Installation manual

BSK 12.1

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INHALT

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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 installation may only be carried out by a registered specialist.

Fireplaces equipped with a water boiler must be pressure-tested after hydraulic connection to the heating system. Masonry work may follow only after this pressure test. Ulrich Brunner GmbH does not cover any costs incurred by necessary dismantling of masonry for rework at water boiler installation or replacement of the boiler.

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.

Fireplaces that meet the requirements of DIN EN 13240 or DIN EN 13229 and that can only be operated as intended with closed combustion chamber door or that have a self-closing firebox door are suitable for multiple occupancy.

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.

1.1 GENERAL INFORMATION

Fireplace insert

The fireplace cladding sets of the Brunner System fireplace series are suitable only for the indicated fireplace inserts offered by Ulrich Brunner GmbH.

Brunner System Kamine	Suitable fireplace inserts
BSK 01	Eck-Kamin lifting door (ST) 57/52/52 with 50 mm mounting frame Eck-Kamin side-opening (DT) door 57/52/52 with door frame
BSK 02	Eck-Kamin lifting door 57/67/44 L/R with 50 mm mounting frame
BSK 02.1	Kamin-Kessel Eck 45-67-44 S04.2
BSK 03	Eck-Kamin lifting door 57/82/48 L/R with 50 mm mounting frame
BSK 04	Stil-Kamin side-opening door 62/76 with 50 mm mounting frame Stil-Kamin Tunnel 62/76 S/S as well as S/K with 50 mm mounting frame
BSK 05.1	Panorama-Kamin 57/40/60/40 with fire table
BSK 06	Architektur-Kamin lifting door 45/101 with 50 mm mounting frame Architektur-Kamin Tunnel 45/101 S/S as well as S/K with 50 mm mounting frame Kamin-Kessel Tunnel 45/101 S/S as well as S/K with 50mm mounting frame Kamin-Kessel 45/101 and Kamin-Kessel Tunnel 45/101 (For the horizontal outlet rear or left/right, “Smoke pipe branch BSK”, art.no. I019490 is necessary.)
BSK 07	Architektur-Kamin 38/86/36 corner with 50 mm mounting frame
BSK 08	Stil Kamin 51/67 lifting and side-opening door with hot air-or boiler top Stil Kamin Tunnel ST/ST, ST/DT, DT/DT 51/67 with hot air-or boiler top for: Stil-Kamine ST with mounting frame 50 and DT with door frame
BSK 09	Eck-Kamin 42/42/42 side-opening door with frame
BSK 10	Panorama-Kamin 42/42/42/42 with firetable
BSK 11	Panorama-Kamin 70/25/40/25 with firetable
BSK 12	Eck-Kamin 42/57/30 Kamin-Kessel Eck 42/57/30
BSK 12.1	Kamin-Kessel Eck/corner 42-57-30 S04.2
BSK 13	Panorama-Kamin 51/66/50/66 with firetable and support frame
BSK 42-42	BKH 5.0 flat 42-42
BSK 42-66	BKH 5.0 flat 42-66 BKH 5.0 flat 42-66 Tunnel
BSK 42-42-42	BKH 5.0 corner 42-42-42
BSK 42-66-42	BKH 5.0 corner 42-66-42
BSK 45-45-45-45	BKH 5.0 Panorama 45-45-45-45

The data specified in these instructions regarding spacing and insulation thicknesses apply.

If the installation differs from these instructions, please refer to the installation instructions for the heating insert for the required distances and insulation thicknesses.

The Brunner System Fireplace components fulfil the requirements of exposed concrete class SB2.

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Floor
On flammable floors, the fireplace must be placed on a plate made of non-flammable material. This plate must be at least 500 mm long in front and 300 mm wide on both sides of the fireplace. The base plate of fireplace casing must be carefully set to level; please pay attention, that it lies on the floor over the entire surface. It is recommended to use the wall as reference and set the base plate at 90 degrees. The completely set fireplace cannot be moved or turned afterwards.

Acrylic adhesive
Used pointwise to stick elements together and to fill the gaps.

Painting
24 hours after assembly you can paint the fireplace casing. Plastered walls must be previously sanded with fine abrasive paper.

Hairline cracks
Joints between the elements of fireplace casing and the between the house wall and the fireplace casing can tend to the formation of small cracks. This is normal and no cause for concern. Small cracks can be removed with the revision set (Art.Nr.: 900300). After 24 hours the joint can be painted over.

Bigger cracks
Transportation damage must be reported immediately to the shipping company. Replacement parts can be order at Ulrich Brunner GmbH. In the case of bigger defects that cannot the repaired with the revision set (Art.Nr.: 900300), it is possible to request for exchange at Ulrich Brunner GmbH as part of your warranty.

Replacement requests:
When ordering replacement parts it is necessary to mark the damaged parts on the attached packing list and make a picture of the damage. Then, the printed picture and packing list should be sent back to Ulrich Brunner GmbH. The replacement part will be sent as soon as possible.

Fireplace casing with concrete look
The fireplace cladding with concrete look, despite the best possible care during manufacturing and shipping, can show slight irregularities like air inclusions, small cracks or unclean edges. This corresponds entirely to the concrete look and does not constitute a reason for a claim. Cracked or significantly damaged elements will be replace as part of your products' warranty.



