Installation Manual

BKH flat
50-42

green

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BRUNNER®

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1 BASIC INFORMATIONS

All instructions delivered with products must be observed. We do not accept any warranty claim or liability for damage resulting from failure to observe these installation instructions!
Improper installation can cause injury and material damage!

The floor space of the room must have a suitable structure and sufficient dimensions to ensure proper functioning of the fireplace.

Please note that other installation and assembly instructions are included in other packaging units!

Dimensioning of downstream heat accumulator must be according to valid stove-setting rules.

During installation of the fireplace, all dimensions and minimal clearances of the fireplace casing must be held as specified by the manufacturer.

All binding national or EU standards and local regulations for the installation of fireplaces must be observed.

All valid stove fitting rules and regulations of local construction law must be observed and followed.

Please follow the relevant regulations of your country.

When these instructions are followed and all works are done properly, this will ensure a safe, energy-saving and environmentally friendly operation of the stove. Pictures shown are not to be considered as complete representations of any kind.

Subject to technical and assortment changes.

Please notify your supplier of any damage which might have occurred during transport.

Please keep these instructions.

Please also take note of the online product documentation provided by:

General instructions of the Brunner products installation for the stove construction.

(https://www.brunner.de/produktdownloads/kacheloefen-kamine/allgemeine-hinweise-fuer-den-aufbau_de.pdf) laden können.

1.1 SPECIFIED SYMBOLS

In this documentation, a distinction is made between:

Operating personnel as the **User of the system**, i.e. the end user, which has received instructions from the Contractor and does not necessarily have additional qualifications.

Operating personnel as the **Contractor**, i.e. the qualified professionals, which are entitled to perform the indicated specialist works.

In this document, the following symbols are used:



DANGER
A danger of high risk persists, which leads to severe injury or death, if this endangering situation is not avoided.

WARNING
A danger of medium risk persists, which can lead to severe injury or death, if this endangering situation is not avoided.

CAUTION
A danger of low risk persists, which can lead to minor or moderate injury, if this endangering situation is not avoided.



ATTENTION
There is a certain risk, which can lead to a malfunction or damage of the related system and all devices connected with it, if the indicated notifications are not followed.



NOTE

Additional helpful information

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2 SAFETY

2.1 SAFETY PRECAUTIONS

Fireplaces may be set up only in rooms or areas with no risk of danger due to their location, structure or intended use.

Working on the stove	Installation, commissioning, servicing and maintenance works on the product may be carried out only by an authorized stove-fitter. Safety and efficiency of the system depend on this!
Working with electronics	Switch off the emergency switch or circuit breaker, and secure them against switching on again.



Fireplaces with external air supply are not independent from room air supply and must be considered and designed as roomsealed fireplaces. In connection with a ventilation or extraction system, we recommend the use of a negative pressure safety device (Art.No.: 11600.1).

Installation must be carried out by an authorized stove-fitter, because safety and efficiency of the system depend mostly on proper installation of the product. All valid stove fitting rules and regulations of building law must be observed and followed. Make sure to instruct the owner or user about the functions and controls of the system and possibly installed safety devices.

Fireplaces must be built to ensure safe operation and fire safety in order to eliminate possible risks and unacceptable loads. They have to be ready for use over an adequate period of time.

Make sure to instruct the owner or user about the functions and controls of the system and possibly installed safety devices.

Remember to use only genuine replacement parts.

2.2 FIRE PROTECTION

The thermal insulation listed in the fire protection information is implemented with substitute insulation material in the form of calcium silicate boards (e.g. brands: Promasil, Silka, Skamol).

If a different insulating material is used (e.g. vermiculite), the manufacturer's specifications must be used for conversion to the installed insulating material.

The thermal insulation for non-combustible add-on walls and ceilings is based on the requirements of TROL (Germany).

For extension walls made of combustible building materials, fire protection can also be provided in a version with active rear ventilation. This variant has been tested and is created with an insulation thickness of 5 cm. It is important to ensure that air flows across the entire width and height.

The room air must be able to flow in at the bottom and out at the top. The air inlet and outlet openings (cross-section 75 ^{cm2}) must not be sealable. In normal operation, the temperatures at the air outlet are below 85°C.

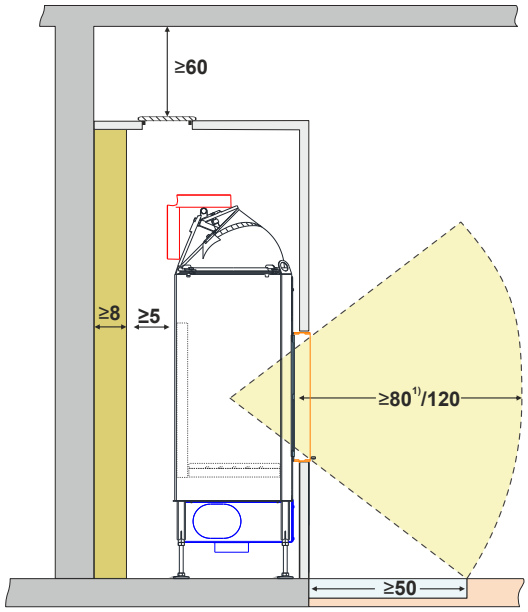
For thermally insulated add-on walls with a U-value < 0.4 $^{W/m2K}$, the fire protection must be designed with active rear ventilation.

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2.2.1 MOUNTING WALL / CEILING NON-COMBUSTIBLE

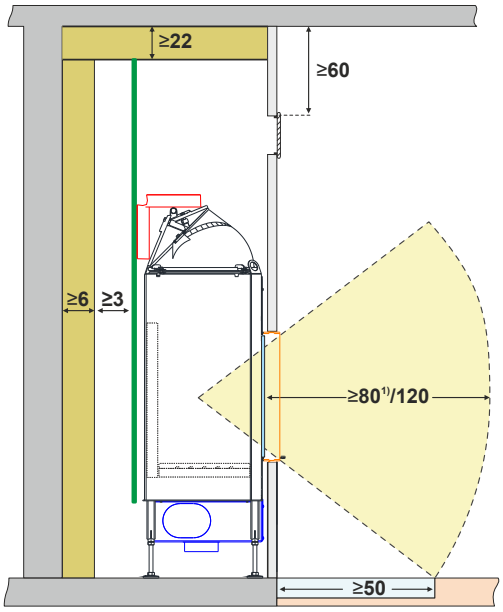
Structure: Substitute insulation material I Mounting wall / Ceiling non-combustible

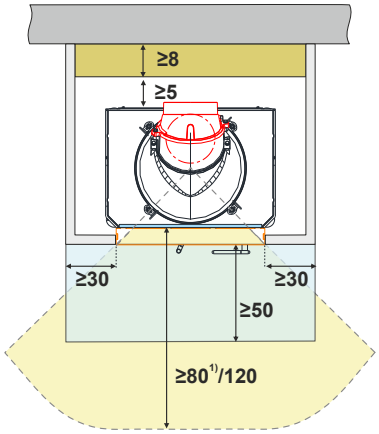
Half-height version

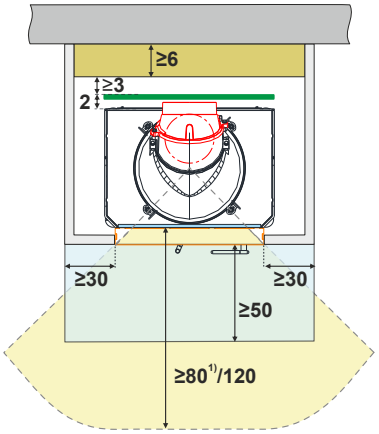


Floor-to-ceiling version

with: heat protection panel







floor/wall/ceiling non-combustible

fireplace cladding

wall/ceiling/floor/attach-ments combustible/to be protected

convection opening (fire-place cladding)

substitute insulation material calcium silicate

radiation range

heat protection panel

non-combustible flooring / floor protection pane

convection opening (active rear ventilation)

[1)] Glass ceramic coated (GKB)

All figures in cm

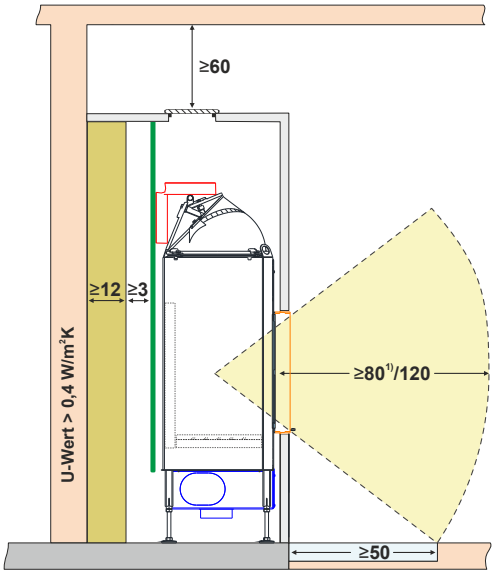
When designing the exhaust system and exhaust pipe, national standards and fire protection regulations must be observed

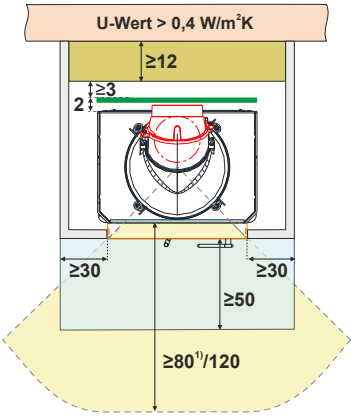
2.2.2 MOUNTING WALL / CEILING COMBUSTIBLE (U-VALUE > 0,4 W/M²K)

Structure: Substitute insulation material I Mounting wall / Ceiling combustible

Half-height version

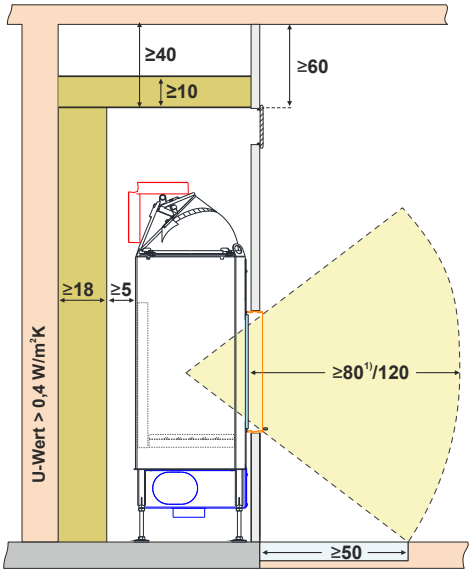
with: heat protection panel
U-value Mounting wall> 0,4 W/m²K

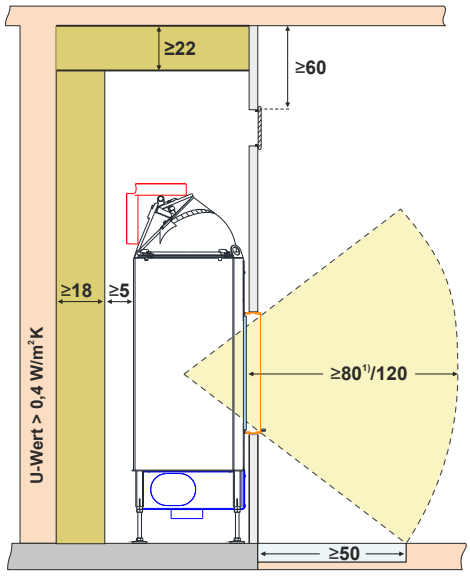




Floor-to-ceiling version

without: heat protection panel
U-value Mounting wall> 0,4 W/m²K





floor/wall/ceiling non-combustible

convection opening (fireplace cladding)

heat protection panel

fireplace cladding

substitute insulation material calcium silicate

non-combustible flooring / floor protection pane

wall/ceiling/floor/attachments combustible/to be protected

radiation range

convection opening (active rear ventilation)

1) Glass ceramic coated (GKB)

All figures in cm

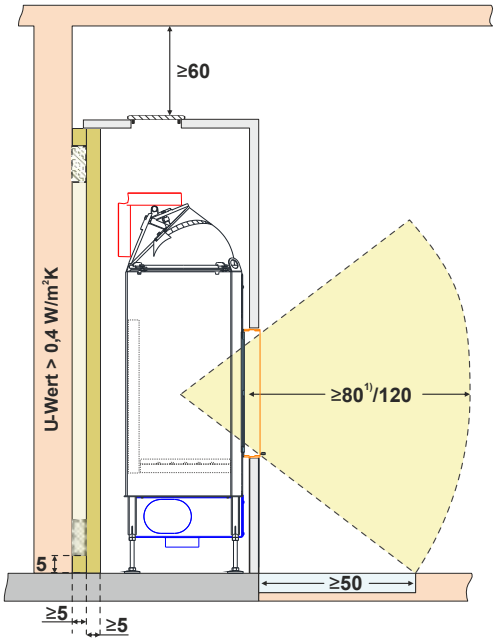
When designing the exhaust system and exhaust pipe, national standards and fire protection regulations must be observed

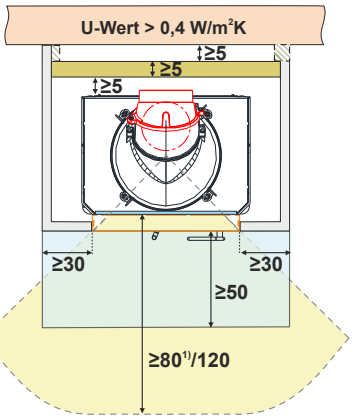
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Structure: Substitute insulation material I active rear ventilation I Mounting wall/ Ceiling combustible

Half-height version

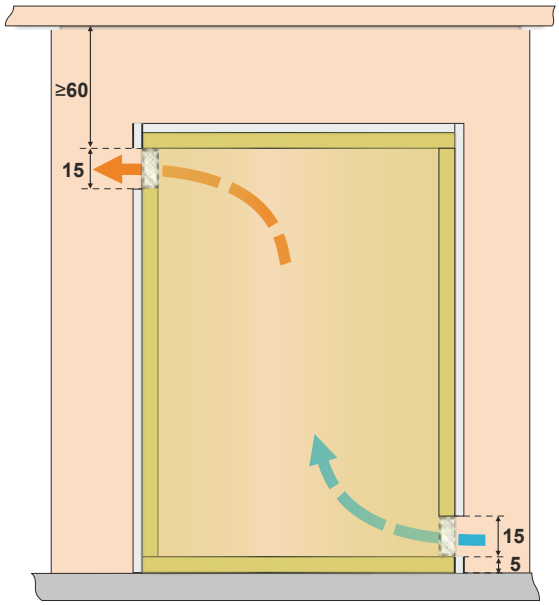
with: active rear ventilation
U-value Mounting wall> 0,4 W/m²K

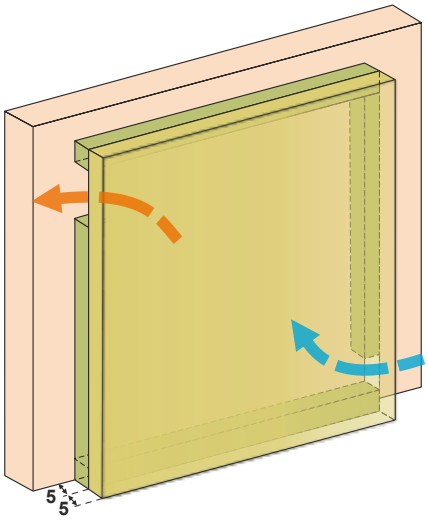




Detail:

active rear ventilation (2x75 cm²)





floor/wall/ceiling non-combustible

convection opening (fire-place cladding)

heat protection panel

fireplace cladding

substitute insulation material calcium silicate

non-combustible flooring / floor protection pane

wall/ceiling/floor/attach-ments combustible/to be protected

radiation range

convection opening (active rear ventilation)

1) Glass ceramic coated (GKB)

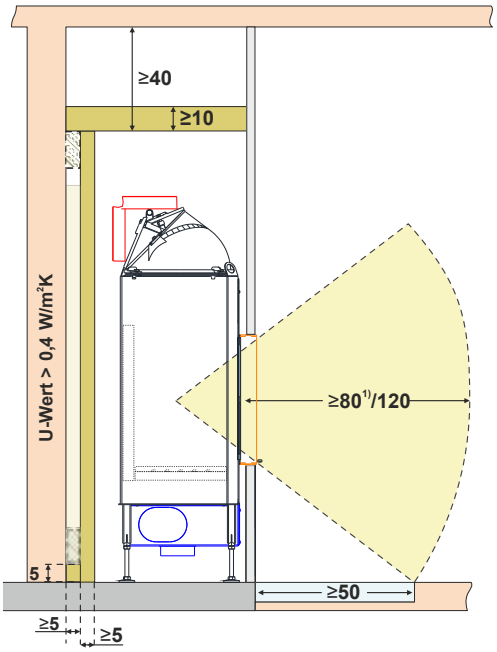
All figures in cm

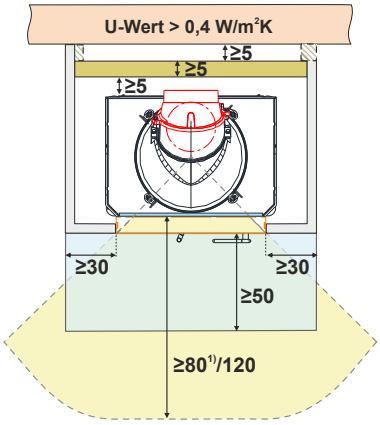
When designing the exhaust system and exhaust pipe, national standards and fire protection regulations must be observed

Structure: Substitute insulation material I aktive Hinterlüftung I Mounting wall/ Ceiling combustible

Floor-to-ceiling version

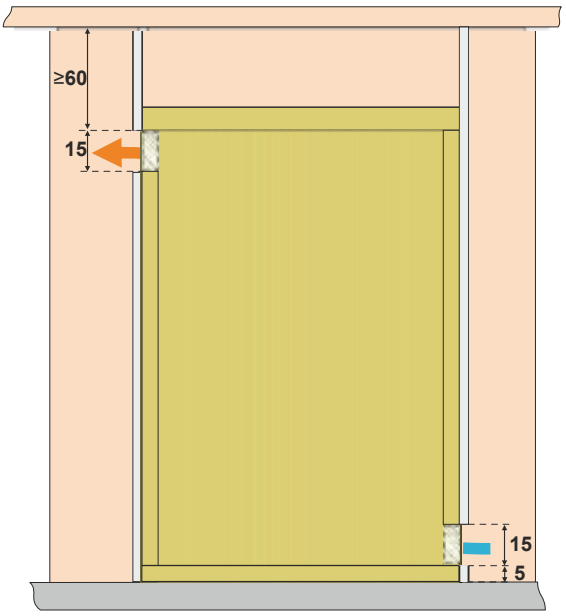
with: active rear ventilation
U-value Mounting wall> 0,4 W/m²K

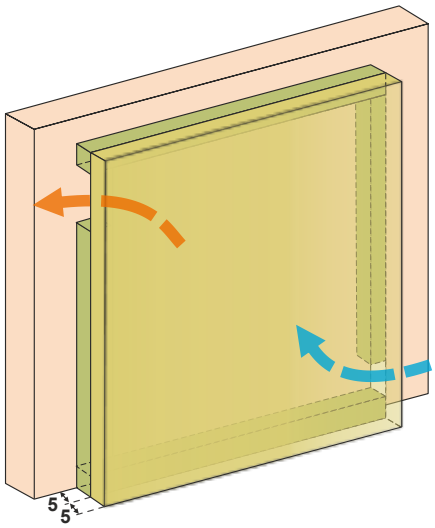




Detail:

active rear ventilation (2x75 cm²)





floor/wall/ceiling non-combustible

convection opening (fire-place cladding)

heat protection panel

fireplace cladding

substitute insulation material calcium silicate

non-combustible flooring / floor protection pane

wall/ceiling/floor/attach-ments combustible/to be protected

radiation range

convection opening (active rear ventilation)

¹⁾ Glass ceramic coated (GKB)

All figures in cm

When designing the exhaust system and exhaust pipe, national standards and fire protection regulations must be observed

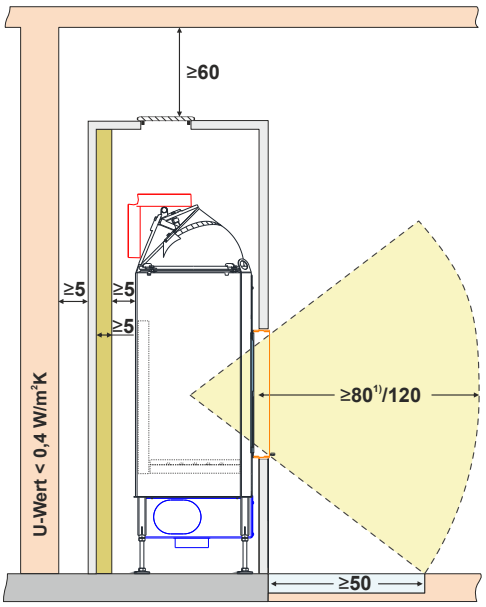
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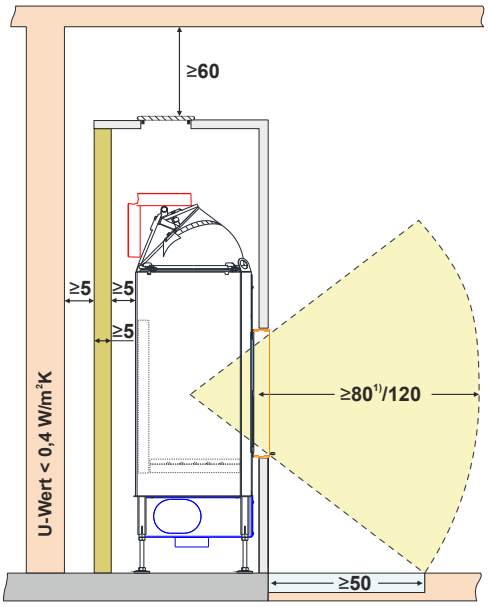
2.2.3 MOUNTING WALL / CEILING COMBUSTIBLE (U-VALUE < 0,4 W/M²K)

Structure: Substitute insulation material I aktive Hinterlüftung I Mounting wall/ Ceiling combustible

Half-height version

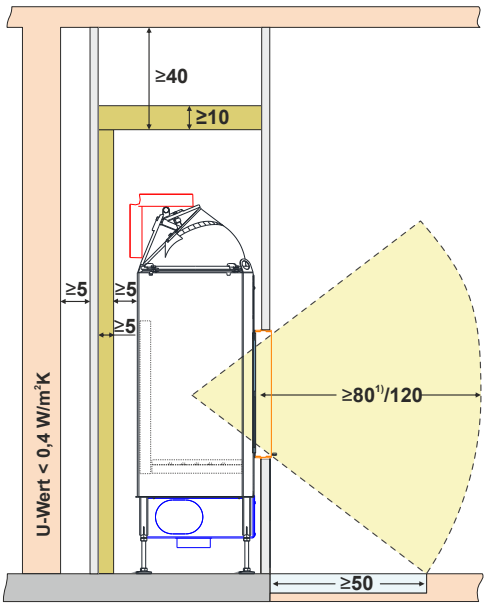
with: active rear ventilation
U-value Mounting wall< 0,4 W/m²K

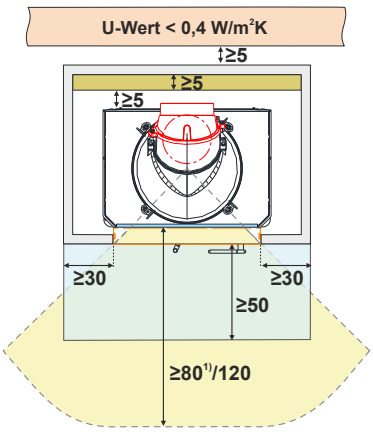




Floor-to-ceiling version

with: active rear ventilation
U-value Mounting wall< 0,4 W/m²K





floor/wall/ceiling non-combustible
convection opening (fire-place cladding)
heat protection panel
fireplace cladding
substitute insulation material calcium silicate
non-combustible flooring / floor protection pane
wall/ceiling/floor/attach-ments combustible/to be protected
radiation range
convection opening(active rear ventilation)

¹⁾ Glass ceramic coated (GKB)

All figures in cm

When designing the exhaust system and exhaust pipe, national standards and fire protection regulations must be observed

3 DELIVERY CONTENTS BKH 50-42

3.1 CATALYTIC CONVERTER (OPTIONAL)



The catalytic converters are coated with a catalytically active layer. This coating can consist of mixed metal oxides or also of precious metals. In order not to limit the effect of this catalytically active layer, the catalysts may only be handled with gloves, preferably with disposable gloves.



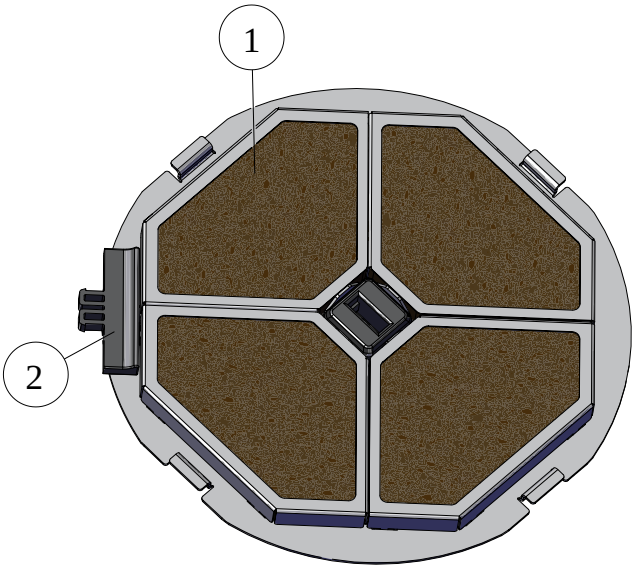
In order not to limit the effect of this catalytically active layer, the catalysts may only be handled with gloves, preferably with disposable gloves.

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ATTENTION
The catalysts are fragile and must only be handled with care. Avoid bumping and do not drop the catalytic converter. This could destroy the catalytic converter!



1	catalytic converter
2	assembly tool

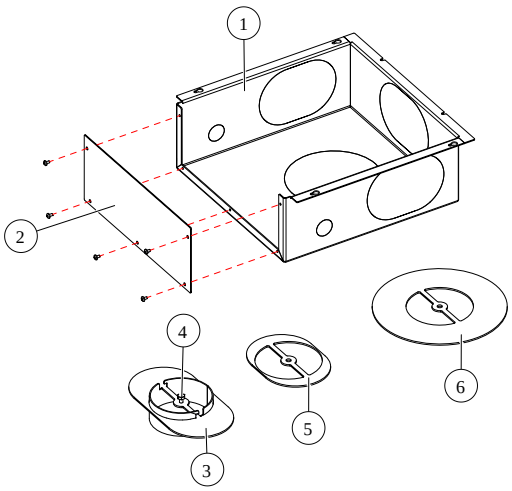
Note

This catalytic converter is suitable for all BKH units (with lifting door, with side opening door, tunnel, with cast dome, with heat exchanger cast rings and MAS).

This catalytic converter can also be retrofitted.

