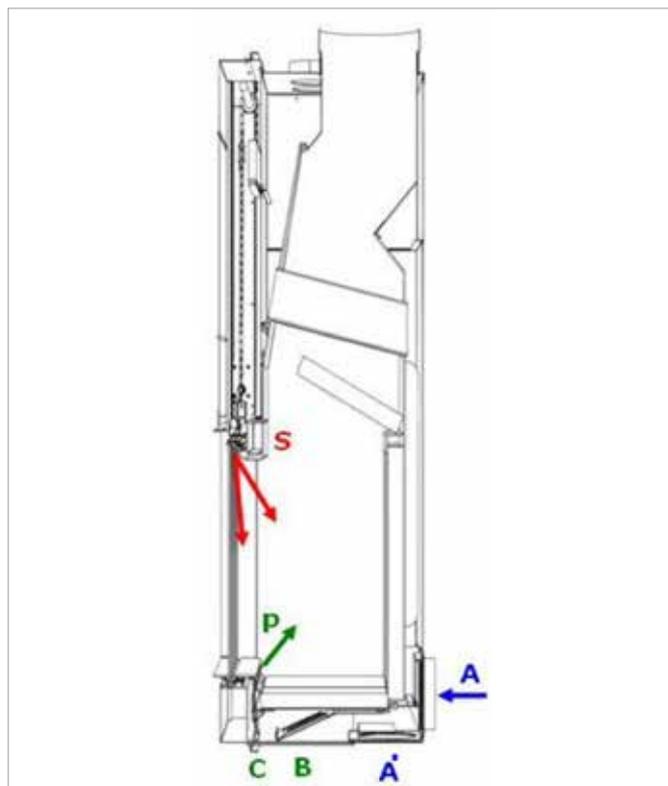
The primary air control is 100% automatic and cannot be influenced by yourself.

#### Secondary combustion air (S)

The air flow is regulated manually via the operating feature to the right of the appliance. Via risers to the left and right of the combustion chamber, this air is warmed up and guided to the combustion chamber via the upper spoiler. The secondary air flow is used to regulate the flames and to keep the glass door clean. This air flow may therefore never be completely closed off.

If used with an open door, the air need of the fireplace changes. The opening at the front will cause large volumes of air to be sucked into the appliance. This air will be taken from the room the fireplace is installed in.

With an opened door, the built-in valve ensures that the passage to the combustion chamber is closed (see figure). The connected air is re-routed to the convection casing, where the air is warmed before it flows into the room. This air then becomes available in the room where the appliance is installed so it can be used in the combustion process.



Detail "valve closed"



Detail "valve open"

### 3.4 Supply of combustion air



The appliance must have enough outside air to ensure problem free ignition. If lower values are established based on the calculated volume of combustion air, building in the appliance is for the risk of the installer.

The Kalfire has a built-in air supply valve; in normal situations no extra air valve is required. In situations where the side gable is subjected to frequent high winds or where there are large indoor/outdoor pressure differences, it is advisable to mount an extra air valve. In that case the valve must be clearly marked to indicate the open and closed position. Inform the users about the function and working of the valve(s).



Some air valve manufacturers use plastic sleeves. Mount these outside the heat radiation range of the fireplace.



Ensure that the fresh air actually is outside air. For example, if the combustion air originates from a cellar, this cellar must have sufficient air vents to ensure that any extracted air is replaced by fresh, outside air.



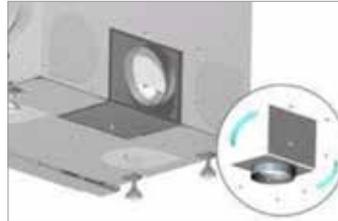
Ensure that the gratings are placed so, that they cannot become blocked.

#### 3.4.1 Fresh air connection base or rear

The standard for the Kalfire W, is that the fresh air connection is situated on the rear. This connection can be relocated to the base.

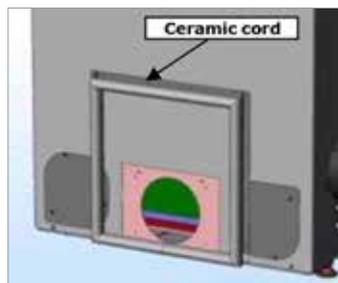
##### Method

1. Demount the connecting collar at the rear of the appliance.
2. Demount the closing plate at the base of the appliance. Mount the closing plate in the former position of the connecting collar.
3. Mount the connecting collar on the base of the appliance in the former position of the closing plate.



#### 3.4.2 Fresh air connection without connecting collar

If there is not enough space for the connection collar, you can demount this and the air connection using a built construction. In this case, the fireplace is positioned on or against an opening for fresh air. Use a ceramic cord to seal off the transition between the fireplace and the constructed opening (Available as an option).



##### Examples:

- The fireplace is positioned against an opening to a cellar.
- The fireplace is positioned against an outside wall, which has an opening to the outside air.

Kalfire W connection kit (optional):

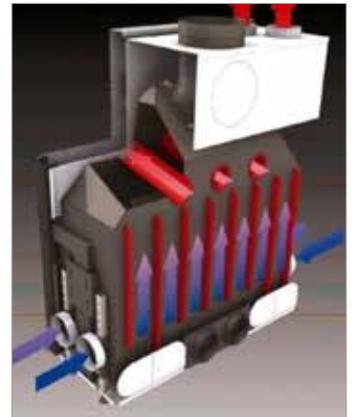
- Ceramic cord to fill gaps of max. 2 cm.
- Metal strips to attach the cord to the Kalfire.

### 3.5 Supply of convection air

The Kalfire W is surrounded by a convection mantle, that warms up the room in a constantly pleasant and efficient manner.

For this system to operate to its maximum effect, a convection set is required.

This optional convection set consists of:



#### Kalfire W45/48F and W60/51F

- Four flexible aluminium hoses Ø150 mm, 1.25 m (two hoses of 2.5 m that are divided into four hoses).
- Eight clamping strips.
- Four gratings (outer dimensions 20 cm × 20 cm, recess dimension 16.5 cm × 16.5 cm, with connection collar Ø150 mm).
- Mantel iron; this must be sawn to the correct size.
- Roll of felt to create an expansion joint between the metal of the mantel iron and the surround.

This convection set is ordered separately to the Kalfire. Instead of a grating, openings (for example recessed plinths) can be used. Do not reduce the convection openings.

Place all gratings/openings, both upper and lower, to facilitate the natural circulation. The gratings/openings should be situated in the same pressure area (the same room) as the Kalfire.

#### Kalfire W70/33F, W71/62F, W85/40F, W100/61F, W105/47F and W120/38F

- Four flexible aluminium hoses Ø150 mm, 1.25 m (two hoses of 2.5 m that are divided into four hoses).
- Four flexible aluminium hoses Ø150 mm, 0.62 m (one hose of 2.5 m that is divided into four hoses).
- Sixteen clamping strips.
- Four gratings (outer dimensions 35 cm × 20 cm, recess dimension 33 cm × 16.5 cm, with two connection collars Ø150 mm each).
- Mantel iron; this must be sawn to the correct size.
- Roll of felt to create an expansion joint between the metal of the mantel iron and the surround.

#### Kalfire W65/38C

- Two flexible aluminium hoses Ø150 mm, 1.25 m (one hose of 2.5 m that is divided into two hoses).
- Four hose brackets.
- Four grills (outer dimensions 20 cm × 20 cm, recess dimension 16.5 cm × 16.5 cm, with connection collar Ø150 mm).

For the Kalfire W65/38C, the mantle iron and roll of felt should be ordered separately, it's not included in the convection set.

This convection set is ordered separately to the fireplace. Instead of a grill, openings (for example recessed plinths) can be used. Do not reduce the convection openings.

Place all grills/openings, both upper and lower, to facilitate the natural circulation. The gratings/openings should be situated in the same pressure area (the same room) as the fireplace.

**Kalfire W66/48S and W80/52T**

- Two flexible aluminium hoses Ø150 mm, 1.25 m (one hose of 2.5 m that is divided into two hoses).
- Eight hose brackets.
- Four grills (outer dimensions 20 cm x 20 cm, recess dimension 16.5 cm x 16.5 cm, with connection collar Ø150 mm).

For the Kalfire W66/48S, the mantle iron and roll of felt should be ordered separately, it's not included in the convection set.

This convection set is ordered separately to the fireplace. Instead of a grill, openings (for example recessed plinths) can be used. Do not reduce the convection openings.

Place all grills/openings, both upper and lower, to facilitate the natural circulation. The gratings/openings should be situated in the same pressure area (the same room) as the fireplace.

**Kalfire W90/47C**

- Four flexible aluminium hoses Ø150 mm, 1.25 m (two hoses of 2.5 m that are divided into four hoses).
- Eight hose brackets.
- Four grills (outer dimensions 20 cm x 20 cm, recess dimension 16.5 cm x 16.5 cm, with connection collar Ø150 mm).

For the Kalfire W90/47C, the mantle iron and roll of felt should be ordered separately, it's not included in the convection set.

This convection set is ordered separately to the Kalfire W90/47C. Instead of a grill, openings (for example recessed plinths) can be used. Do not reduce the convection openings.

Place all grills/openings, both upper and lower, to facilitate the natural circulation. The gratings/openings should be situated in the same pressure area (the same room) as the fireplace.

**Kalfire W90/47S**

- Two flexible aluminium hoses Ø150 mm, 1.25 m (one hose of 2.5 m that is divided into two hoses).
- Four hose brackets.
- Two grills (outer dimensions 20 cm x 20 cm, recess dimension 16.5 cm x 16.5 cm, with connection collar Ø150 mm).
- Two grills (outer dimensions 35 cm x 20 cm, recess dimension 33 cm x 16.5 cm, with connection collar Ø150 mm).

For the Kalfire W90/47S, the mantle iron and roll of felt should be ordered separately, it's not included in the convection set.

This convection set is ordered separately to the fireplace. Instead of a grill, openings (for example recessed plinths) can be used. Do not reduce the convection openings.

Place all grills/openings, both upper and lower, to facilitate the natural circulation. The gratings/openings should be situated in the same pressure area (the same room) as the fireplace.

The supporting frame (including accessories) of the Kalfire W90/47S must be ordered separately.

**Kalfire W105/47T**

- Four flexible aluminium hoses Ø150 mm, 1.25 m (two hoses of 2.5 m that are divided into four hoses).
- Four flexible aluminium hoses Ø150 mm, 0.62 m (one hose of 2.5 m that is divided into four hoses).
- Sixteen clamping strips.
- Four gratings (outer dimensions 35 cm x 20 cm, recess dimension 33 cm x 16.5 cm, with two connection collars Ø150 mm each).
- Mantel iron; this must be sawn to the correct size.
- Roll of felt to create an expansion joint between the metal of the mantel iron and the surround.

**Method when using convection grills**

Ensure that, at the base, there is sufficient supply for the cold convection air from the room (see table below). At the top connect the grills to the outlet openings of the warm convection air (see table below).

**Table 2: Through put openings for convection air**

Kalfire type	W45/48F W60/51F W65/38C W66/48S W80/52T W90/47S	W70/33F W71/62F W85/40F W90/47C W105/47T W100/61F W105/47F W120/38F
	Inlet convection air	2 x Ø150 mm 355 cm <sup>2</sup>
Outlet convection air	2 x Ø150 mm 355 cm <sup>2</sup>	4 x Ø150 mm 705 cm <sup>2</sup>

Attention! When mounting the gratings, ensure they are placed in such a position, that they cannot become blocked.

### Method when using openings

If you do not want to use grills, openings at the top and base of the surround (chimneybreast) are also sufficient. For through put openings, see Table 2. These openings serve the same function as the gratings and supply and extract the convection air. We advise you, to place tubes or hoses on the outlet openings. This makes the convection system (just a little) more powerful and the heat is guided more easily to the openings.



If you do not use the recommended convection set, this may damage the fireplace by overheating. The result may be soiled walls and ceilings in the room. There is always a risk of discolouration to walls and ceilings, but this risk can be considerably reduced, by correctly ventilating the room.



Mount the grills at a distance of at least 30 cm from the ceiling or wall. Ensure there are no flammable materials closer than 30 cm next to and 50 cm above the gratings.

### Heat storage/radiation system

If installing a heat storage/radiation system, the external elements surrounding the fire must be made of materials that are resistant to high temperatures and capable of drawing in and releasing heat. Heat distribution plates, in chamotte fireclay or similar materials, are adapted for this type of use. Any constructed elements surrounding the fireplace insert, such as the ceiling, floor and walls, need to be insulated. The insulation should be 10 cm thick for combustible materials and 6 cm thick for non-combustible materials. The wall behind the insulation should be made of stone, brick, chalk or porous concrete at least 12.5 cm in thickness. A gap should be left between the fireplace insert and the external elements, allowing the air in this space to heat up and then be transferred via the surface materials.

It is possible to combine the fireplace's hot air outlets with the heat storage/radiation system in the installation. The standards that apply to heat-storage fires must be respected for this type of combined installation in order to comply with fire regulations.

In heat storage/radiation installations, the convection hood should remain mounted on the Kalfire W.



The maximum wood amount (indicated in kg/hour) must be respected to avoid overheating the installation. See the table on page 42 of this Manual.

### 3.6 Chimney/flue connection

The Kalfire W is connected to an existing flue. The operational height of the flue must be minimum 4.5 meter (draught 12 Pa), calculated from the point at which the flue duct is joined to the appliance.



Take local legislation and environmental factors into account.

**Table 3: Chimney/flue diameter and firebox per model**

Kalfire type	Firebox (mm) Width/ height	Firebox (cm <sup>2</sup> )	Minimum fresh air supply (mm)	Flue (mm)
W45/48F	415/ 454	1884	1× Ø150 mm	Ø150
W60/51F	545/ 470	2560	1× Ø150 mm	Ø180
W65/38C	610/ 374 333/ 374	3527	2× Ø150 mm	Ø180/Ø200
W66/48S	355/ 475 (2×) 620/ 475	4631	2× Ø150 mm	Ø200
W70/33F	305/ 665	2028	2× Ø150 mm	Ø180
W71/62F	655/ 580	3800	2× Ø150 mm	Ø250
W80/52T	747/ 485(2×)	3625 (2×)	2× Ø150 mm	Ø200
W85/40F	795/ 360	2860	2× Ø150 mm	Ø200
W90/47C	870/ 460 390/ 460	5796	2× Ø150 mm	Ø250
W90/47S	870/ 460 390/ 460 (2×)	7590	2× Ø150 mm	Ø250/ Ø300
W100/61F	570/ 926	5278	2× Ø150 mm	Ø250
W105/47F	995/ 440	4380	2× Ø150 mm	Ø250
W105/47T	995/ 440(2×)	4380(2×)	2× Ø150 mm	Ø250
W120/38F	1145/ 340	3895	2× Ø150	Ø250

If you want to use a flue diameter that differs from those shown in table 3, use the formula below to calculate a possibly smaller diameter.

$F_{sch} = \frac{F_{so} \times e}{\sqrt{H_{sch}}}$	<p>Fsch Fso Hsch e</p>	<p>Flue section in cm<sup>2</sup>. Surface firebox in cm<sup>2</sup>. Height of flue in metre measured from the upper side of the Kalfire. Influence factor between 0.2 and 0.6 determined by the flue quality: 0.2 with a perfect flue, straight above the Kalfire; 0.6 with connection less than 45°.</p>
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**Permitted reduction:**

- Flue Ø150 → Reduction not allowed.
- Flue Ø180 → Front models: Maximum reduction 30 mm.  
Edge-, 3-sided- and tunnel models:  
Reduction not allowed.
- Flue Ø200 → Front models: Maximum reduction 20 mm.  
Edge-, 3-sided- and tunnel models:  
Reduction not allowed.
- Flue Ø250 → Maximum reduction 50 mm.



After reducing the flue, it is no longer possible to use the Kalfire W as an open fire place.



Reduction is permitted immediately behind the damper/ connection collar, but not any deeper into the flue. At doubt, always use the connection diameter indicated on the appliance.



- Avoid horizontal runs; one extension may be placed with adjustable elbows with maximum one change of direction of 45°.
- Kalfire advises you to insulate the flue; this will reduce the risk of the smoke condensing and will improve the draught. Use the Kalfire stainless steel insulated flue duct for this purpose.
- Kalfire advises you not to use larger flue diameters than the connection present on the appliance. Using a larger flue diameter can result in the following problems:
  - Too fast and uncontrolled combustion.
  - Irregular flames.
  - Reduced heat output.
- Use a draught hood if there is a flue with a (too) strong draught. If the flue has too much upward draught, this may result in a too quick, uncontrolled combustion, irregular flames and rapid soiling of the glass door.
- Use of different flue diameters to those indicated, is entirely for the risk of the installer; when the door is opened, smoke may escape back into the room or it may be more difficult to ignite the fireplace.
  
- Take factors in the surrounding environment into account which could cause a strong draught in the flue. For example, frequent high winds, which require a damper to be mounted.
- Pay attention that it is also possible to sweep the chimney in the connection piece.

### 3.6.1 Rear connection

The Kalfire W is delivered as standard, with the flue exit connection on the top of the appliance. This connection can be converted to create a flue exit connection at the rear of the appliance.

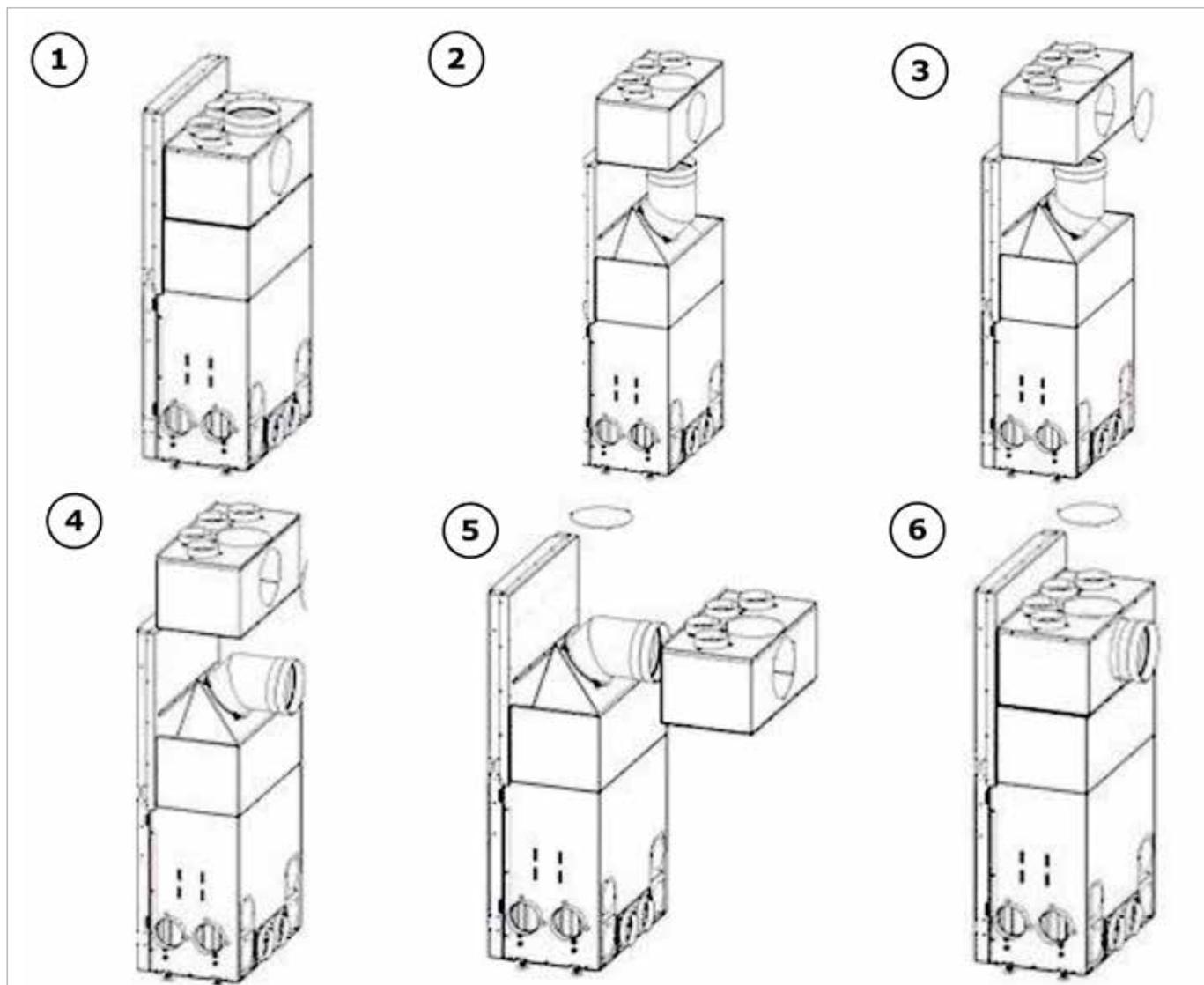


Figure 1 Converting a top flue exit into a rear flue exit (6 steps)

1. Demount the upper part of the convection casing.
2. The connection piece is now visible, and the four bolts can be unscrewed.
3. Turn the connecting piece 180°.
4. Press the punched cover out of the convection casing; this cover is used to close off the upper connection.
5. Mount the upper part back onto the appliance.
6. Place the cover on the opening on the top.
7. Continue with the connection of the fireplace.