Do not use adhesive tape or similar for the exposed concrete parts! Removing the adhesive tape will permanently damage the surface. For plastering or painting work, cover the fireplace cladding with a non-adhesive masking film.

Built-in components

If any additional components like electronics (EOS) or similar are installed inside the fireplace casing, the max. allowed ambient temperature must be followed. Electronics must be installed in such a way to provide for rear ventilation.

All safety distances are minimal required distances.

Subject to errors and changes!



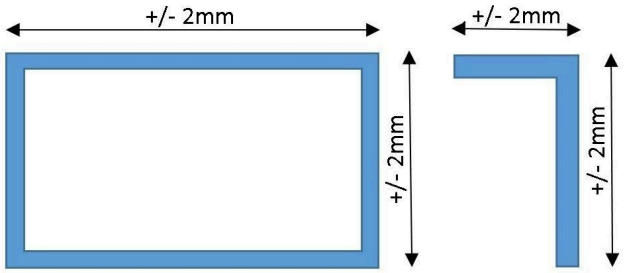
Please follow the separate installation instructions for the fireplace insert.

1.2 TOLERANCES OF THERMAL CONCRETE PARTS

The following tolerances are valid for all parts of our system fireplace/stove casings. Except where otherwise indicated, all data refer to the nominal dimensions, as found in dimensional drawings.

Length Tolerances

For each part, the indicated tolerances apply.



Height Tolerances

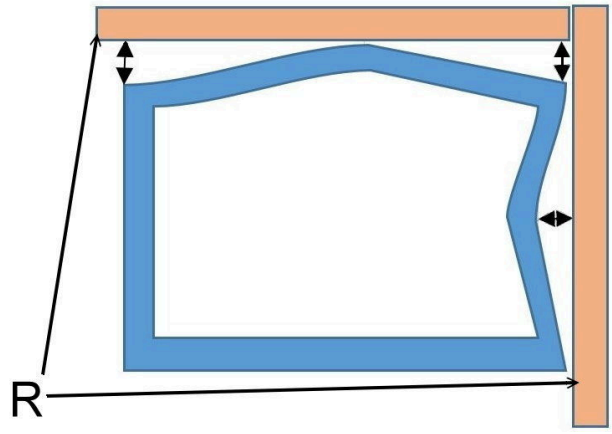
For each part, the indicated tolerances apply.



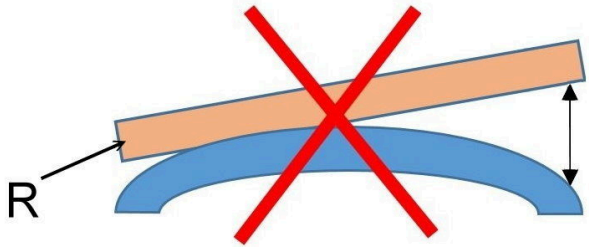
Tolerances of Flatness

For parts with nominal dimensions up to 950 mm, a tolerance of +/- 2.5 mm applies. Above this dimension, a tolerance of +/- 3 mm applies.

These tolerances apply also for the base support and top cover parts. The leveling board (R) must be placed in parallel to the basic body!



Im. 1: Leveling boards placed correctly



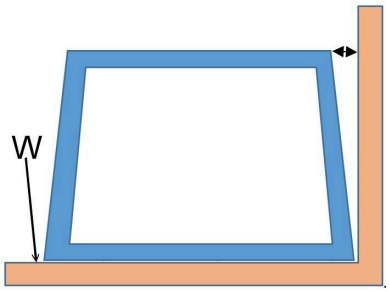
Im. 2: Incorrectly placed leveling board

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Tolerances of Angle

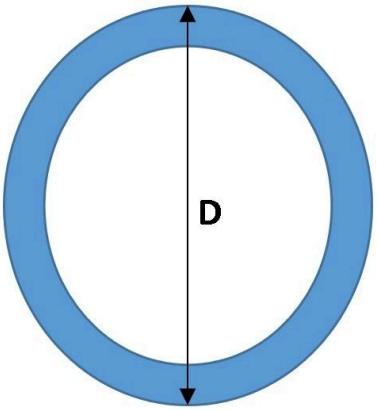
In order to determine the deviations of angles, place the square measuring tool along the long edge!

For nominal dimensions up to 600 mm, a tolerance of 0.28%, i.e. 1.7 mm applies. For nominal dimensions up to 900 mm, a tolerance of 0.30%, i.e. 2.4 mm applies.



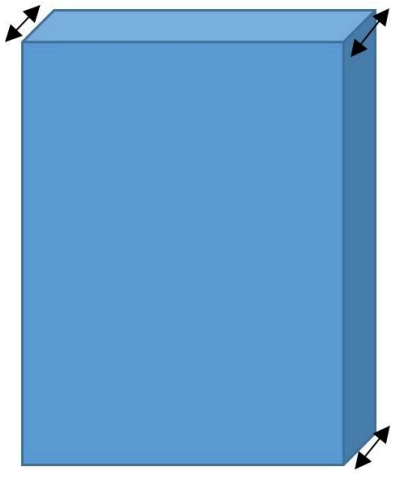
Roundness

Up to a nominal diameter of 650 mm, a tolerance of 0.25%, i.e. 1.62 mm applies. For diameters above this value, a tolerance of 0.28%, i.e. 2.38 mm applies.