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3.2 AIR CONNECTION BOX (OPTIONAL)

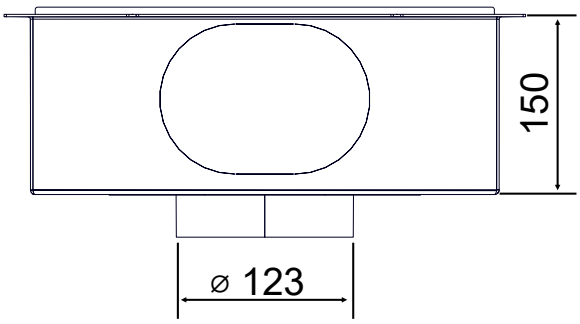


Pos.	Description of use
1	Air connection box - allows the connection of an external combustion line
2	Cover for air connection box
3	Air connection is welded, connection point for combustion air line
4	Screw for fixing the respective clamping plate
5*	Clamping plate for fixing the external combustion air line on the side
6*	Floor clamping plate for fixing the external combustion air line to the floor
*both clamp plates are supplied, but only the appropriate one is used.	

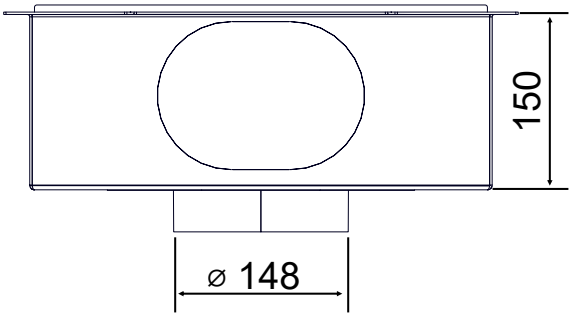
The perforation of the cut-outs for the connection piece can optionally be masked with aluminum adhesive tape.

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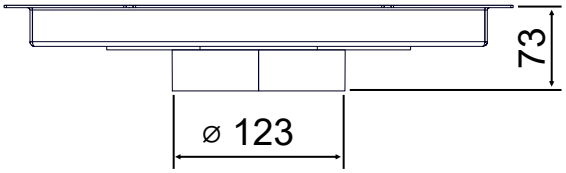
Supply air connection box ⌀ 125 mm



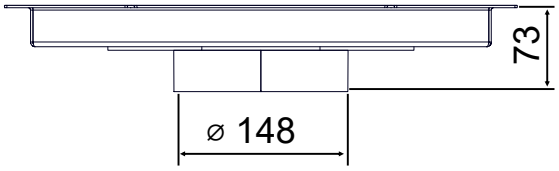
Supply air connection box ⌀ 150 mm



Suply air connection box low ⌀ 125 mm



Supply air connection box low ⌀ 150 mm



The air connection box low/**not** suitable for heating inserts:

- with electronic combustion control (with a low air connection box, controls **cannot** be retrofitted
- with an integrated secondary air supply

4 INSTALLATION

4.1 INSTRUCTIONS BKH ACCESSORIES & ADDITIONAL OPTIONS

The instructions for installing the respective accessories and additional options are available via the following QR codes.

Heat exchanger rings **for:**



BKH flat

BKH corner

BKH Tunnel

https://www.brunner.com/23617

Connection piece eccentric **for:**



BKH flat

BKH corner

BKH Tunnel

https://www.brunner.com/23652

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Cast iron dome ⌀ 180 mm low **for:**



BKH flat 42-42

BKH flat 42-50

BKH flat 42-66

BKH Tunnel 42-50

BKH Tunnel 42-66

BKH corner 42-42-42

BKH corner 42-66-42
(DTL & DTR)

https://www.brunner.com/23653

Modular Accumulator MAS **for:**



BKH flat
(without 50-162)

BKH corner

BKH Tunnel
(without 50-162)

BKH Panorama

https://www.brunner.com/23633

Boiler module

for:



BKH flat
(without 50-162)

BKH corner

BKH Tunnel
(without 50-162)

https://www.brunner.com/23650

Integrated secondary air device

for:

BKH flat

BKH corner

BKH Tunnel

https://www.brunner.com/23651

Carrier unit suspended

for:

BKH Panorama

https://www.brunner.com/23654

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4.2 SETTING UP



DANGER
Possible personal injury and/or property damage caused by improper installation

Assembly and installation of BKH requires extensive specialist knowledge.

- Assembly and installation works must be performed by authorized professionals.



Danger
Risk of injury caused by heavy loads

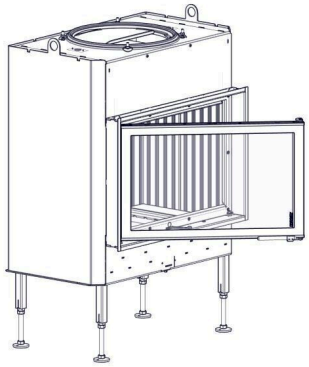
Carrying of heavy loads can lead to injuries.
- The equipment should be carried by at least two people.
- Use appropriate carrying aids.
- Keep the transport weight in mind.

As long as the device is on the wooden pallet, it can be transported with a hand truck or forklift as usual.

4.2.1 REMOVE THE TRANSPORT LOCKS

Version with side-opening door

NO TRANSPORT LOCK !



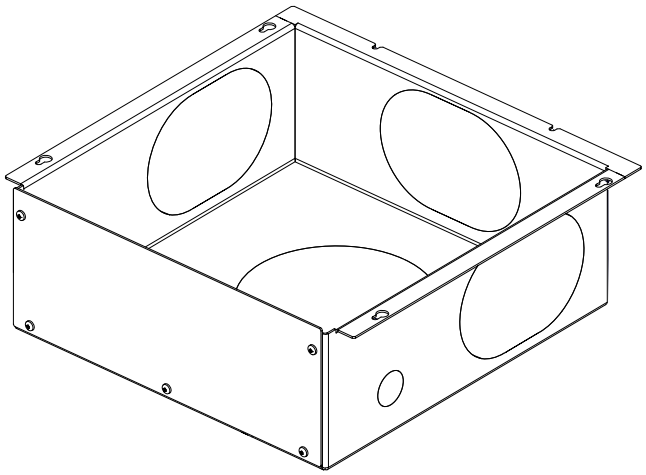
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4.2.2 VARIANT WITH EXTERNAL COMBUSTION AIR CONNECTION

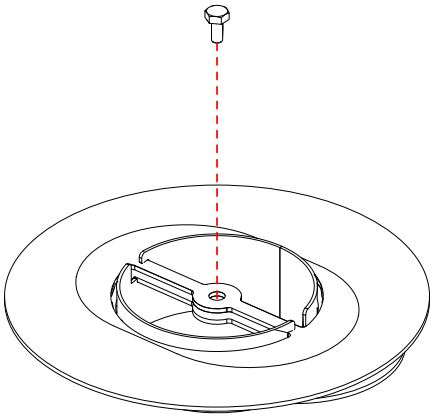
Preparatory work

Workflow:

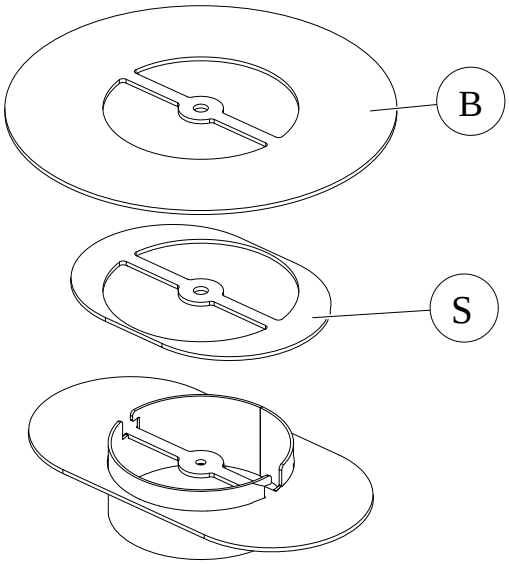
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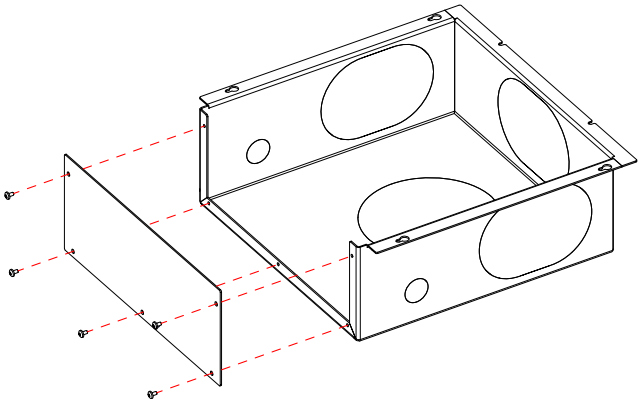
2



3



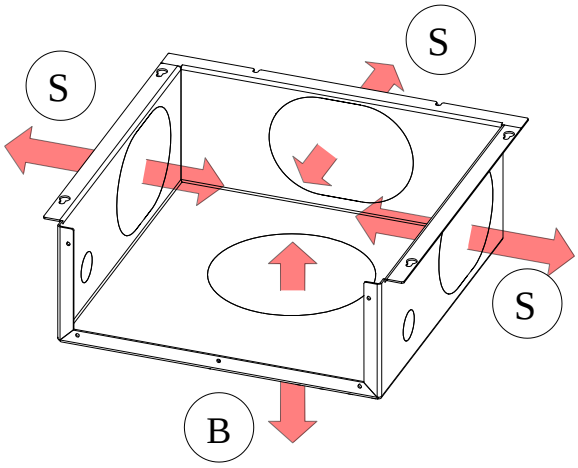
4



Im. 1: Recommended for easier handling

Depending on the planning, the air connection is possible - using aluxflex on 3 lateral parts (S) and also from the bottom (B).

Once you have made a decision, break out the appropriate part and make the connections for the air supply.

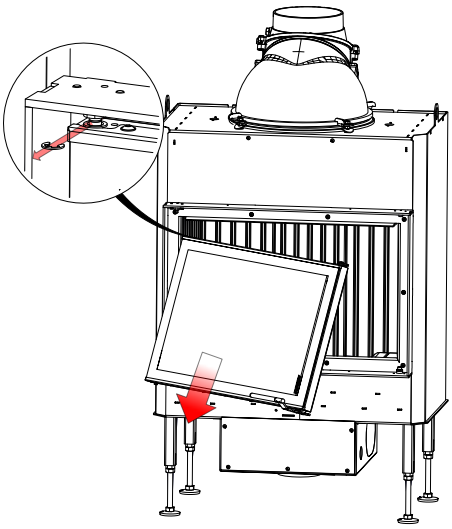


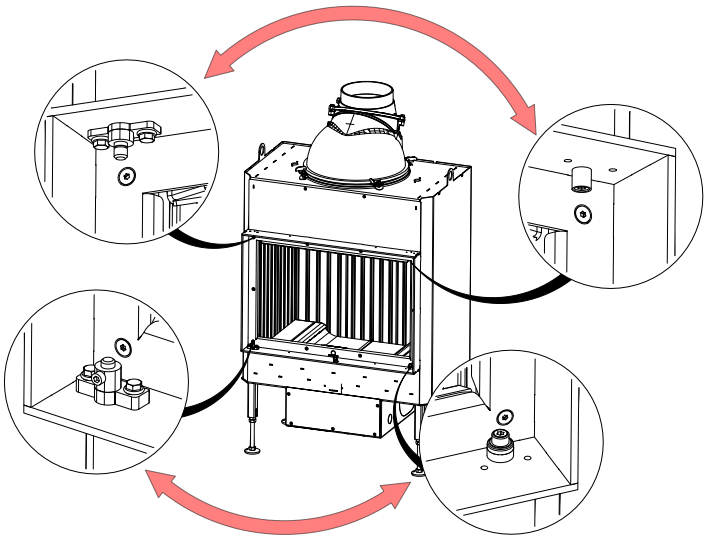
 © 2025 Brunner GmbH

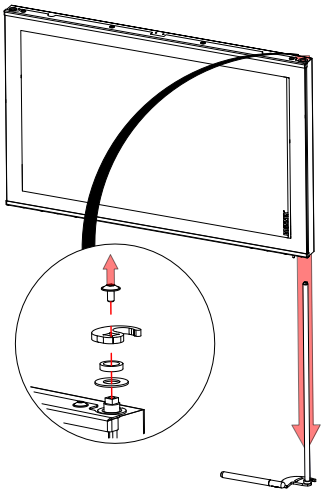
4.2.3 CONVERSIONS, SETTINGS

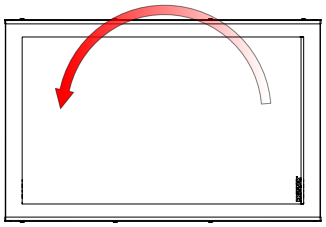
4.2.3.1 CHANGE OF THE DOOR STOP

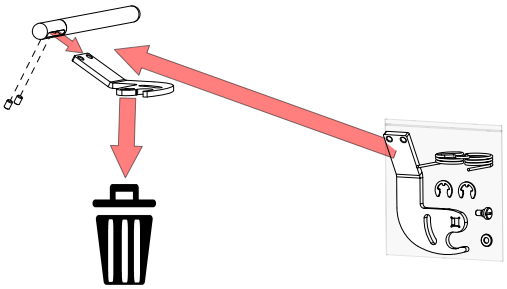
Summarised information:

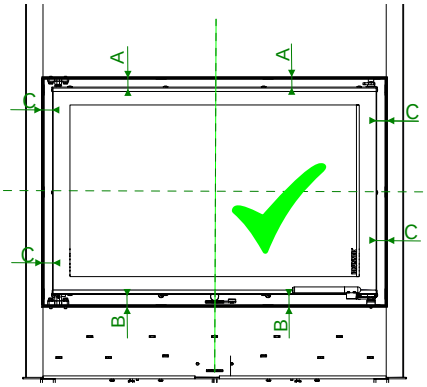


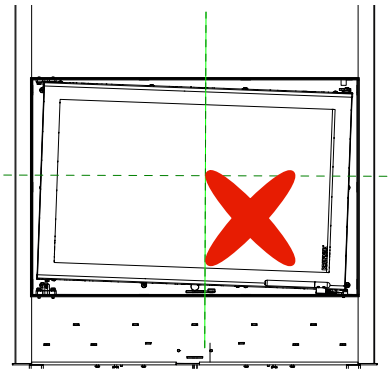












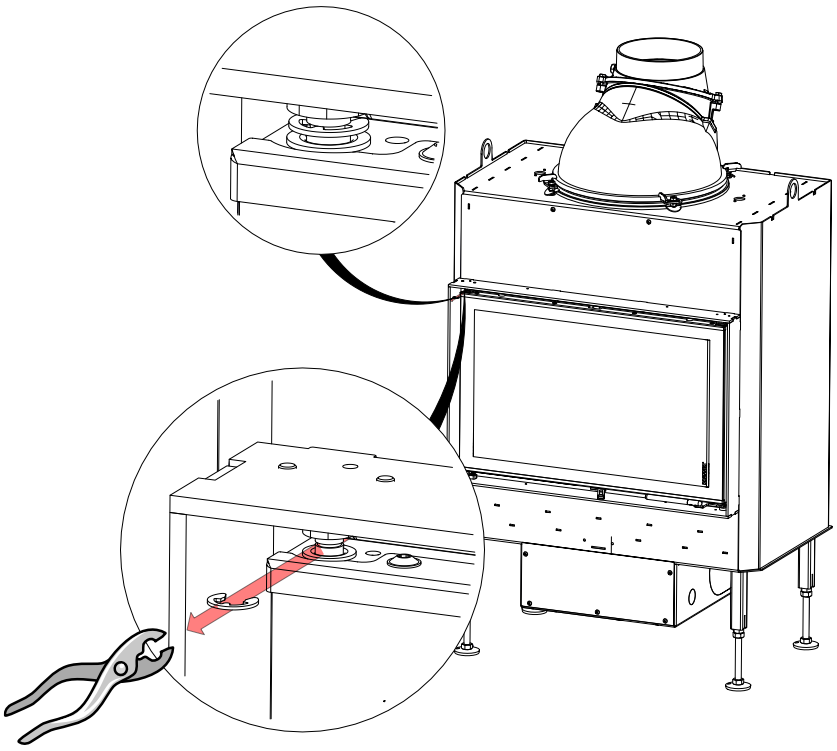
Adjust door !!

The door must be aligned vertically and horizontally. When the door is closed, the sealing cord of the door must be tight to the body.

Additional info: https://www.brunner.de/de/

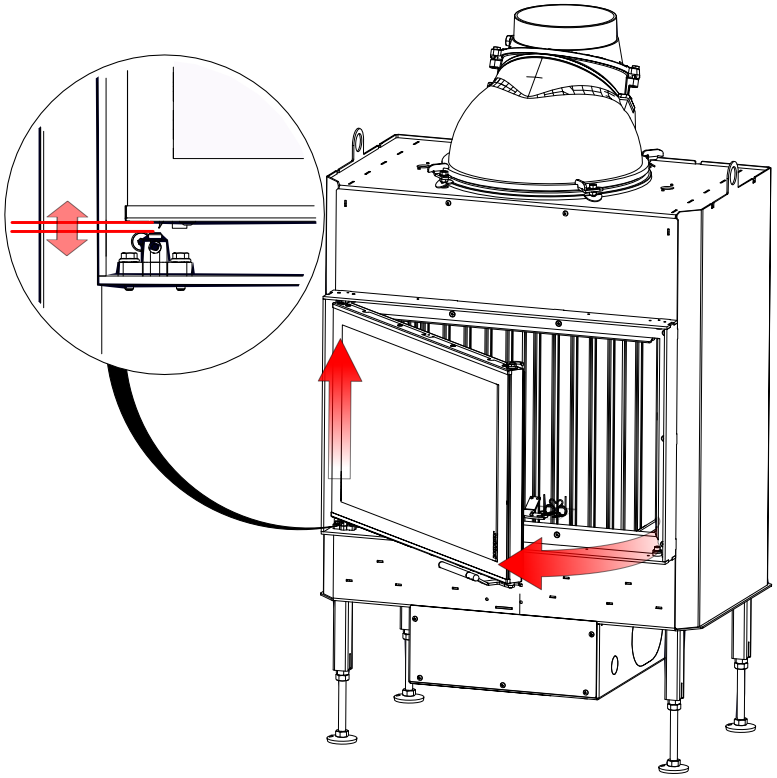
Workflow:

1

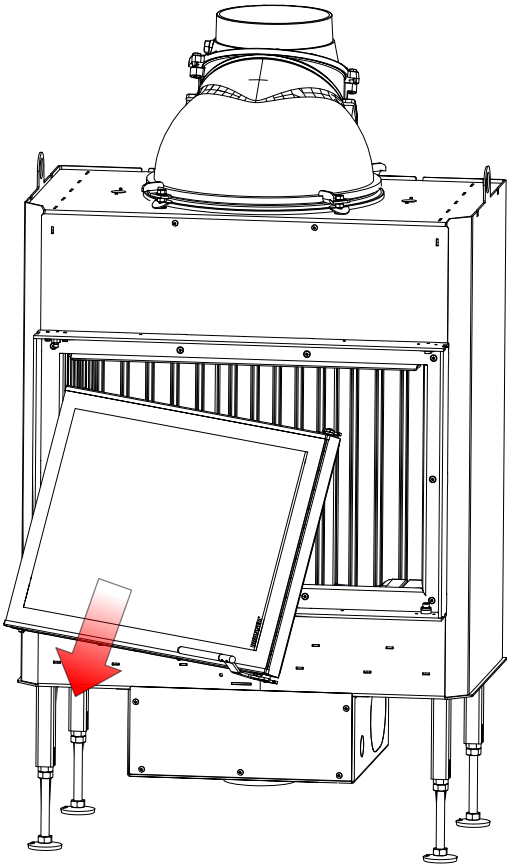


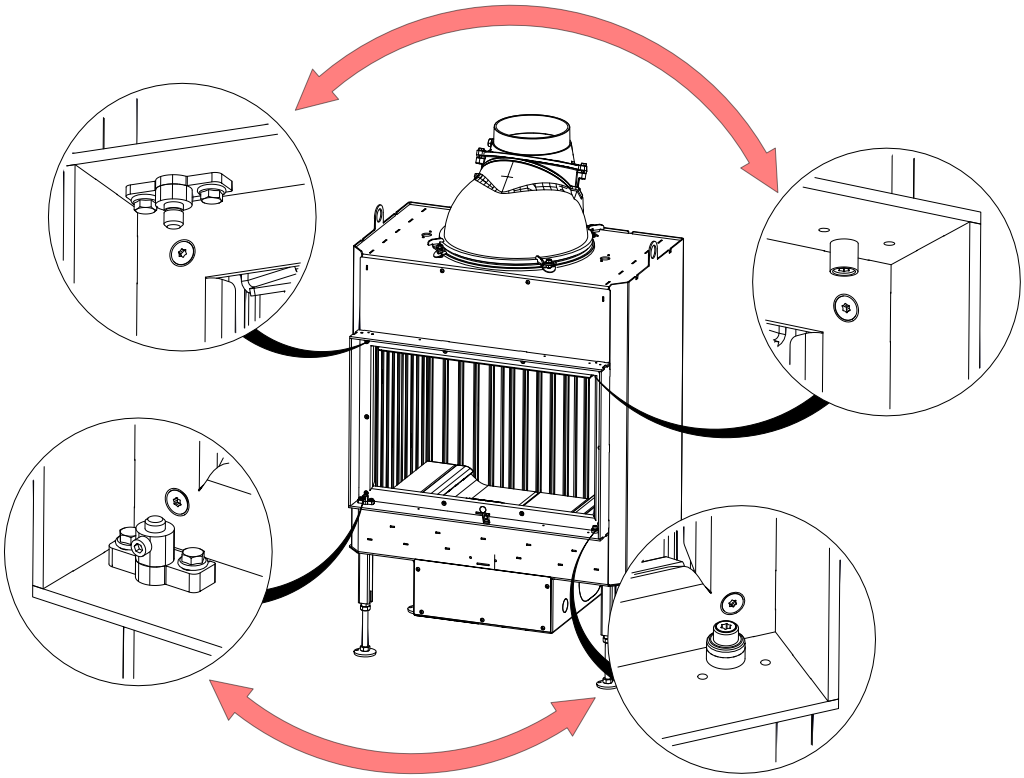
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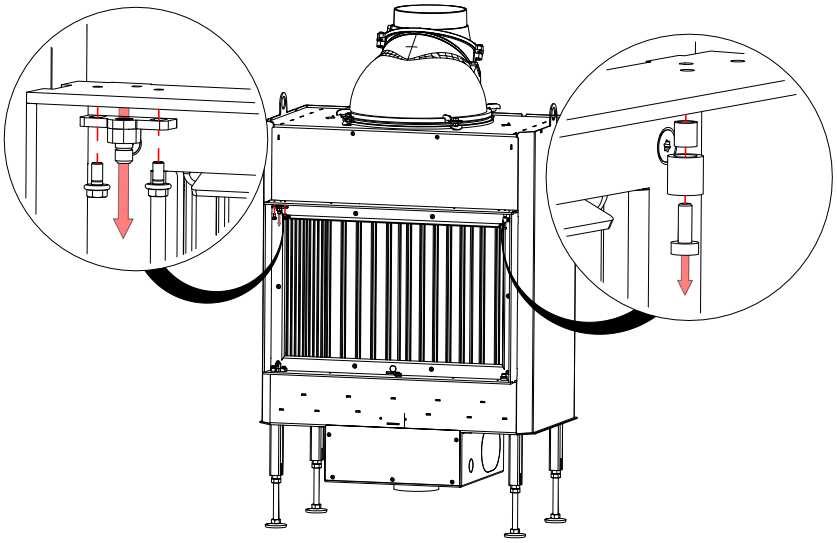
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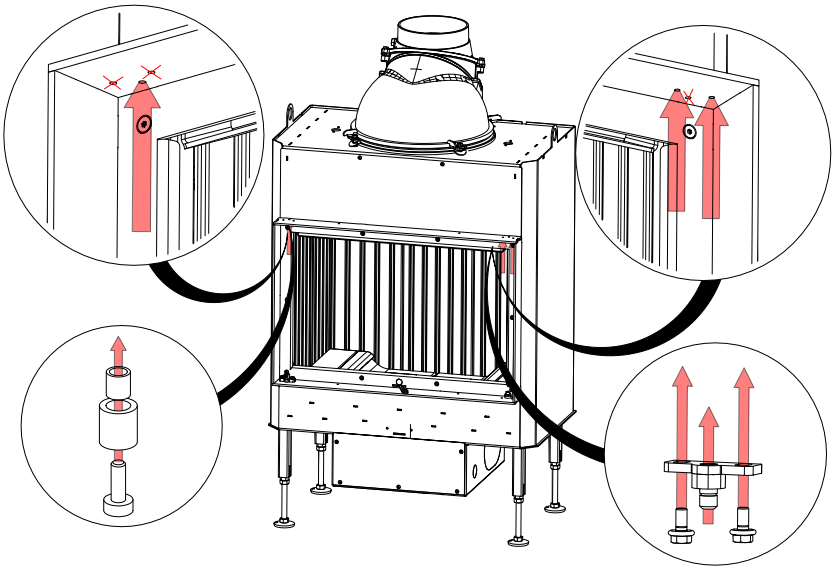


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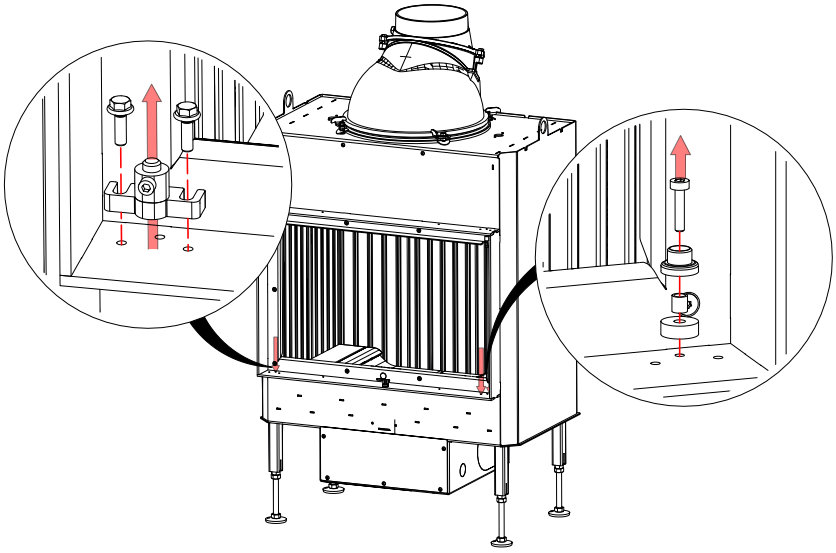
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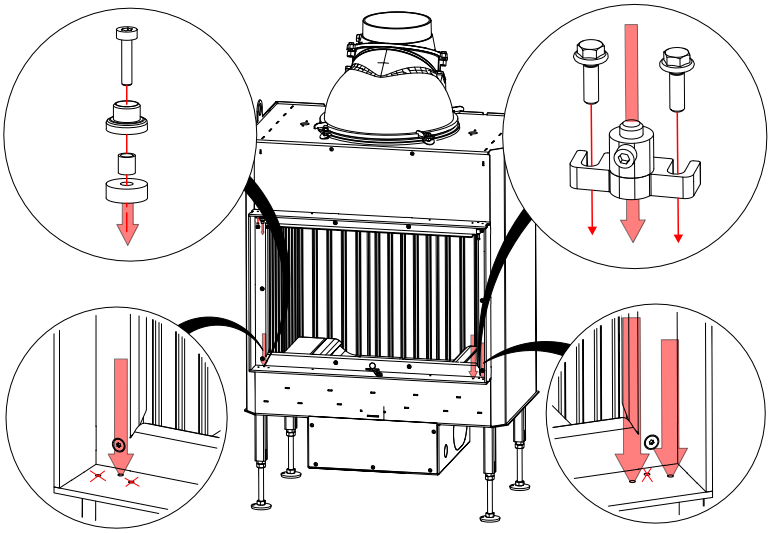
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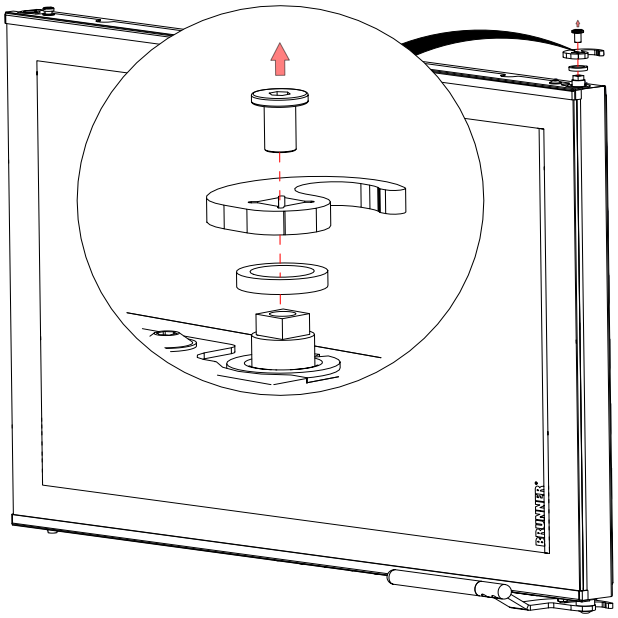