#### Attention:

- Make sure that all the horizontal parts of the rear connection can be reached for cleaning.
- The horizontal part may be maximum 50 cm.

### 3.6.2 Reducer ring

The Kalfire W is delivered as standard with a reducer ring (except for Kalfire W66/48S). This ring can be used to connect various flue systems to the Kalfire.

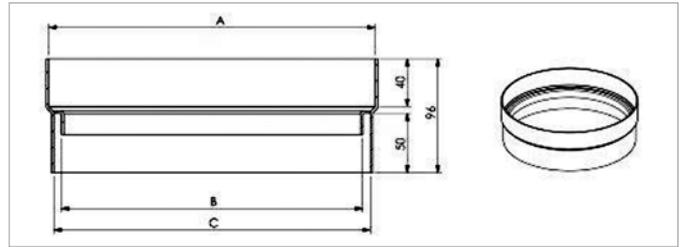


Figure 2 Reducer ring

Table 4: Diameter chimney connection collar

Kalfire type	Connection collar (mm)	A (mm)	B (mm)	C (mm)
W45/48F	Ø148 ±2	Ø156 ±1	Ø136 ±1	Ø152 ±1
W60/51F, W70/33F	Ø178 ±2	Ø186 ±1	Ø166 ±1	Ø182 ±1
W85/40F	Ø198 ±2	Ø206 ±1	Ø186 ±1	Ø202 ±1
W71/62F, W100/61F, W105/47F, W120/38F	Ø248 ±2	Ø256 ±1	Ø236 ±1	Ø248 ±1
W65/38C	Ø178 ±2	Ø186 ±1	Ø166 ±1	Ø182 ±1
W66/48S, W80/52T	Ø198 ±2	Ø206 ±1	Ø186 ±1	Ø202 ±1
W90/47C, W90/47S, W105/47T	Ø248 ±2	Ø256 ±1	Ø236 ±1	Ø248 ±1

#### Kalfire W65/38C

Connection to a Ø200 flue duct is only possible with a chimney duct of minimum 4.5 metres and maximum 6 metres long.

#### Kalfire W66/48S

Connection must remain Ø200 flue, reduction is not allowed.

#### Kalfire W90/47S

Connection to a Ø300 flue duct is only possible with a chimney duct of minimum 4.5 metres and maximum 6 metres long.

### 3.7 Mounting the damper

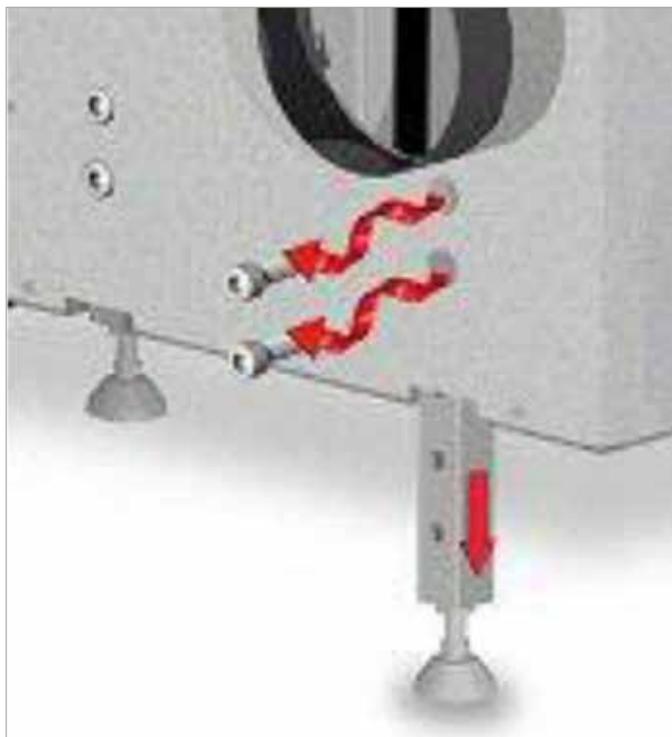
The Kalfire W is delivered as standard without a damper. A damper can be used to influence the degree of draught (suction) in the flue. With the Kalfire W an external damper can be added. If there is too much suction in the flue, we advise you to use a damper. The amount of draught can be tested when you ignite the fire to test the operation of the appliance. Pay extra attention to this aspect, if the flue is longer than 7 metres. Normally the Kalfire W can be controlled well using the air regulation (see section 5.3).

#### Attention

- Make sure that the position of the damper is visible for the end user. For this purpose, most of the operating knobs have a position indication (Open = Auf or +, Closed = Zu or -).
- Check the functioning of the damper before completing the installation of the fireplace.
- Make sure that the end user is familiar with way the damper functions.

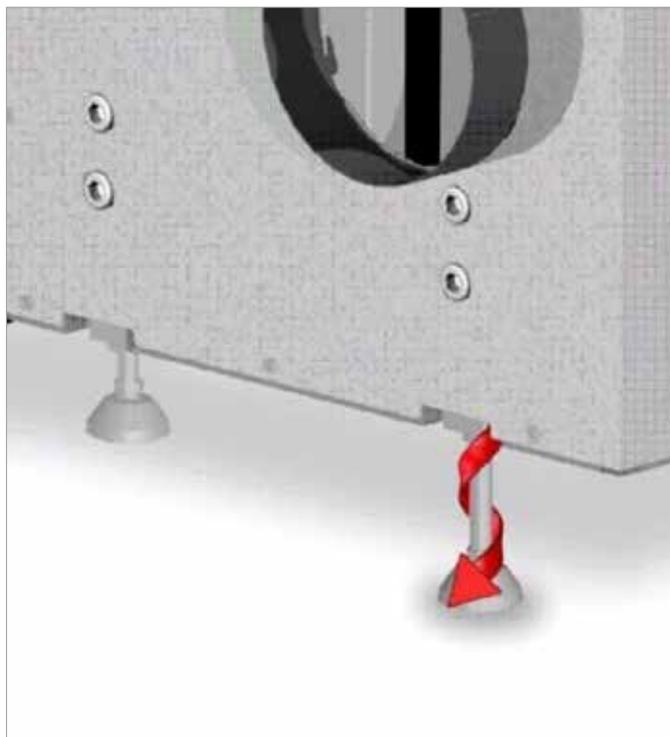
### 3.8 Adjusting the feet

Kalfire W front and tunnel models



#### Rough adjustment

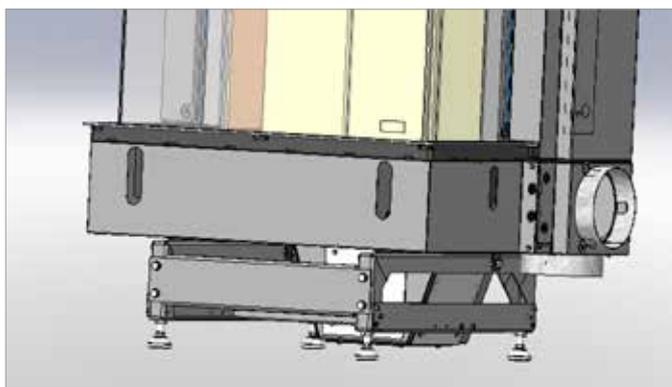
Unscrew the two bolts and roughly set the height. Range 38 cm. Do not forget to place the two bolts back.



#### Fine adjustment

Screw the adjustment foot bolt to set the precise height. Range 3 cm. Use this method to set the fireplace perfectly level.

Kalfire W corner and 3-sided models



#### Fine adjustment

Screw the bolt at the adjustment foot to set the precise height. Range 3 cm. Use this method to set the fireplace perfectly level.

## Fireplace surround

Materials with the following characteristics can be used to create the surround around the Kalfire W:

- Resistant to high temperatures, minimum 700 °C.
- Free from materials which can cause fumes and odour nuisance.
- Dimensionally stable, even after lengthy exposure to high temperatures.



1. The surround must have no direct connection to the appliance; it must be self-supporting.
2. Seal the joints between the appliance and the surround, using heat resistant glass fibre or ceramic cord.
3. Use the Kalfire mantel iron for easy and stable mounting of the span above the door of the fireplace. Never attach this mantel iron to the actual appliance, but to the side of the surround or use tie rods to attach it to the ceiling or wall.
4. Ensure that the thickness of the surround above the door of the fireplace does not exceed 11 cm, otherwise the fireplace will be too deeply recessed and it will be difficult to operate/clean the door.
5. Finish the surround using materials that do not contain any plastic substances. High temperatures may cause plastic to discolour.
6. Before completely closing off the surround, ensure that the inside of the surround is clean and free of dust. Preferably use a vacuum cleaner to clean the inside of the surround. If you fail to do this, particles of dust may cause problems in the air flow of the convection system.
7. The fireplace is surrounded by a metal strip which facilitates the join between the surround and the fireplace. These metal strips can be hidden from view on the front; all the lines of the surround then merge into the finishing strips. The side strips can be demounted inwards, so the guide can be accessed in the event of maintenance.

### 3.8.1 Practical examples of connection: combustion air and convection

#### Situation 1 - Recommended situation

The combustion air is connected directly to the appliance from outside. The outside air is not in contact with the room the fireplace is installed in or with the chimneybreast. The convection system is also connected directly to the fireplace. There are no open connections between the interior of the chimneybreast and the room in which the fireplace is installed.

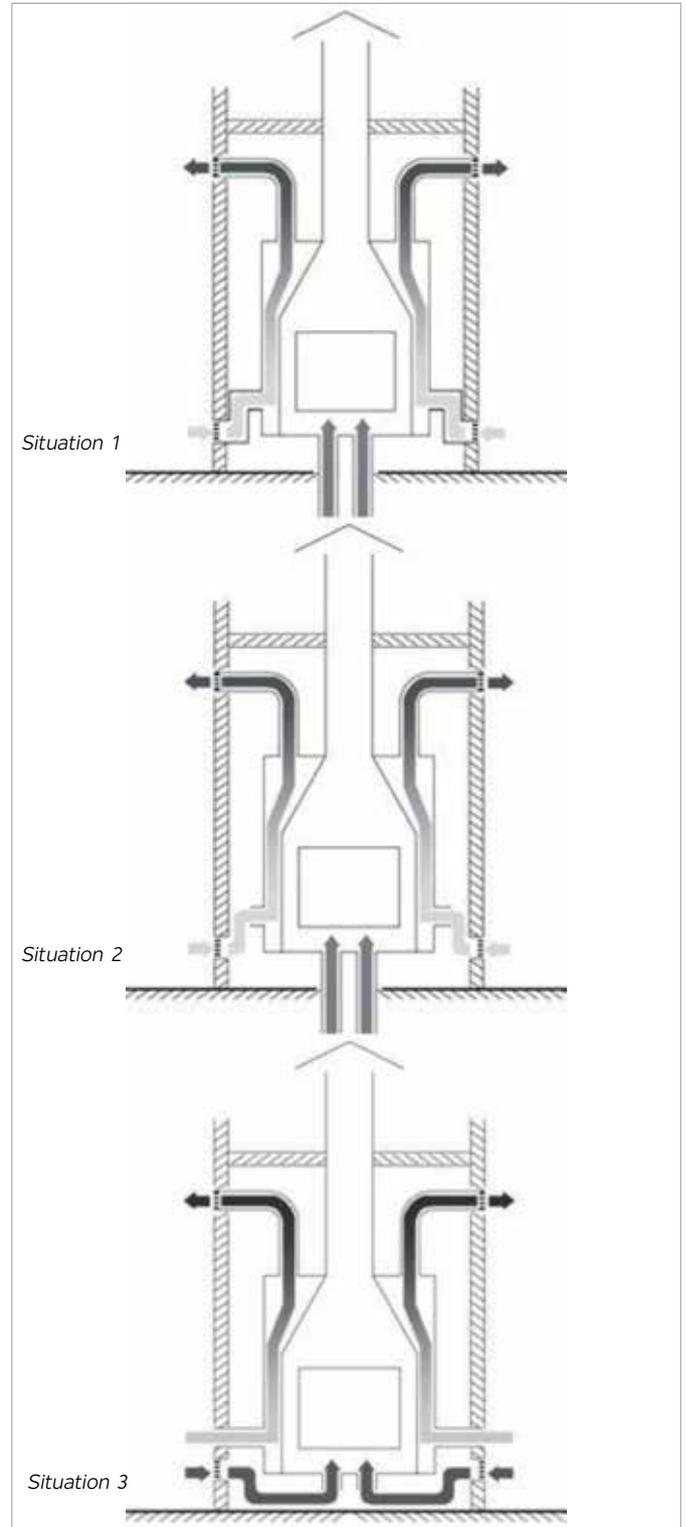
#### Situation 2:

The combustion air is connected directly to the appliance from outside. The outside air is not in contact with the room the fireplace is installed in or with the chimneybreast. The convection system is only in contact to the room in which the fireplace is installed.

#### Situation 3:

The combustion air cannot be connected directly to the appliance; this air must be taken from the room the fireplace is installed in. This mainly occurs in an existing situation, in which

the combustion air can only be taken from the room the appliance is in. The convection system must then be physically separated from the combustion air; connect the lower and upper convection gratings directly to the appliance. The combustion air reaches the fireplace through extra openings in the chimneybreast. See Technical Specifications (table 4) for the through put of these openings.



The convection connections at the top of the appliance must be connected at all times.

### 3.9 Baffle plate

#### Kalfire W45/48F

The Kalfire W45/48F has removable baffle plates. These baffle plates are situated above the smoke hood just below the heat exchanger. The baffle plates ensure an optimal combustion.

In the following situations, it may be necessary to remove the baffle plate(s) or decrease its size.

- Bad exhaust of the flue gasses.
- Condensation in the flue duct.

If necessary, you can adjust the baffle plate as follows:

1. Remove the baffle plate and see if this solves the problem. If the problem still occurs, then something else is the cause. If removing the plate solves the problem, proceed with the next step.
2. Use a saw or knife to cut away a strip of 1 cm wide at the front of the baffle plate. Do not remove too much. The baffle plate must still be able to rest on the bracket. A maximum of 6 cm can be cut away from the baffle plate.
3. In certain situations, it may be necessary to remove the baffle plate completely.

#### Kalfire W70/33F, W105/47F and W120/38F

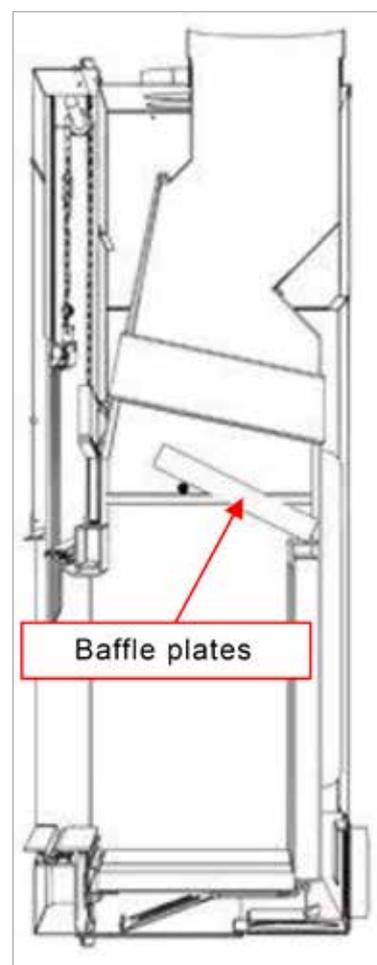
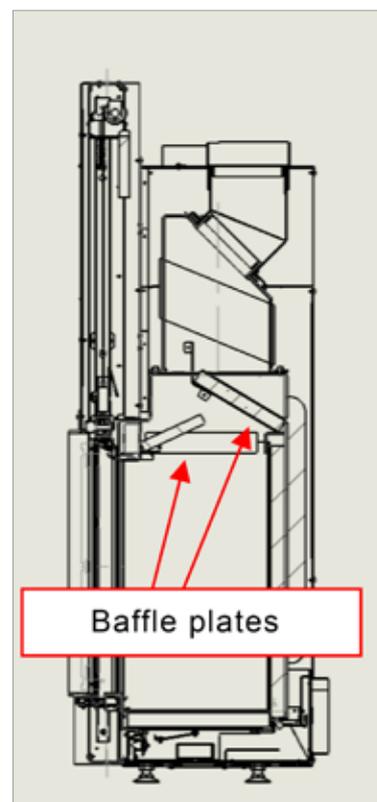
The Kalfire W70/33F, W105/457F and W120/38F have a removable baffle plate. This baffle plate is situated above the smoke hood just below the heat exchanger. With the larger Kalfire models this plate consists of several parts. The baffle plate ensures an optimal combustion.

In the following situations, it may be necessary to remove the baffle plate or decrease its size.

- Smoke return when the Kalfire starts.
- Condensation in the flue duct.

If necessary, you can adjust the baffle plate as follows:

1. Remove the baffle plate and see if this solves the problem. If the problem still occurs, then something else is the cause. If removing the plate solves the problem, proceed with the next step.
2. Use a saw or knife to cut away a strip of 1 cm wide at the front of the baffle plate. Do not remove too much. The baffle plate must still be able to rest on the bracket. A maximum of 6 cm can be removed from the baffle plate.
3. In certain situations, it may be necessary to remove the baffle plate entirely.



### Kalfire W60/51F, W71/62F and W85/40F

The Kalfire W60/51F, W71/62F and W85/40F have a removable baffle plate. This baffle plate is situated above the smoke hood, just below the heat exchanger. With the larger Kalfire W models this plate consists of several parts. The baffle plate ensures an optimal combustion.

In the following situations, it may be necessary to remove the baffle plate or decrease its size.

- Smoke return when the Kalfire starts.
- Condensation in the flue duct.

If necessary, you can adjust the baffle plate as follows:

1. Remove the baffle plate and see if this solves the problem. If the problem still occurs, then something else is the cause. If removing the plate solves the problem, proceed with the next step.
2. Use a saw or knife to cut away a strip of 1 cm wide at the front of the baffle plate. Do not remove too much. The baffle plate must still be able to rest on the bracket. A maximum of 6 cm can be removed from the baffle plate.

 All baffle plates must be removed if the Kalfire **W60/51F**, **W71/62F** or **W85/40F** is used as an open fire place.

### Kalfire W100/61F

The Kalfire W100/61F has removable baffle plates. These baffle plates are situated above the smoke hood just below the heat exchanger. Baffle plates ensure an optimal combustion.

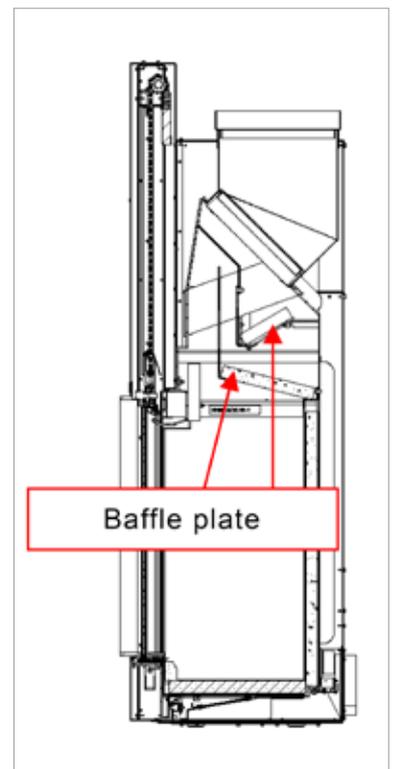
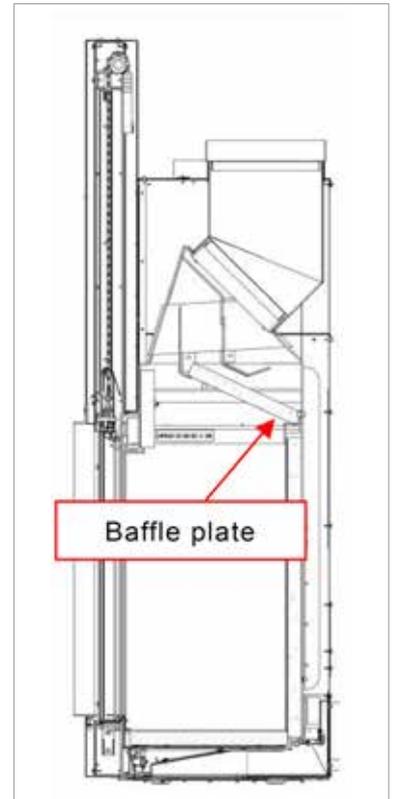
In the following situations, it may be necessary to remove the baffle plate(s) or decrease its size.

- Bad exhaust of the flue gasses.
- Condensation in the flue duct.

If necessary, you can adjust the baffle plate as follows:

1. Remove the baffle plate and see if this solves the problem. If the problem still occurs, then something else is the cause. If removing the plate solves the problem, proceed with the next step.
2. Use a saw or knife to cut away a strip of 1 cm wide at the front of the baffle plate. Do not remove too much. The baffle plate must still be able to rest on the bracket. A maximum of 6 cm can be cut away from the baffle plate.