Wall thicknesses

For wall thicknesses, a tolerance of 3.5% applies.



The overall appearance with color shade differences being present or not can be assessed in general only after a longer period of time (several weeks in some cases). The uniformity of color should be assessed from a typical viewing distance.

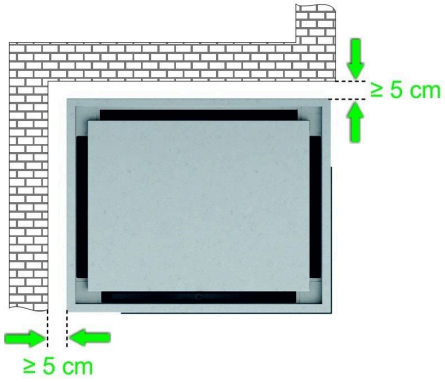
2 SAFETY

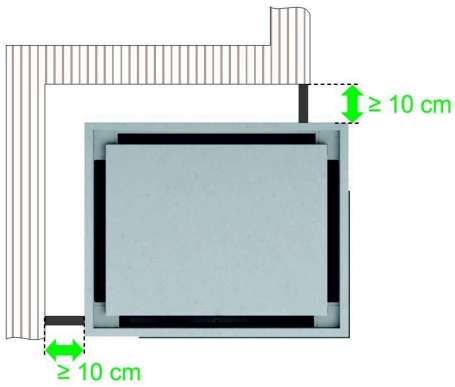
2.1 MINIMAL DISTANCES

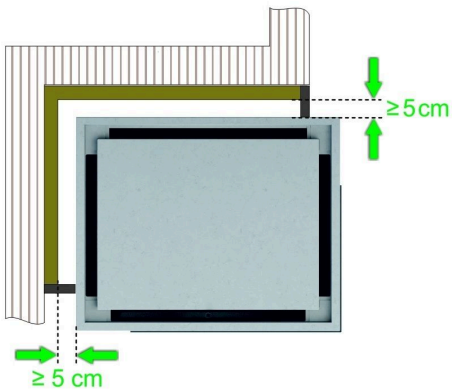
Minimal distances to adjacent walls

Depending on wall type (flammable or non-flammable wall), the minimal distances are different. With installed heat protection screen it is possible to minimize the distance to adjacent wall.

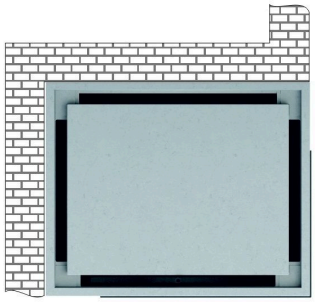
Without heat protection screen:

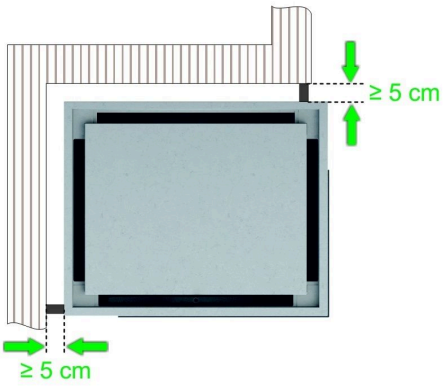


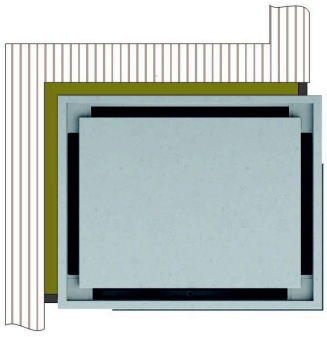




With installed heat protection screens:







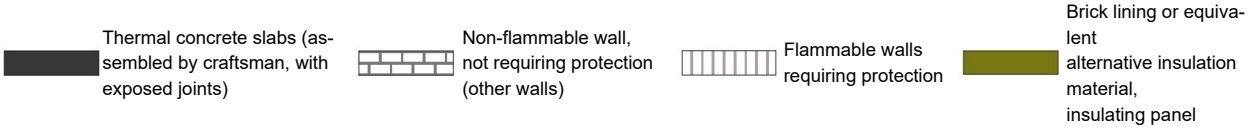
Other walls:

- aerated concrete
- ceramic bricks
- sand-lime bricks
- mineral building materials with wall thicknesses > 10 cm

Walls requiring protection:

- flammable walls and wall structures
- load-bearing reinforced concrete walls
- other walls up to 10 cm thickness
- walls with built-in furniture behind them (heat accumulation)