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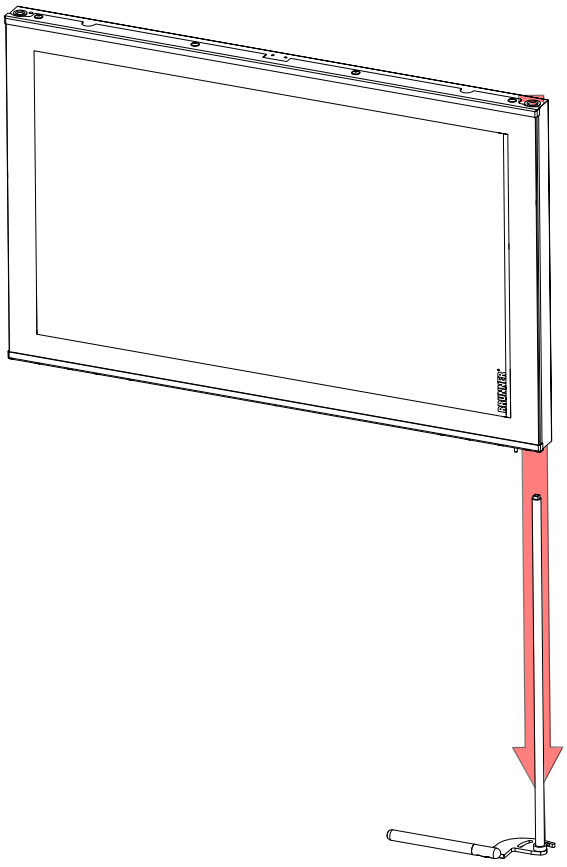


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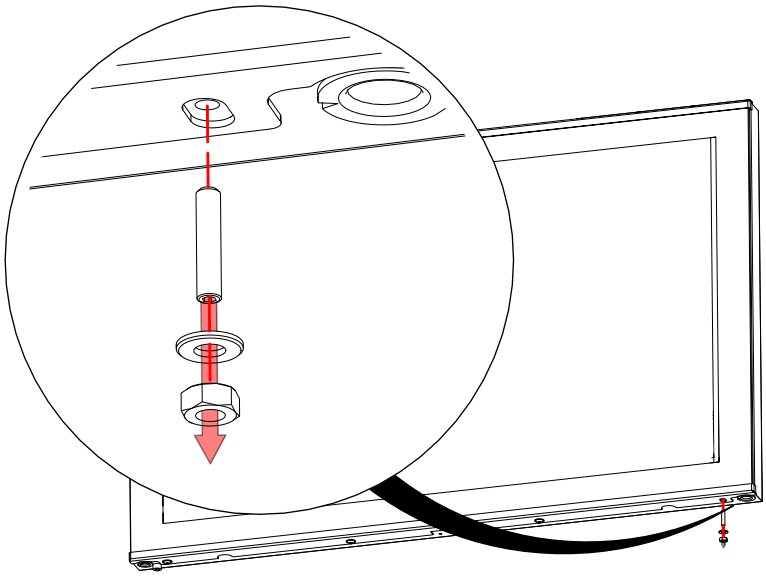
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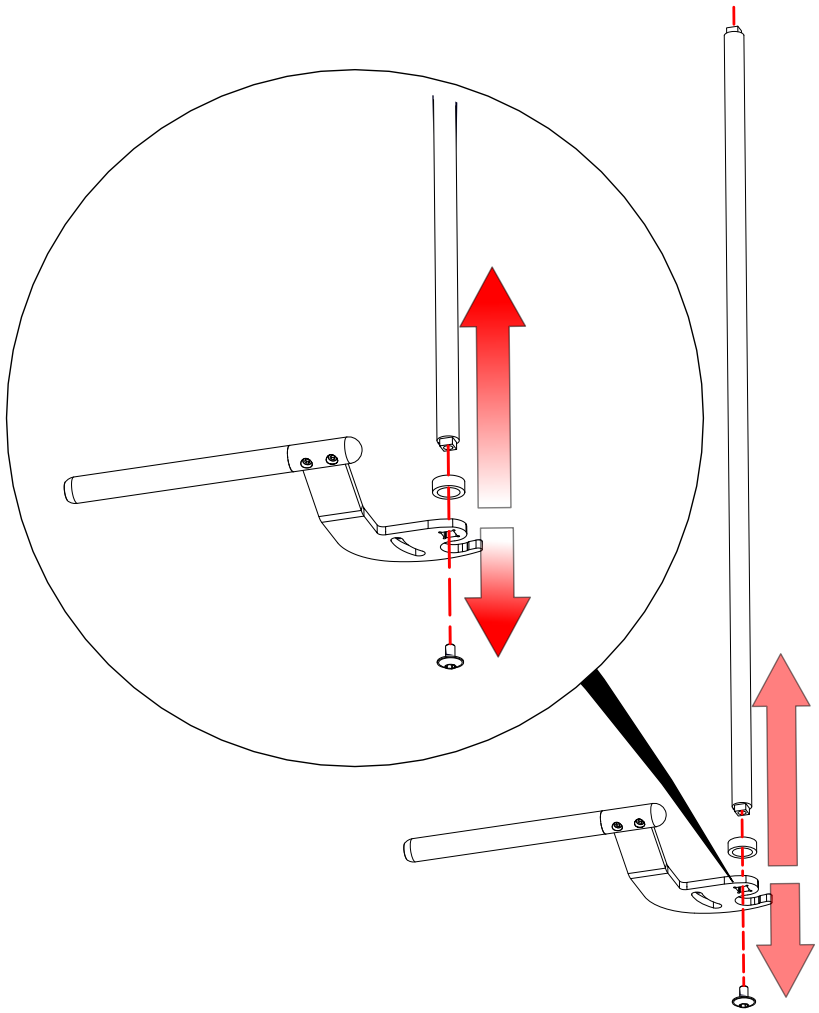


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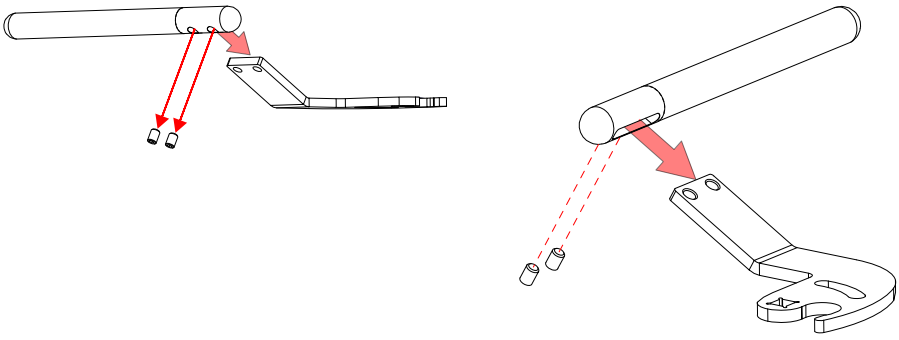


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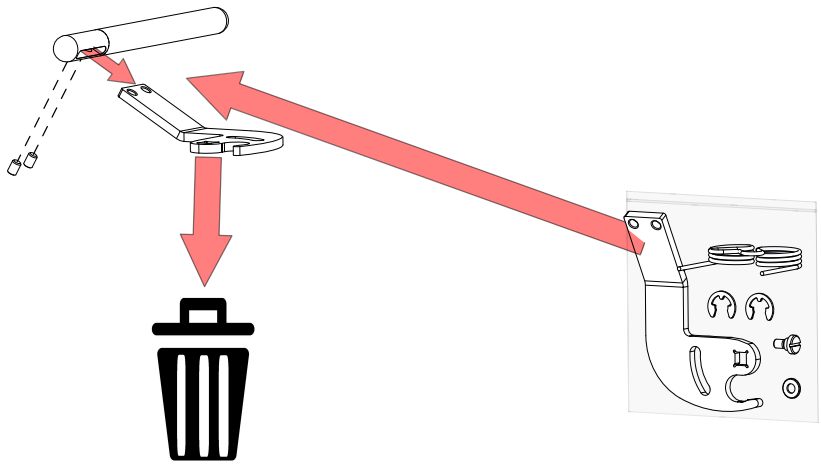
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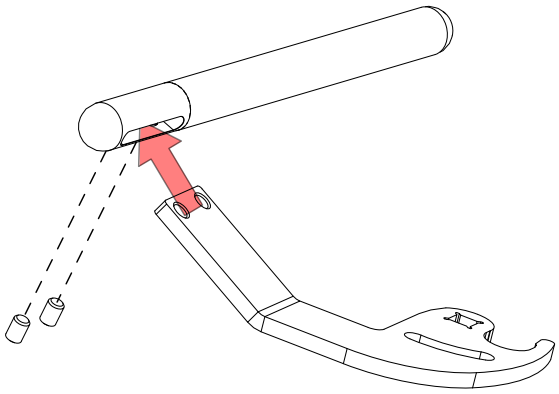
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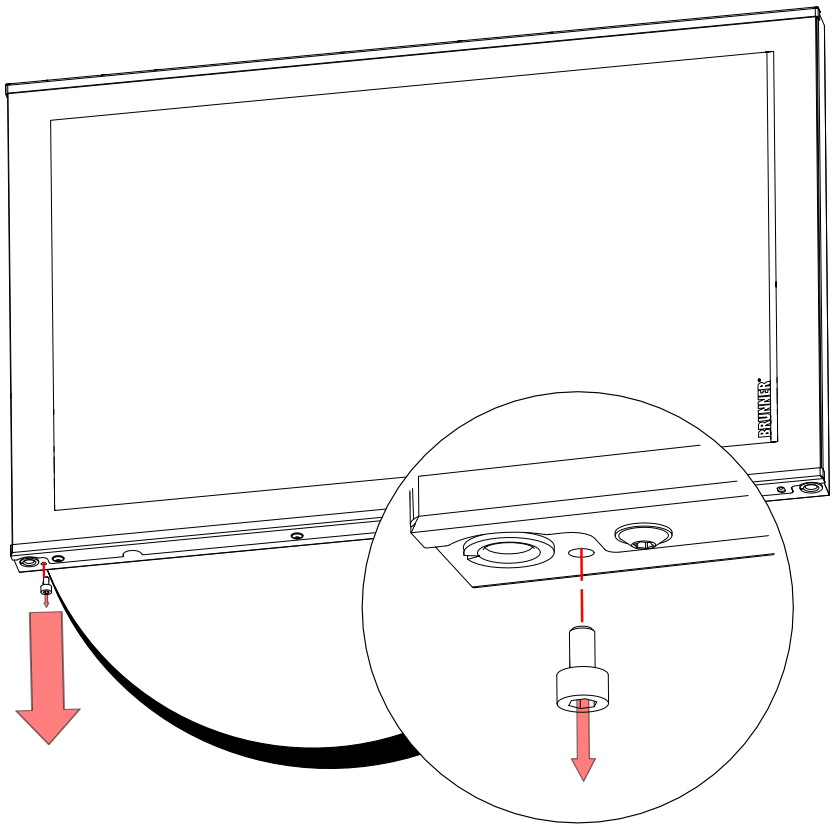


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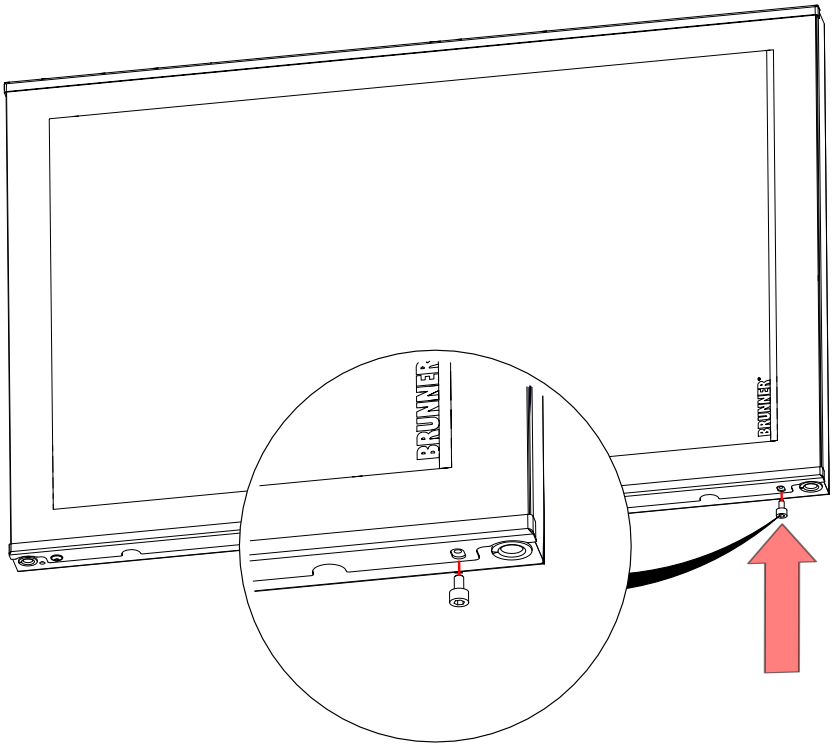


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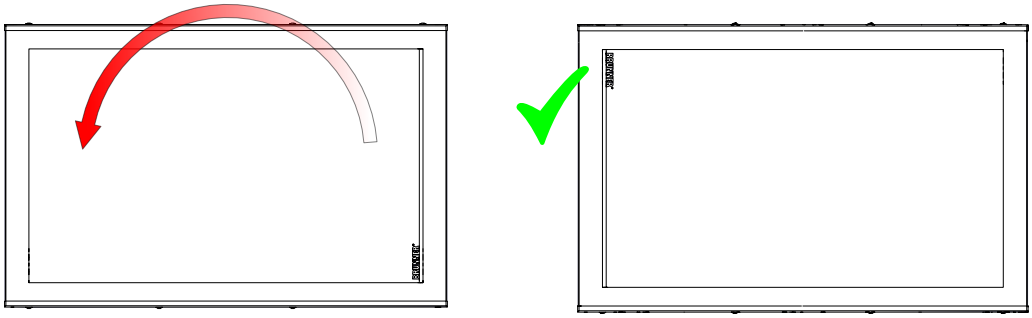
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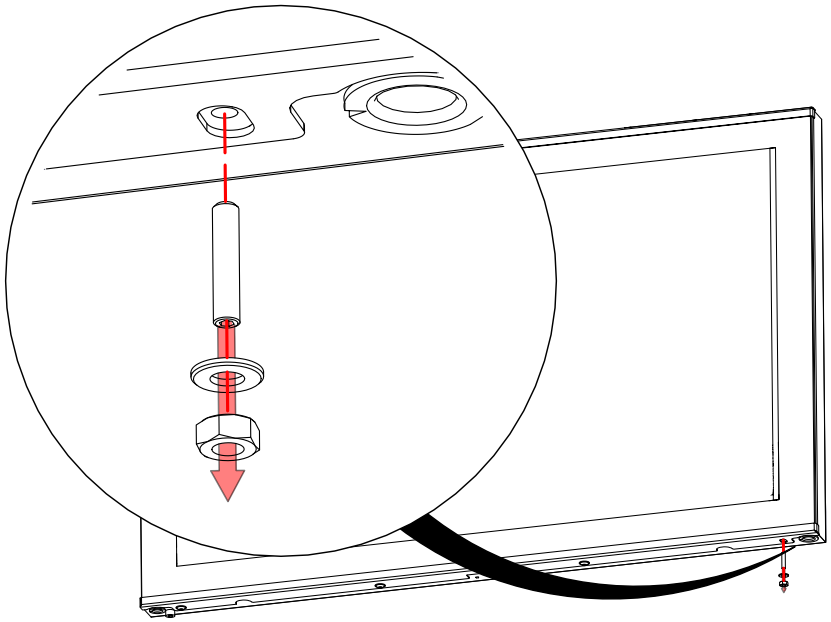
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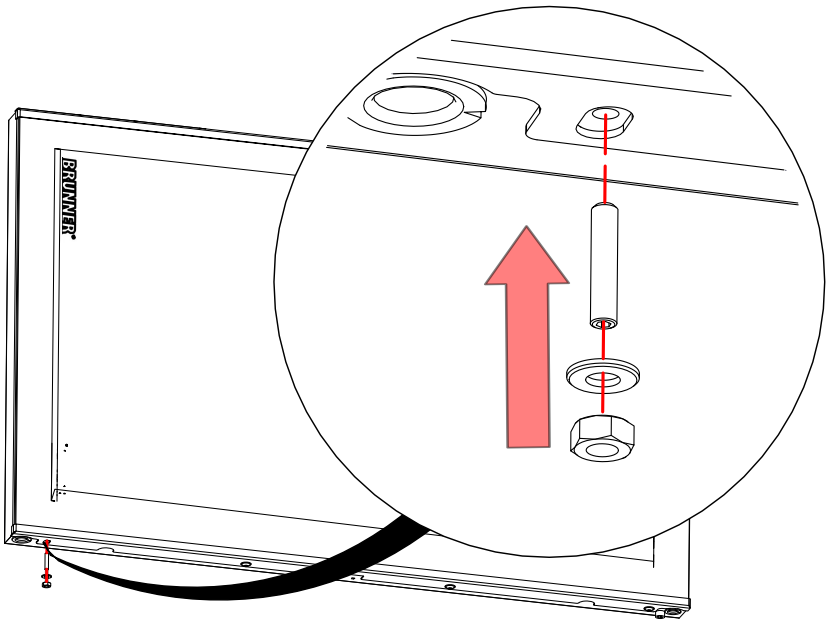


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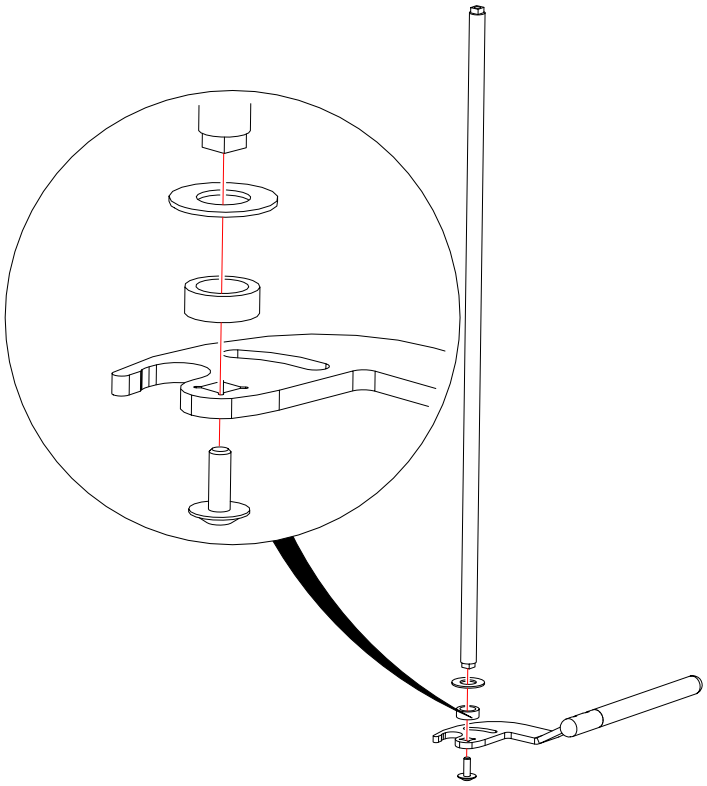


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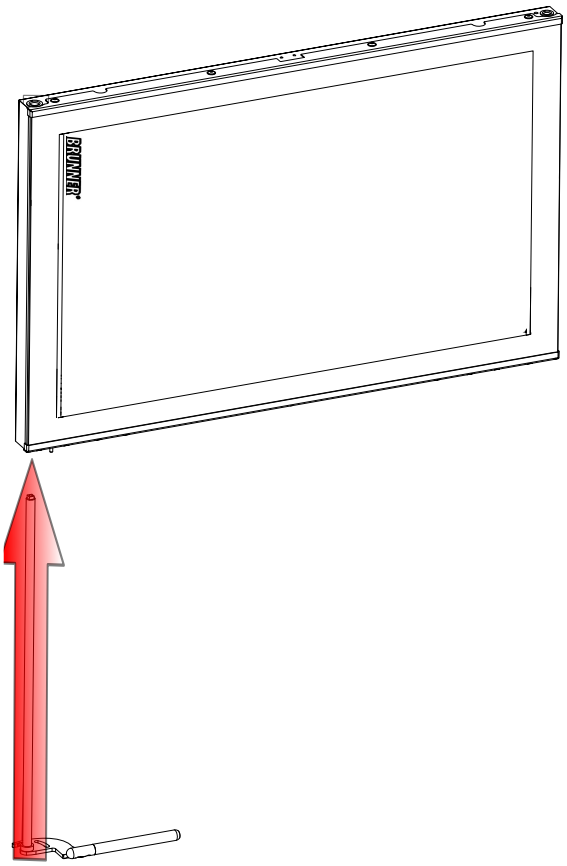
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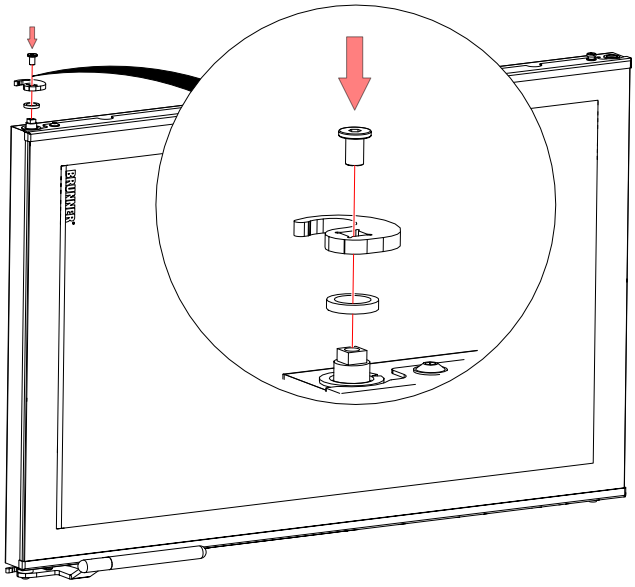
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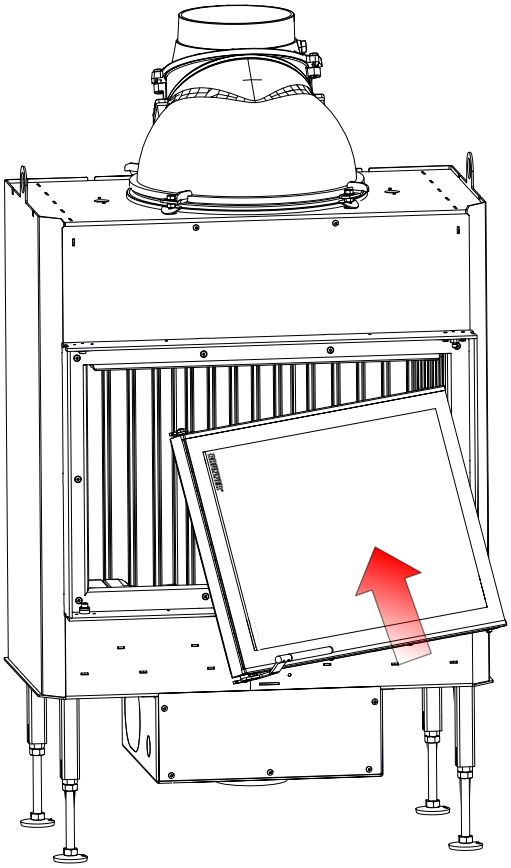


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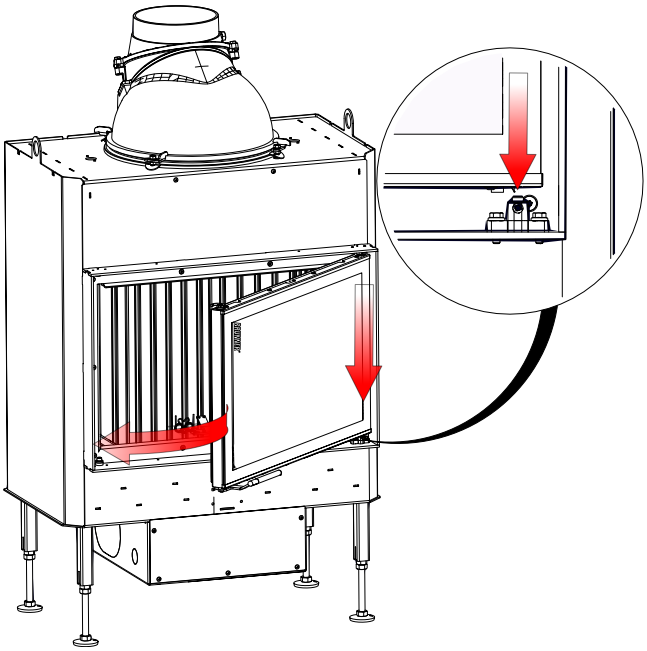


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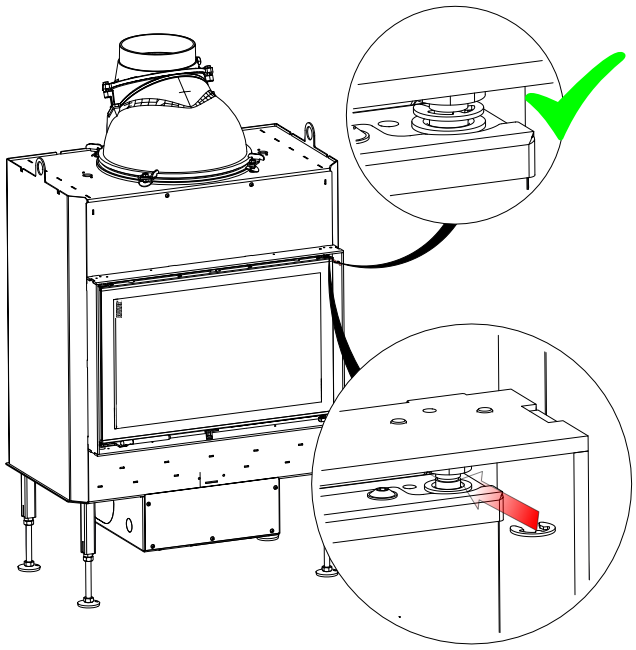
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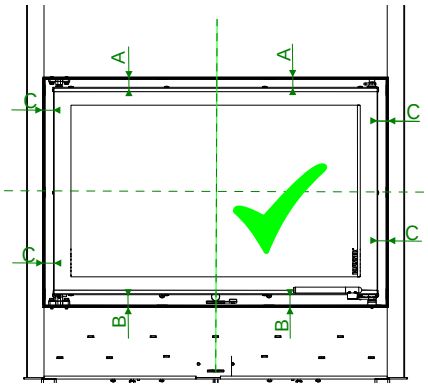


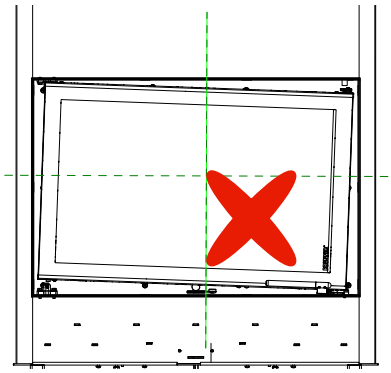
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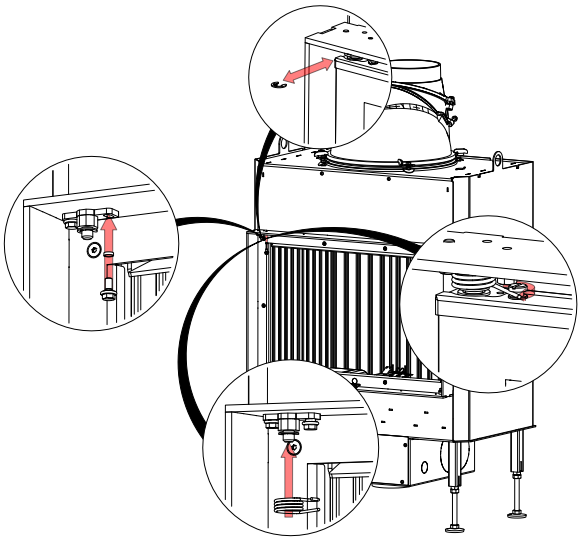


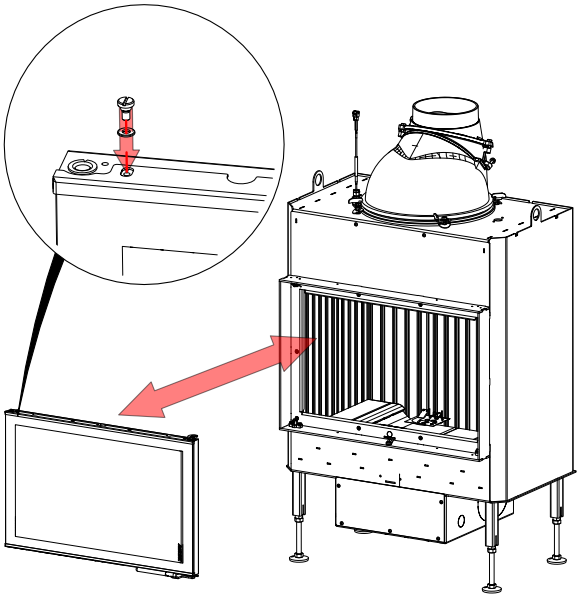
Adjust door !!