 When used as an open fire place, the baffle plates should be removed completely.



### Kalfire W65/38C, W66/48S, W90/47C and W90/47S

The Kalfire W65/38C, W66/48S, W90/47C and W90/47S have two removable baffle plates. These baffle plates are situated above the smoke hood just below the heat exchanger. The baffle plate ensures an optimal combustion.

In the following situations, it may be necessary to remove the baffle plate(s) or decrease its size.

- Smoke return when the Kalfire starts.
- Condensation in the flue duct.
- When the Kalfire W65/38C, W66/48S, W90/47C and W90/47S are being used as an open fireplace.

If necessary, you can adjust the baffle plates as follows:

1. Remove the lower baffle plate and see if this solves the problem. If the problem still occurs, then also remove the upper baffle plate. If the problem still isn't solved, then something else is the cause. If removing the plate(s) solves the problem, proceed with the next step.
2. Cut away a strip of 3 cm wide, at the front and rear of the baffle plate. If necessary, do this for both baffle plates.

A 3-sided and corner fireplace is always a more sensitive product than a fireplace with a door at the front, particularly when used with an open door. If the Kalfire W65/38C, W66/48S, W90/47C and W90/47S are used as an open fireplace, some smoke may flow back into the room - even if both baffle plates have been removed.

This may have a number of causes:

- Insufficient pull in the chimney duct.
- The air flow patterns in the room where the 3-sided fireplace has been installed.
- Too low ignition temperature.

### Kalfire W80/52T and W105/47T

The Kalfire W80/52T and W105/47T has several removable baffle plates. These baffle plates are situated above the smoke hood just below the heat exchanger. The baffle plate ensures an optimal combustion.

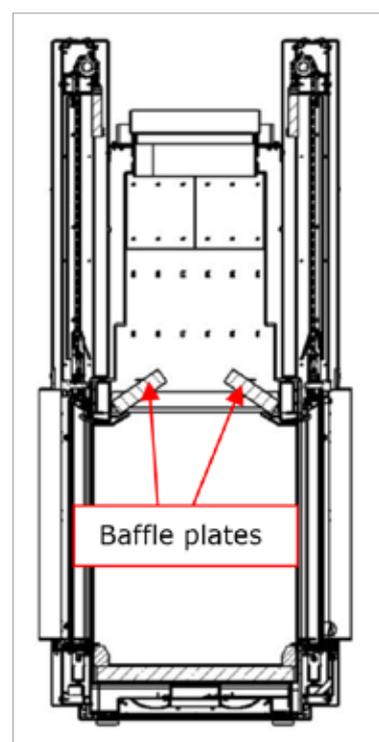
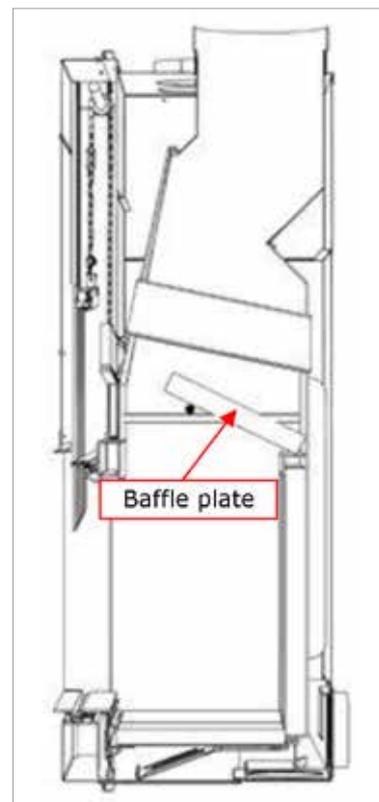
In the following situations, it may be necessary to remove the baffle plate or decrease its size.

- Smoke return when the fireplace starts.
- Condensation in the flue duct.

If necessary, you can adjust the baffle plate as follows:

1. Remove all baffle plates and see if this solves the problem. If the problem still occurs, then something else is the cause. If removing the plate solves the problem, proceed with the next step.
2. Use a saw or knife to cut away a strip of 1 cm wide at the front of the baffle plate. Do not remove too much. The baffle plate must still be able to rest on the bracket. A maximum of 6 cm can be removed from the baffle plate.
3. In certain situations, it may be necessary to remove the baffle plate entirely.

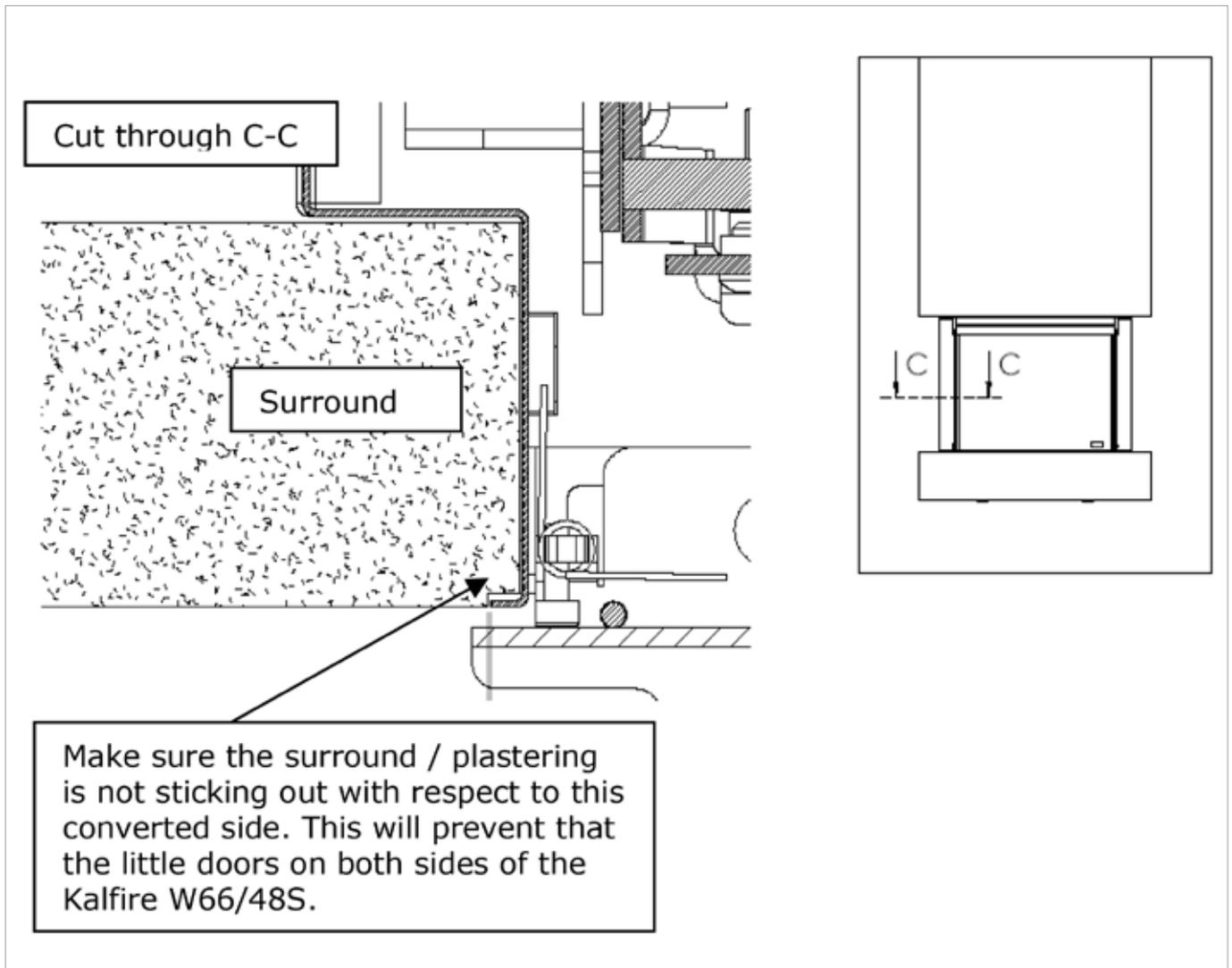
 The Kalfire W105/47T is not suitable to be used as an open fire place.



### 3.10 Finish

Finish upper side Kalfire W66/48S and W90/47S

The surround above the Kalfire W66/48S and W90/47S must have at least 2 mm of play, in relation to the trim above the door.



### Finish the front platform of the Kalfire W65/38C, W66/48S, W90/47C and W90/47S

The front of the Kalfire W65/38C, W66/48S, W90/47C and W90/47S can be finished in two ways:

- Mount the platform under the steel design trim.
- Mount the platform against the steel design trim (at the same height).

 The platform may not touch the steel design trim leave at least 2 mm between the platform and the steel design trim.

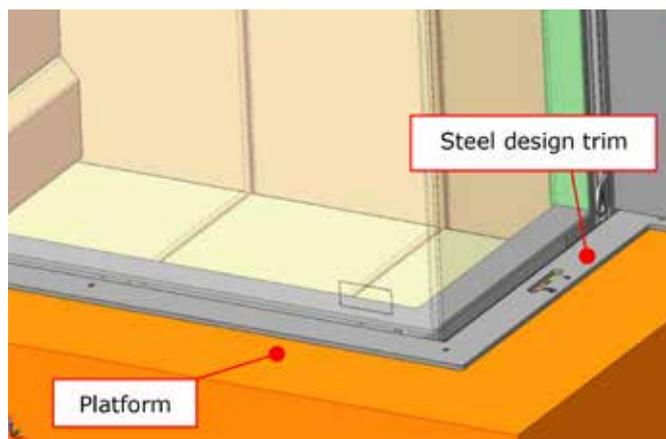


Table 5: Technical data

Kalfire type	W45/48F	W60/51F	W65/38C	W66/48S	W70/33F	W71/62F	W80/52T	W85/40F
Indication plate	P8-086-2009	P8-003-2015	P8-020-2014	P8 054-2015	P8-017-2015	P8-025-2011	P8-070-2015	P8-001-2015
Inspection body	1004	1004	1004	1004	1004	1004	1004	1004
Norm	EN13229 A2							
Output (kW)	4.7-9.3	6.6-13.2	6.5-13	6.7-13.3	6-12	8-16.0	8.4-16.8	7.4-14.8
Flue gas mass flow (g/s)	6.8	11.3	10.2	13.04	10.3	12.7	15.8	13.2
Heat output (%)	86	81	82	80	80	83	80	81
Energy efficiency class	A+	A+	A+	A	A	A+	A	A+
Energy efficiency Index (%)	115	108	109	106	106	110	106	108
Flue gas temperature (°C)	270	260	257	247	282	302	262	257
CO at 13%O <sub>2</sub> (%)	0.10	0.08	0.1	0.07	0.09	0.10	0.09	0.06
CO <sub>2</sub> content (%)	11.1	10.1	10.8	8.8	10.5	10.6	9.3	9.72
Dust content at 13%O <sub>2</sub> (mg/nm <sup>3</sup> )	36	13	35	10	34	11	12.8	17
NO <sub>x</sub> at 13%O <sub>2</sub> (mg/nm <sup>3</sup> )	150	119	94	111	87	113	119	80.7
CnHm at 13%O <sub>2</sub> (mg/nm <sup>3</sup> )	58	58	82	49	74	61	65	25.6
Min. flue draught (Pa)	12	12	13	12	11	12	12	11.6
Insulation side panel (cm) (AGI-Q 132, table 1)	5	10	5	10	10	10	-	10
Insulation rear panel (cm) (AGI-Q 132, table 1)	5	10	5	10	10	10	10	10
Insulation base (cm) (AGI-Q 132, table 1)	0	0	0	0	0	0	0	0
Insulation roof (cm) (AGI-Q 132, table 1)	9	9	9	9	9	9	9	9
Flue connection (mm)	∅150	∅180	∅180/200	∅200	∅180	∅250	∅200	∅200
Combustion air connection (mm)	1× ∅150	1× ∅150	2× ∅150	2× ∅150	2× ∅150	2× ∅150	2× ∅150	2× ∅150
Convection connection inlet (mm)	2× ∅150	2× ∅150	2× ∅150	2× ∅150	4× ∅150	4× ∅150	2× ∅150	4× ∅150
Convection connection outlet (mm)	2× ∅150	2× ∅150	2× ∅150	2× ∅150	4× ∅150	4× ∅150	2× ∅150	4× ∅150
Weight (kg)	180	226	270	270	210	271	385	257

Kalfire type	W90/47C	W90/47S	W100/61F	W105/47F	W105/47T	W120/38F
Indication plate	P8-048-2010	P9-004-2013	P8-066-2010	P8-019-2015	P8-007-2010	EZ/07/2213/01
Inspection body	1004	1004	1004	1004	1004	0608
Norm	EN13229 A2					
Output (kW)	7.5-14.9	9.0-18	8.8-17.6	8.8-17.6	8.8-17.6	17
Flue gas mass flow (g/s)	14.95	15.5	17.34	15.9	20.87	14.5
Heat output (%)	80	82	80	81	78	75
Energy efficiency class	A	A+	A	A+	A	A
Energy efficiency index (%)	106	109	106	108	103	106
Flue gas temperature (°C)	241	248	255	245	275	324
CO at 13%O2 (%)	0.1	0.1	0.09	0.08	0.10	0.11
CO2 content (%)	8.6	9.9	8.8	9.46	7.4	8.6
Dust content at 13%O2 (mg/nm <sup>3</sup> )	20	30	22	11	25	44
NOx at 13%O2 (mg/nm <sup>3</sup> )	138	112	116	118	150	104
CnHm at 13%O2 (mg/nm <sup>3</sup> )	93	78	90	60	110	70
Min. flue draught (Pa)	13	13	13	12	11	12
Insulation side panel (cm) (AGI-Q 132, table 1)	10	5	5	5	-	8.4
Insulation rear panel (cm) (AGI-Q 132, table 1)	10	10	5	5	10	9.4
Insulation base (cm) (AGI-Q 132, table 1)	0	0	0	0	0	0
Insulation roof (cm) (AGI-Q 132, table 1)	9	9	9	9	9	9.3
Flue connection (mm)	ϕ250	ϕ250/300	ϕ250	ϕ250	ϕ250	ϕ250
Combustion air connection (mm)	2× Ø150					
Convection connection inlet (mm)	4× Ø150	2× Ø150	4× Ø150	4× Ø150	4× Ø150	4× Ø150
Convection connection outlet (mm)	4× Ø150	2× Ø150	4× Ø150	4× Ø150	4× Ø150	4× Ø150
Weight (kg)	320	360	430	328	435	335

## 4 Preparing for use

### 4.1 Type of wood

The Kalfire W built-in fireplace is suitable for burning dry wood. We recommend using only chopped wood, which has not undergone any treatment; MDF, stained or coated wood, and flammable waste should not be used as fuel in the Kalfire on environmental grounds and to protect the working life of the fireplace. The most suitable types of wood are beech, oak and birch.



Dry wood (approximately 15% moisture content) is extremely important for a good combustion process. If damp wood is used, the ceramic window pane in the door will become soiled and there is an increased risk of chimney fire. It will also form an environmental nuisance and a nuisance to the neighbours as a result of the excessive smoke/odour that is released (extremely dark smoke). This is why you should always make sure that dry wood is stored suitably. To obtain the ideal moisture content of 15%, the chopped wood often needs to dry outside for a period of 2 to 3 years.

If the Kalfire W is lit with an open door, we advise you to use broadleaf wood such as oak, beech and birch. These types of wood do not contain much resin. When burning types of wood that do contain resin, such as pine and larch and fir, a lot of sparks are released. We also discourage the use of hardwood. It is better to mix the different types of wood, for example, by combining broadleaf wood with hardwood. This will benefit the lifespan of the Kalfire W and will create a more attractive play of flames.

### 4.2 Storing the wood

All types of wood should be stored for about 2 to 3 years in a dry, protected and well-ventilated area. For example in a lean-to next to the house. A cellar or a garage without good ventilation is not suitable as a storage place for wood. Also, the wood should be stored chopped; otherwise the bark will impede the drying process. Wood often contains insects; therefore do not store the wood in the living room for lengthy periods.



### 4.3 Ventilation

The risk of discolouration can be reduced by effective ventilation in the room where the appliance is installed (see also section 3.5). Below are some tips, from the Dutch decorative heating guild, to avoid discolouration:

- The area in which the fireplace is situated must be well ventilated.
- Minimise the use of candles and oil lamps and keep the wick as short as possible. These 'decorative touches' produce considerable amounts of soiling and unhealthy soot particles in your home.
- Wait at least 6 weeks before lighting a newly installed masonry mantelpiece or after building work. The building moisture must be allowed to disappear completely from walls, the floor and ceiling.
- Avoid smoking. Smoking is not only bad for your health, but cigarette and cigar smoke also contain tar, that will cause deposits on colder and damp walls when heated.
- With renovations or new building work, ensure there is extra ventilation to remove volatile solutions from your home.

## 5 Lighting the Kalfire W

### 5.1 Lighting the Kalfire W for the first time

When the Kalfire W is lit for the first time, the enamel on the stove will burn in and cure. This causes nuisance in the form of odour and fumes. Make sure the room is well ventilated. It is advisable to light the fireplace during the day, and open all doors and windows in order to reduce the odour nuisance. If the Kalfire has a slatted rear panel, the first time a fire is lit use only a very small quantity of wood (max. 2 kg/hour). The paint on the surface of the slats needs to cure gradually. If too much wood is burned during the first use, the paint could burn or flake.

 Enamel that has not yet cured is particularly sensitive. Avoid touching the enamelled parts of the fireplace. Leave the door open, for about 5 cm, the first time the fireplace is lit and close the door after it has cooled down. When heated the enamel is soft and will stick sooner. If the door does stick to the fireplace, it can be tilted (see section 5.2).

### 5.2 Opening the door

The Kalfire W is equipped with a lifting door. To open the door, place the handle in the opening on the lower right. To do so, use the short pin, attached to the handle.

Then lift the handle upwards.

The first 3 cm can be quite difficult, because the door has to be pulled out of the lock. After this, it will be easier. The door can be left open in any desired position. The frameless bottom of the door, always gives you have an optimum view of the flames.

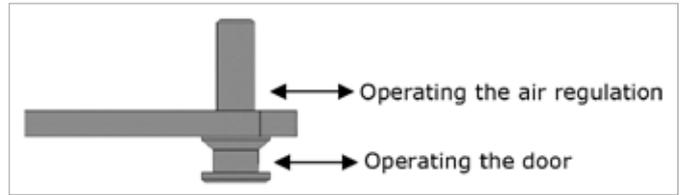
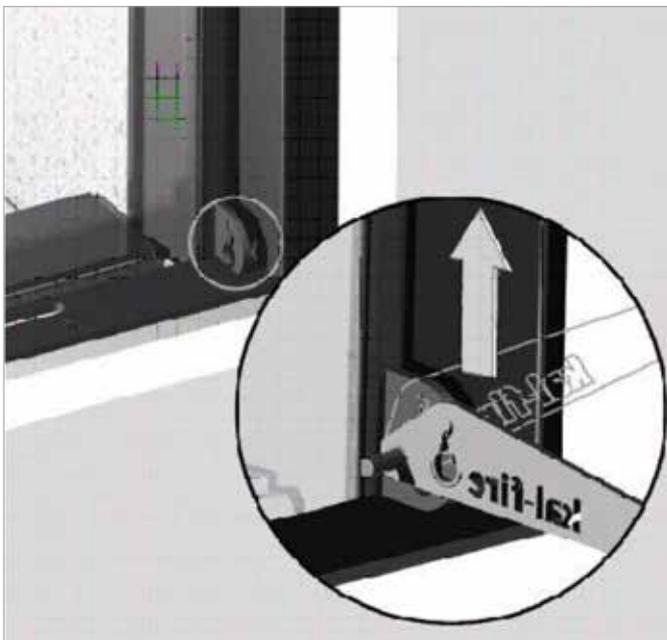


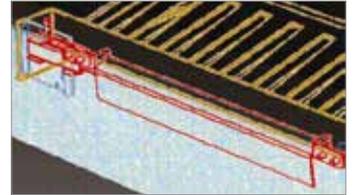
Figure 3: End of the key

### 5.3 Air regulation

The Kalfire W has two types of air regulation:

The primary air is regulated automatically and ensures that the wood is easily ignited. This creates a glowing bed of carbonised wood for an optimal gasification process. After burning for approximately 50 minutes, this valve closes automatically, which will produce a high heat output.

When the primary air valve is closed, the air enters the combustion chamber through the top spoiler.



This top spoiler also ensures that the window remains clean. When the draught in the chimney exceeds 12 Pascal, and (very) dry wood is being burned, you will be able to keep the window clean for a considerable length of time. However, soiling can occur on the window when the fire is smothered by closing the air regulation.

The flames can be regulated by inserting the side of the key into the groove positioned on the right-hand side of the Kalfire. Use the right side of the handle (figure 3). By moving the key to the left, you will minimise the air supply to the top spoiler; the fire will burn more calmly (provided that the primary air valve has closed automatically). By moving the key to the right, the air supply to the fire will increase and the fire will burn more strongly.