Walls requiring protection with 10 cm brick lining or alternative insulation

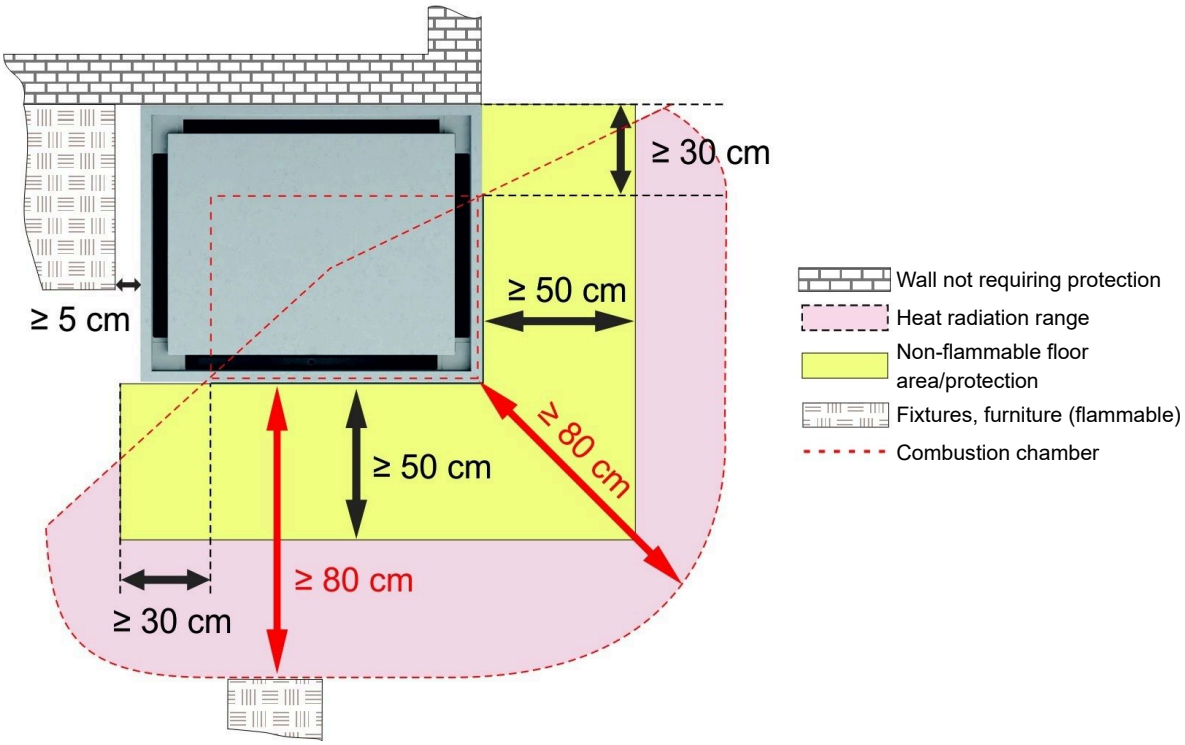


2.2 HEAT RADIATION RANGE

Within the range of heat radiation through the fireplace door (glass pane) there must be a minimal distance to all flammable parts (e.g. built-in furniture, fixtures) of at least 80 cm.

Outside the heat radiation range, any flammable fixtures cannot be exposed to temperatures above 85°C. Large-dimensioned parts from flammable materials or built-in furniture must have a clearance of at least 5 cm to external fireplace cladding. In this clearance, the room air must be able to circulate without any obstacles.

In general, parts of external fireplace cladding are allowed to be installed without any clearances, if such parts are not exposed to temperatures above 85°C under any circumstances.



3 INSTALLATION

3.1 FURTHER ASSEMBLY TIPS & INSTRUCTIONS

NOTICE

Observe further instructions for proper installation!

► Follow the assembly instructions for corner fireplace boiler 42-57-30.

Installation Manual

Installation Manual

Kamin-Kessel Eck/
corner 42-57-30

https://www.brunner.de/11256

⚠ CAUTION

Risk of injury due to heavy loads

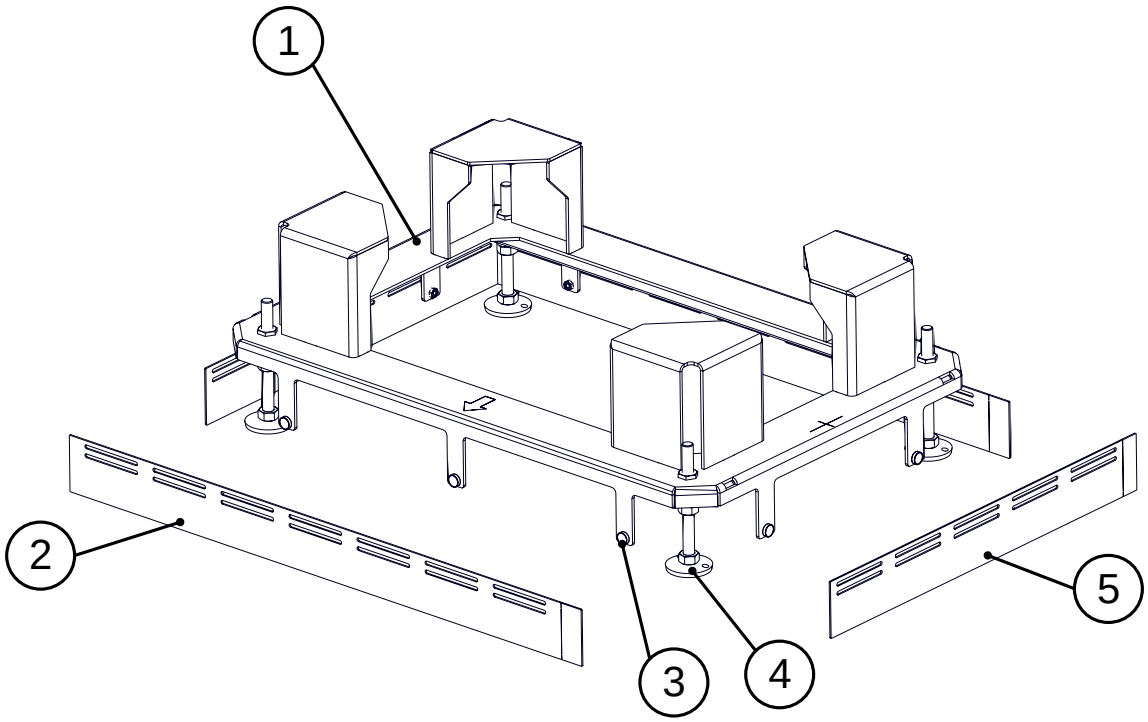
Moving the heating element and heavy cladding parts can cause crushing injuries.