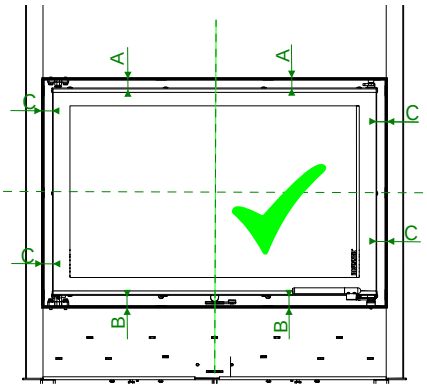
The door must be aligned vertically and horizontally. When the door is closed, the sealing cord of the door must be tight to the body.

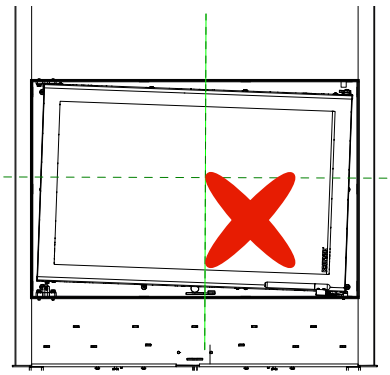
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4.2.3.2 ADJUSTING OF SELF-CLOSING DOOR









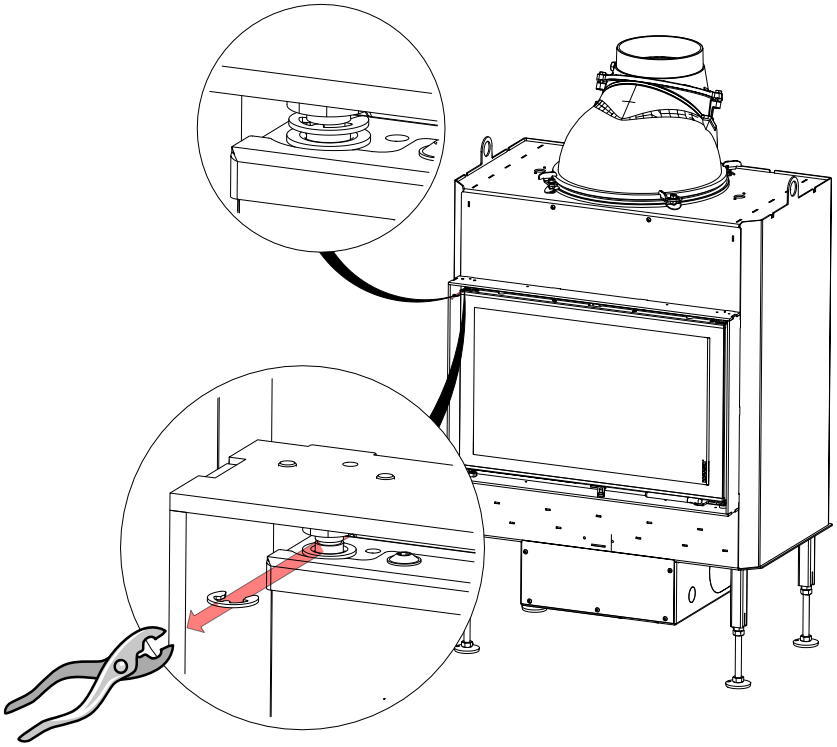
Adjust door !!

The door must be aligned vertically and horizontally. When the door is closed, the sealing cord of the door must be tight to the body.

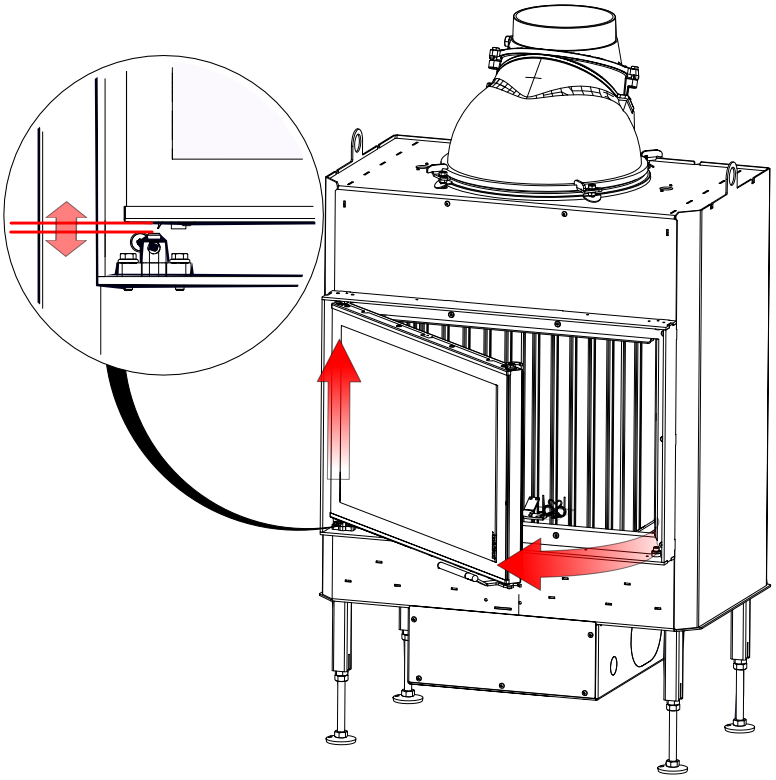
Version : BKH with side-opening door

-> without self-closing

1

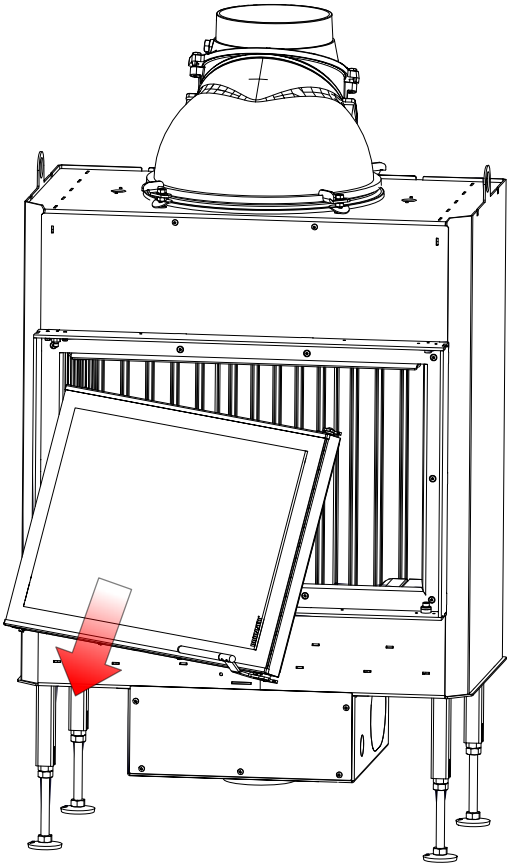


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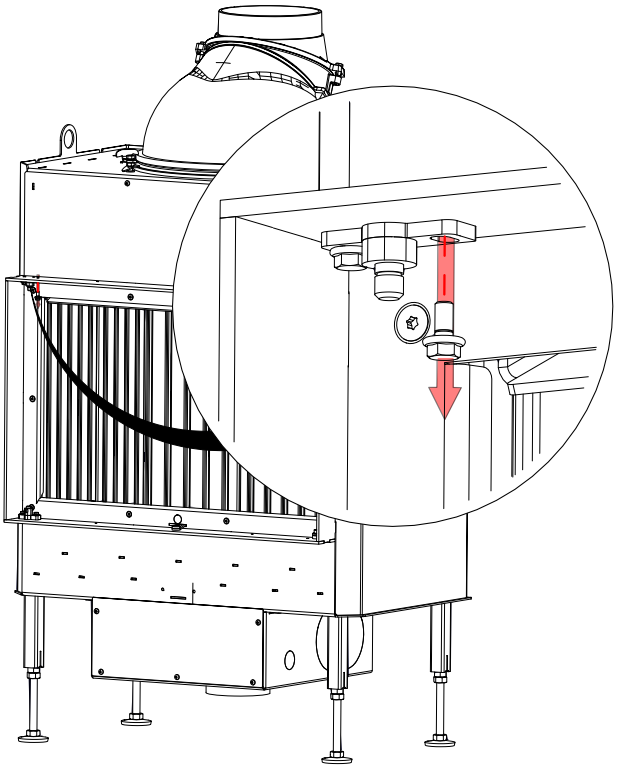


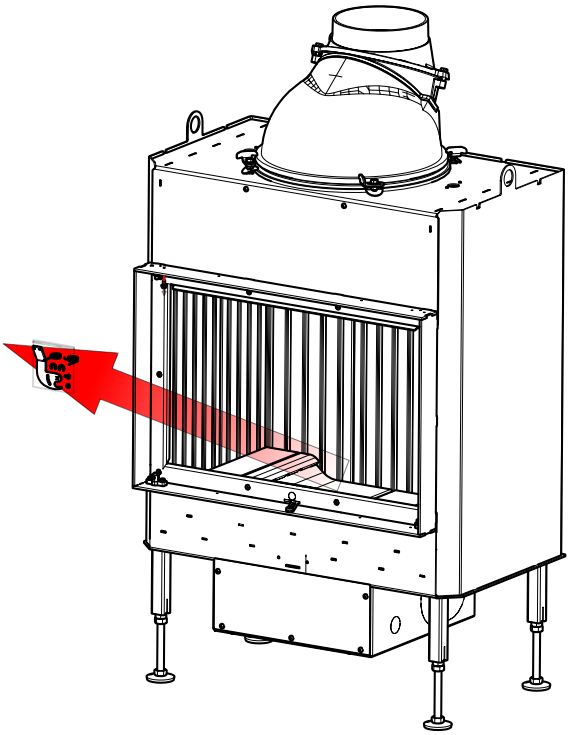
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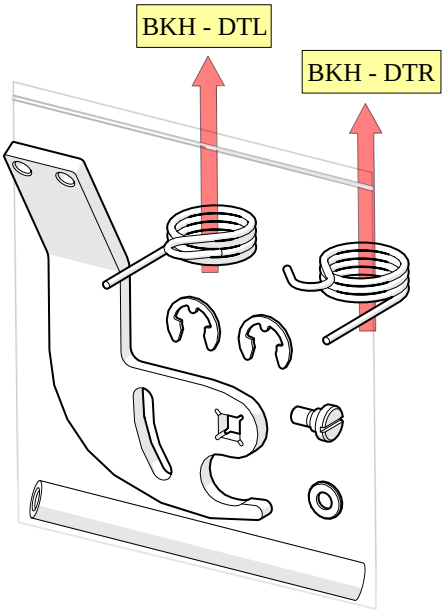
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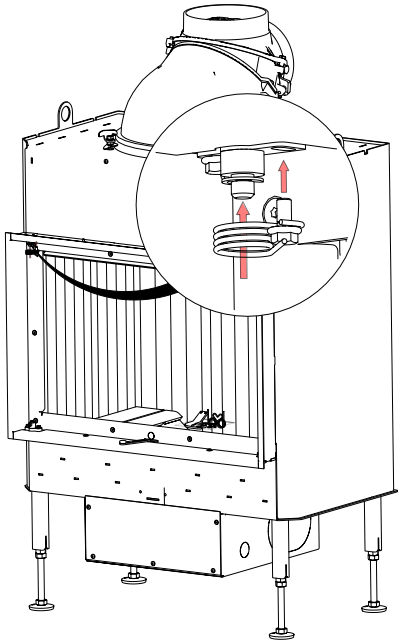




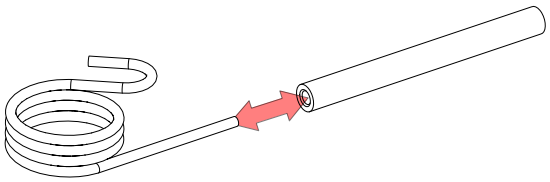


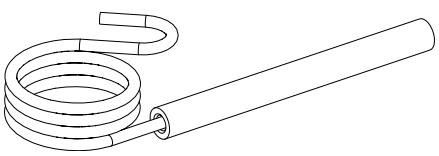
DTL = side-opening door - left side
DTR = side-opening door - right side

5



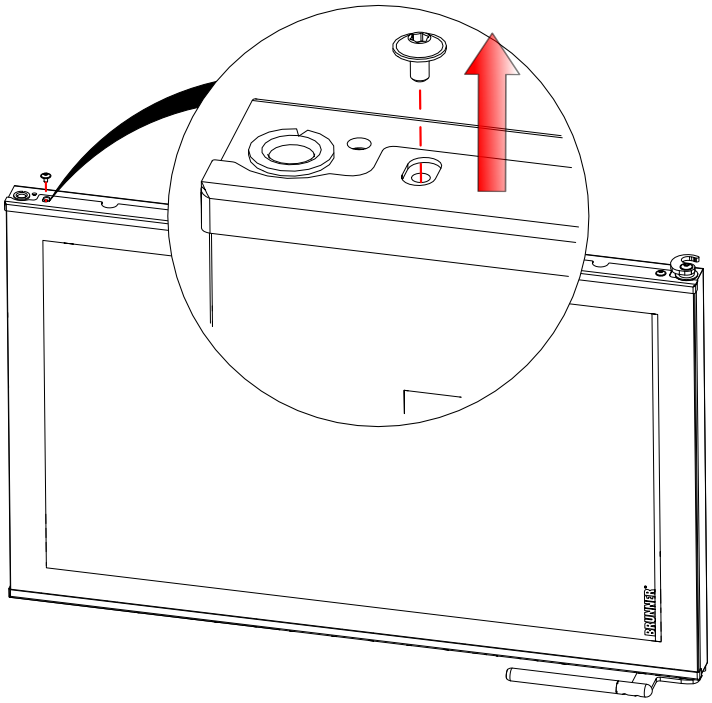
Mounting aid:



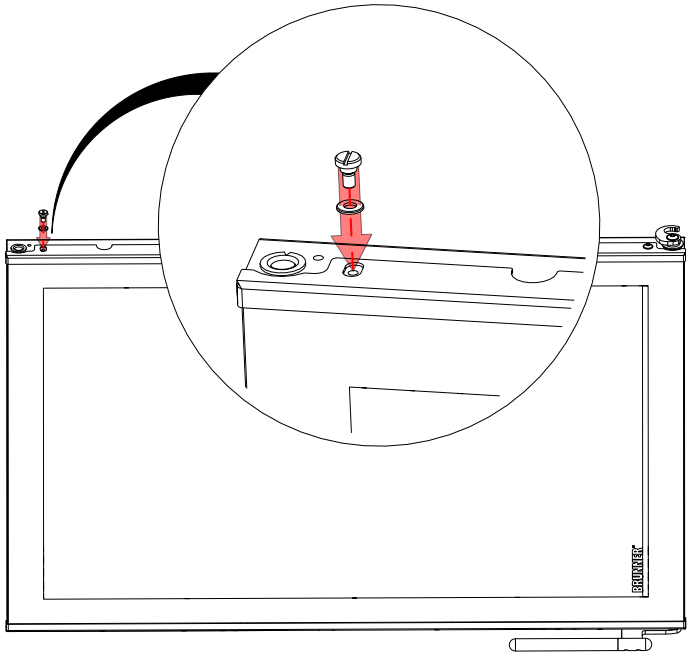


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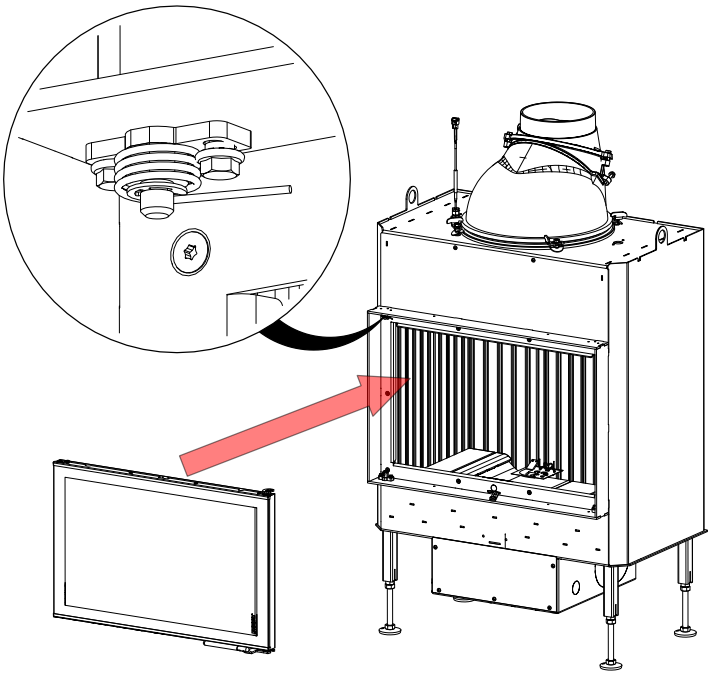
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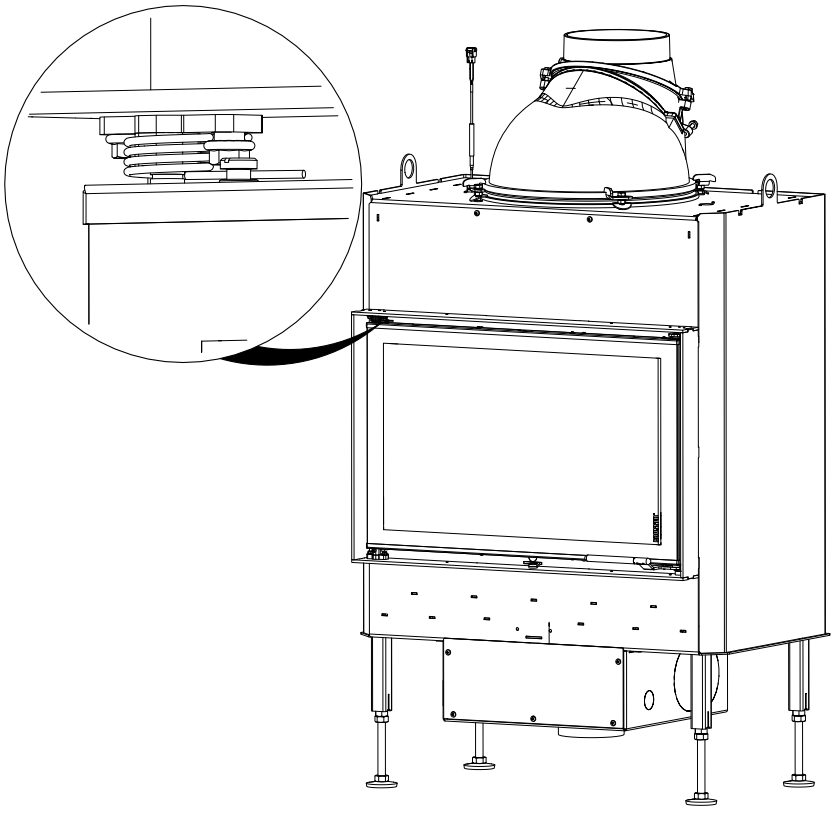
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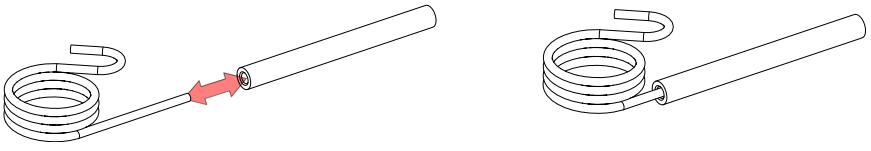
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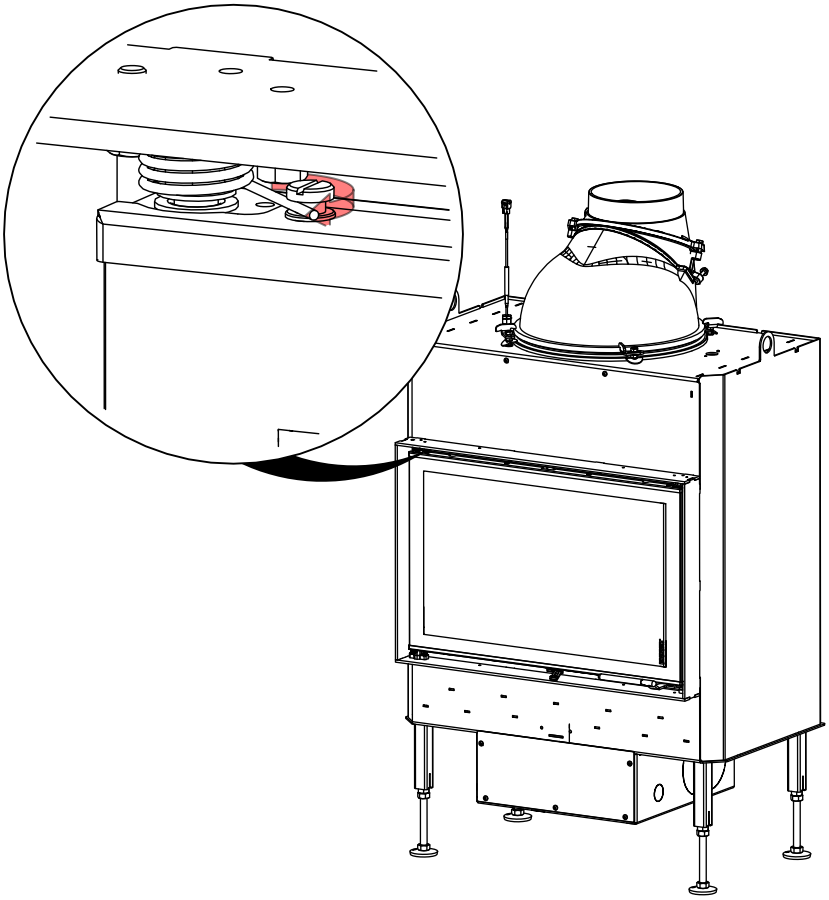


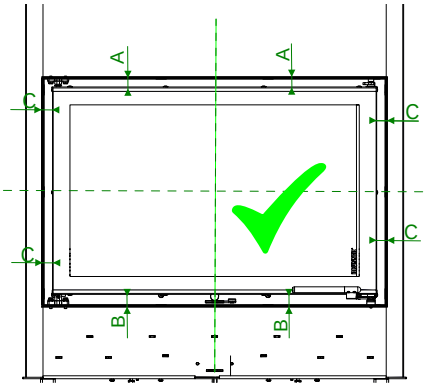
Mounting aid:

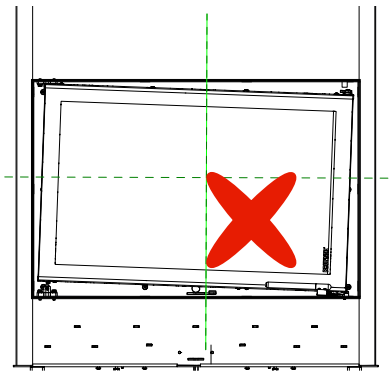


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10







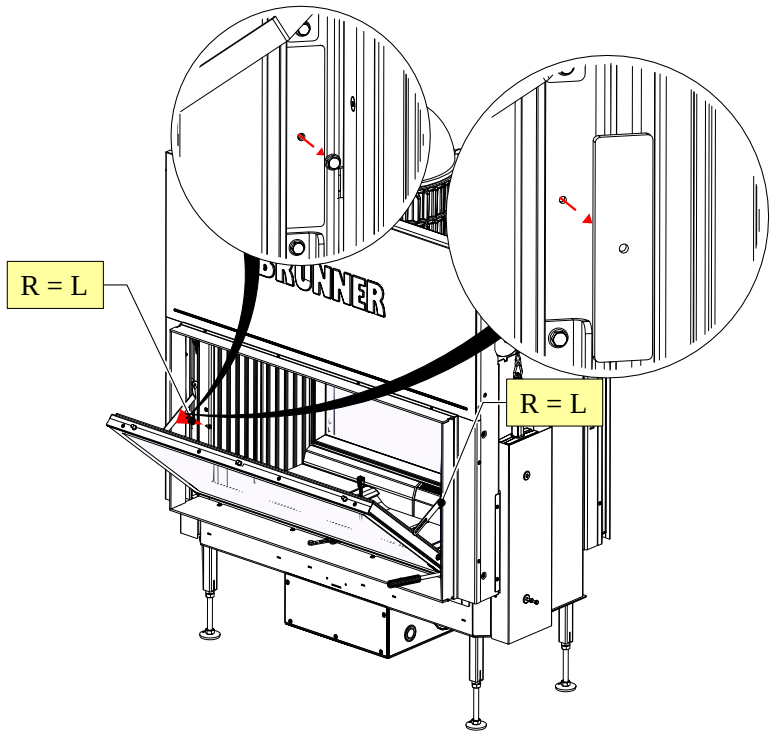
Adjust door !!