#### 5.4 Using the Kalfire W with an open or closed door

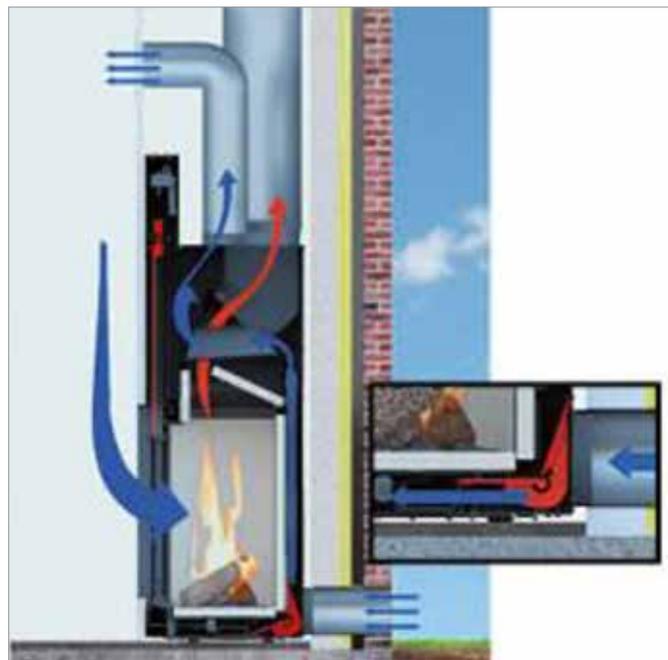
The Kalfire W can be used as an (open) fireplace or a stove (door closed). The main difference, is that each use has a different air requirement. For this reason, the Kalfire W features a fresh air valve at the rear of the appliance (patent).

**Advantage:** The air required by the flue duct to ensure good constant circulation is always introduced into the fireplace or room in the most efficient and comfortable way. When placing the fireplace, it is always important to take heavy air users into account, such as large ventilation systems and extractor hoods. These products use powerful motors to extract air, the pressure difference built up naturally by a flue is far less.

When the door is open, the heat output will fall to about 20%. The wood consumption will increase; as air has unregulated access to the wood. The advantage is a cosy hearth fire.



- Never leave an open fire burn without supervision; any sparks could cause a fire.
- Open the damper (if present) completely.
- Only use the Kalfire W as an open fireplace if there is enough draught in the flue.
- Preferably use the fireplace with a closed door. This is better for the environment and the heat output.



*Closed door*



*Open (fireplace) door*

## 5.5 Igniting the Kalfire

### 5.5.1 Igniting the Kalfire W45/48F, W60/51F, W71/62F, W100/61F and W66/48S



Place a couple of large logs on the base of the appliance and one large log against the rear wall. Place a smaller log on top. Place some firelighters on top.



Place some finely chopped wood onto the logs. Open the air regulation completely (position on the extreme right).



Ignite the firelighters using a long match. Leave the door slightly open (1-2 cm) for a couple of minutes.

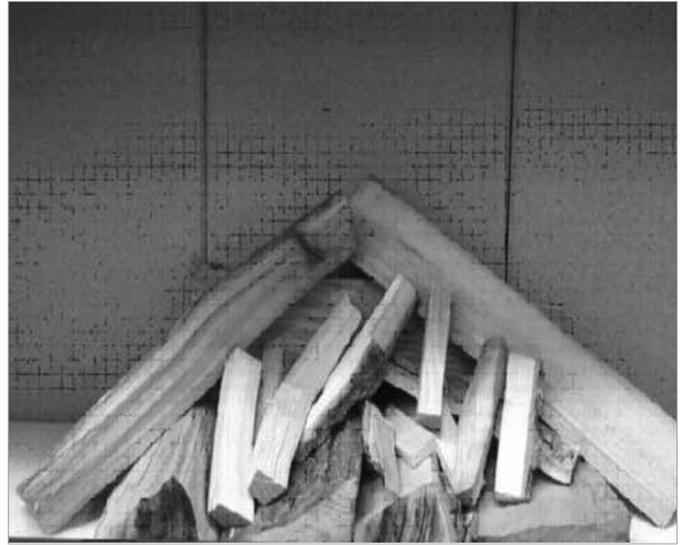


When there is a glowing bed, distribute the glowing ashes using poker. Now add more wood (see section 5.6).

### 5.5.2 Igniting the Kalfire W70/33F, W85/40F, W105/47F, W120/38F, W65/38C, W90/47C and W90/47S



Place a couple of large logs on the base of the appliance and one large log against the rear wall. Place two pieces diagonally on top. Place some firelighters on the logs.



Place some finely chopped wood onto the logs. Open the air regulation completely (position on the extreme right).



Ignite the firelighters using a long match. Leave the door slightly open (1-2 cm) for a couple of minutes.



When there is a glowing bed, distribute the glowing ashes using poker. Now add more wood (see section 5.6).

### 5.5.3 Igniting the Kalfire W80/52T and W105/47T



Place a log on the base of the appliance with some finely chopped wood on both sides.



Place 2 logs diagonally on top of the wood, together with a few firelighters. Use the operating key to open the air regulation completely. (position on the extreme right).



Ignite the firelighters using a long match. Leave the door slightly open (1-2 cm) for a couple of minutes.



When there is a glowing bed, distribute the glowing ashes using a poker. Now add more wood (see section 5.6.).

## Tips

- Use enough wood to ignite the Kalfire:
  - Kalfire W45/48F ca. 2 kg
  - Kalfire W70/33F ca. 3 kg
  - Kalfire W60/51F, W85/40F, W65/38C, W66/48S, W90/47C, W90/47S ca. 4 kg
  - Kalfire W71/62F, W100/61F, W105/47F, W80/52T en W105/47T ca. 6 kg
- When the fire has been lit, leave the door slightly open (1-2 cm) for a few minutes; the wood will catch fire more easily and the flue will be quickly warmed-up.



Do not use white spirits, petrol, oil or other liquid fuels.

Be aware that weather conditions (air pressure, temperature, wind) can influence combustion. Minimize these influences by adjusting the secondary air supply.

## 5.6 Optimal heat output

For optimal heat production we advise you to burn wood according to the instructions below. This will achieve the same performance and emission values, obtained during inspection of the appliances.

- Ensure a glowing bed is created (see section 5.5).
- Use logs of wood of approximately the same size. The amount differs per Kalfire W model. See table below.

**Table 6 Instructions for optimal burning per model**

Kalfire model	W45/48F	W60/51F	W65/38C	W66/48S	W70/33F	W71/62F	W80/52T
Weight* per log (g)	850	850	950	975	800	1100	850
Number of logs	2	3	3	3	3	3	4
Max. weight* wood per hour (kg)	2.3	3.6	4	3.5	2.9	5	4.5
Air regulation open (%)	100	50	30	25	75	33	90

Kalfire model	W85/40F	W90/47C	W90/47S	W100/61F	W105/47F	W105/47T	W120/38F
Weight* per log (g)	1000	850	1400	1200	1280	1100	1300
Number of logs	3	4	3	3	3	4	3
Max. weight* wood per hour (kg)	4	4	5.5	3.6	4.6	5	5.2
Air regulation open (%)	50	10	50	60	33	50	100

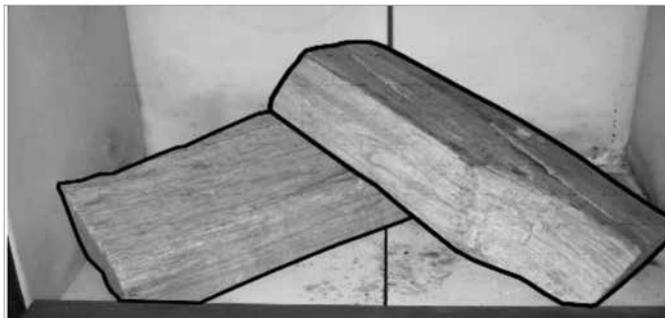
\* Weight for beech wood.

To get an optimal air mixture, you need to place the logs as follows:

### **Kalfire W45/48F**

Place the two wood logs in a V-shape.

The Kalfire W45/48F can be used both as an open or closed fireplace. Remove both baffle plates before using the appliance with the door open, to enable correct exhaust of the flue gas.



### **Kalfire W60/51F**

Three logs are approx. 25 cm. long.



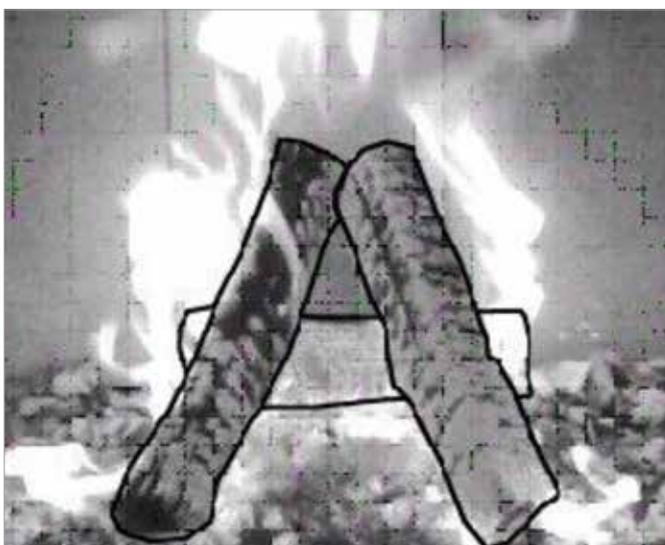
### **Kalfire W70/33F**

Two logs are 15 to 16 cm long, the third is 33 cm.



### **Kalfire W71/62F**

Position the logs in an A-shape with the horizontal log at the base.

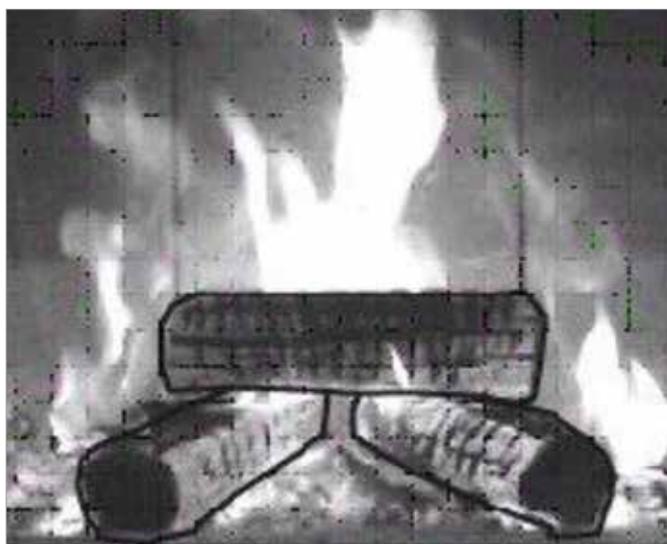


**Kalfire W85/40F and W105/47F**

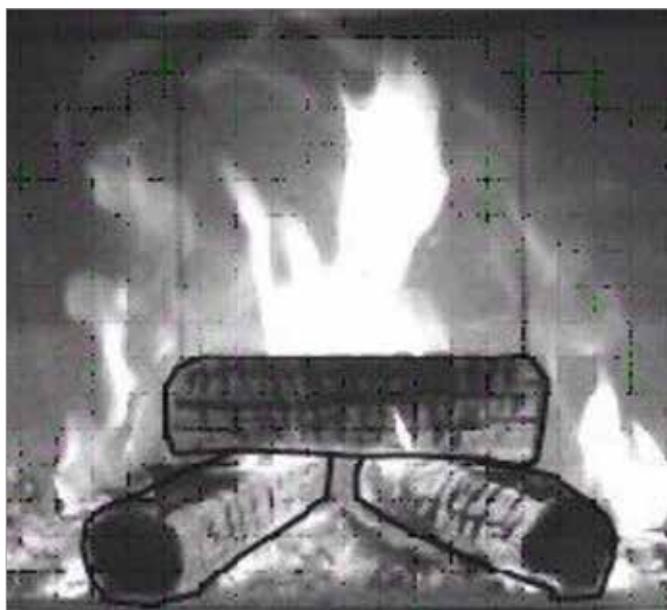
The three logs are approx. 25cm long for the Kalfire W85/40F.  
The three logs are approx. 32cm long for the Kalfire W105/47F.

**Kalfire W100/61F and W120/38F**

Position the logs in an A-shape with the horizontal log at the top.  
The three logs are approx. 29 cm long.

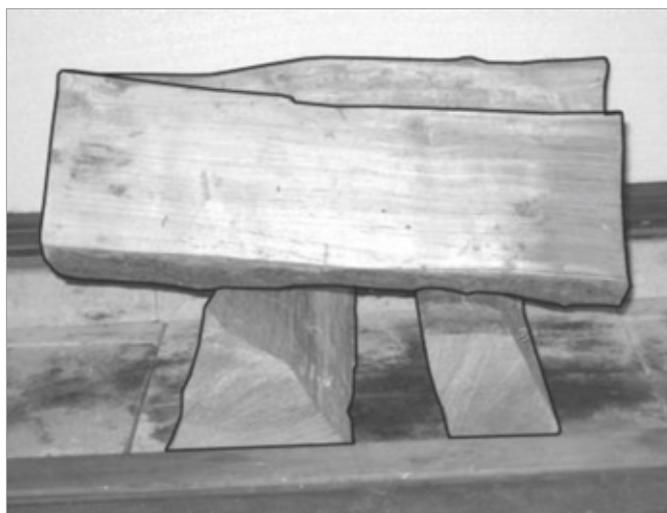
**Kalfire W66/48S**

Position the logs in an A-shape with the horizontal log on top of the two vertical logs.



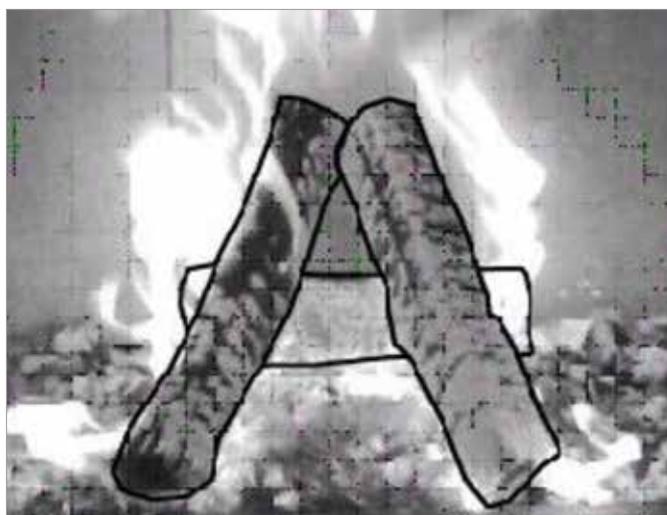
### **Kalfire W90/47C**

Place 4 logs of approx. 25cm long in a cross shape in the right or left side of the fireplace.



### **Kalfire W90/47S and W65/38C**

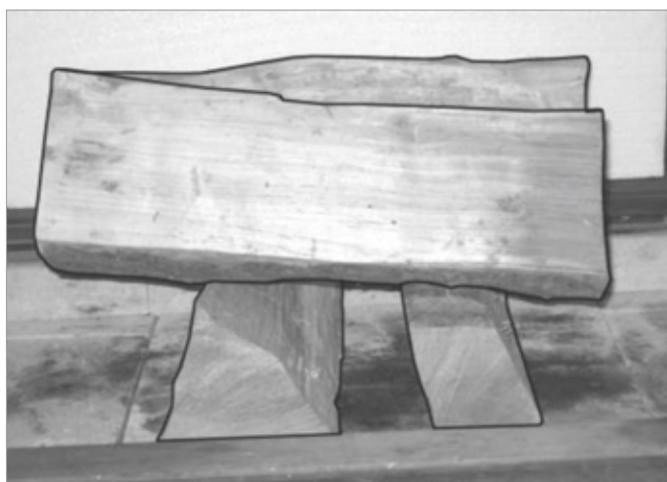
Position the logs in an A-shape with the horizontal log at the base.



### **Kalfire W80/52T and W105/47T**

Place 4 logs of approx ca. 30cm long in a cross shape in the centre of the fireplace.

When the logs have been burnt, position new logs on the glowing bed in the same way as explained above. Take the amount of wood indicated per hour into account.



## Open door use

### **Kalfire W45/48F**

We advise you to keep the door of the Kalfire W45/48F door closed, until there is a good glowing bed and the Kalfire W45/48F is well heated (high temperature of the skamol plates and in the combustion chamber). This ensures the flue gas is exhausted correctly.

If the appliance is used with the door open straight away, there is only a minimum of pull in the chimney. The flue gasses will not be exhausted correctly, but will flow back into the room.

When the logs have been burnt, position new logs on the glowing bed in the same way as explained above. Take the amount of wood indicated per hour into account.

### **Kalfire W65/38C and W90/47C**

These appliances can be used with the door open or closed. If you use the appliance with the door open, we strongly advise you to remove the baffle plate in order to guarantee optimal pull of the flue gasses.



By definition, the 3-sided and corner models are less suitable for use as an open fire than the front opening models. If the Kalfire W65/38C, W66/48S, W90/47C or W90/47S models are used with the door open, smoke may be blown into the room even if both baffles have been removed.

The degree to which you can successfully use the appliances open greatly depends on the flue duct and the draught it exerts.

### **Kalfire W80/52T and W105/47T**

The Kalfire W80/52T and W105/47T are not suitable to be used when open. Only open the door of the firebox if strictly necessary (e.g. to add logs).

## **5.6.1 Topping up with wood**

To maintain optimal heat output, top up the fire with new wood as soon as the flames have disappeared and the logs are starting to glow (no smoke development). To add new logs, you need to open the door slowly, to prevent smoke escaping into the room because of the sudden draught. Do not add more than 2 to 3 logs (see maximum weight wood, table 5). When the logs are burning strongly, you can close damper (if installed) again.

A rule of thumb: 1 kg of wood provides about 4 kW of energy.

The Kalfire W is suitable for discontinuous use. This is achieved by burning according to table 5.

## **5.7 Operation the damper (optional)**

Depending on the situation, an external damper can be connected to the fireplace (see section 3.6). Attention! It is not necessary to install a damper in all situations! After the installer has installed the damper, you can operate it using the knob on the side of the surround.

When using an original Kalfire damper, the letters "Auf or +" on the knob show the open position. "Zu or -" is the closed position. Set the required position by turning the knob. The position of the damper depends on the draught in the flue and the way the appliance is being used:

When lighting the fire      Damper fully open.

When burning with closed door      The damper can be closed to 20-50% which will calm the flames. If you want to top up wood, open the damper completely, before opening the door. When the wood is burning to your satisfaction, you can partly close the damper again.

## 6 Maintenance

### 6.1 Keeping clean panes

#### To keep the panes clean:

- Only burn dry wood (with a moisture level of approximately 15% and stored dry and chopped for 2 years).
- Open the air supply completely (100%).
- Open the damper completely (if present).
- Ensure the flue has a minimum draught of 12 Pa.

#### COMMENTS:

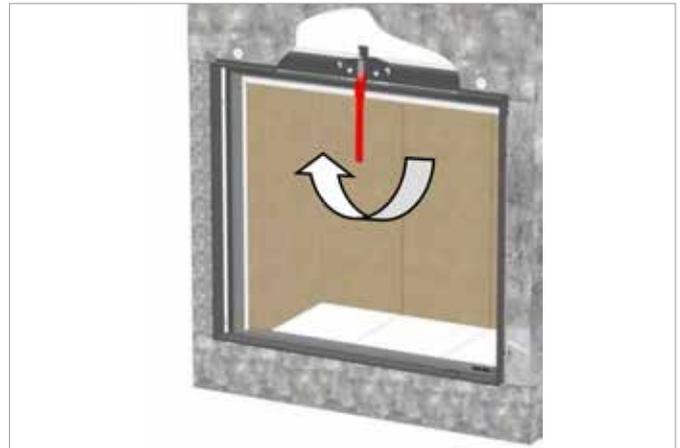
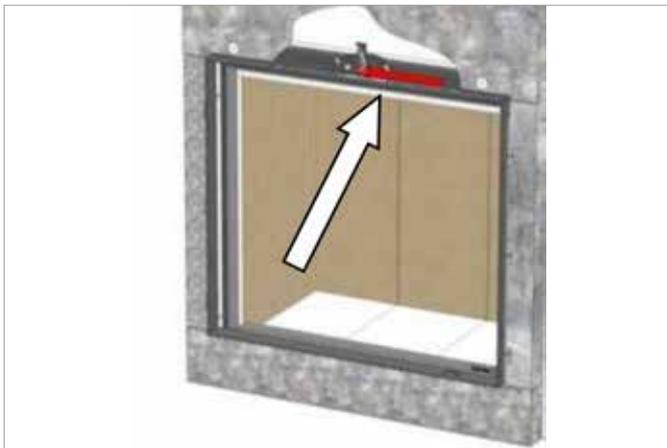
- The risk of soot building up on the glass panel during combustion is higher with a rear panel of steel slats than with a vermiculite rear panel.
- Due to the smaller surface area of vermiculite in the two-sided (tunnel) Kalfire W80/52T and W105/47T, the risk of soot build-up on the glass panel is higher.