► Only lift and move the boiler appliance with a suitable lifting device (e.g. assembly crane).
► Cladding parts must be moved by at least two people.

3.2 BASE PLATE

3.2.1 COMPONENTS OF THE BASE PLATE

BG base plate BSK 12.1 complete (BSK12000-104)



Pos.	Designation	Part no.	piece
1	Base plate	BSK12000-105	1
2	Front-rear panel	BSK12000-108	2
3	Magnet	903274	10
4	adjustable foot	I001400	4
5	Left-right cover	BSK12000-108	2

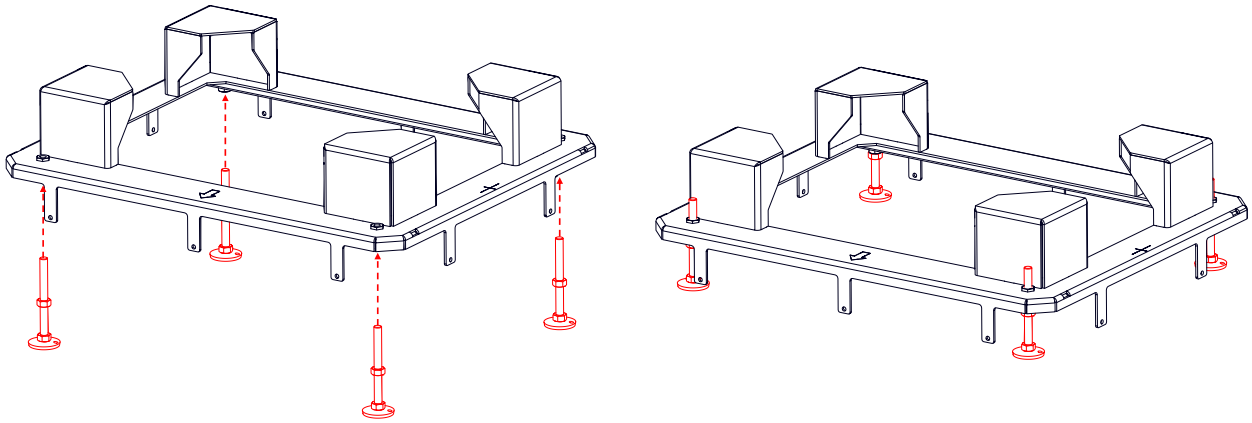
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3.2.2 ASSEMBLY OF THE BASE PLATE

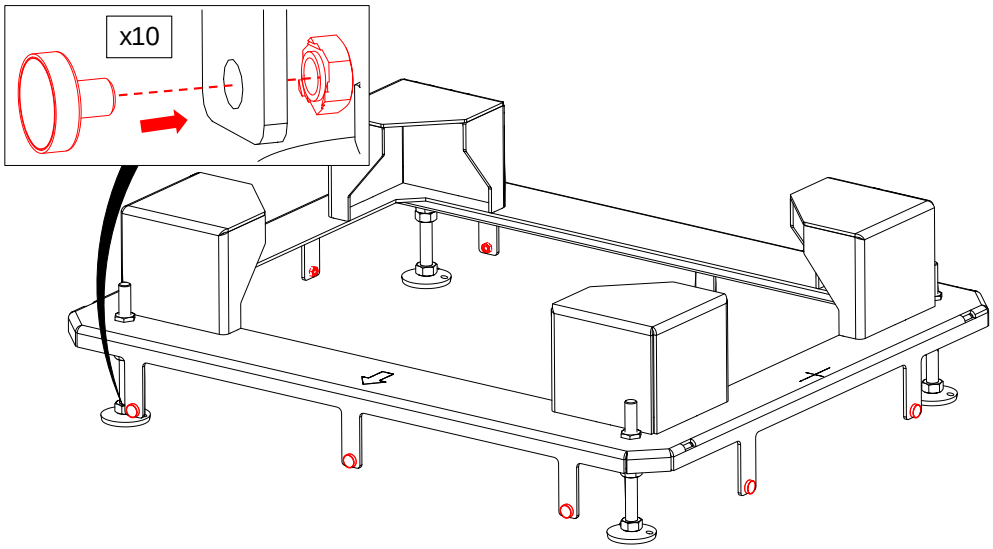
Work steps

1. Install the base plate

► Fit the adjustable feet to the underside of the base plate.