The door must be aligned vertically and horizontally. When the door is closed, the sealing cord of the door must be tight to the body.

Version : BKH with lifting door

-> Self-closing is active in the delivery state..

4.2.3.3 MODIFICATION - LIFTING DOOR: “NON SELF CLOSING”



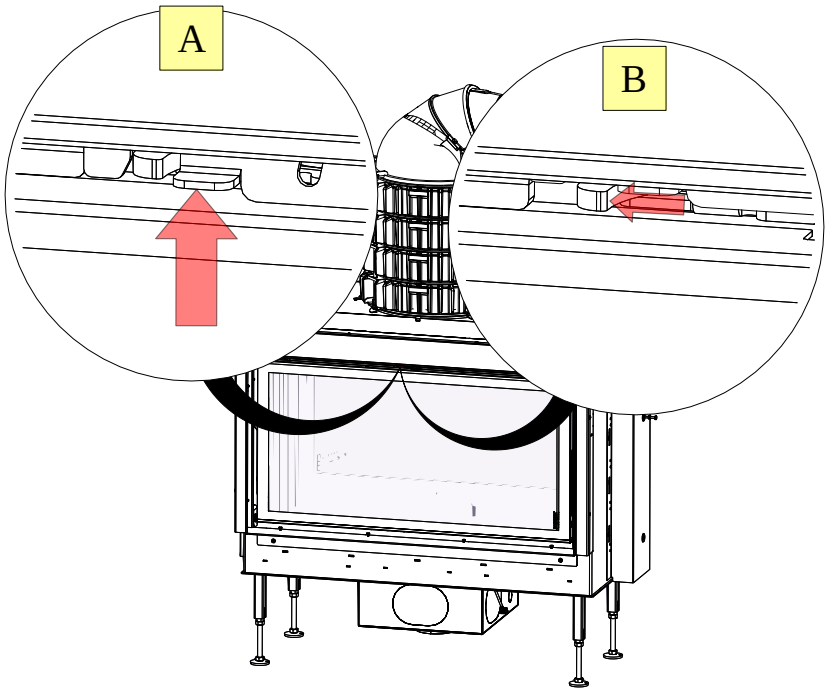
Im. 2: Summarised information

R = right side

L = left side

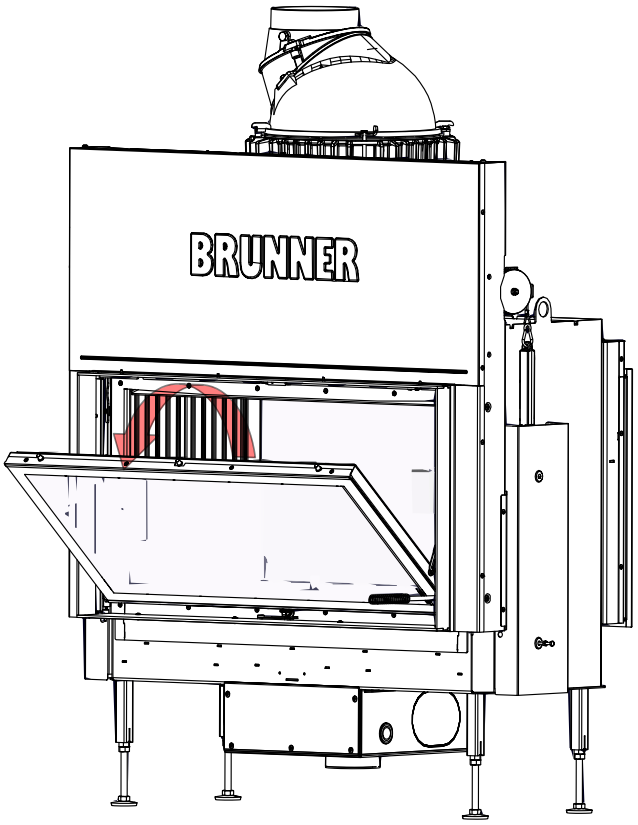
Workflow:

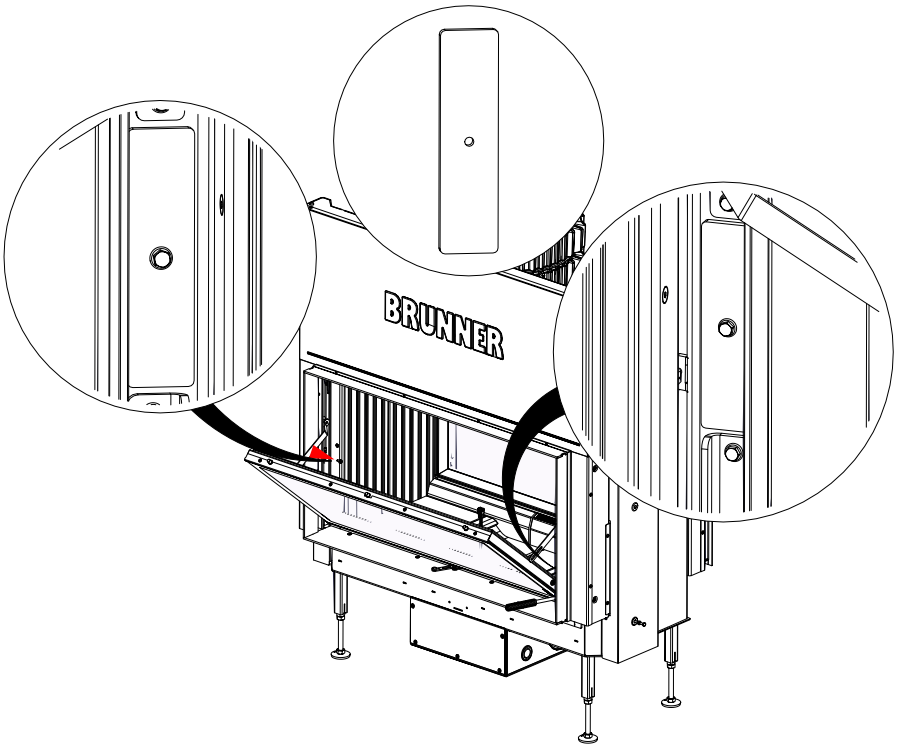
1



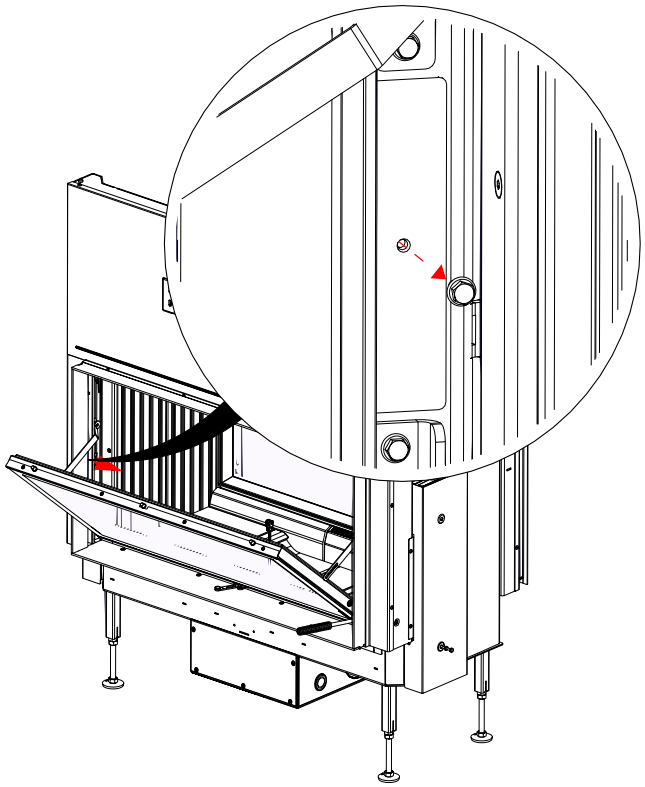
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2

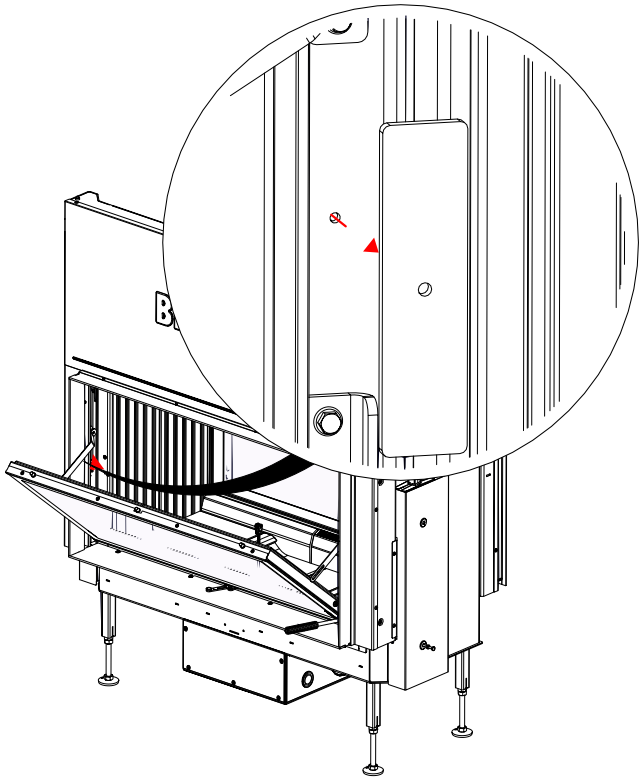




3

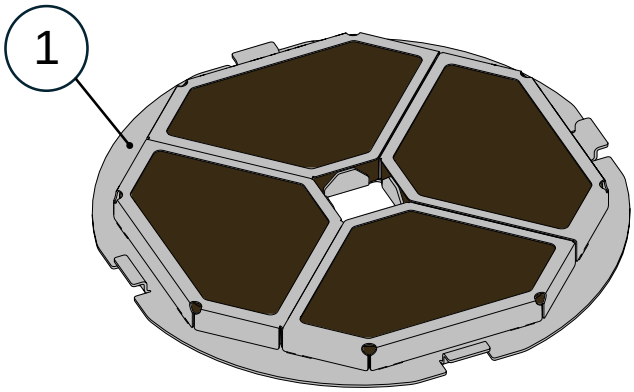


4



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4.3 CATALYTIC CONVERTER



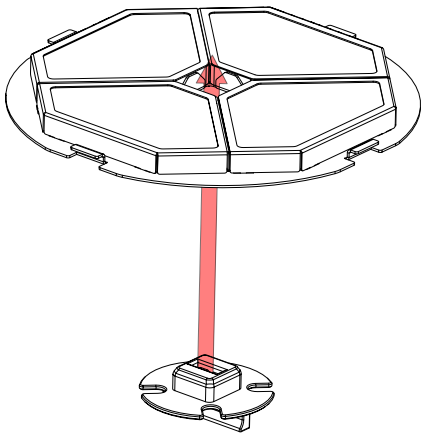
Position	Designation	Art.-Nr.	Pcs.
1	Catalytic converter BKH 5.0	HK000210	1

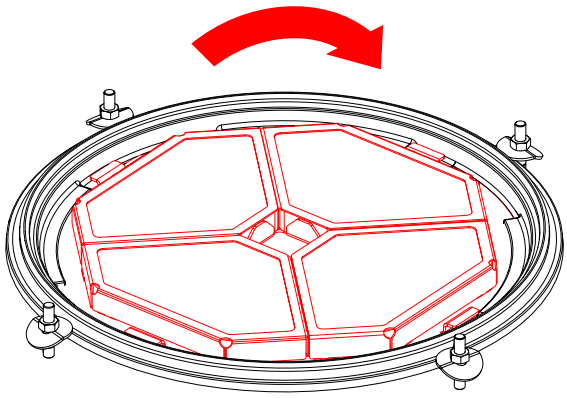
Fitting:

► Insert the catalytic converter through the combustion chamber into the catalytic converter retaining ring.

Pick up the catalytic converter with the assembly tool.

► Turn the catalytic converter to secure it. Then remove the assembly tool.

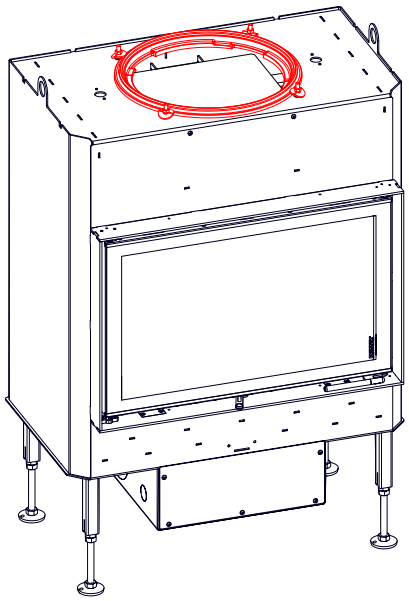




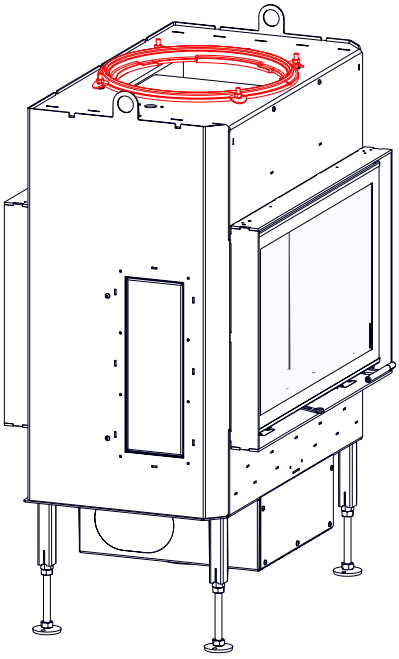
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Position catalytic converter retaining ring BKH

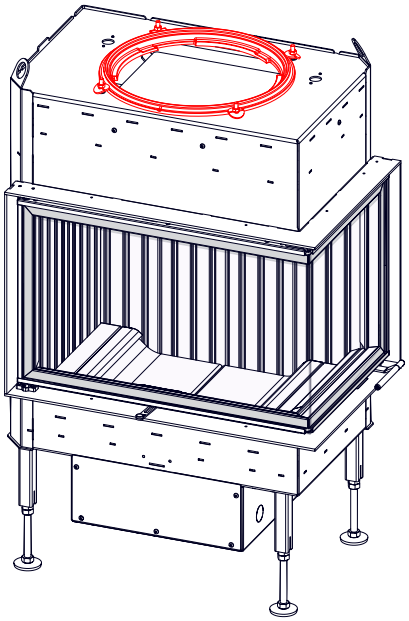
flat



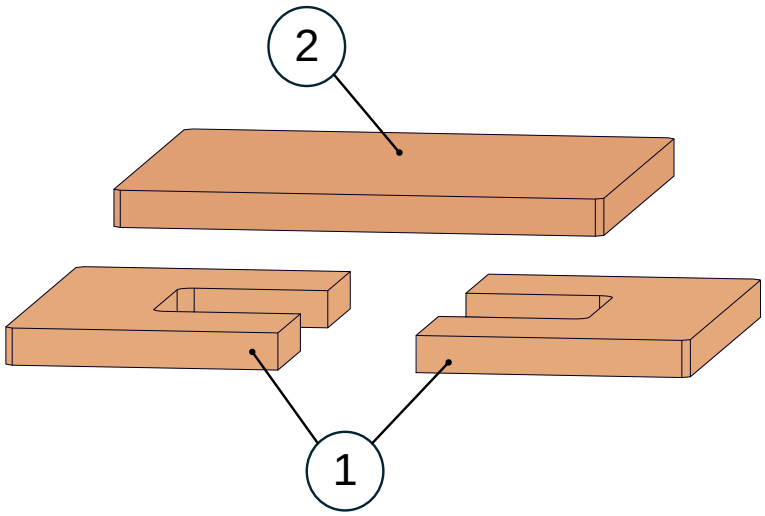
Tunnel



corner



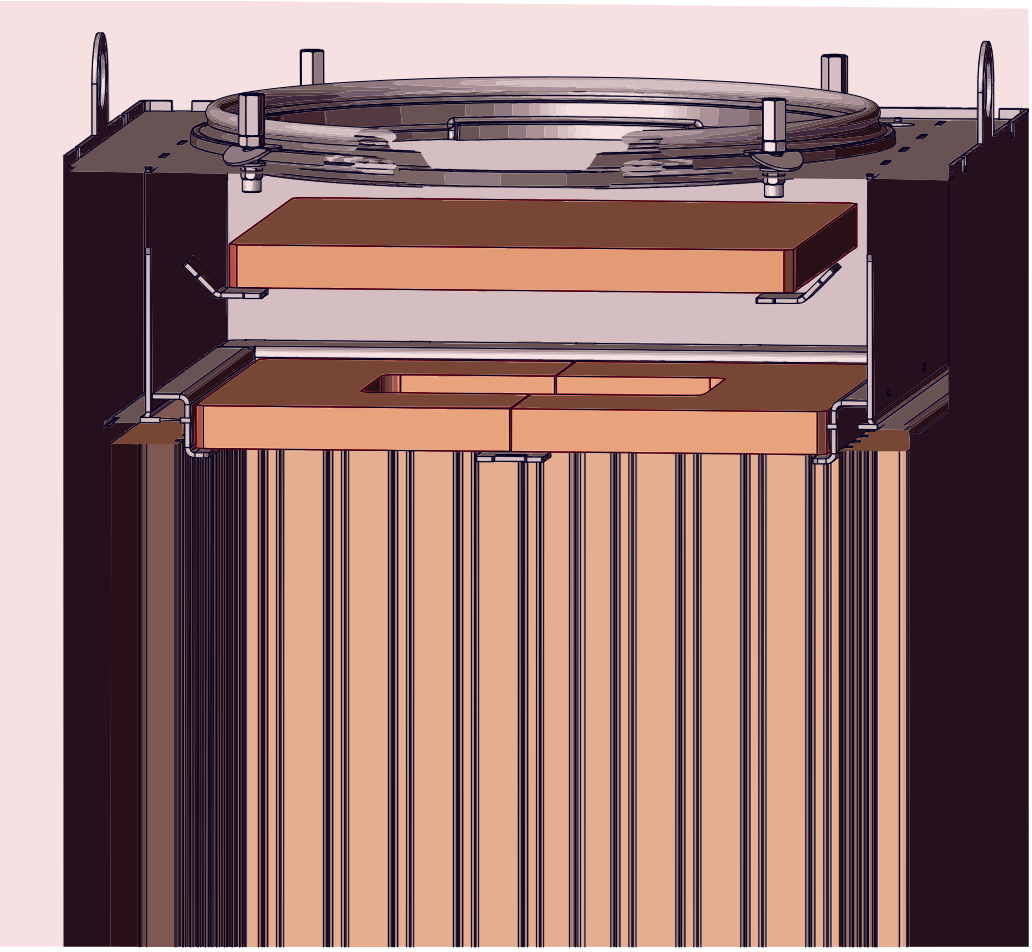
4.4 DEFLECTION



Position	Designation	Art.-Nr.	Pcs.
1	Deflection 1	HK001201	2
2	Deflection 2	HK000099	1

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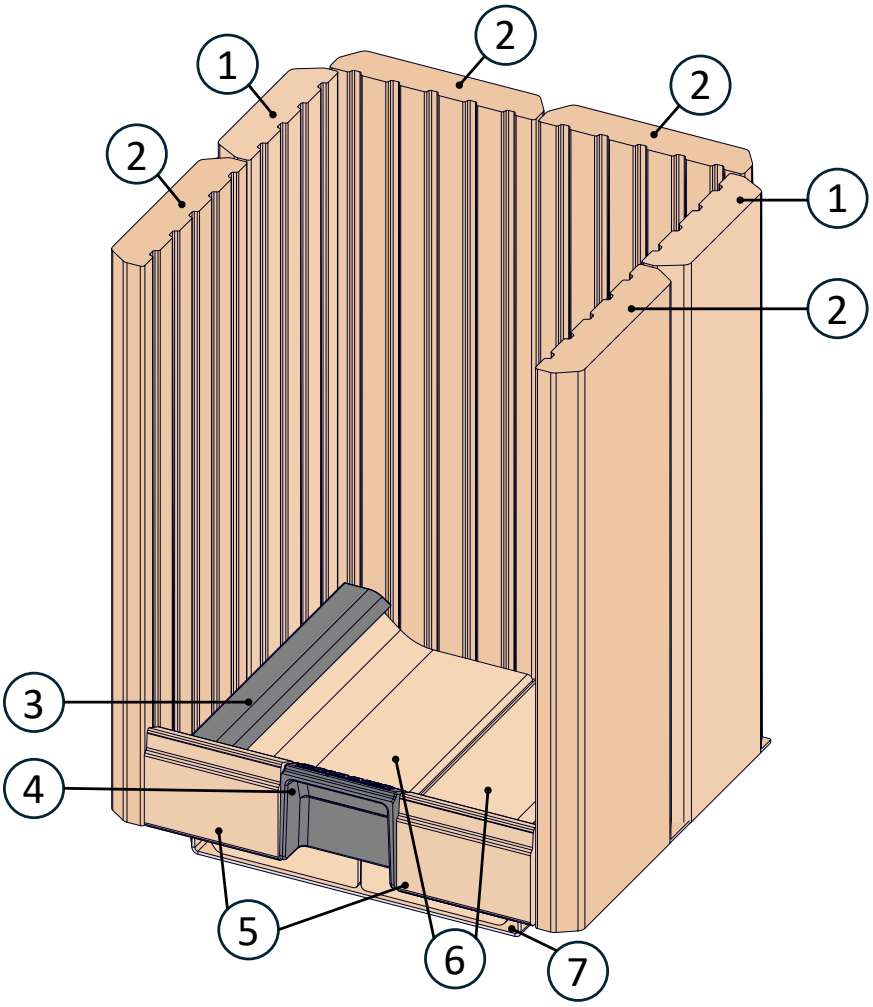
Position



4.5 VARIANTS COMBUSTION CHAMBER LINING

4.5.1 CHAMOTTE INNER LINING

flat 42-42 (HK001200-01)



Position	Designation	Art.-Nr.	Pcs.
1	Stone 572x173x40	HK000011	2
2	Stone 572x203x40	HK000012	4
3	Cast air distributor	HK000006	2
4	Cast inlay front	HK000007	1
5	Wedge stone132x99x40	HK001204	2
6	Bottom stone	HK001206	2
7	Bottom insulation	HK001207	1

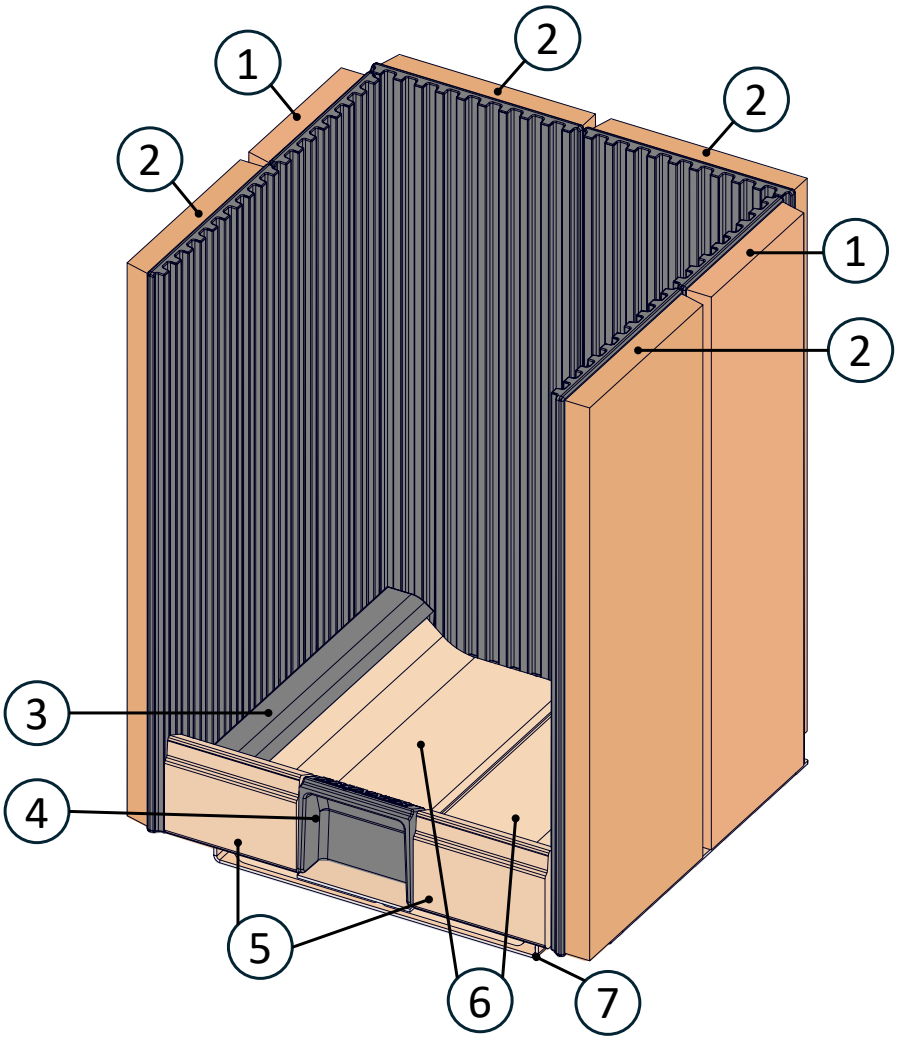
 © 2025 Brunner GmbH



Chamotte inner lining to be installed dry

4.5.2 COMBUSTION CHAMBER INNER LINING CAST IRON

flat 42-42 (HK001200-02)



Position	Designation	Art.-Nr.	Pcs.
1	BG Cast iron plate 572x174x40	HK000174	2
2	BG Cast iron plate 572x210x40	HK000173	4
3	Cast air distributor	HK000006	2
4	Cast inlay front	HK000007	1
5	Wedge stone132x99x40	HK001204	2
6	Bottom stone	HK001206	2
7	Bottom insulation	HK001207	1

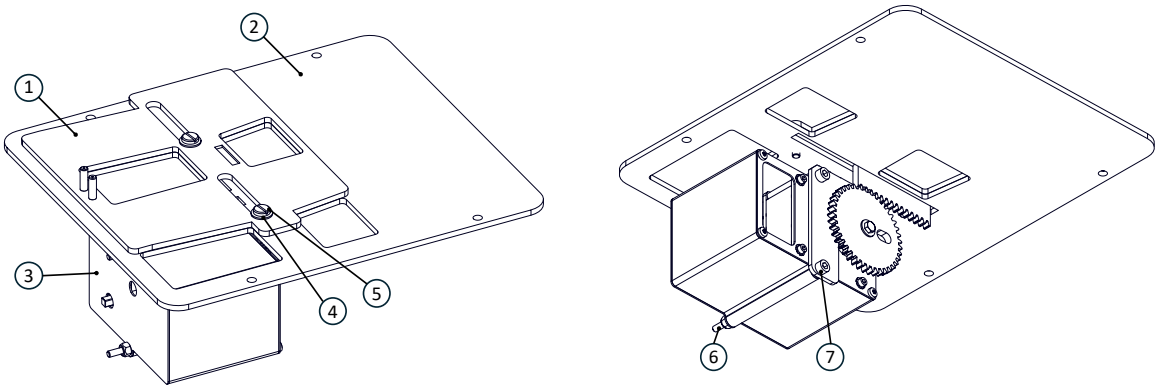
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4.6 VARIANT: EOS