### 6.2 Cleaning the pane

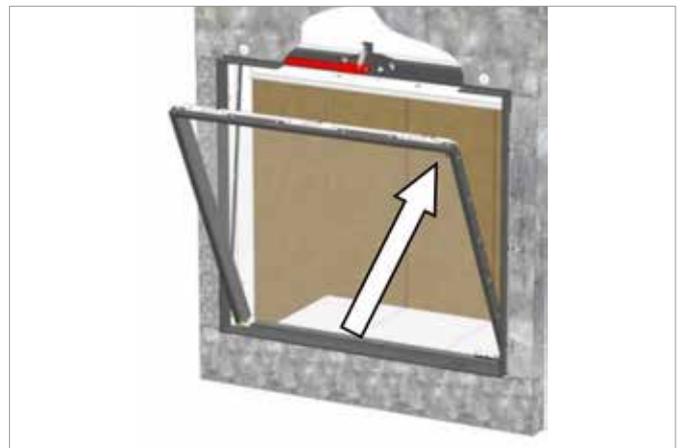
#### Kalfire front and tunnel models

Before cleaning the glass, allow it to cool down completely to prevent any damage.

The fireplace has a handle which opens the window. The handle is in the middle, immediately above the window.



1. Move the handle all the way from right to left (180 degrees) in one smooth movement.
2. The window is now released.



3. Carefully tilt the window forwards, using the small hole in the top right-hand corner of the window. The window remains open at an angle of approximately 45 degrees.

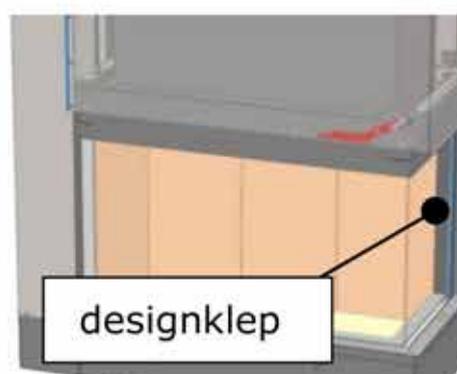
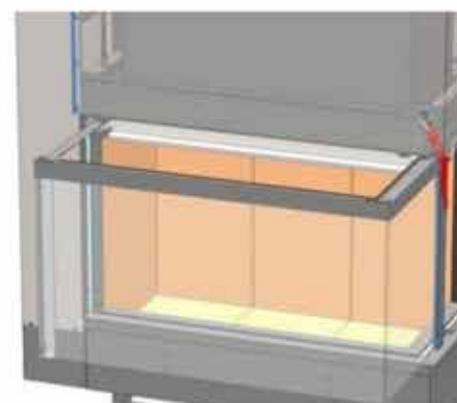
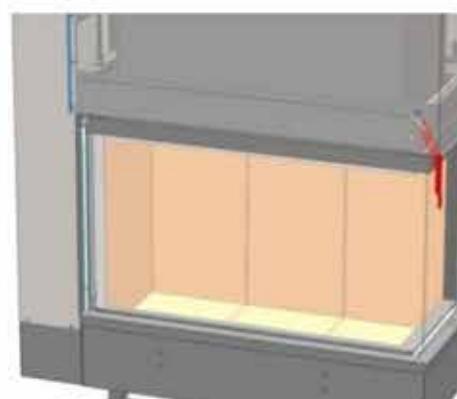
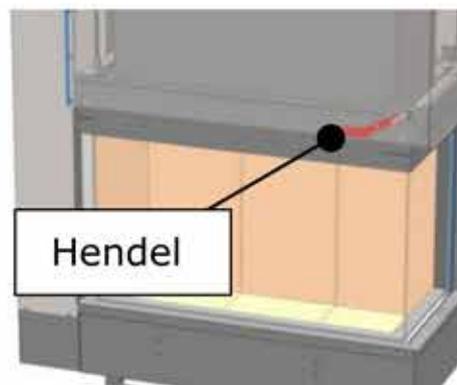
4. Use a cloth or piece of paper to remove the worst soiling from the glass.
5. Spray the cleaning agent onto a cloth or piece of paper and wipe the glass clean. Never spray the cleaning agent directly onto the glass.



6. Wipe the window with a damp cloth to remove the cleaning agent. The deposits will automatically fall into the combustion chamber due to the tilted position of the door. The area in front of the fireplace will remain clean.

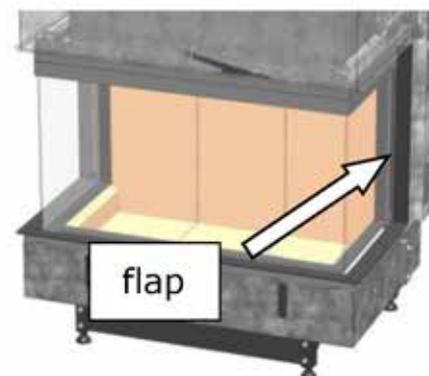
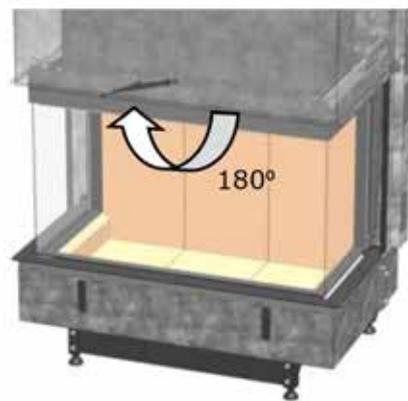
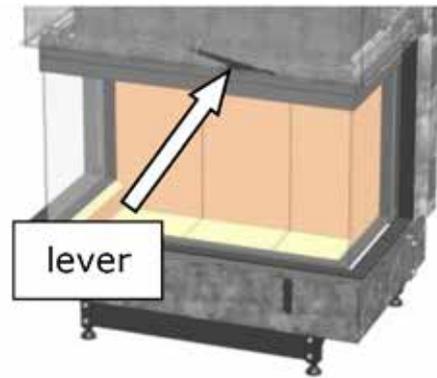
**Kalfire W65/38C**  
**Kalfire W90/47C**

1. Before you are going to clean the glass, it has to be completely cooled down, to prevent damage.
2. Press the complete lifting door down firmly.
3. To open the door use the lever (see picture).
4. Pull down the lever until it is in a vertical position.
5. The door is released and can be moved forward (see image). Take hold of the door on and gently pull it forward.
6. Use a cloth or piece of paper to remove the worst soiling from the glass.
7. Spray the detergent onto a cloth or piece of paper and wipe the glass clean. Never spray the cleaning agent directly onto the glass.
8. Wipe over the glass with a damp cloth afterwards, to remove all traces of the detergent used.
9. To close the door, gently push back the glass. Turn back the lever in its original horizontal position.
10. Close the flap (see last picture).



**Kalfire W66/48S**  
**Kalfire W90/47S**

1. Before you are going to clean the glass, it has to be completely cooled down, to prevent damage.
2. Press the complete lifting door down firmly.
3. In one smooth movement, twist the lever (upper centre of the convection casing above the door) 180 degrees to the left until the lever is in a horizontal position again.
4. The door has now been released and can be tilted forward. Grasp the door by the glass or by the steel edge at the top and pull it forward carefully.
5. Use a cloth or piece of paper to remove the worst soiling from the glass.
6. Spray the detergent onto a cloth or piece of paper and wipe the glass clean. Never spray the cleaning agent directly onto the glass.
7. Wipe over the glass with a damp cloth afterwards, to remove all traces of the detergent used.
8. To close the door, gently push back the glass. Turn back the lever in its original horizontal position.
9. Close the flaps left and right (see last picture).



To close the door again, tilt it back and turn the key to the right. The fireplace will be hermetically sealed again by the three-point closure.

-  - Ensure that no detergent fluids makes contact with the sealing cords. This will damage the cords!
- Remove persistent soiling by dipping a damp cloth into the ash. Rub the glass with the cloth.
- Do not use detergents that contain ammonia. Ammonia will damage the sealing cords.
- Ensure that no glowing particles come into contact with the sealing cord. These will damage the cords.

### 6.3 Cleaning the grate

Your Kalfire W is suitable for burning dry wood, which burns best in its own ashes. This combustion leaves very little residual ash (approx. 3 g per kg wood).

-  Be careful when you remove the ashes, as they can still glow, even after 24 hours. Never use a vacuum cleaner without special accessories, like the ash-clean.

-  Make sure that the level of ash does not rise above the spoiler. The spoiler is situated in the frame and ensures correct ignition of the wood. The opening of the air gauge must never be obstructed or blocked. The lower sealing cord must be free of ash, so that the glass is able to lay against the sealing cord.

**TIP:** Ash consists largely of minerals, which can be used as a fertiliser in the garden.

### 6.4 Maintenance

1. The enamelled parts of the Kalfire W can be cleaned using a lint-free damp cloth. Repair enamel and spray cans can be obtained from your dealer, if the enamel becomes damaged.
2. The flue/chimney should be inspected and swept at least once every year. Do not use steel brushes on a stainless steel flue duct. Remove the baffle plate before sweeping to remove the soot and to ensure the plate is not obstructing the passage during sweeping.
3. Clean the space underneath the fireplace via the convection gratings at the base. Dust can easily collect here, conveyed by the convection current.
4. Make sure the cord in the lower frame is free of ash and soiling.
5. If the cords no longer seal properly, they can be replaced. Contact your dealer for assistance.
6. Treat the chain in the lifting door system each year, by spraying it with Kal-fire lubrication.



The pane is made from special ceramic glass. This should not be placed in the bottle bank (recycling glass). Ceramic glass does not melt in the glass oven and will therefore cause problems in the glass oven. Your ceramic glass should be returned to your council waste tip so that it can be recycled appropriately.

Only use Kalfire spare parts as replacement parts (if necessary). These parts can be obtained from your trade dealer.

## 7 Trouble shooting

### Dirty pane

- Press the door fully downwards, so it is closing properly against the lower sealing cord.
- Check the sealing cord in the door and at the base of the pane for damage/wear.
- Check the moisture content of the wood.
- Check that the air vents in the spoilers above and below the window are blocked.
- Burn wood according to the instructions.
- Check the corner rubbers for wear.
- Check if the tilting mechanism is correctly locked.
- Check if the secondary air regulation is in the maximum position to the right.

### Damper is sticking

- Check if there is something blocking the damper and remove this, if necessary.
- Check if the flue/ chimney is blocked.

### Lifting door moves with difficulty

- Clean the guide.
- Check if the door cord is sticking against the surround.

### Smoke return

- Check if the flue/ chimney is blocked.
- Ensure that the flue duct is sufficiently warmed up before opening the lifting door.
- Only burn dry wood.
- Reduce or remove the baffle plate.
- Check that enough fresh air is being supplied.

### Fire bricks or skamol plates are broken

- Cracks in the inner housing do not influence the operation of the Kalfire.

### Odour nuisance

- When the fireplace is used for the first time, a chemical odour is released due to the enamel being cured;
- Check if the flue/ chimney is blocked.
- Ensure that the flue duct is sufficiently warmed up before opening the lifting door.
- Check that enough fresh air is being supplied.
- Only burn dry wood.
- Check if the odour is not caused by the chimneybreast or accessories in the vicinity of the fireplace.

### Draught

- Extreme winds and temperature differences can lead to discernible currents of air that are caused by play in the air supply and/or exhaust valve of the appliance.

### What to do if there is a chimney fire?

You can recognise a chimney fire by a loud, roaring sound in the flue duct.



Never extinguish the fire with water!

This will cause enormous clouds of steam. As this happens so quickly, the flue may crack due to the pressure.

- Use sand or salt to extinguish the fire in the appliance.
- Close the fireplace and leave the flames to die naturally. If necessary, contact the fire brigade.

### What to do after a chimney fire?

- Have the flue/chimney inspected by an authorised specialist.

## APPENDIX A: EC-declaration of compliance

**Kalfire bv**  
**Geloërveldweg 21**  
**NL – 5951 DH, Belfeld**

hereby declares, that appliances of the brand Kalfire with the following models are in compliance with the appliances as described in the “EG-type-test certificates”

N° P8-063/2009 (Kalfire W45/48F)  
N° P8-003/2015 (Kalfire W60/51F)  
N° P8-020/2014 (Kalfire W65/38C)  
N° P8-054/2015 (Kalfire W66/48S)  
N° P8-8017/2015 (Kalfire W70/38F)  
N° P8-025-2011 (Kalfire W71/62F)  
N° P8-070/2015 (Kalfire W80/52T)  
N° P8-001/2015 (Kalfire W85/40F)  
N° P8-048/2010 (Kalfire W90/47C)  
N° P9-004/2013 (Kalfire W90/47S)  
N° P8-066/2010 (Kalfire W100/61F)  
N° P8-019/2015 (Kalfire W105/47F)  
N° P8-007/2010 (Kalfire W105/47T)  
N° EZ/07/2213/01(Kalfire W120/38F)

and also meet the applicable essential requirements of directive 13229-A2.