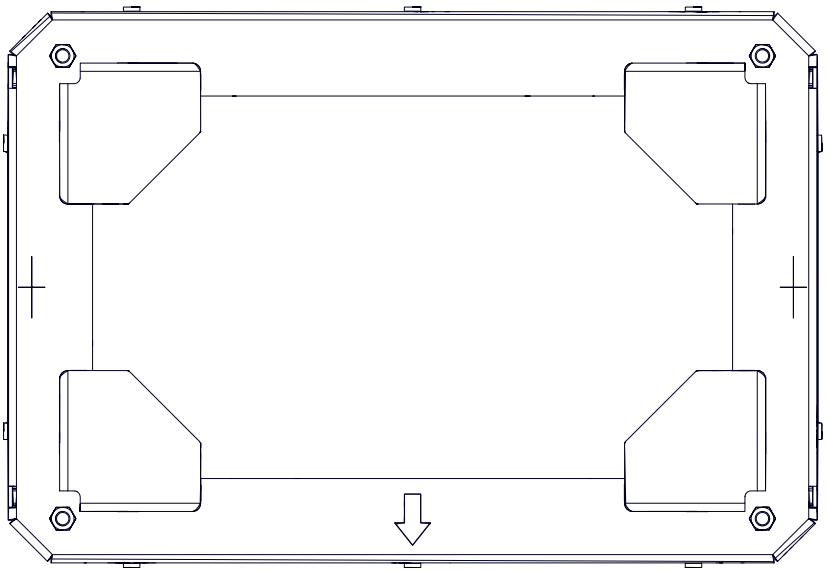
► Attach the magnets on the sides.



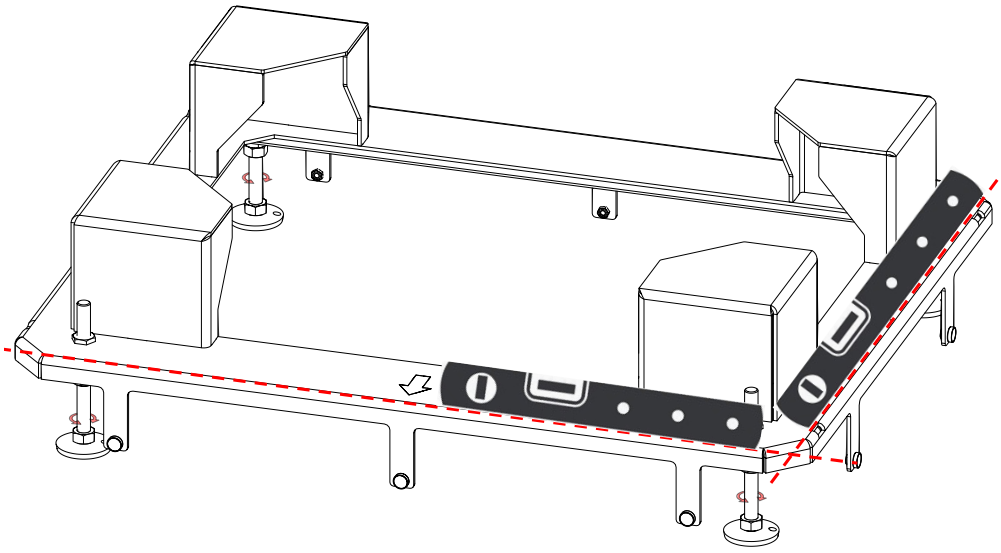
2. Adjust the base plate

► Position the base plate using the markings.

The arrow points towards the front.



► Align the base plate.

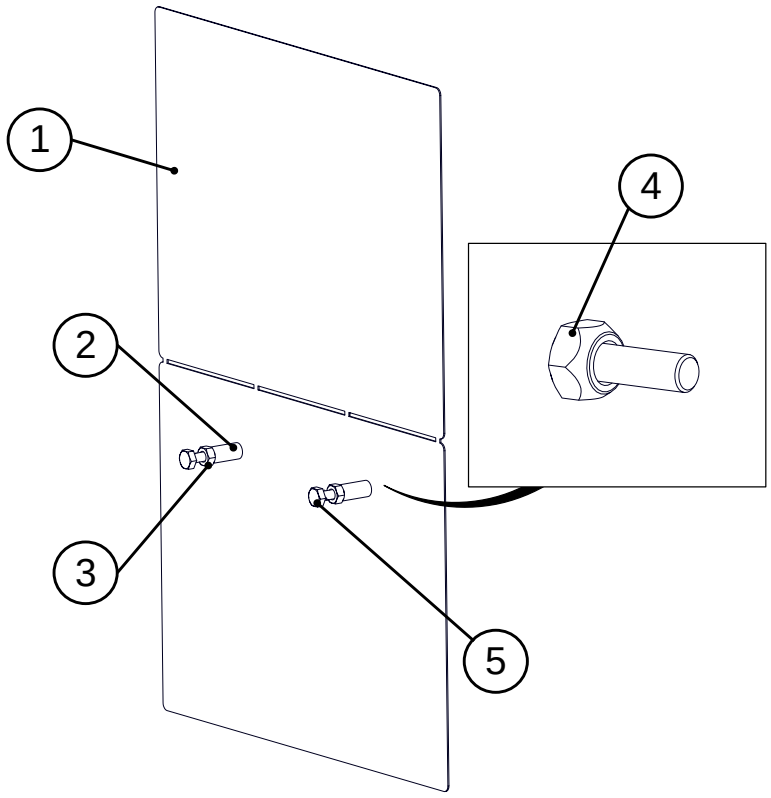


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3.3 HEAT PROTECTION PANEL (OPTIONAL)