4.6.1 BOTTOM COVER AIR BOX EOS

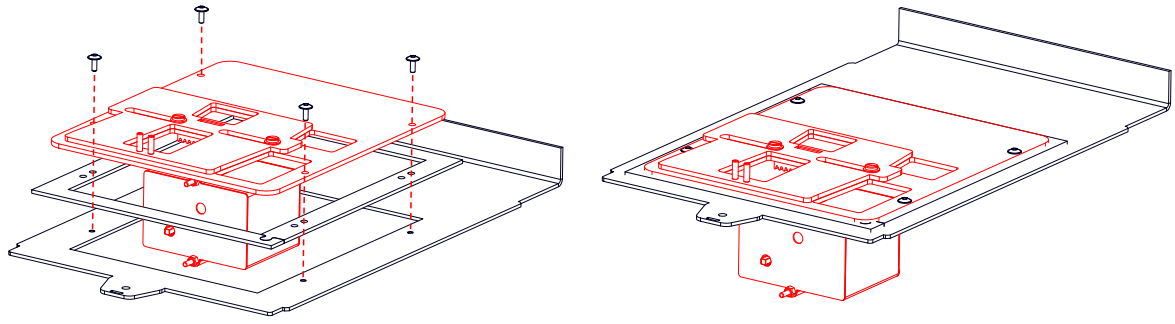
4.6.1.1 COMPONENTS EOS

BG Bottom cover Air box small, EOS (HK000064)

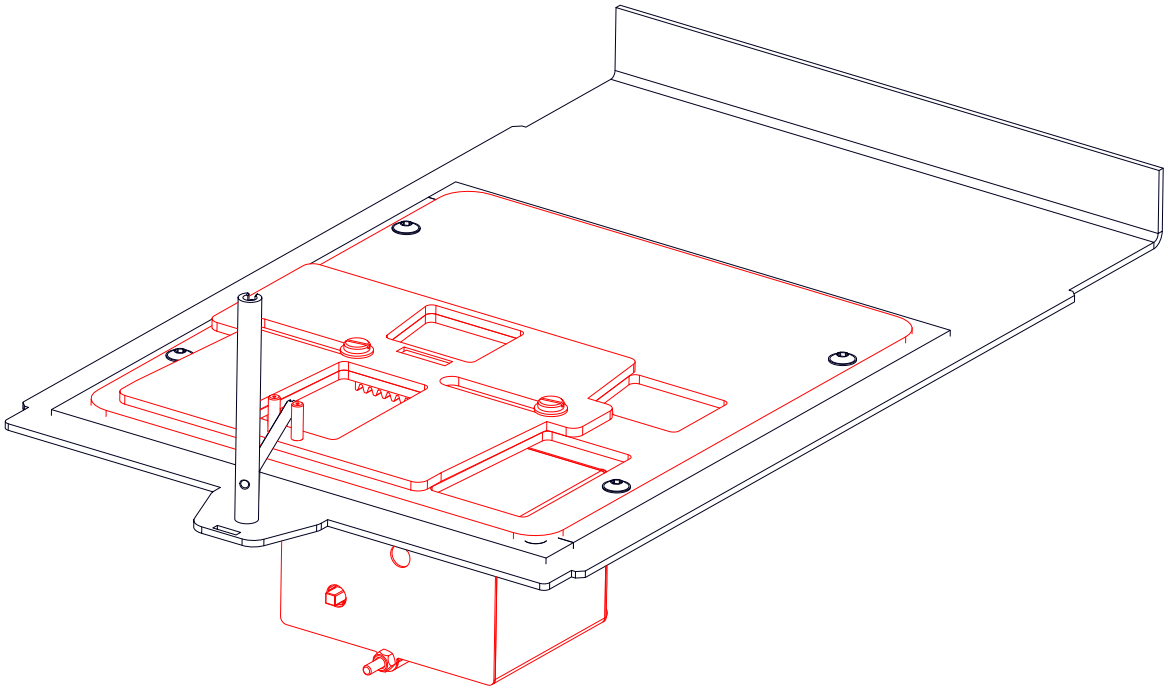


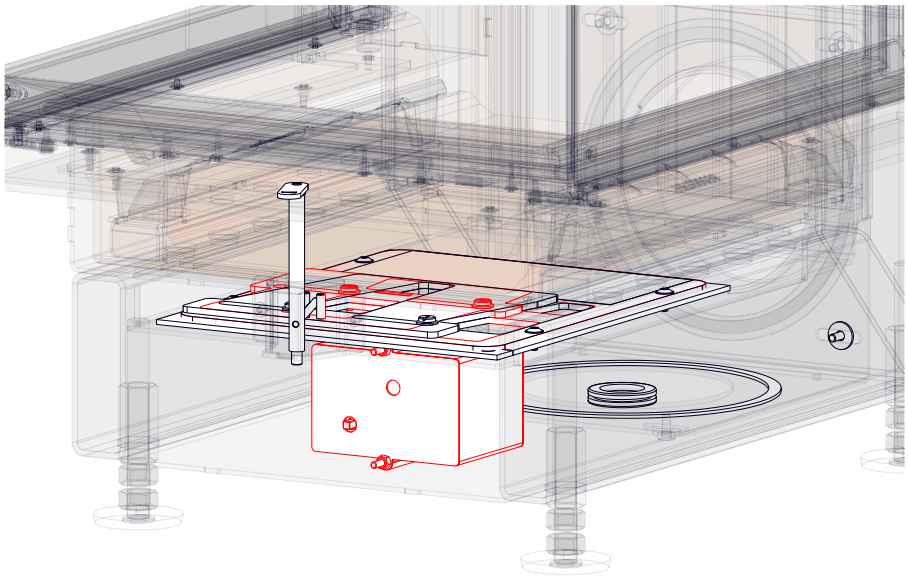
Position	Designation	Art.-Nr.	Stk.
1	Air slider plate small EOS	HK000232	1
2	BG Bottom cover Air box small EOS	HK000219	1
3	BG Servomotor EOS with Gear wheel	N003157	1
4	Collar bushing	I007337	2
5	Flat head screw (M5x6)	800461	2
6	hexagon nut with Clamping part	800155	2
7	Cylinder head screw (M5x100)	800035	2

4.6.1.2 FITTING: EOS



1

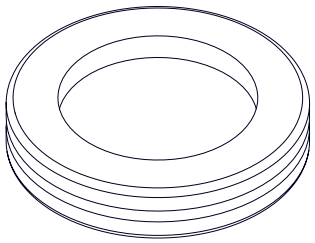




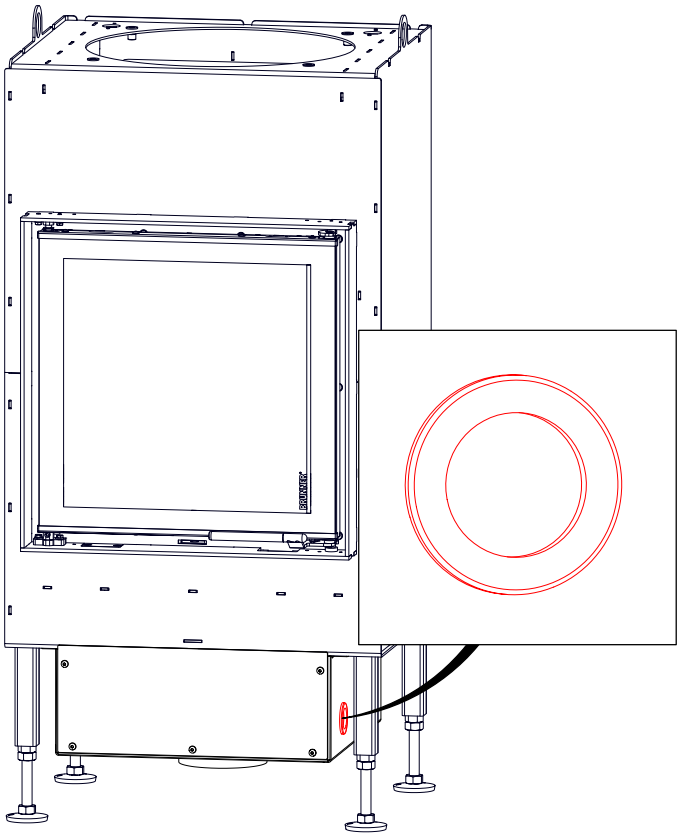
© 2025 Brunner GmbH

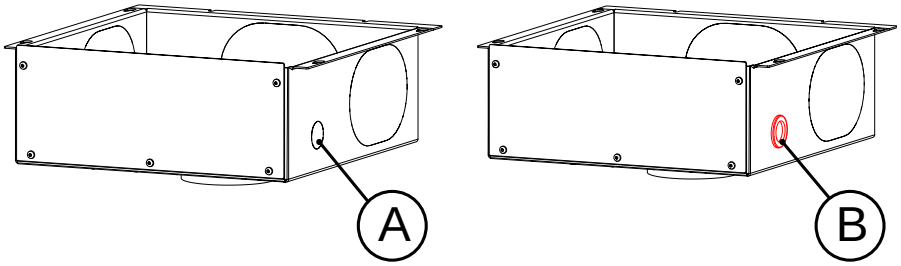
4.6.1.3 MEMBRANE FEED-THROUGH

Membrane feed-through (901248-01)



Position





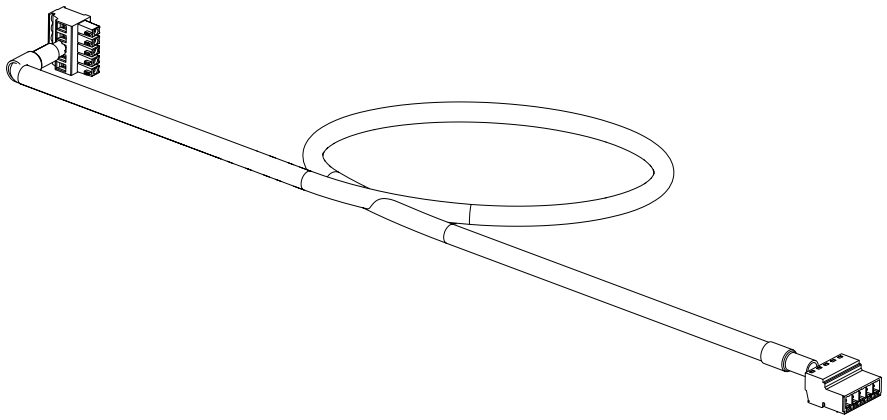
A = BKH

B = BKH with EOS

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4.6.1.4 SERVOMOTOR CONNECTING CABLE

BG Connecting cable series 5 E013038



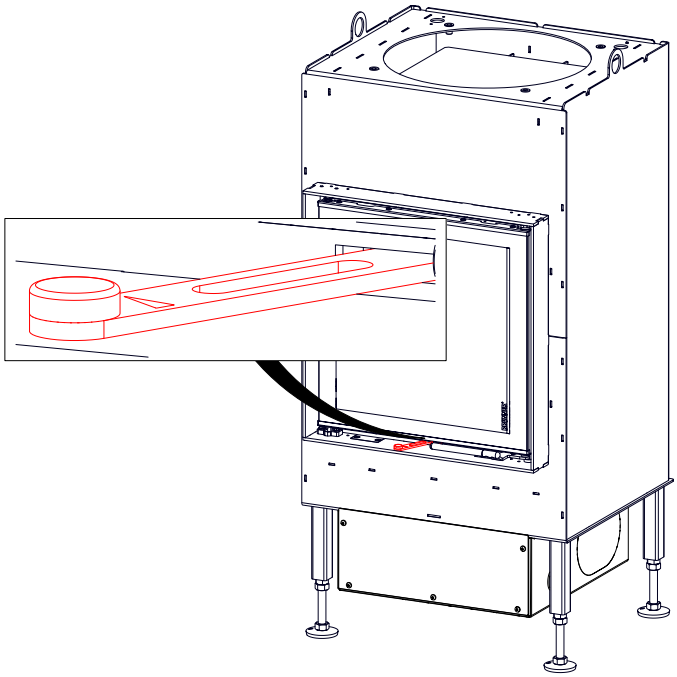
Laying the connecting cable

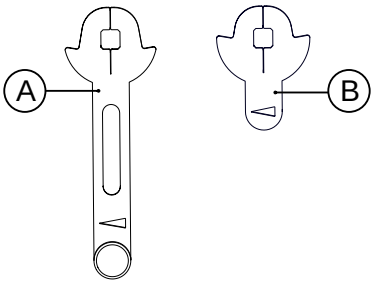
The connecting cable acts as an extension cable and enables components of the control unit to be replaced during servicing.

► Insert the connecting cable from the outside through the corresponding diaphragm bushing (rear/bottom).

► Connect the plug of the motor cable to the plug of the connecting cable in the **inner** base area of the heating insert.

4.6.1.5 AIR POSITION INDICATOR BKH FLAT





A = BKH flat

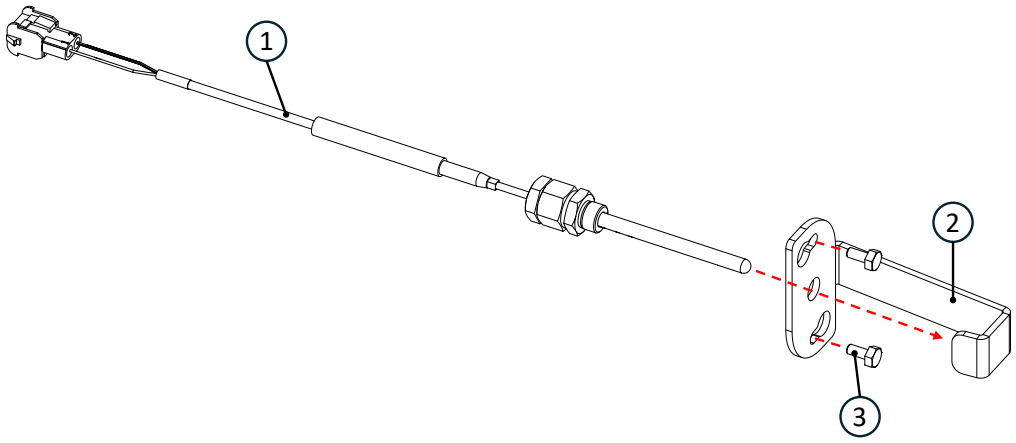
B = BKH flat with EOS

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4.6.2 THERMOCOUPLE

4.6.2.1 COMPONENTS THERMOCOUPLE

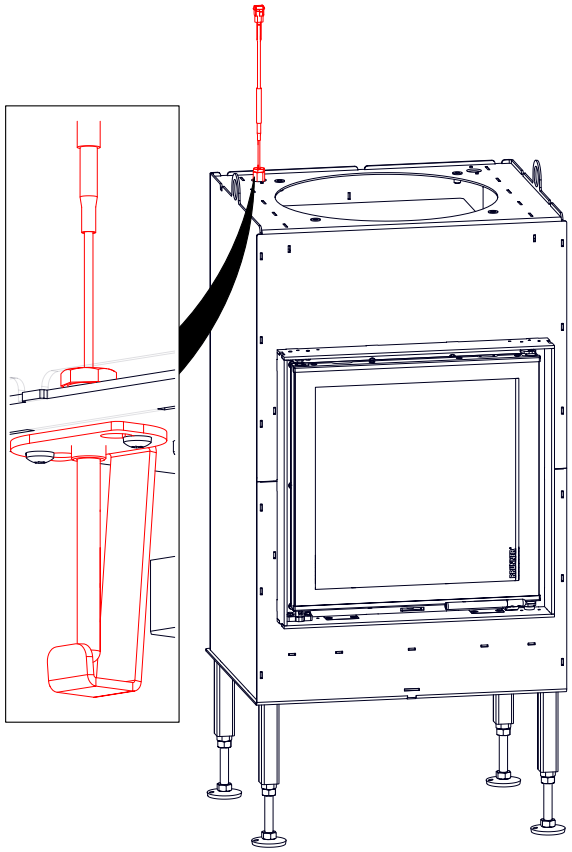
BG Thermocouple with Retaining plate (HK000095)



Position	Designation	Art.-Nr.	Pcs.
1	BG Thermocouple	10992.1	1
2	Thermocouple Retaining plate	HK000216	1
3	Hexagon head screw (M5x10)	02531	2

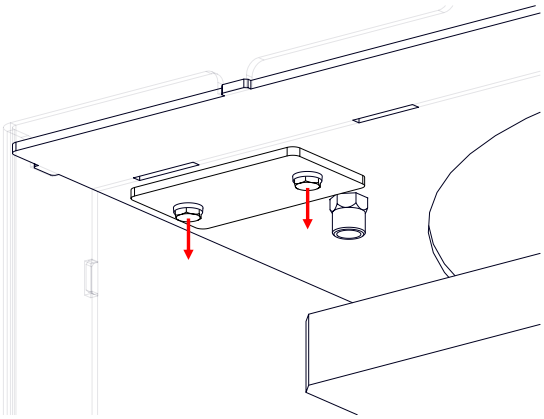
4.6.2.2 FITTING: THERMOCOUPLE

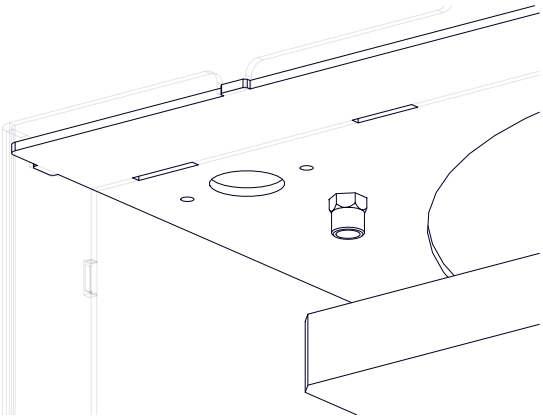
Position



Workflow

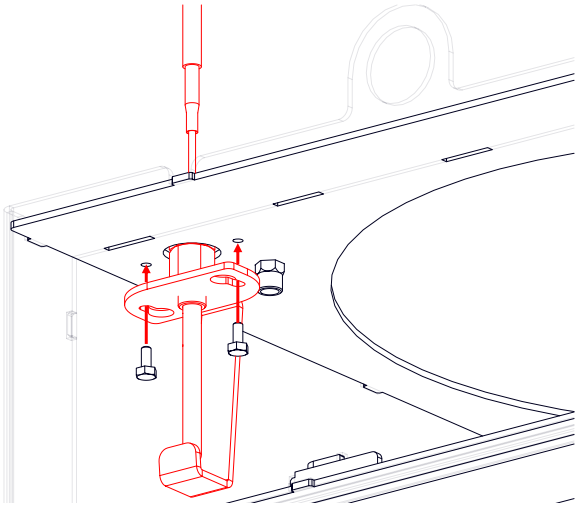
1

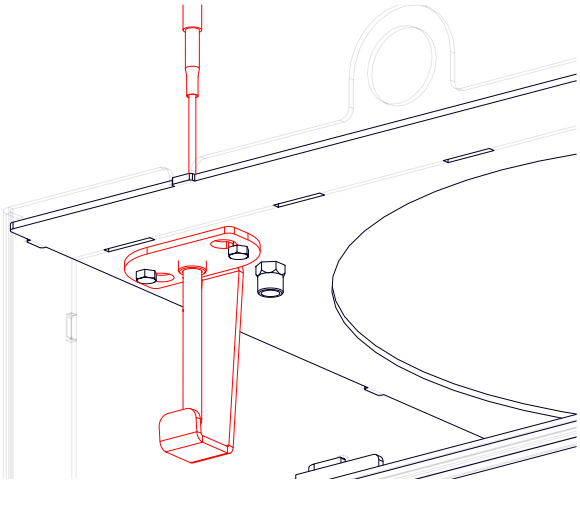




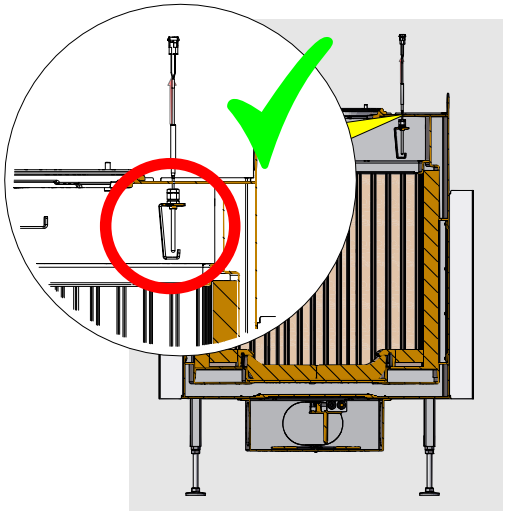
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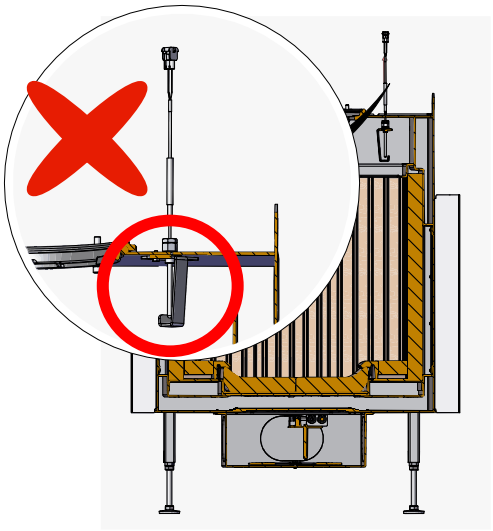
2



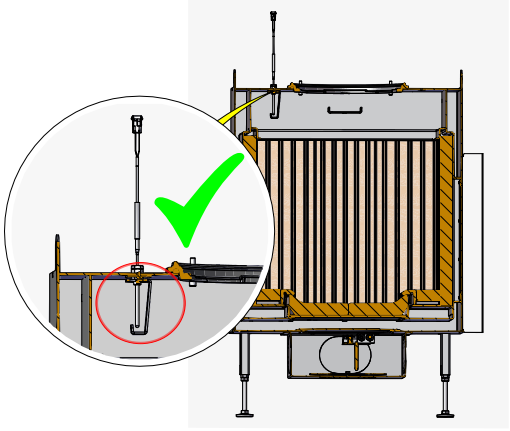


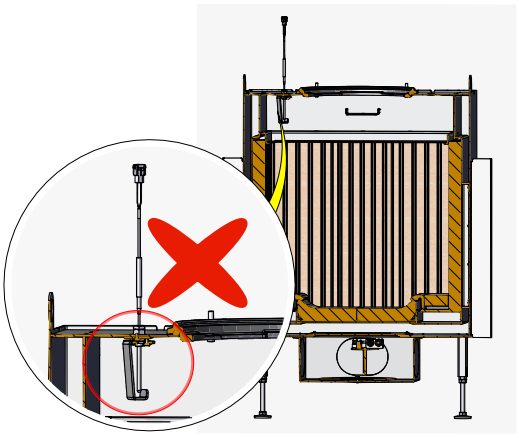
Variant: Thermocouple right side





Variant: Thermocouple left side

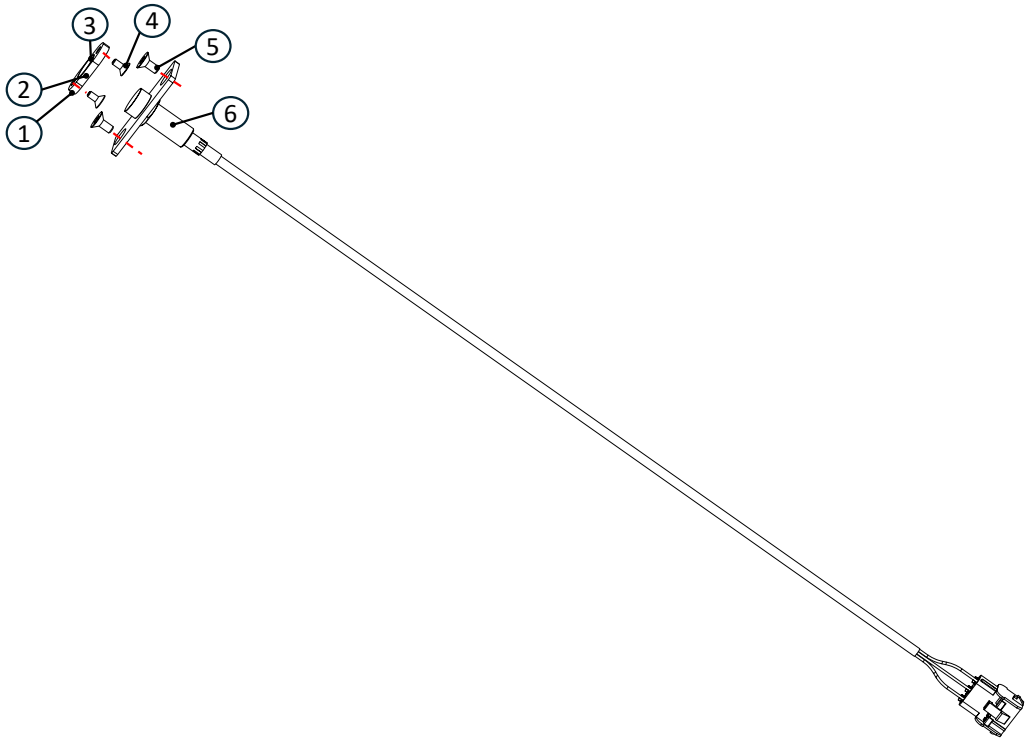




4.6.3 DOOR CONTACT SWITCH

4.6.3.1 COMPONENTS DOOR CONTACT SWITCH

Door contact switch (E011001)

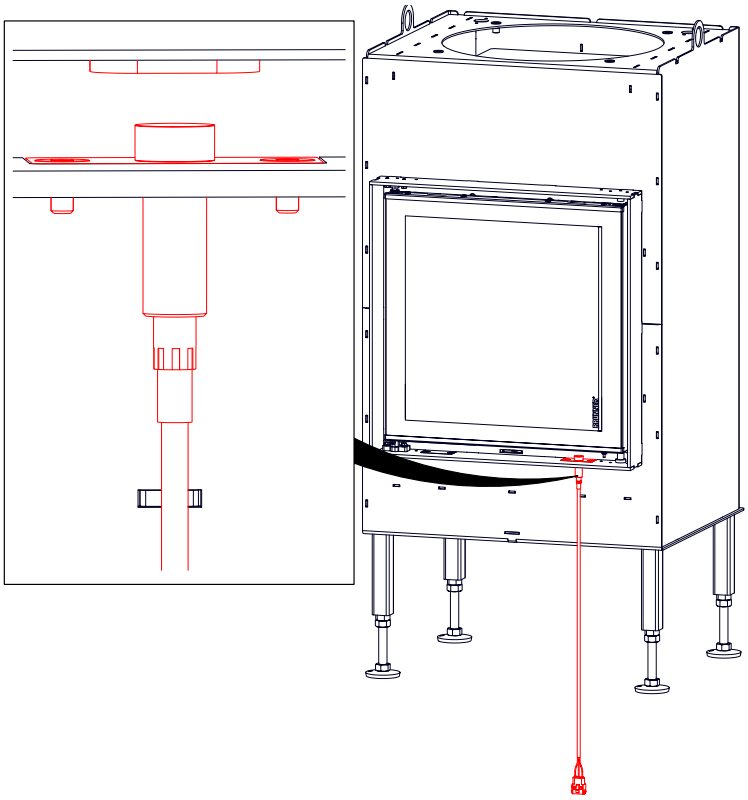


Position	Designation	Art.-Nr.	Pcs.
1	Retaining plate Magnet	E011011	1
2	Magnet	903324	1
3	Insulation	E011013	1
4	Countersunk screw (M4x8)	800063	2
5	Countersunk screw (M5x10)	800184	2
6	Door contact switch	E011003	1