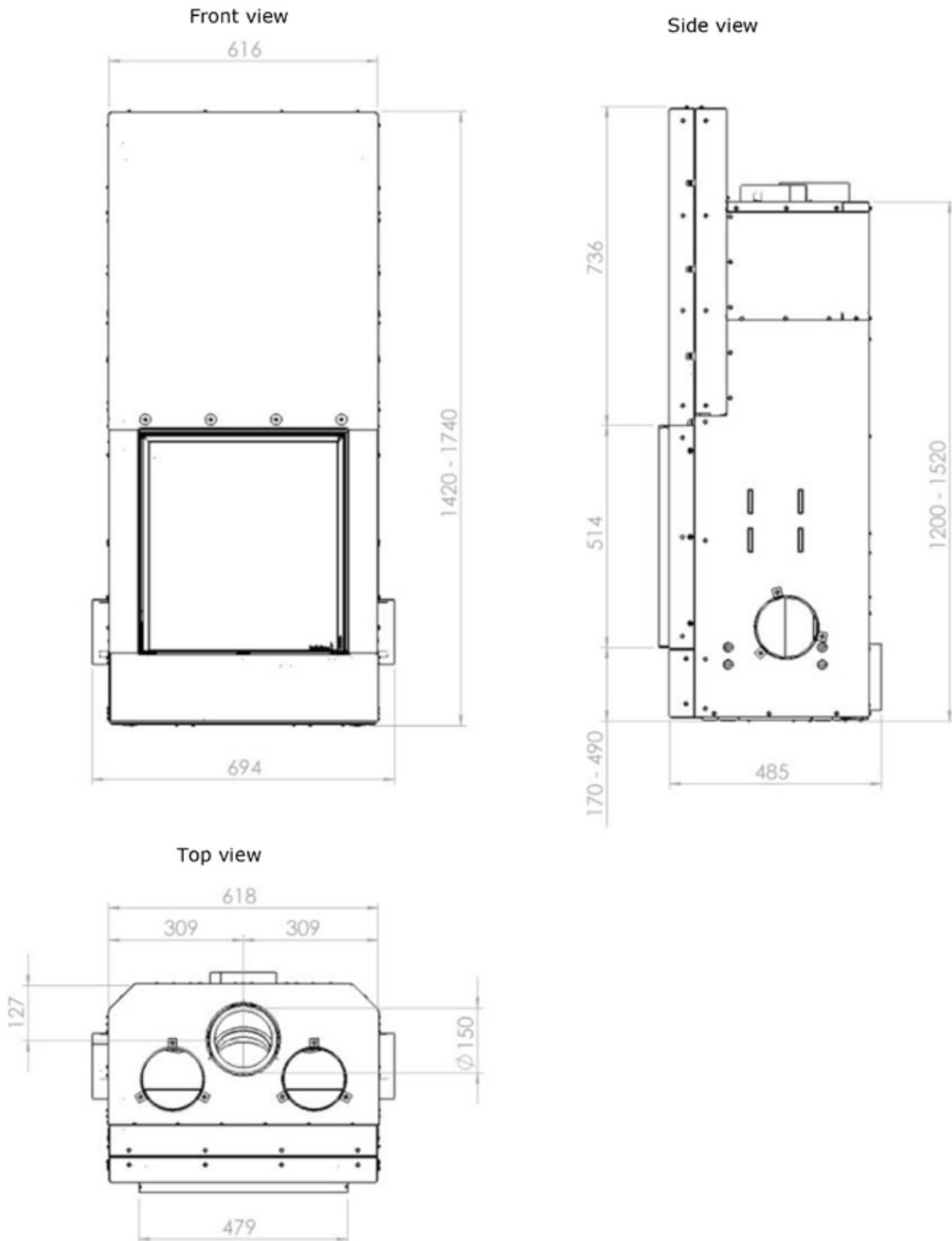


January 2018

Drs. Ing Beijko van Melick Msc  
Algemeen Directeur  
Kalfire BV

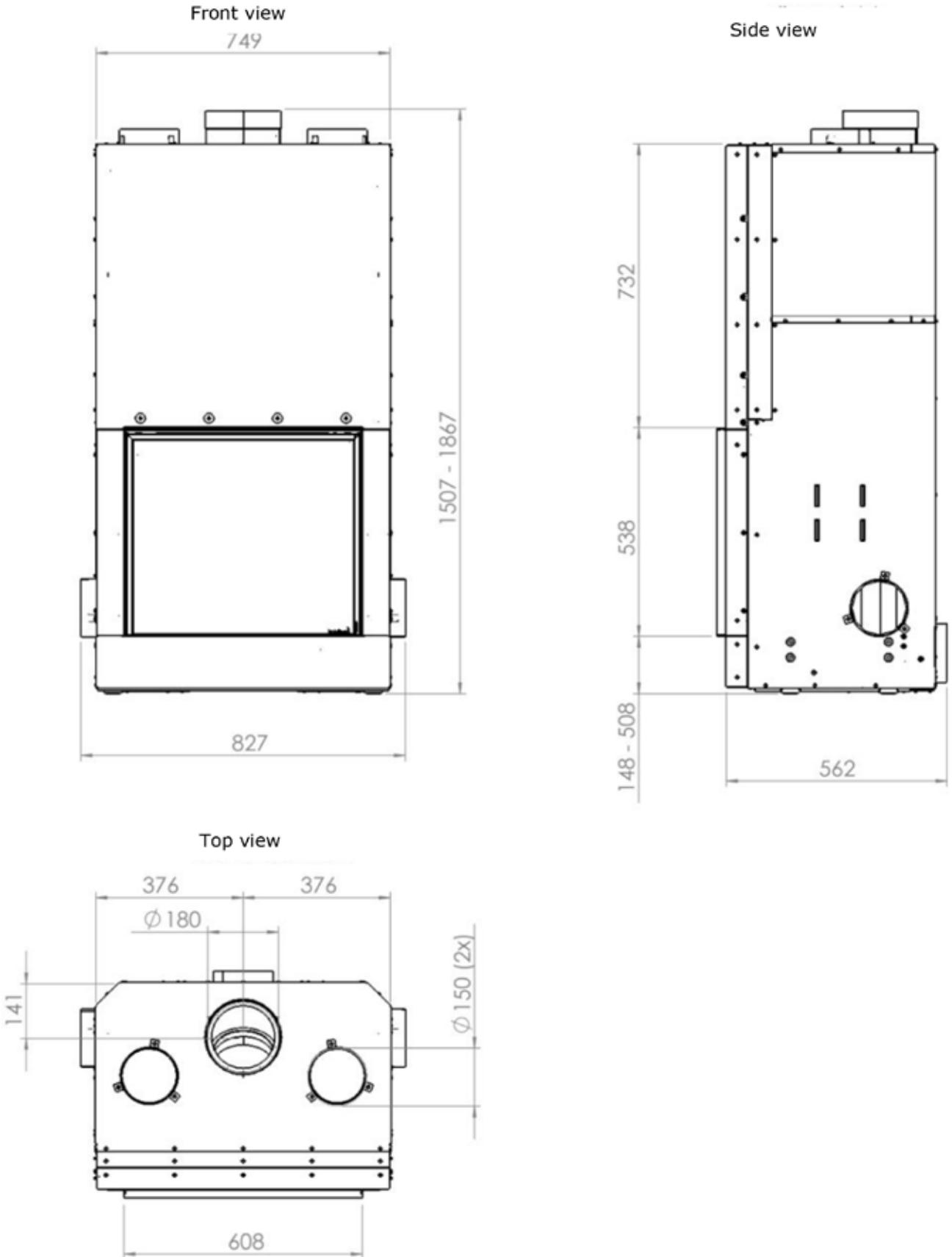
## APPENDIX B: Dimension diagrams

Kalfire W45/48F



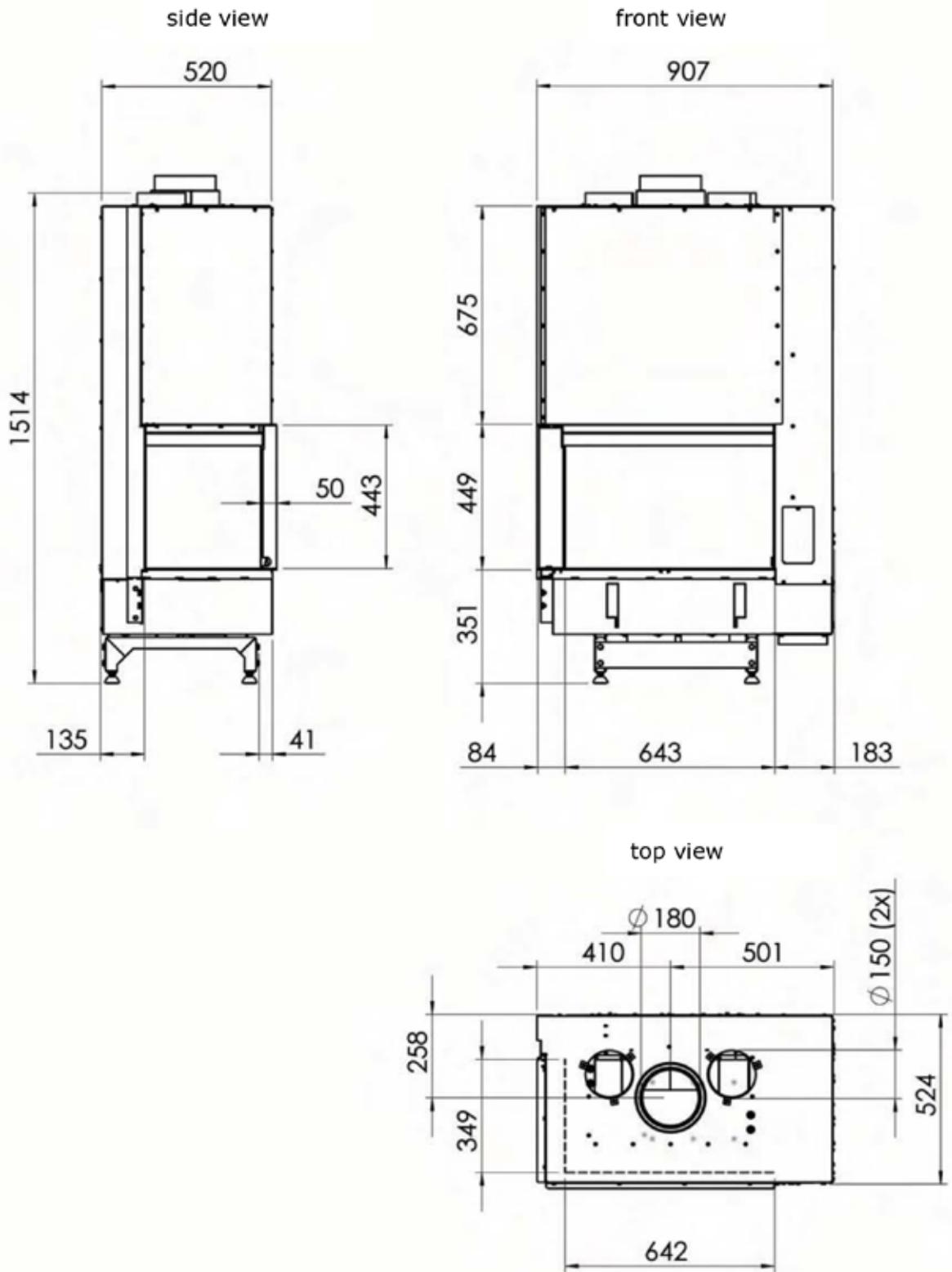
All dimensions shown in mm. Dimensions subject to modification

Kalfire W60/51F



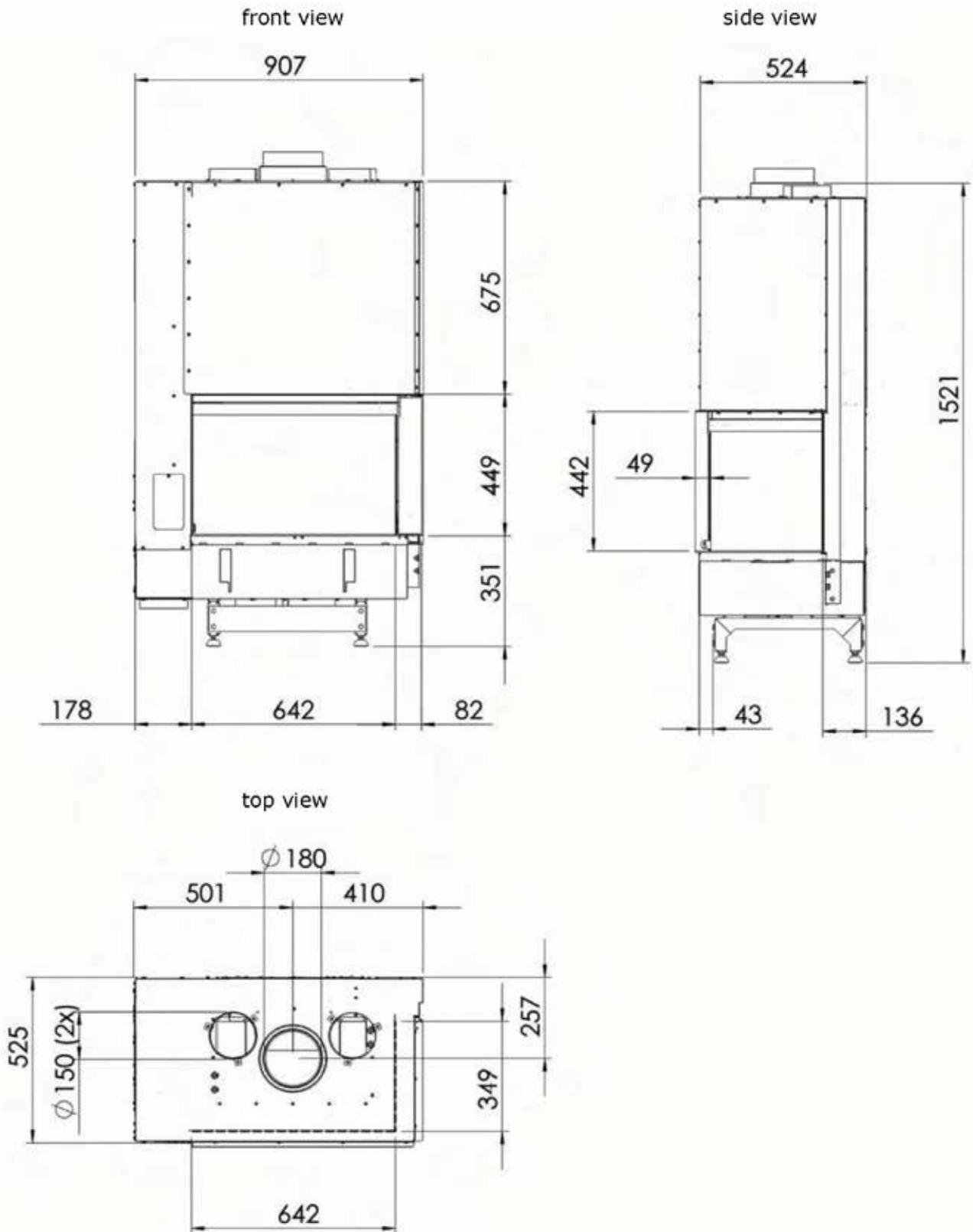
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Kalfire W65/38CL



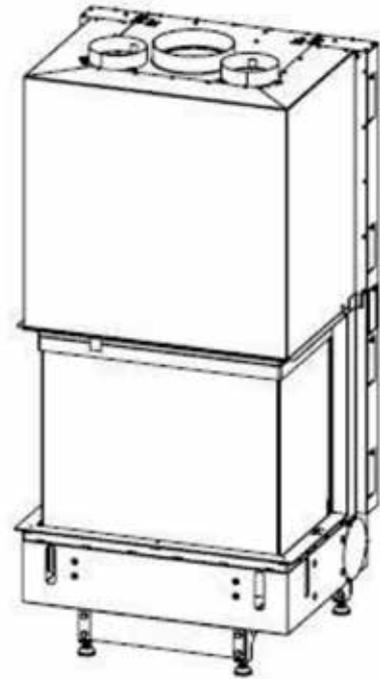
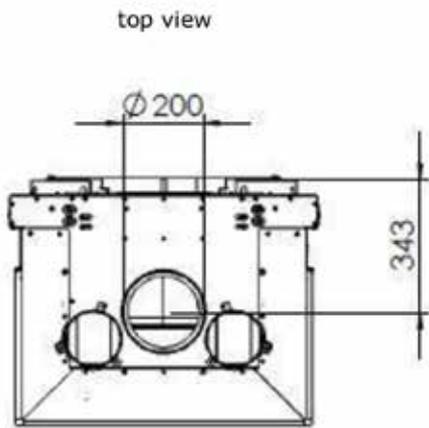
All dimensions shown in mm. Dimensions subject to modification

Kalfire W65/38CR

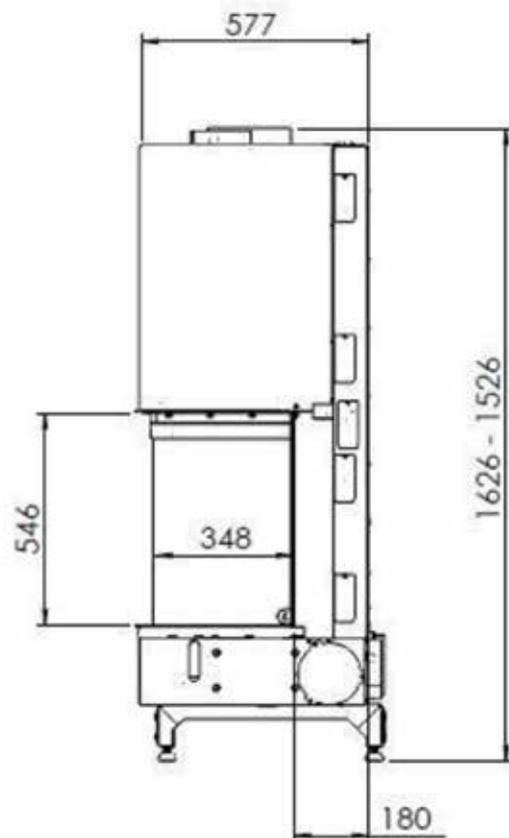


All dimensions shown in mm. Dimensions subject to modification

Kalfire W66/48S



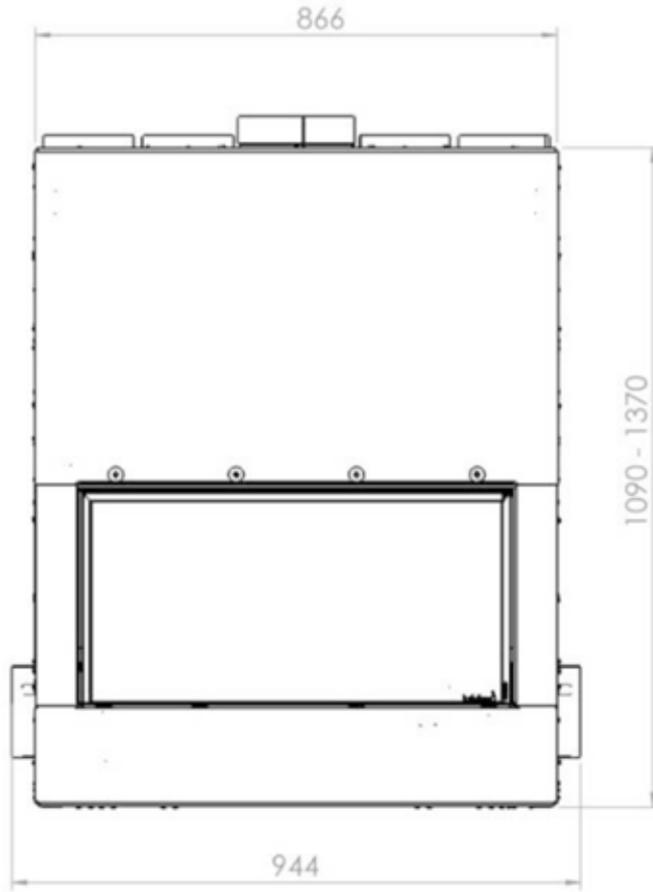
side view



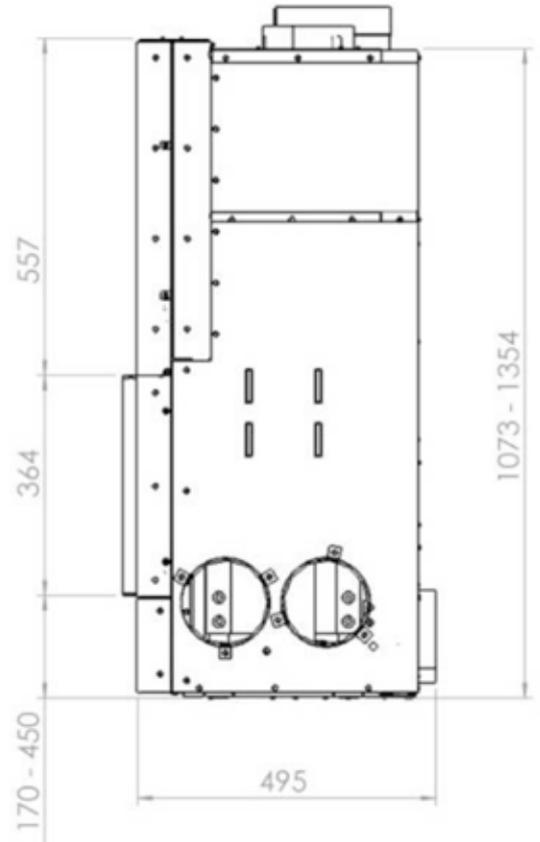
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Kalfire W70/33F

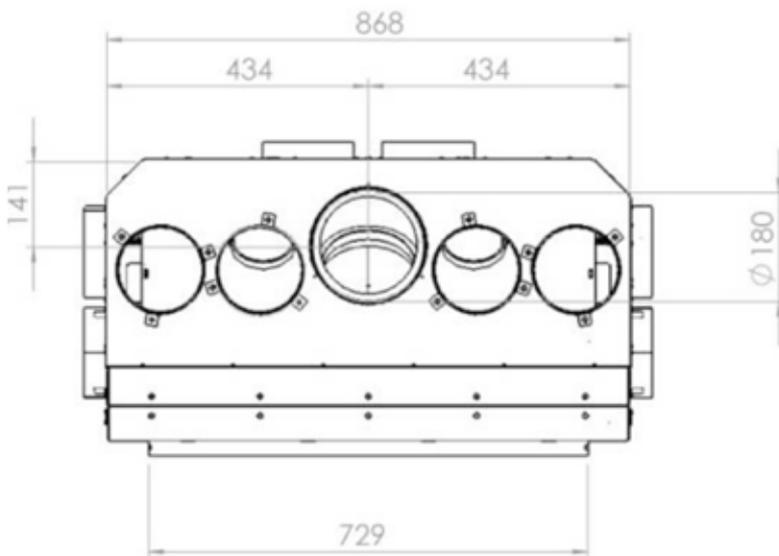
Front view



Side view



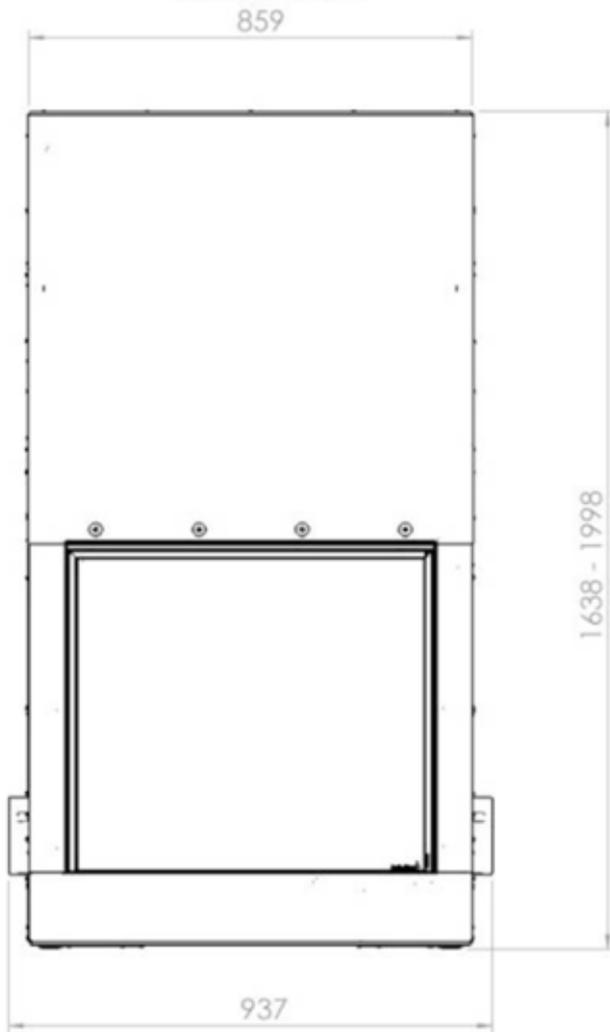
Top view



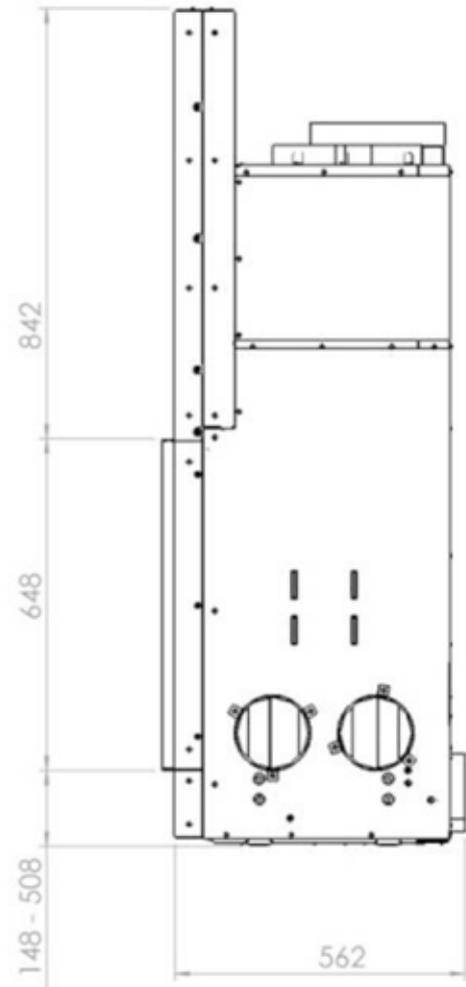
All dimensions shown in mm. Dimensions subject to modification