3.3.1 COMPONENTS - HEAT PROTECTION PLATE

Heat protection plate for BSK (BSK12000-124)

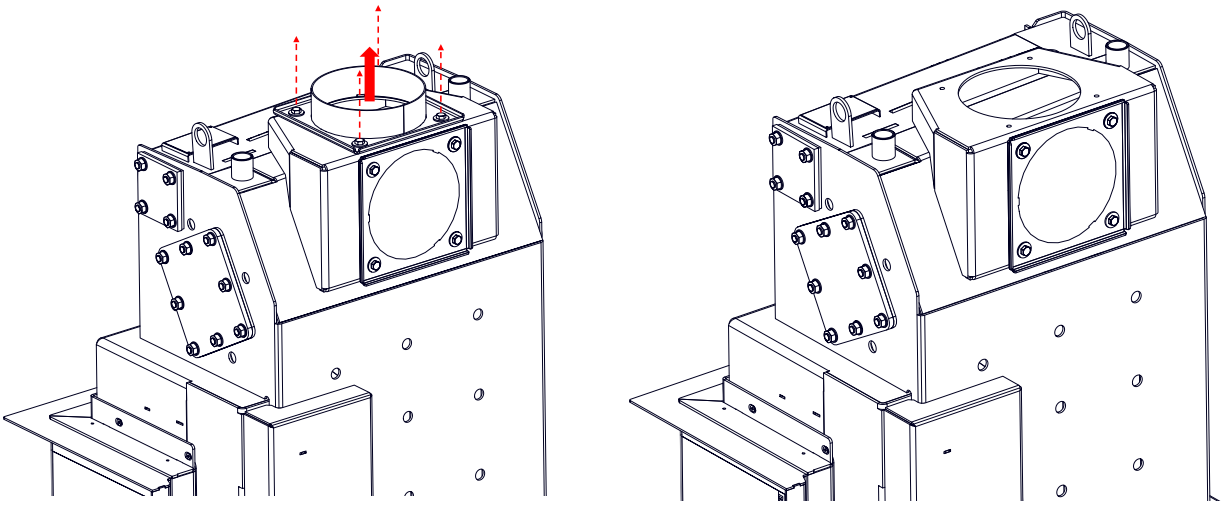


Pos.	Designation	Part no.	piece
1	Heat protection plate	BSK12000-125	1
2	Radiation protection spacer bolt	K006046	2
3	Hexagon nut	800202	2
4	Hexagon nut with clamping part	800157	2
5	Hexagon head screw M8x70	800501	2

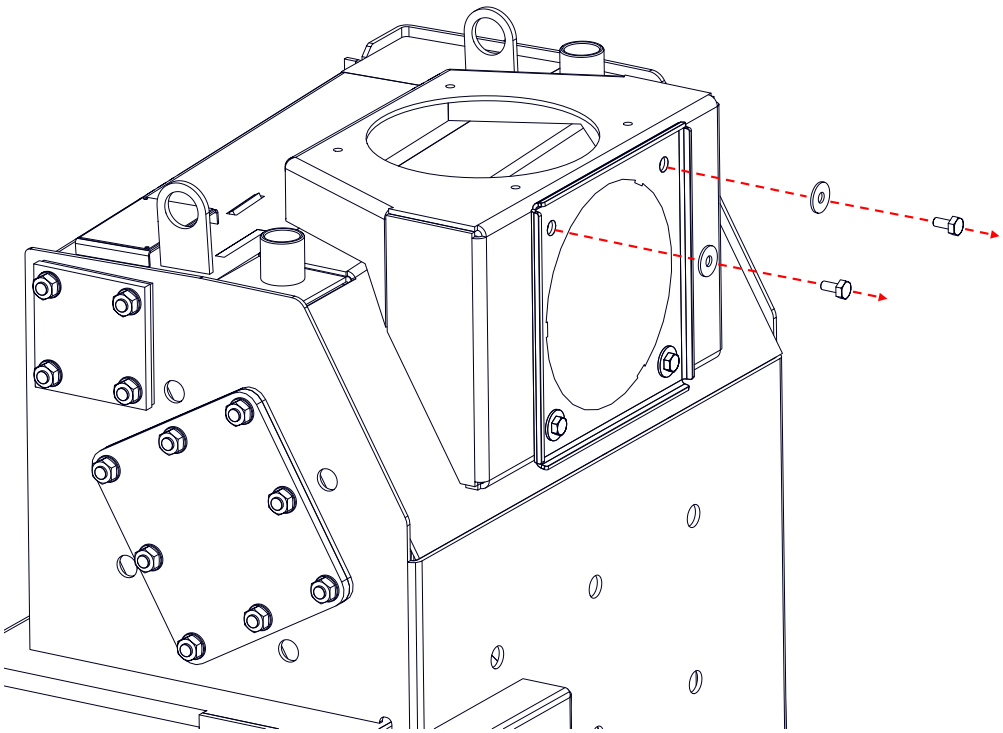
3.3.2 FITTING THE HEAT PROTECTION PLATE

Work steps

► Remove the top of the flue gas cover.