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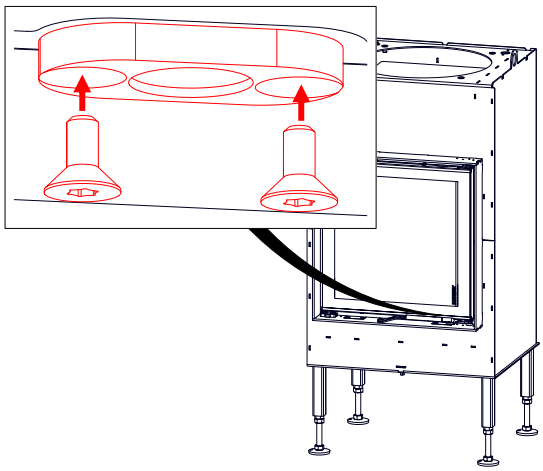
4.6.3.2 FITTING: DOOR CONTACT SWITCH

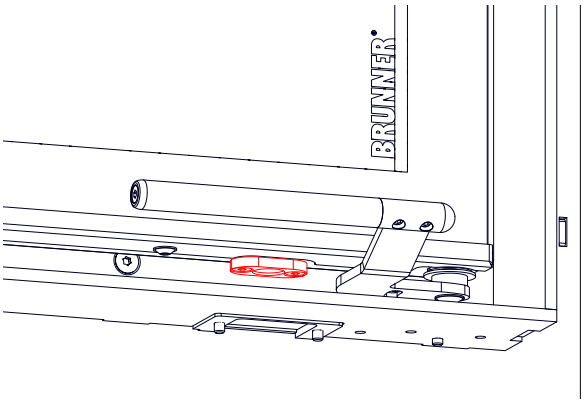
Position



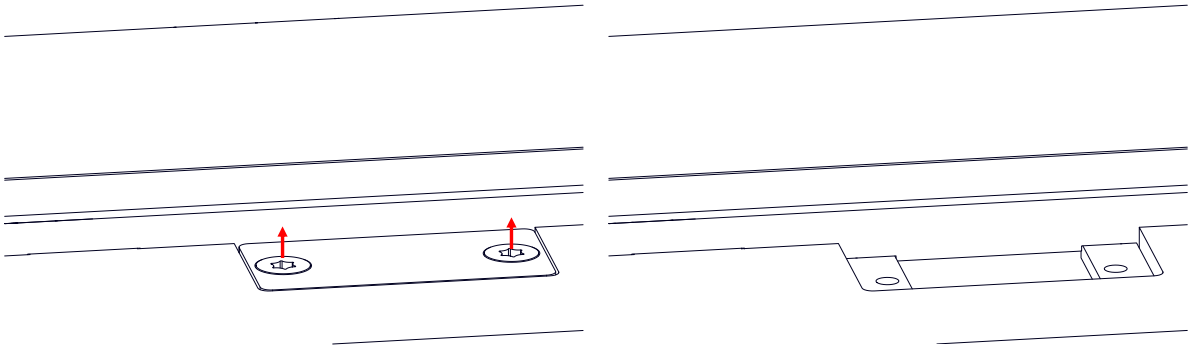
Workflow

1

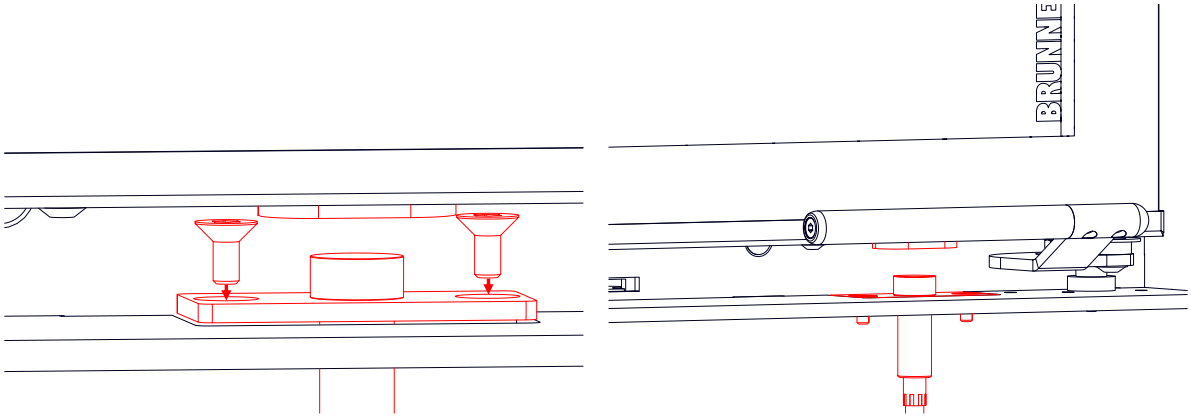




2



3



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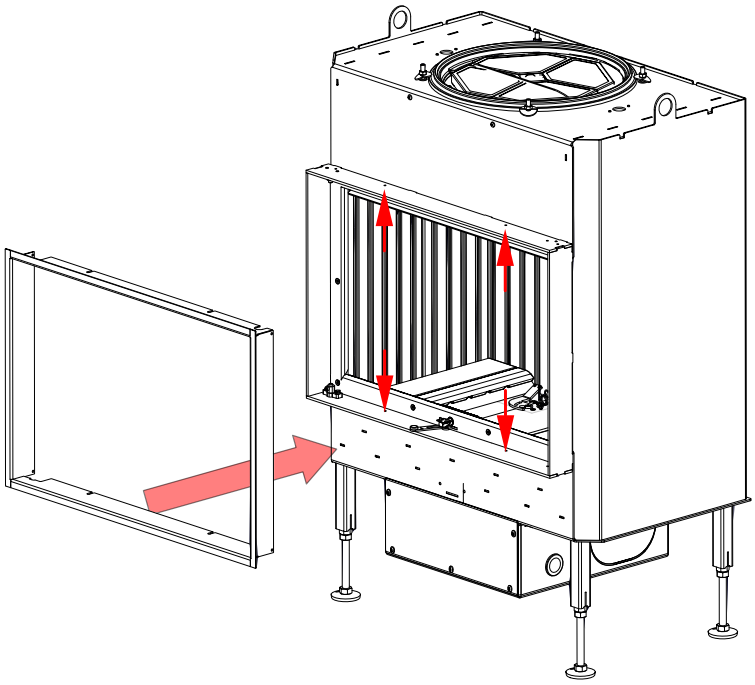
5 FRAME VARIANTS

NOTICE

The frame and side panels must remain revisable!

► Ensure that the frame and side parts such as panels can still be inspected after complete assembly and installation! Do not brick in these parts.

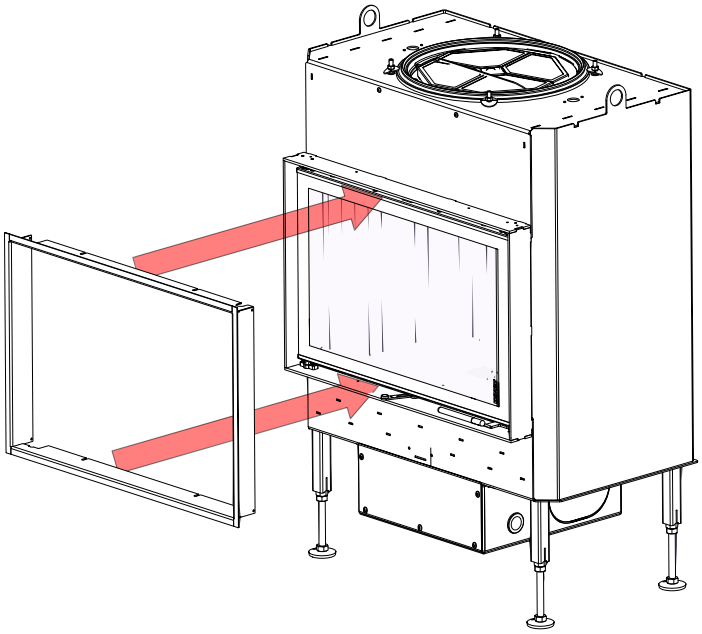
5.1 DOOR FRAME (BKH WITH SIDE-OPENING DOOR)



Im. 3: Summarised information

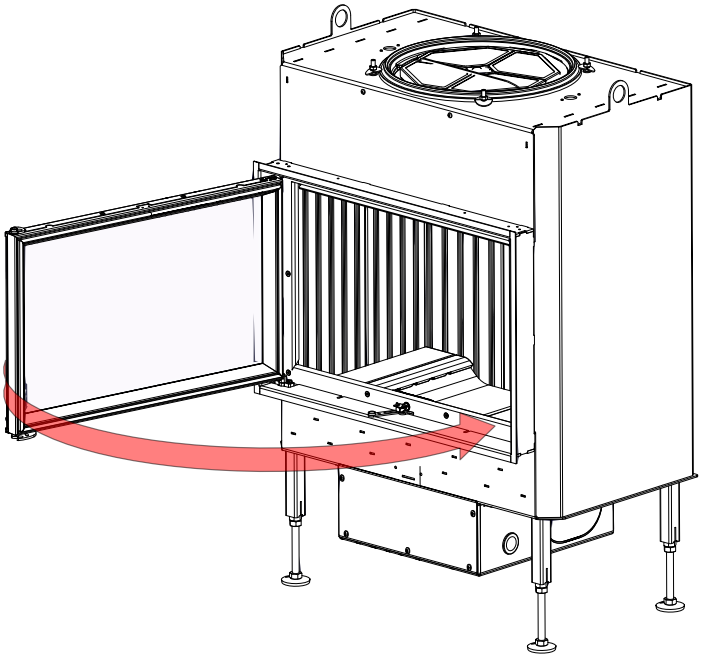
Workflow:

1

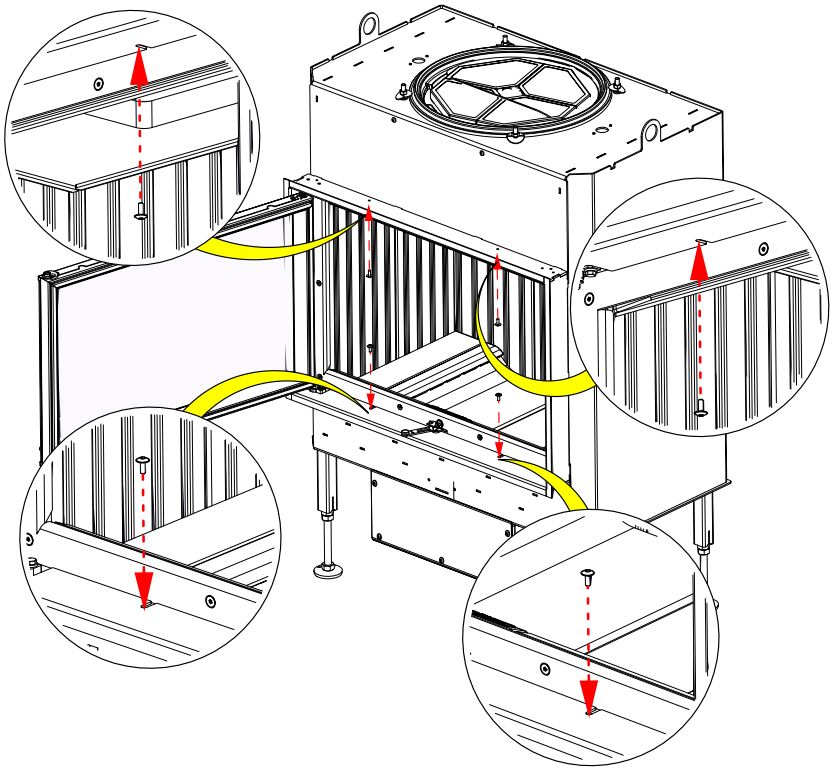


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2



3



6 DISPOSAL

Old equipment contains valuable materials that must be recycled. Observe the applicable national legal regulations for disposal.



Danger of electrocution.

Electrical connections of the furnace system are under mains voltage. This can lead to electric shock.

Switch off the power supply

Secure power supply against restart.

Old metal parts can be disposed of as metal recycling.

Electrical and electronic components must be disposed of as electronic waste. Fireclay linings can be disposed of as rubble.

Fireclay linings can be disposed of as rubble.

Dispose of insulating and insulating materials of the heating or fireplace insert in a closed container on a suitable waste disposal site.

Do not put the glass ceramic discs in the waste glass collection container! The glass panes can be disposed of as normal household waste.

Recycling of catalytic converters containing precious metals

Oxidative catalytic converters, as installed in modern wood stoves, are very effective at reducing emissions of carbon monoxide and hydrocarbons. This is possible, because precious metals like platinum, palladium and rhodium are used on the surface of catalytic converters. These precious metals are distributed very evenly in very small amounts on the surface of catalytic converters. Over the years, the abrasive effect of particles streaming through the catalytic converter will cause the partial diminishing of the coating containing precious metals. Continuous overheating of catalytic converters (T > 700 °C) will damage the coating. In certain cases, the catalytic converter should be replaced and a new converter must be installed to ensure the catalytic effect.

Used catalytic converters are suitable for re-use. Even if they are broken or damaged, they are suitable for recycling.

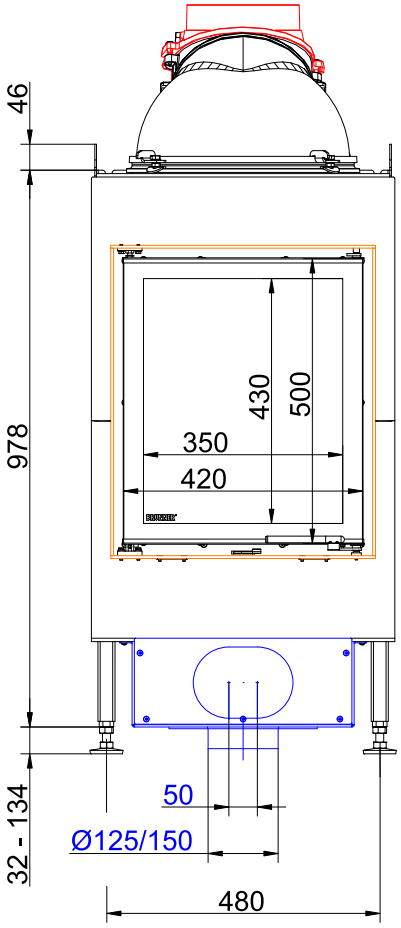
Contained precious metals can be recovered by thermal or chemical separation techniques to almost 90%, and then used again in the manufacturing process.

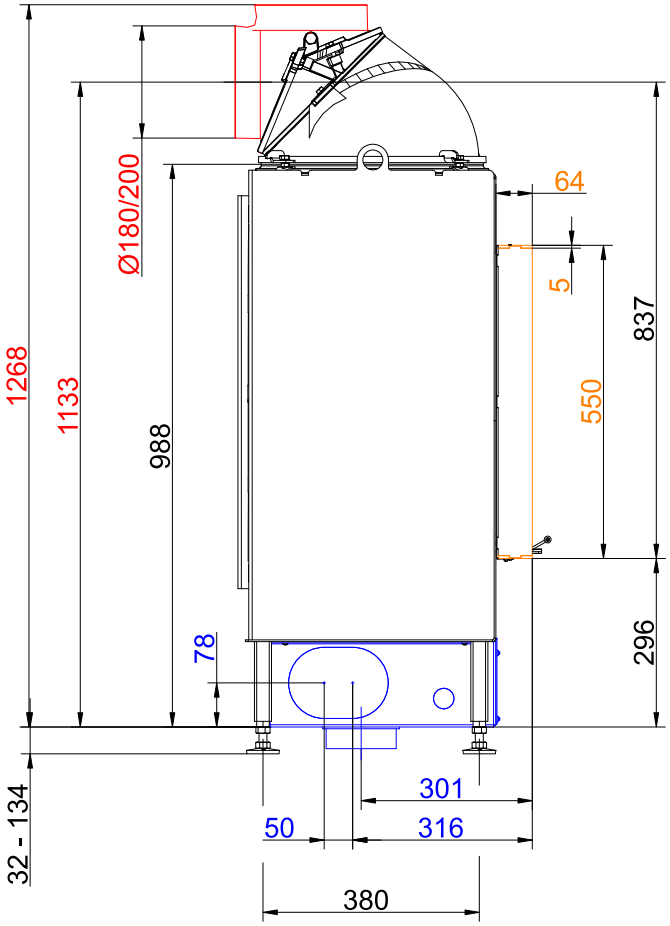
Please bring the used cacatalytic converter to a recycling center.

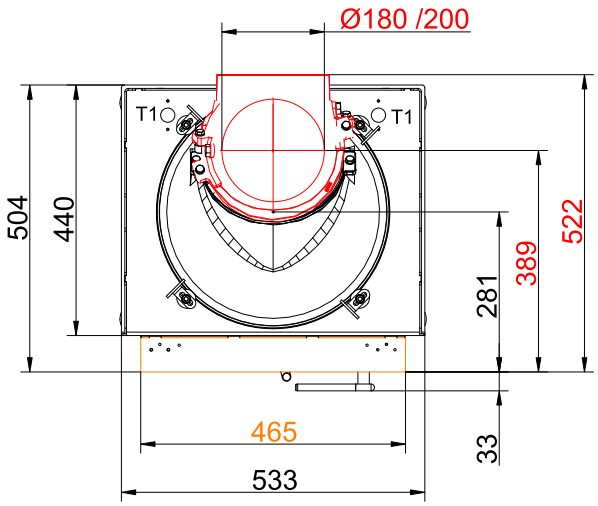
Thank you very much for your efforts in supporting the protection of environment and sustainable use of resources.