Kalfire W71/62F

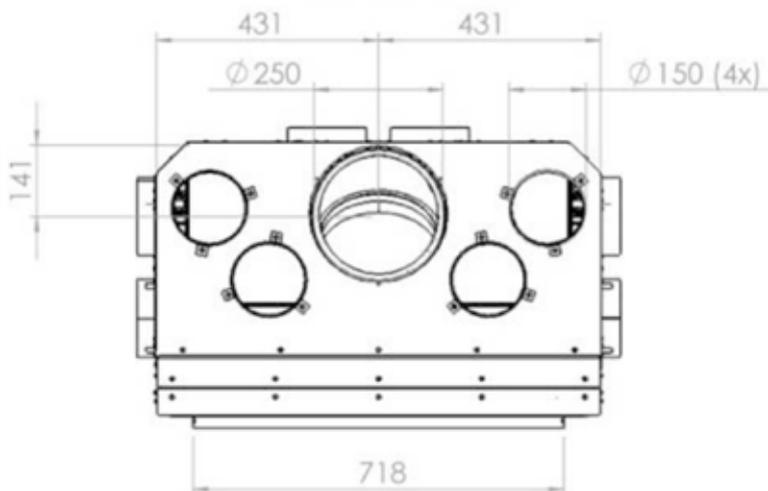
Front view



Side view



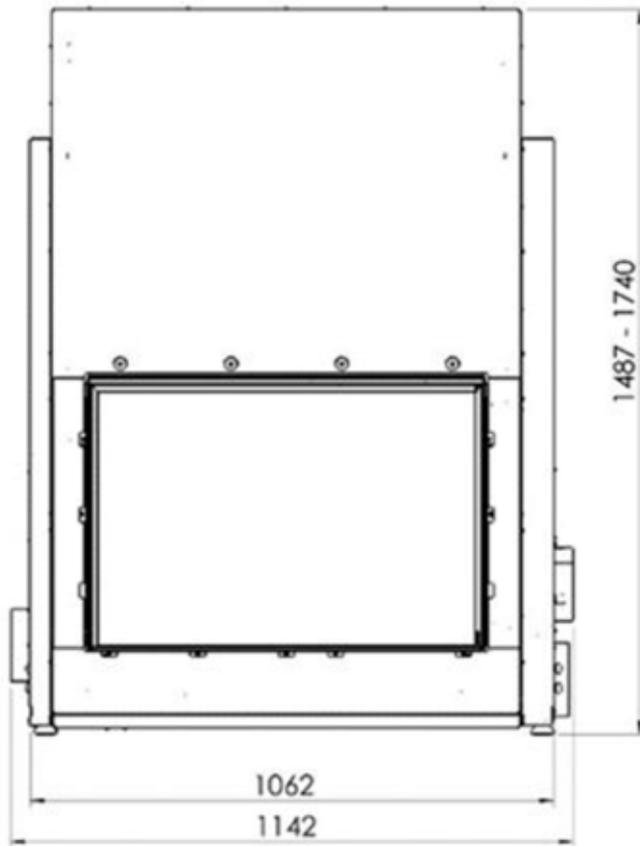
Top view



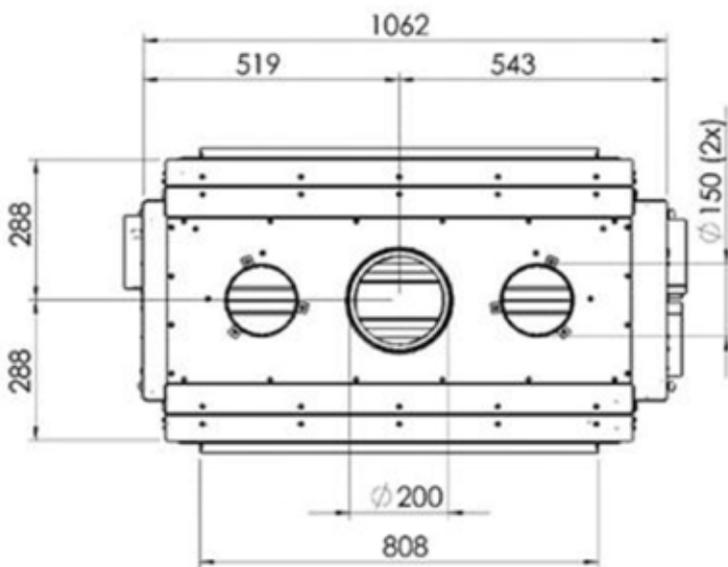
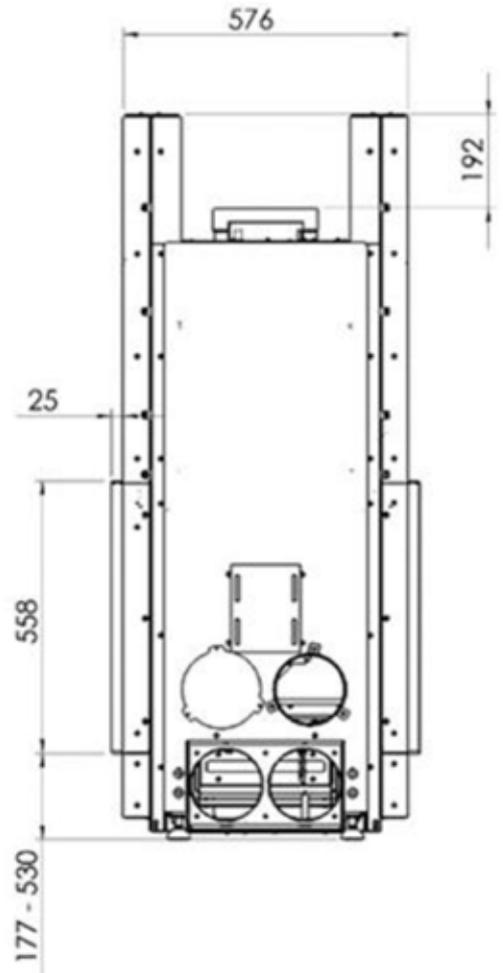
All dimensions shown in mm. Dimensions subject to modification

Kalfire W80/52T

Front view

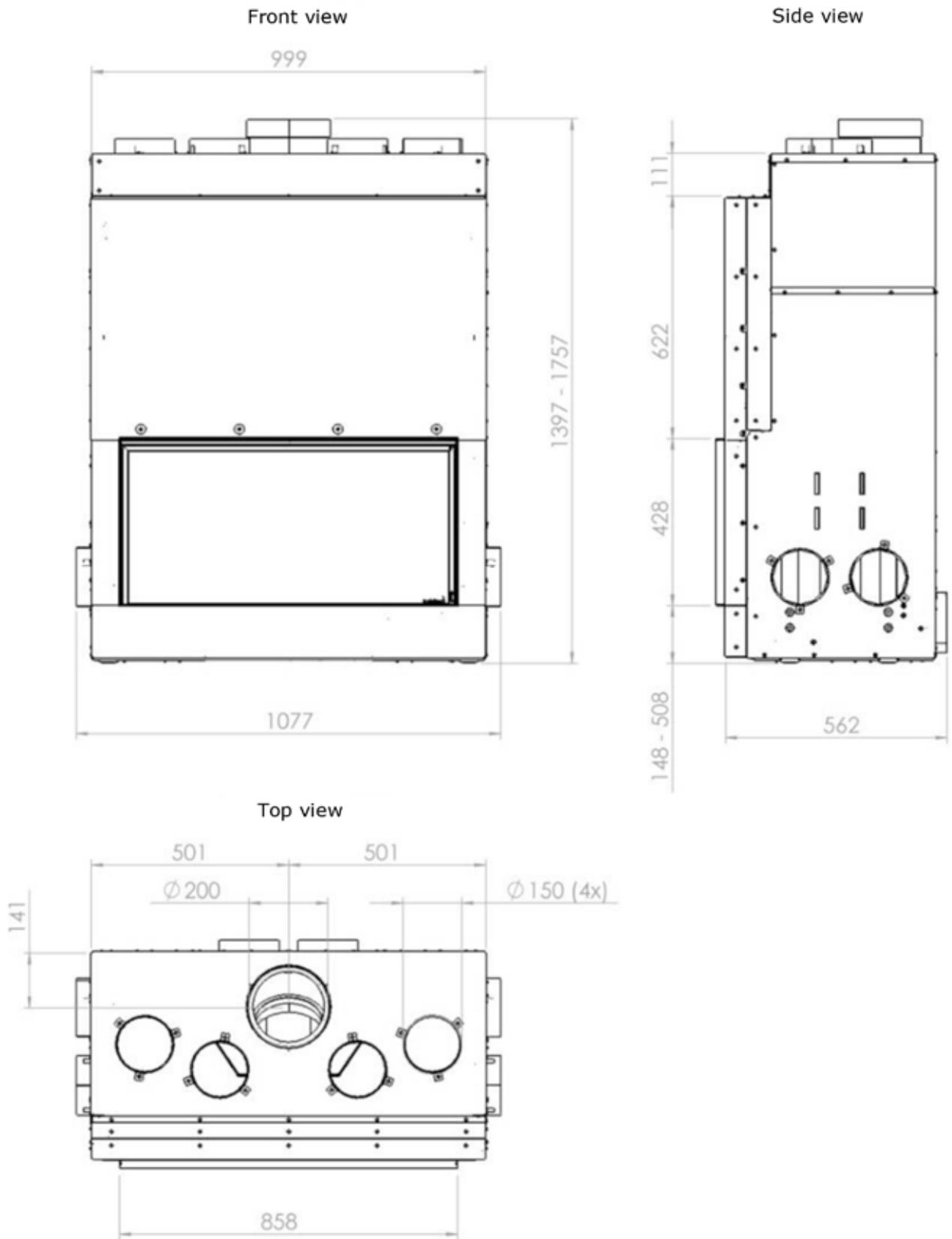


Side view



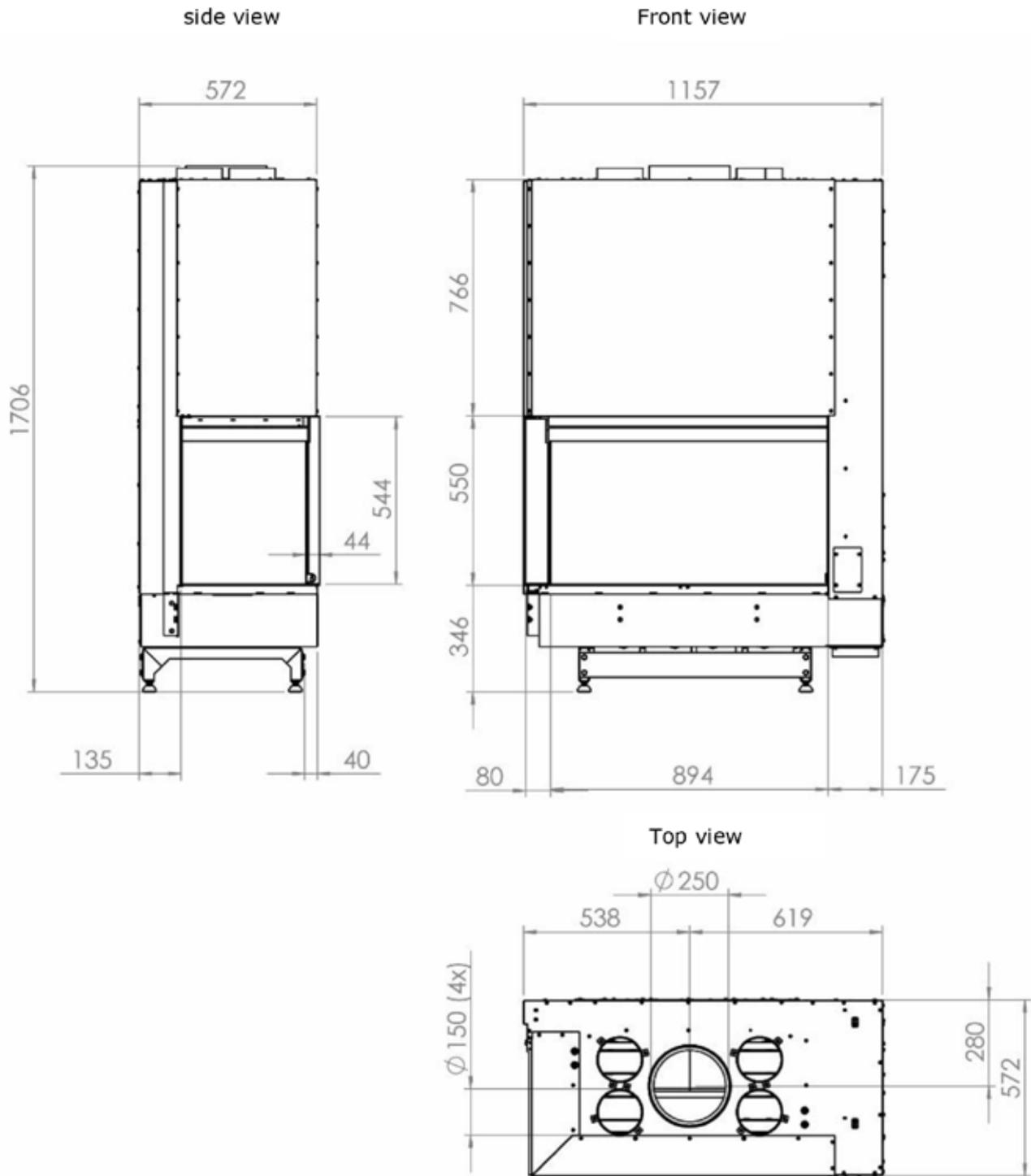
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Kalfire W85/40F



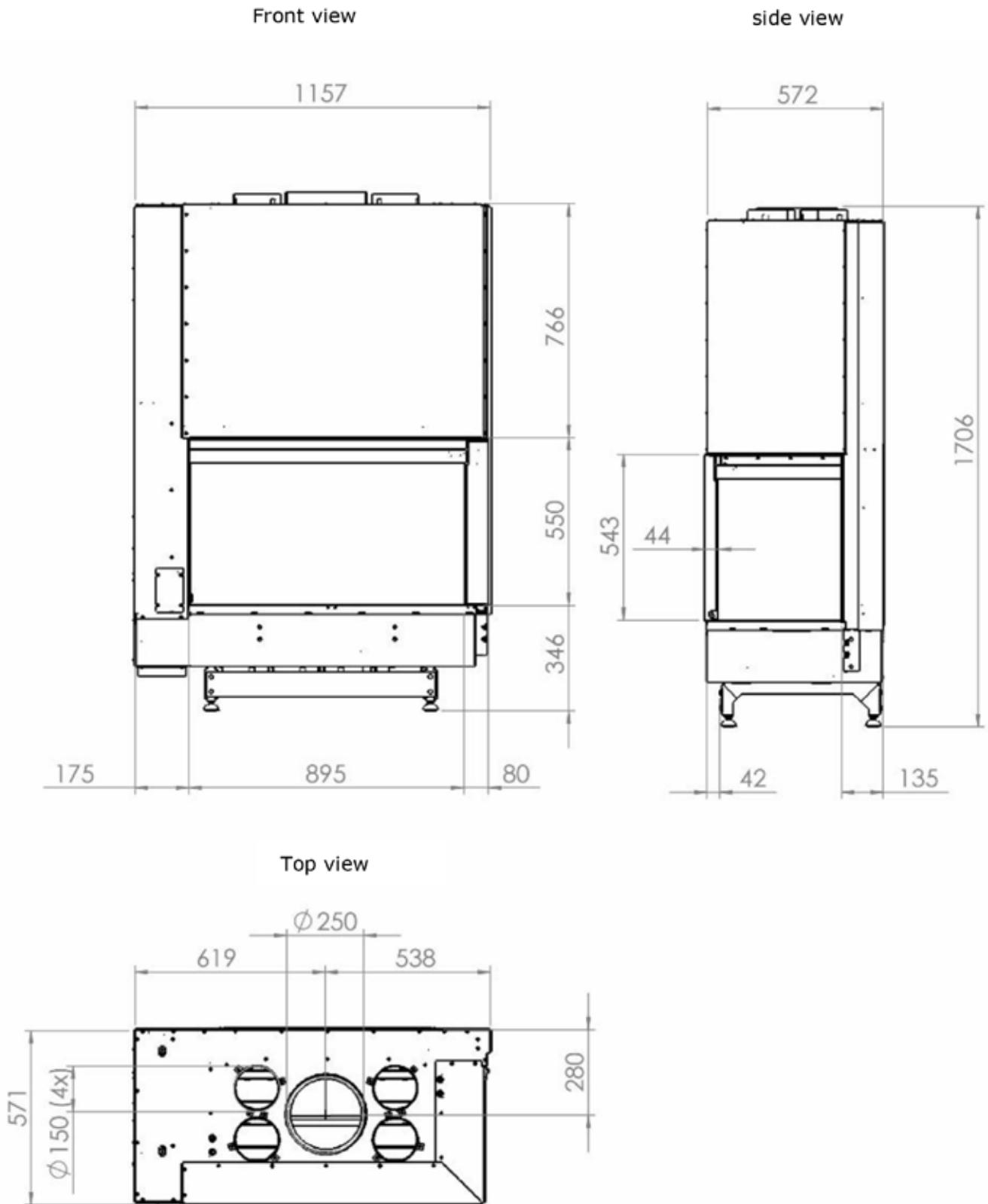
All dimensions shown in mm. Dimensions subject to modification

Kalfire W90/47CL



All dimensions shown in mm. Dimensions subject to modification

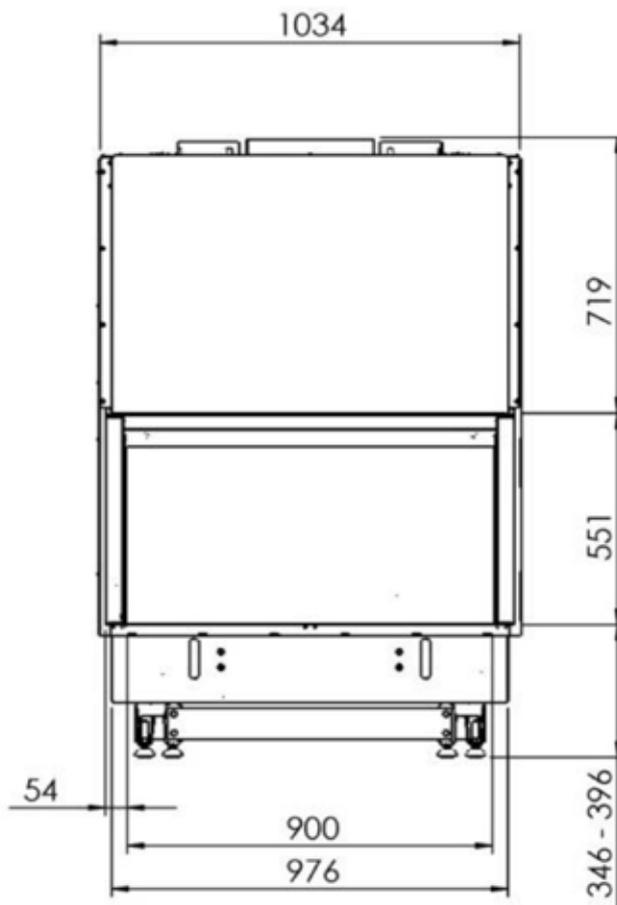
Kalfire W90/47CR



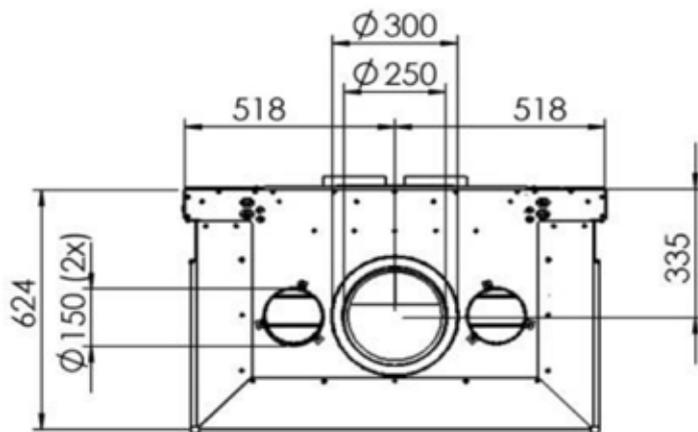
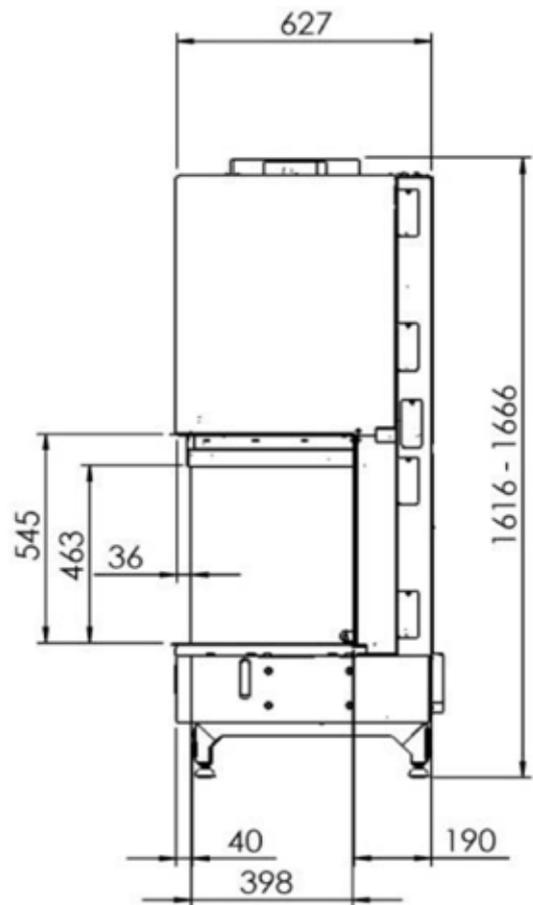
All dimensions shown in mm. Dimensions subject to modification