 © 2025 Brunner GmbH

Dimension sheets - BKH flat 50-42 green

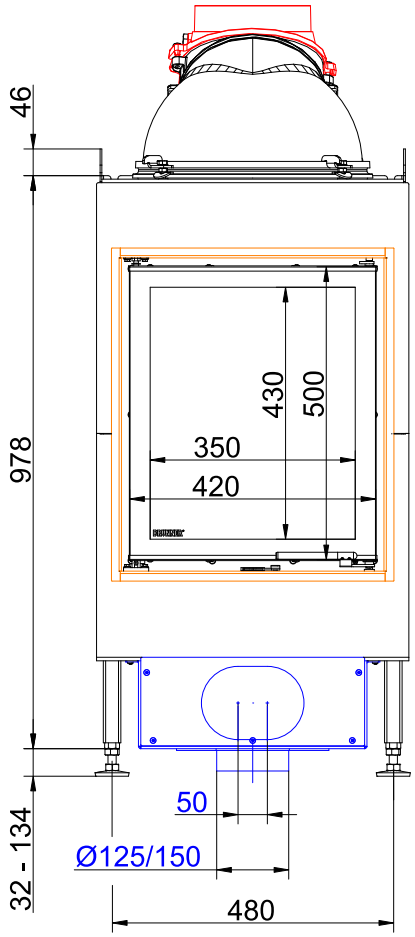


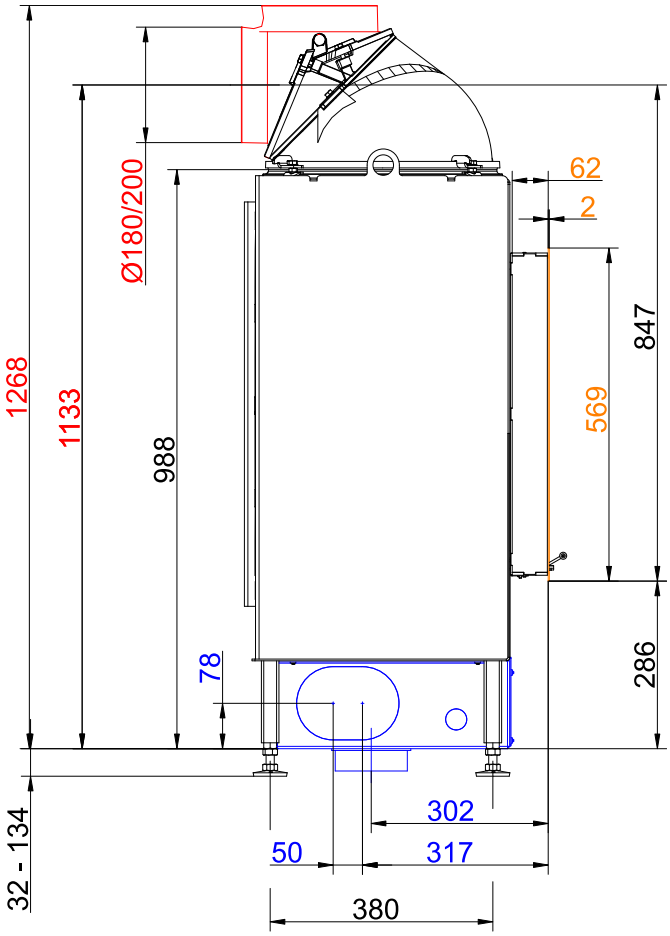


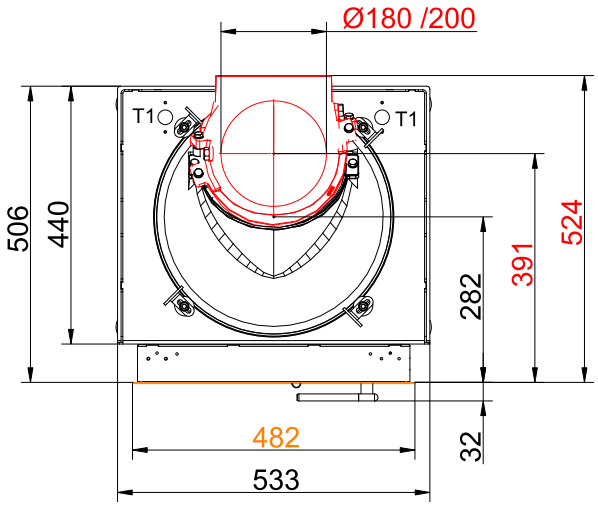


… mounting bracket and cast iron dome

Dimension sheets - BKH flat 50-42 green



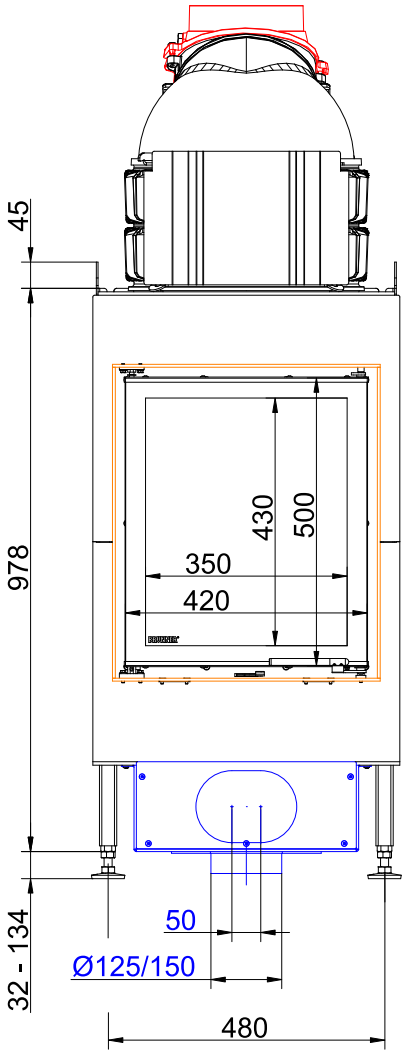


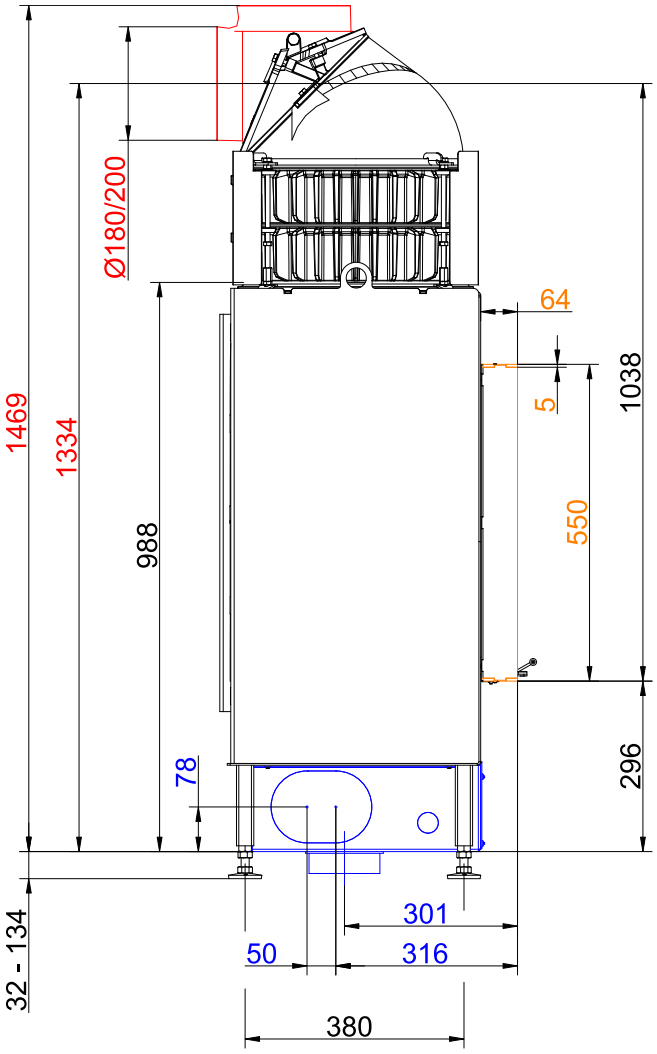


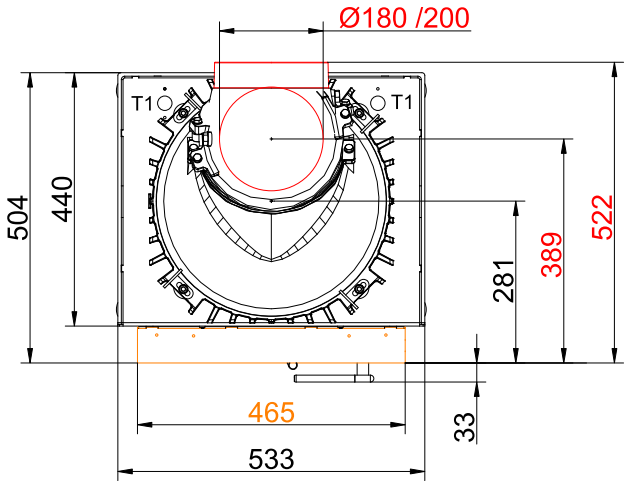
… door frame and cast iron dome

Stand: 2025-09-02

Dimension sheets - BKH flat 50-42 green



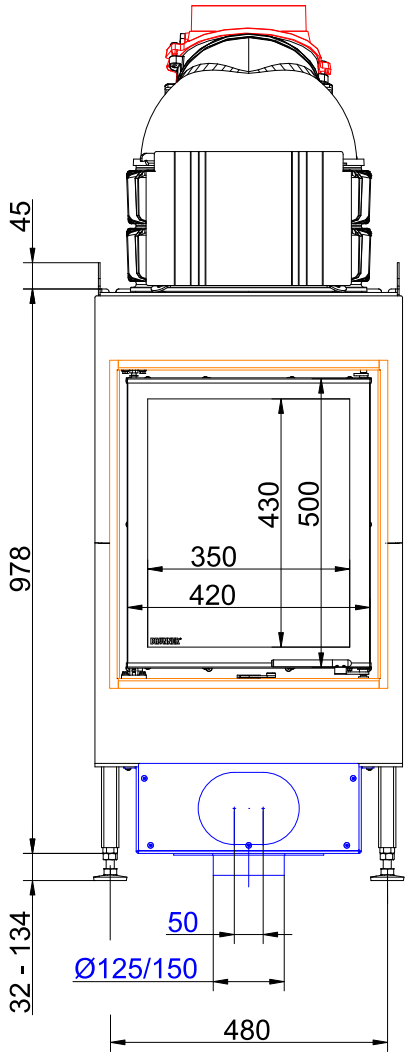


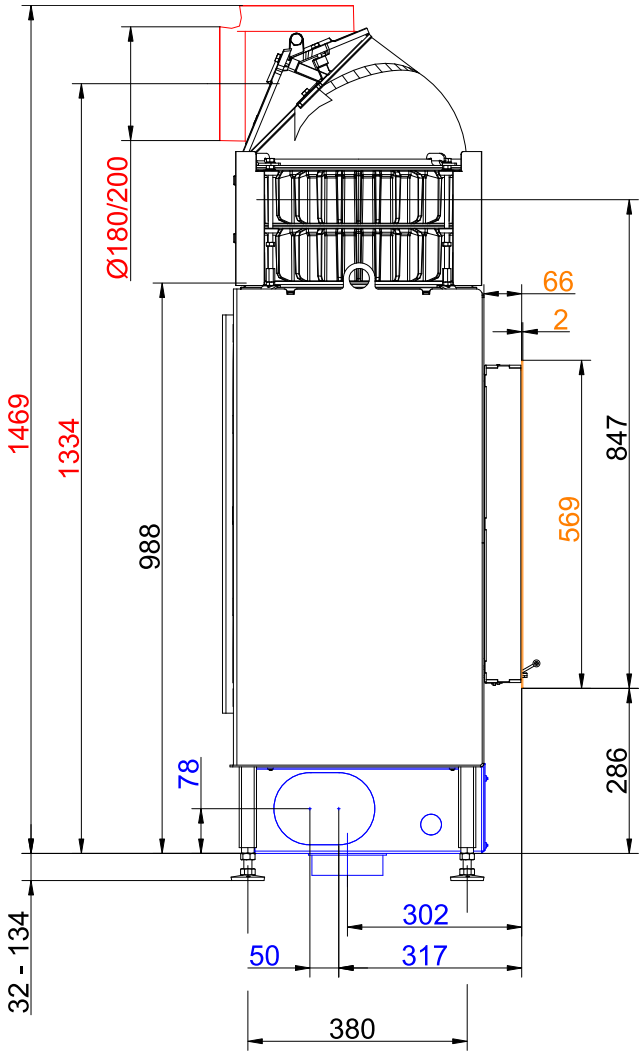


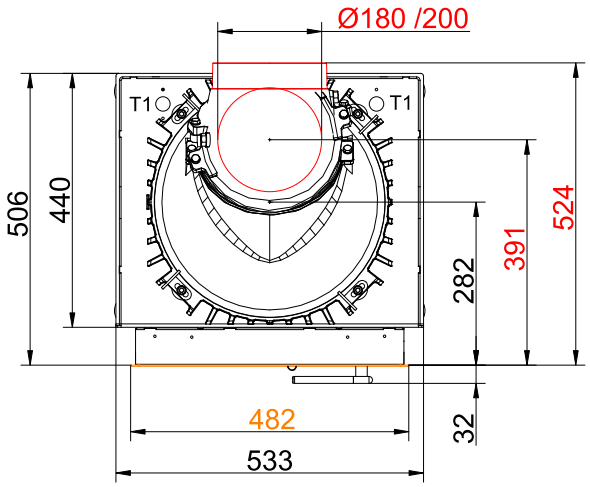
...mounting bracket and cast iron heat exchanger rings + dome

Stand: 2025-09-02

Dimension sheets - BKH flat 50-42 green



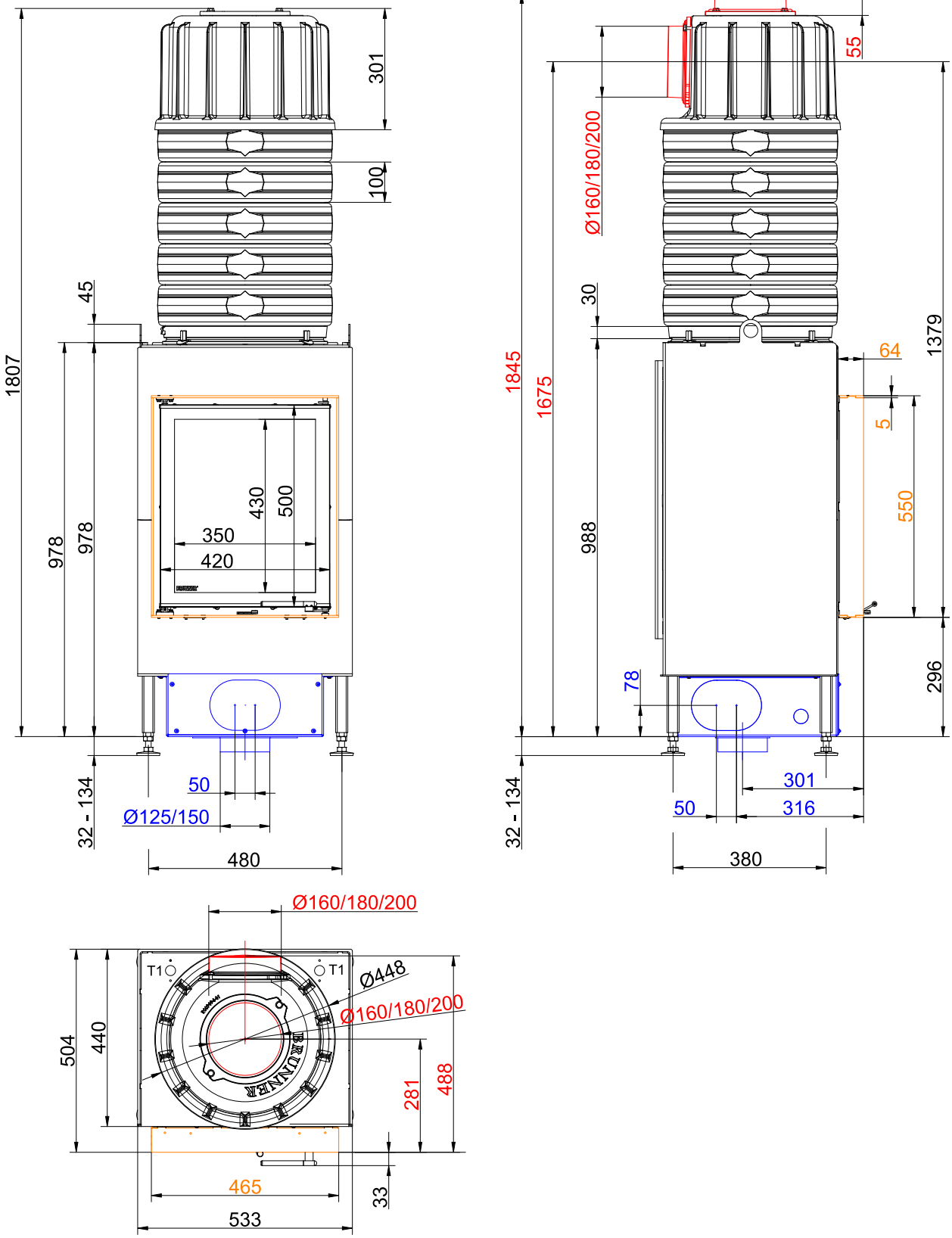




...door frame and cast iron heat exchanger rings + dome

Stand: 2025-09-02

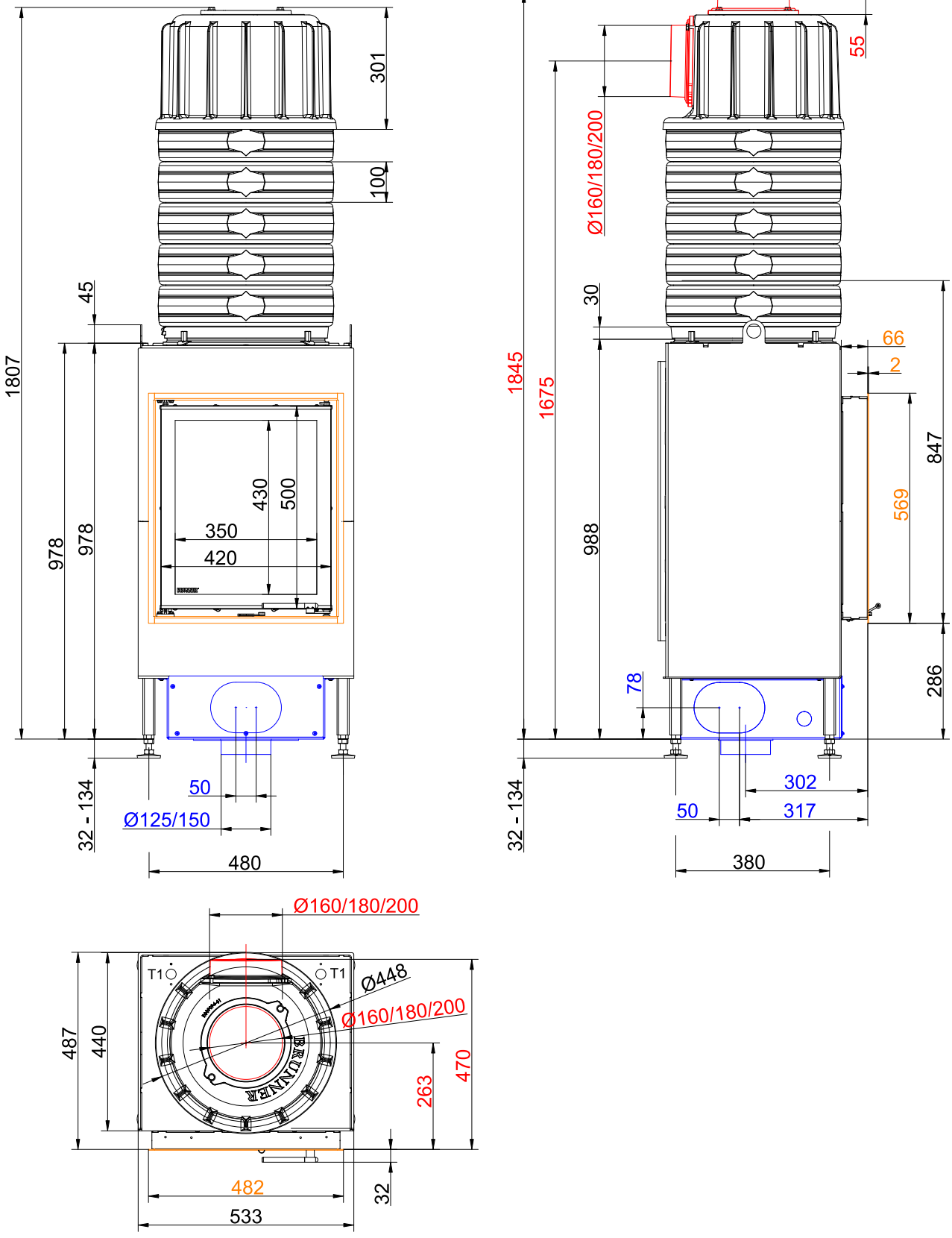
Dimension sheets - BKH flat 50-42 green



… mounting bracket and MAS

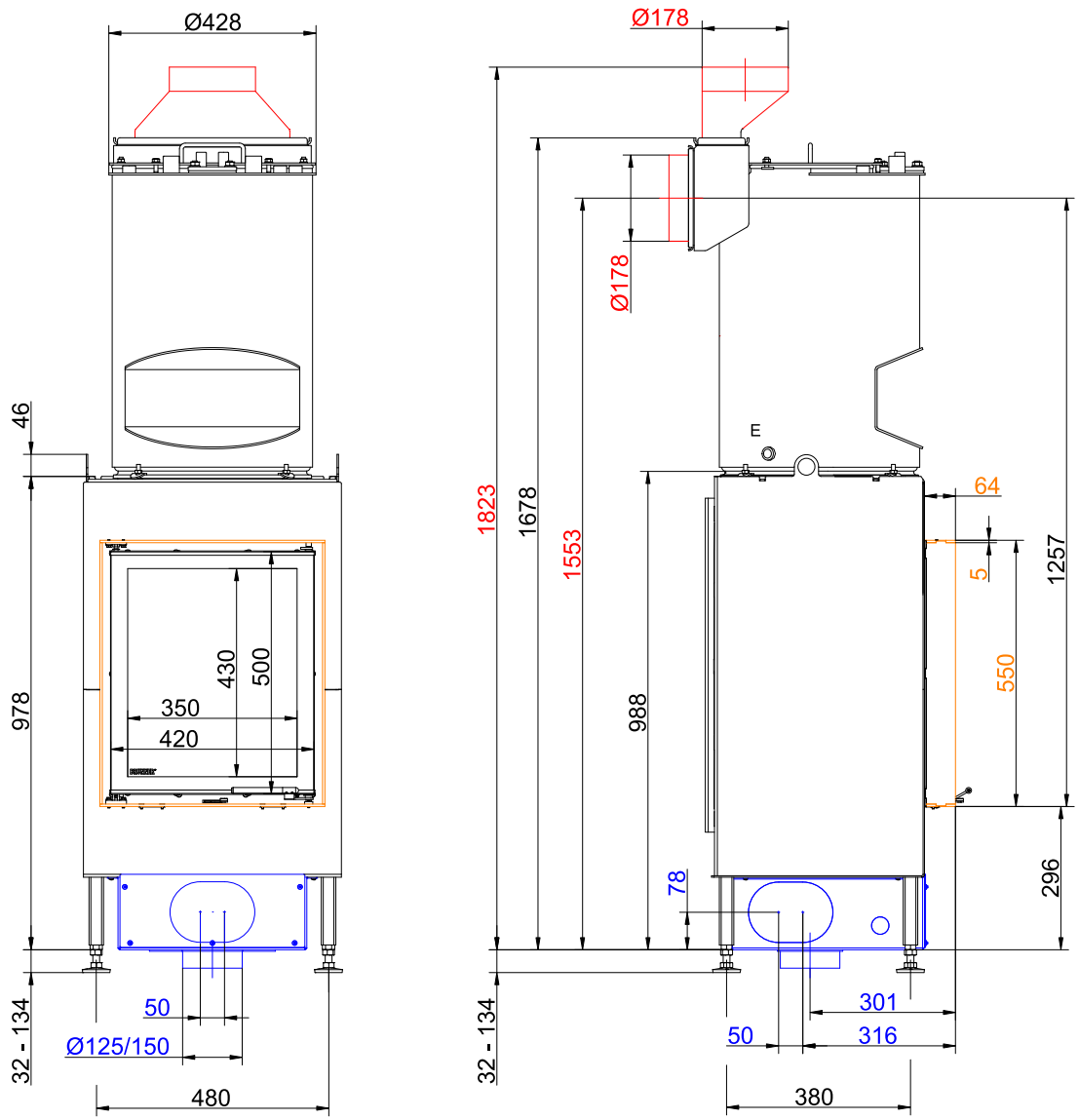
Stand: 2025-09-02

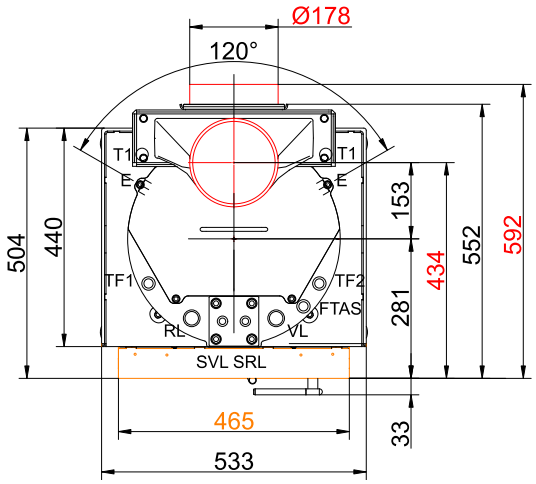
Dimension sheets - BKH flat 50-42 green



… door frame and MAS

Dimension sheets - BKH flat 50-42 green



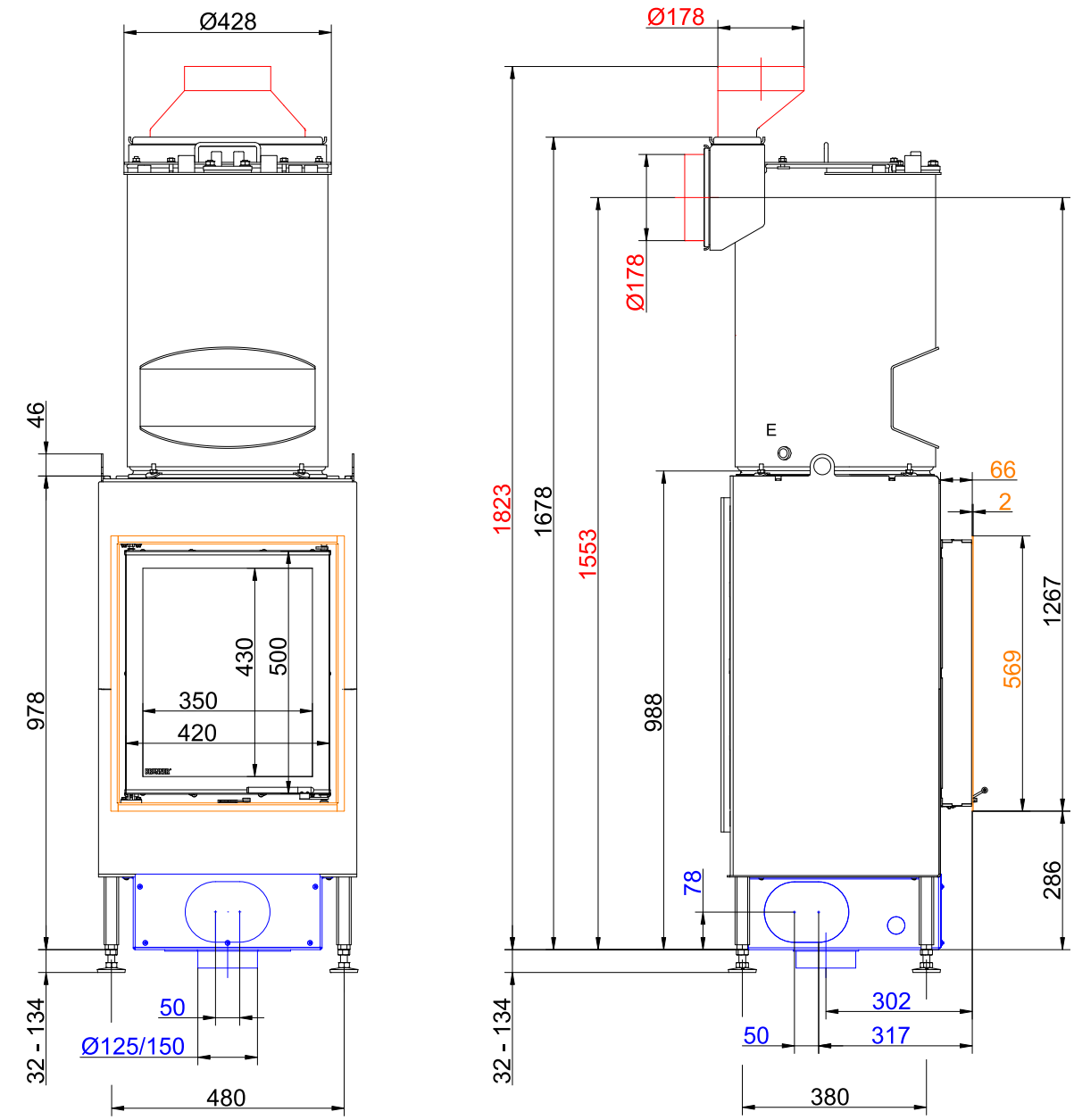


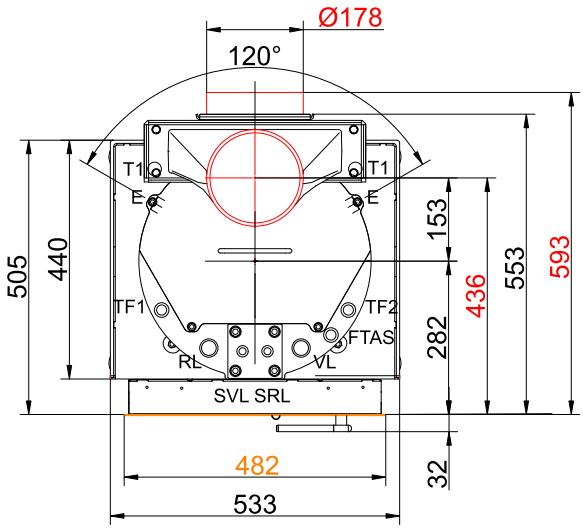
VL	supply 1"ext. th.
RL	return boiler 1"ext.th.
E	drain 1/2"int. th.
SVL	supply cooling pipe outlet ext.th.
SRL	return cooling pipe outlet 1/2"ex-t.th.
FTAS	socket for thermal safety sensor int.th.
TF	socket 1/2" for sensor int.th.

BKH 50-42 … mounting bracket and Boiler module

Stand: 2025-09-02

Dimension sheets - BKH flat 50-42 green





VL	supply 1"ext. th.
RL	return boiler 1"ext.th.
E	drain 1/2"int. th.
SVL	supply cooling pipe outlet ext.th.
SRL	return cooling pipe outlet 1/2"ext.th.
FTAS	socket for thermal safety sensor int.th.
TF	socket 1/2" for sensor int.th.

BKH 50-42 ... with door frame and Boiler module

We suggest for CAD planning Palette CAD. Permanent updated drawings: www.brunner.de
Frames/ flue gas outlet connection/ combustion air supply connection/ front variants/ support bearing are marked in color.

Stand: 2025-09-02

Planning and installation - BKH flat 50-42 green

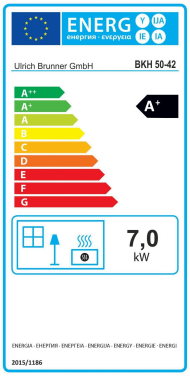
Tested according to		EN 13229 W	EN 13229 WA
Values measured at		Rated power [1]	Storage operation [2]
Data for functional demonstration			
Rated heat power	kW	7	-
Fire wood volume	kg/h	1.5	3.0
Combustion performance	kW	8.2	11
Flue gas mass flow	g/s	6.6	14
Flue gas temperature after:			
2 x cast iron heat exchanger rings + dome	°C	210	290
5 x accumulation rings incl. MAS casted cover [3]	°C	-	260
2,0 m ceramic accumulator [4]	°C	-	180
1,4 m accumulation stones (MSS) [4]	°C	-	180
Boiler module	°C	208	-
Necessary supply pressure	Pa	12	12
Fuel amount	kg	1.5	3.0
Combustion air consumption	m³/h	18	31
Combustion air connection Ø	mm	125	125
Heat distribution			
Insert / reheating surface	%	30 / 30	30 / 30
glass ceramic / glass ceramic coated (GKB)	%	40 / 30	40 / 30
Cross-section of gratings [5]			
exhaust warm air	cm²	600	600
Recirculation air	cm²	600	600
Minimal oven surface for closed construction type			
Heat dissipating surface	m²	3.5	3.5
Minimal distances of the fireplace			
Heat protection panel for cladding, insulation layer	cm	3	3
to cladding, insulation layer	cm	5	5
to the floor (non-combustible)	cm	3	3
Fire protection with active rear ventilation, intermediate space			
Minimum insulation thickness for construction : insulation material I 5 cm rear active ventilation I wall [6]			
for mounting wall (combustible/non-combustible)	cm	5	5
Minimum insulation thickness for construction: insulation material I 30 cm closed gap I ceiling [7]			
for ceiling (combustible)	cm	10	10
Fire protection with adequate insulation material			
Minimum insulation thickness for construction: insulation material I mounting wall, ceiling, floor [7]			
with heat protection panel, mounting wall (non-combustible) [8]	cm	6	6
with heat protection panel, mounting wall (combustible) [8]	cm	12	12
Mounting wall (non-combustible)	cm	8	8
Mounting wall (combustible)	cm	18	18
Ceiling (non-combustible)	cm	8	8
Ceiling (combustible)	cm	22	22
Floor (non-combustible)	cm	0	0
Minimum distances in front of the combustion chamber, glass ceramic / glass ceramic coated (GKB)			
for combustible parts	cm	≥ 120 / ≥ 80	≥ 120 / ≥ 80
Weight			
Fireplace insert + combustion chamber inner lining chamotte/cast iron	kg	88 + 65 / 79	
Meets requirement/limit values for:			

Planning and installation - BKH flat 50-42 green

EU / Germany	Ecodesign / 1. BImSchV (Stufe 2)

1) Indications to "Rated power" determined with 2 heat exchanger rings made of cast iron and Ø180 dome.
2) Indications to "Storage operation" for the manual execution of the reheating surface (guide values).
3) Damper flap recommended
4) Standard value or calculated functional proof required.
5) Air cross-sections if the specified nominal heat output is desired as the heat output.
6) Fire safety: Values determined with air cross-sections recorded for testing purposes; active rear ventilation, stove shell is heat emitting.
   Insulation thickness 5 cm calcium silicate board (brands: Promasil, Silka, Skamol) and 5 cm active rear ventilation with diagonally positioned air circulation and supply air openings of 75 cm ^{2} (5x15 cm) each. For detailed design, see assembly instructions.
7) Fire safety: values determined in safety test with air cross-sections recorded for testing purposes; stove shell is heat emitting.
   Information on replacement insulation material with calcium silicate boards (brands: Promasil, Silka, Skamol).
   The specifications for non-combustible walls/ceilings and the structure with a closed gap (30 cm) correspond to the specifications of TROL (Germany), see assembly instructions.
8) Heat protection plate: accessory for BKH flat/tunnel/corner versions; factory-fitted for BKH panoramic fireplaces.

Product data sheet according to (EU) 2015/1186:



Supplier's name or trademark	Ulrich Brunner GmbH
Model identifier:	BKH 5.0 Flach 50-42 green DT HK009
Energy efficiency class:	A+
Direct heat output:	7,0 kW
Indirect heat output:	N.A. kW
Energy efficiency index:	115,7
Fuel energy efficiency (at nominal heat output):	87,0 %
Fuel energy efficiency (at minimum load):	N.A. %
Special precautions: see supplied product documentation	

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