Kalfire W90/47S

vooraanzicht



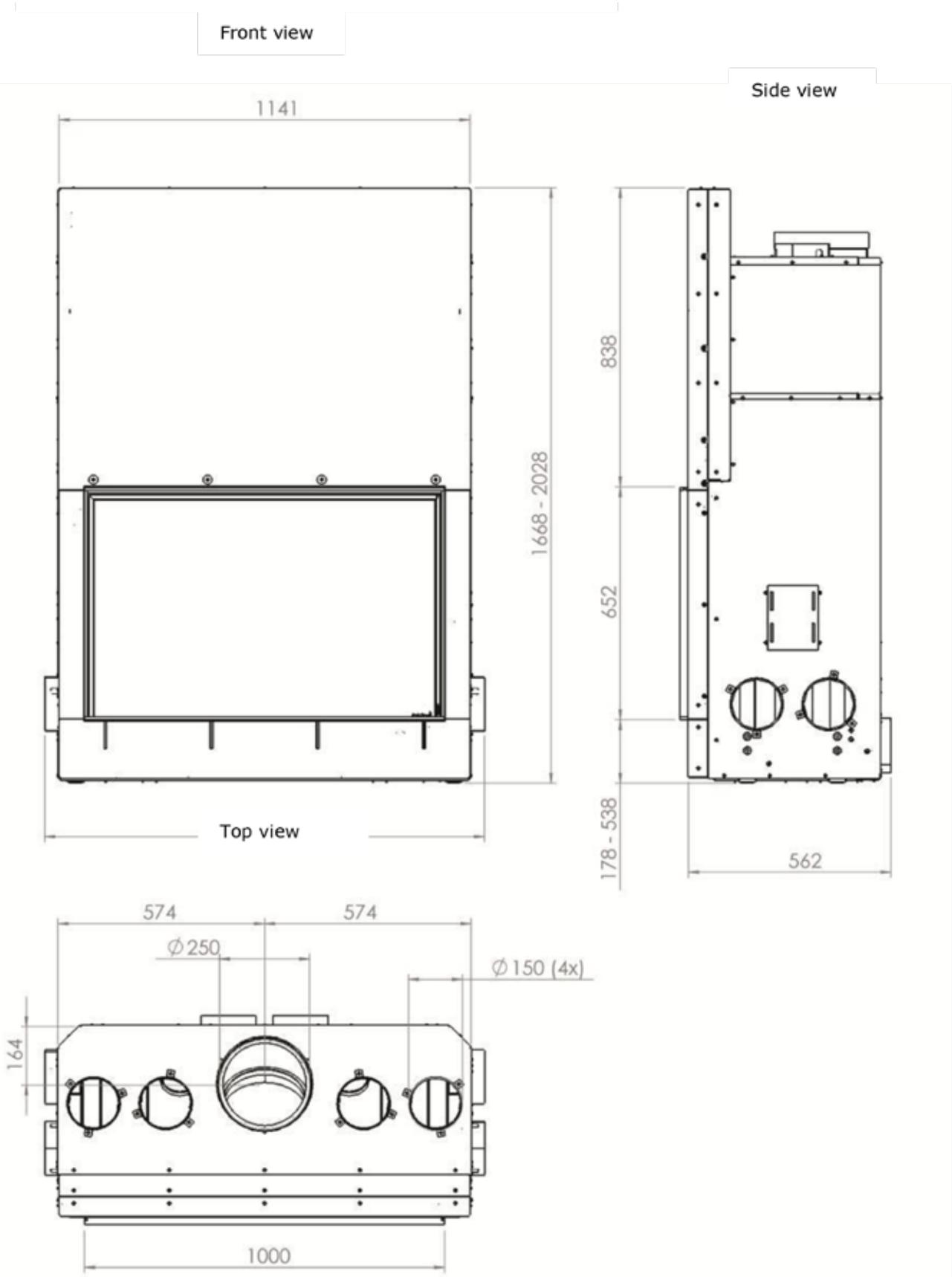
zijaanzicht



bovenaanzicht

All dimensions shown in mm. Dimensions subject to modification

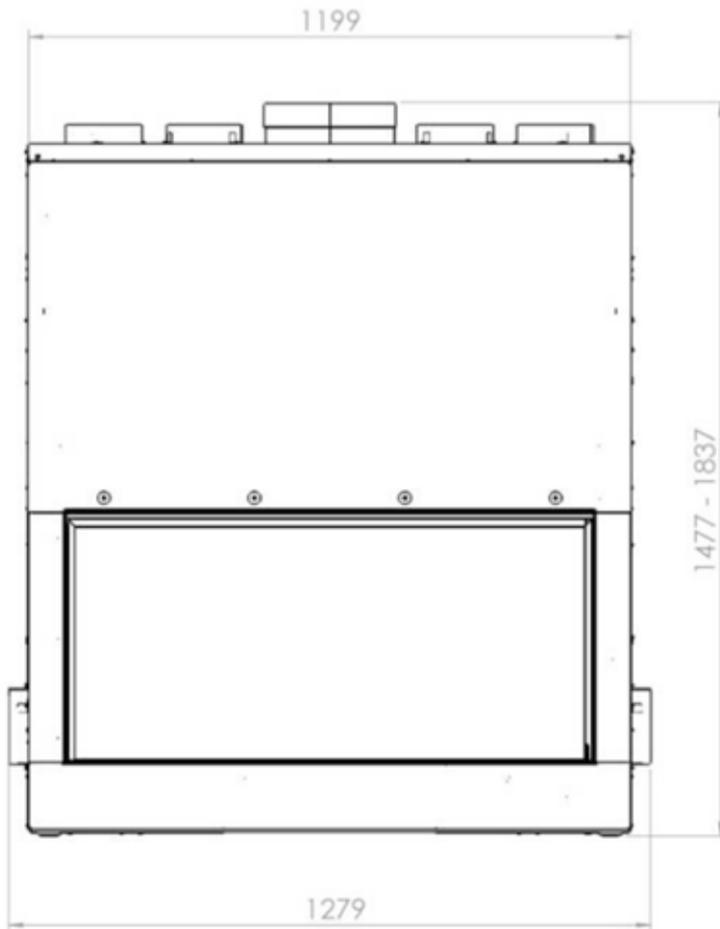
Kalfire W100/61F



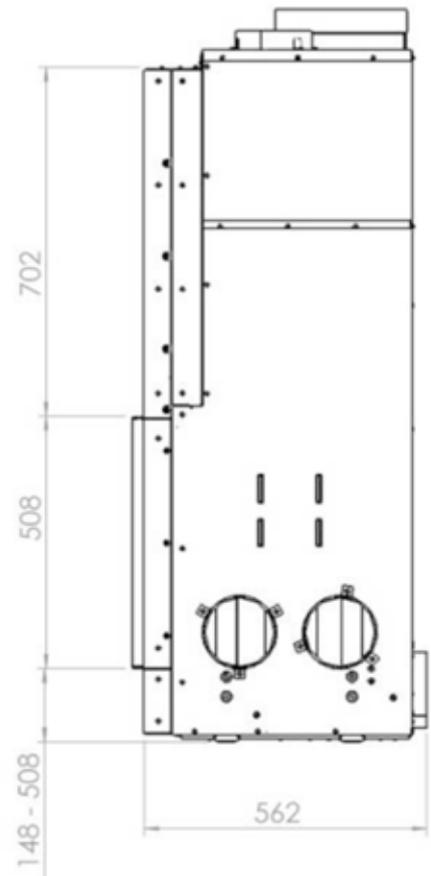
All dimensions shown in mm. Dimensions subject to modification

Kalfire W105/47F

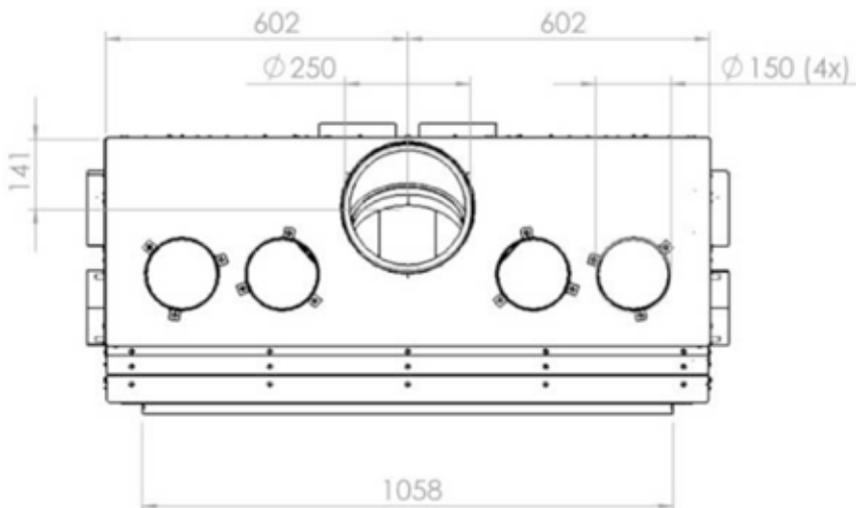
Front view



Side view

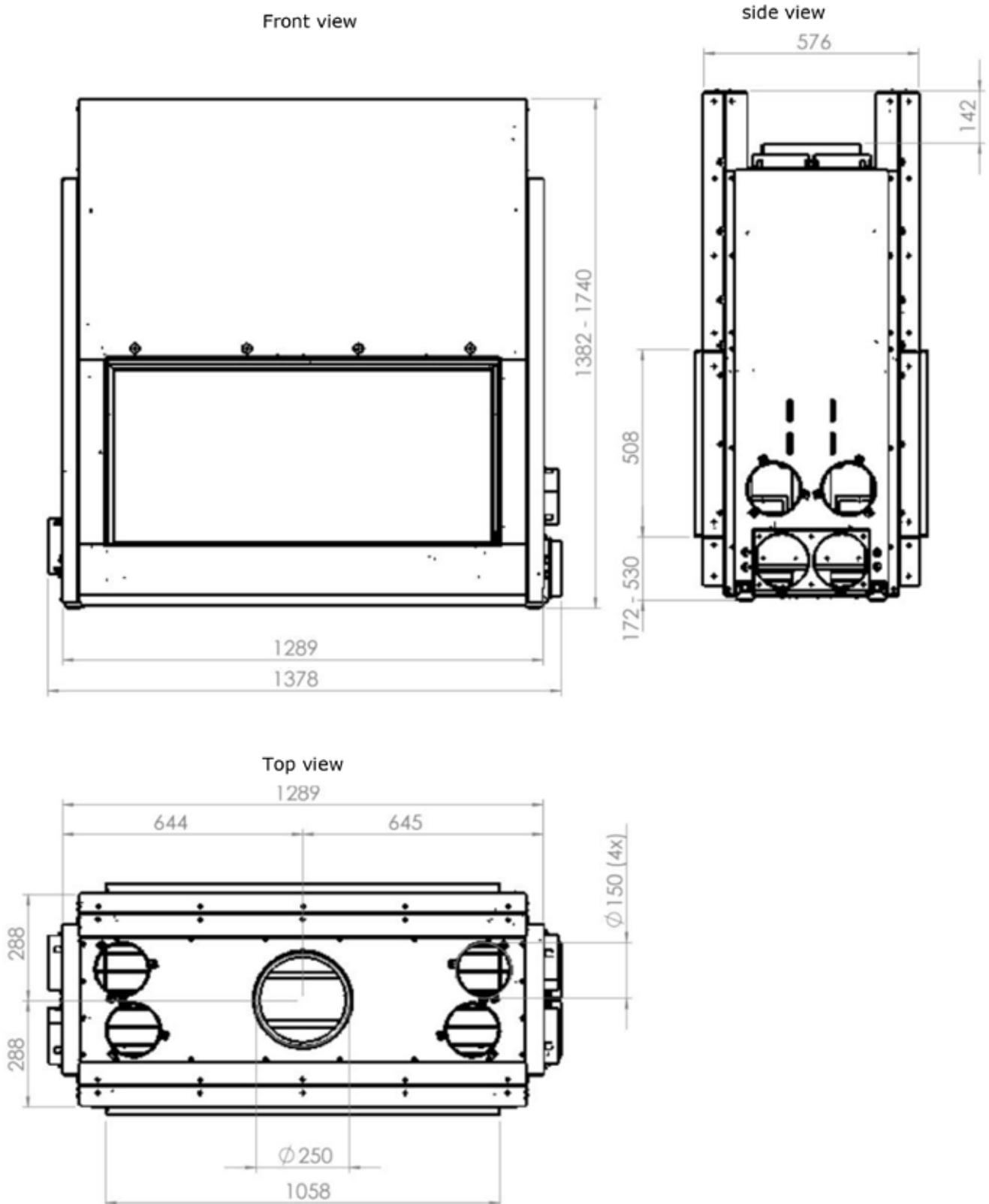


Top view



All dimensions shown in mm. Dimensions subject to modification

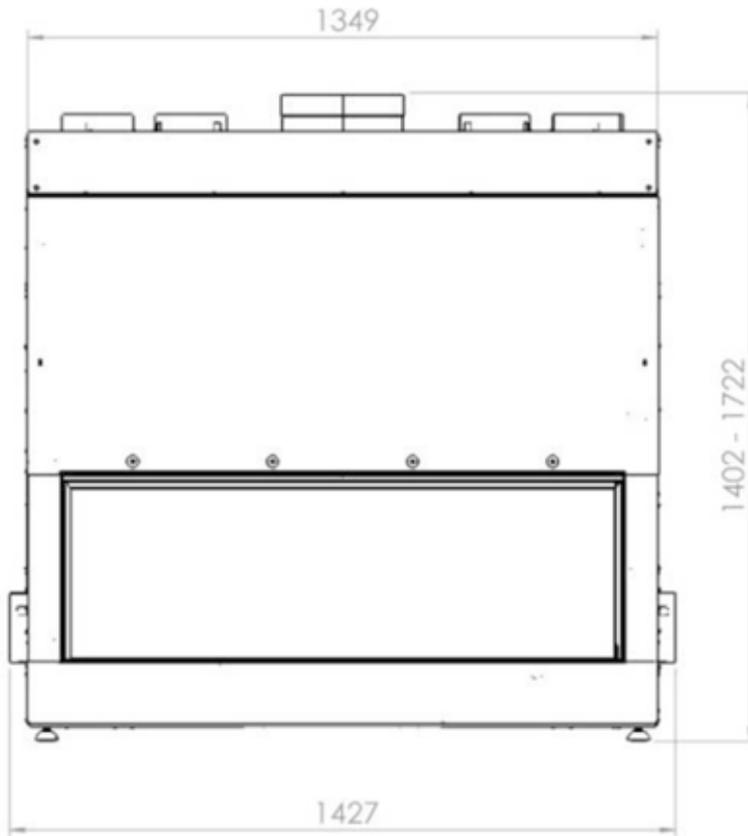
Kalfire W105/47T



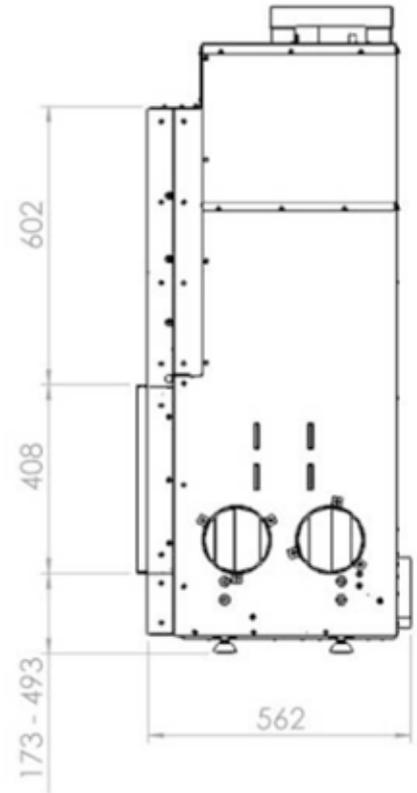
All dimensions shown in mm. Dimensions subject to modification

Kalfire W120-38F

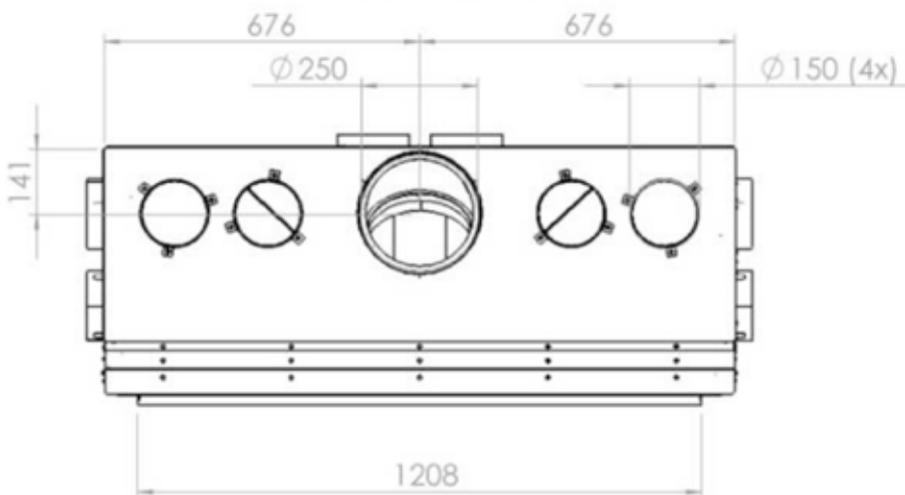
Front view



Side view



Top view



All dimensions shown in mm. Dimensions subject to modification

## APPENDIX C: Product Fiche ((EU) 2015/1186 Annexe IV)

model	energy efficiency class	direct heat output	indirect heat output	energy efficiency index (EEI)	useful energy efficiency at nominal heat output	useful energy efficiency at minimal heat output
Kalfire W45/48F	A+	9,3 kW	10,8 kW	115%	86,0%	83,0%
Kalfire W60/51F	A+	13,2 kW	16,3 kW	107%	81,0%	81,0%
Kalfire W65/38C	A+	13,0 kW	15,9 kW	109%	82,0%	78,0%
Kalfire W66/48S	A	13,3 kW	16,6 kW	106%	80,0%	80,0%
Kalfire W70/33F	A	12,0 kW	15,0 kW	106%	80,0%	80,0%
Kalfire W71/62F	A+	16,0 kW	19,3 kW	110%	83,0%	79,0%
Kalfire W80/52T	A	16,8 kW	21,0 kW	106%	80,0%	80,0%
Kalfire W85/40F	A+	14,8 kW	18,3 kW	107%	81,0%	79,0%
Kalfire W90/47C	A	14,9 kW	18,6 kW	106%	80,0%	78,0%
Kalfire W90/47S	A+	18,0 kW	22,0 kW	109%	82,0%	80,0%
Kalfire W100/61F	A	17,6 kW	22,0 kW	106%	80,0%	78,0%
Kalfire W105/47F	A+	17,6 kW	21,7 kW	107%	81,0%	81,0%
Kalfire W105/47T	A	17,6 kW	22,6 kW	103%	78,0%	78,0%
Kalfire W120/38F	A	17,0 kW	22,8 kW	106%	74,6%	x

## APPENDIX D1: Proof of guarantee

This document is only valid if it is presented together with a dated proof of purchase. Therefore, save this document carefully!

### Address details customer

Name : .....  
Street : .....  
Zip code + Place : .....

### Type of appliance

Kalfire: .....

**Manufacturing number** (this is found on the upper left in the combustion chamber, on the strip attaching the interior panels)

.....

### Date of purchase

..... - ..... - .....

### Address details installer- retailer

Name : .....  
Street : .....  
Zip code + Place : .....

## APPENDIX D2: Terms of guarantee

Kal-fire products, which are covered by this guarantee, have been carefully made from high quality materials. If, despite this care, faults or defects occur, the following guarantee stipulations apply:

1. Before the appliance is installed, the authorised installer must ensure that the flue gas duct is in good quality and in good working order. The wood burning fireplace must be built in by authorised installers, in accordance with the national and any regional applicable legislations, and must be installed in accordance with the installation instructions supplied with the Kal-fire.
2. Kal-fire B.V. is not liable for the installation of the Kal-fire.
3. The period of guarantee for Kal-fire wood burning built-in fireplaces is five years, commencing on the date of purchase. This date must be clearly and legibly stated on the invoice.
4. Glass, sealings and the fire bricks or skamol plates are not covered by this guarantee.
5. This guarantee is only valid if the fireplace has been used normally and only if wood has been used as fuel.
6. The guarantee covers the replacement or repair of all defects, identified by the manufacturer.
7. The guarantee does not give any entitlement for compensation, in case if the Kal-fire cannot be used.
8. The renewal or replacement of parts that fall under the guarantee, will not prolong the total term of the guarantee.
9. If, within the period covered by the guarantee, a defect occurs as a result of a manufacturing fault or faulty material, Kal-fire will send the replacement part free of charge to the installer, without compensation for the disassembly/assembly. Transport costs are for the account of the user.
10. If the installer is unable to remedy the defect/malfunction, he can expressly request the assistance of Kal-fire (only in BENELUX countries).
11. The fireplace in its entirety, or parts of the fireplace, may only be returned for inspection or repair after prior consultation. These goods should be accompanied by a fully completed guarantee document (Appendix C1) and the dated proof of purchase.
12. With any on-site service (only in BENELUX countries) by Kal-fire during the guarantee period, the guarantee documents (Appendix C1 and the dated proof of purchase) must be handed over.
13. For service carried out on site, outside the guarantee period, material costs, labour hours and call out costs will be charged.

### The guarantee does not apply:

1. If faults do not, or only partially, comply with the points mentioned above.
2. If the fireplace has been modified in any way, without the permission of Kal-fire.
3. If the fireplace is transported without adequate packaging and protection.
4. If the fireplace changes ownership.
5. If the installation and/or operating instructions given by the manufacturer have not been followed.
6. If damage is caused by external causes (jolts, lightning, falls, flood, overheating of the fireplace) during transport, storage or assembly.
7. In the event of incorrect treatment, improper and poor use and/or neglect of the appliance.
8. If repairs or supplies of separate parts have been carried out by another manufacturer or a dealer not authorised by our company.
9. In the event that the proof of guarantee and the original and dated proof of purchase cannot be presented, and / or when the particulars on the proof of purchase have been tampered with (date deleted, made illegible, changed etc.).



**KALFIRE**  
FIREPLACES

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info@kalfire.nl  
**KALFIRE.COM**

DON'T COMPROMISE.