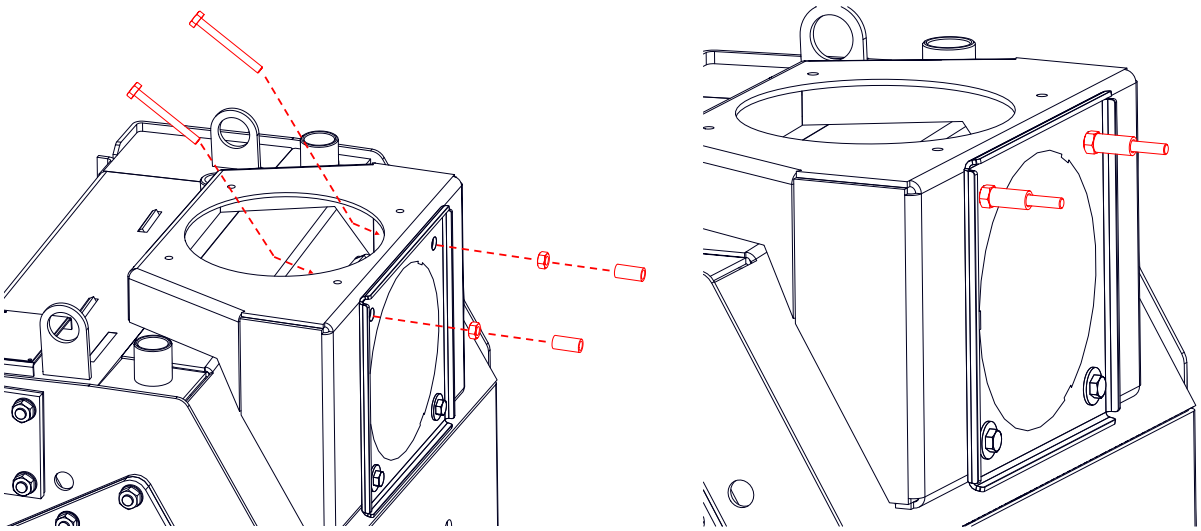


► Remove the upper screws of the flue gas cover.

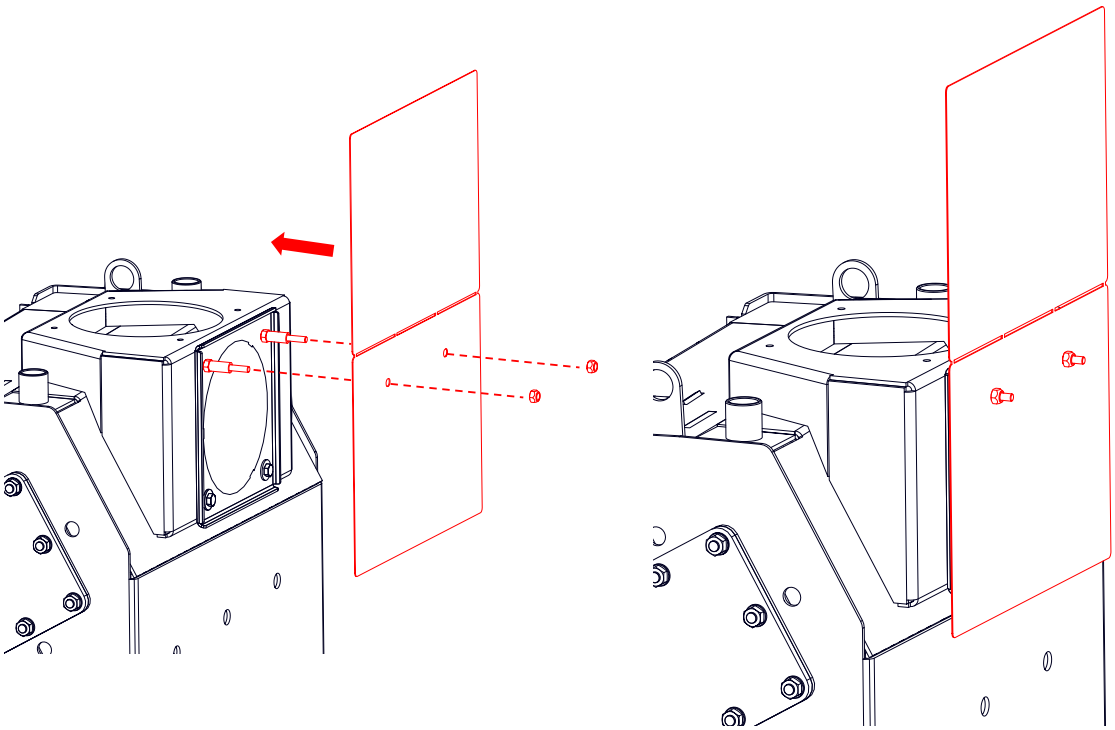


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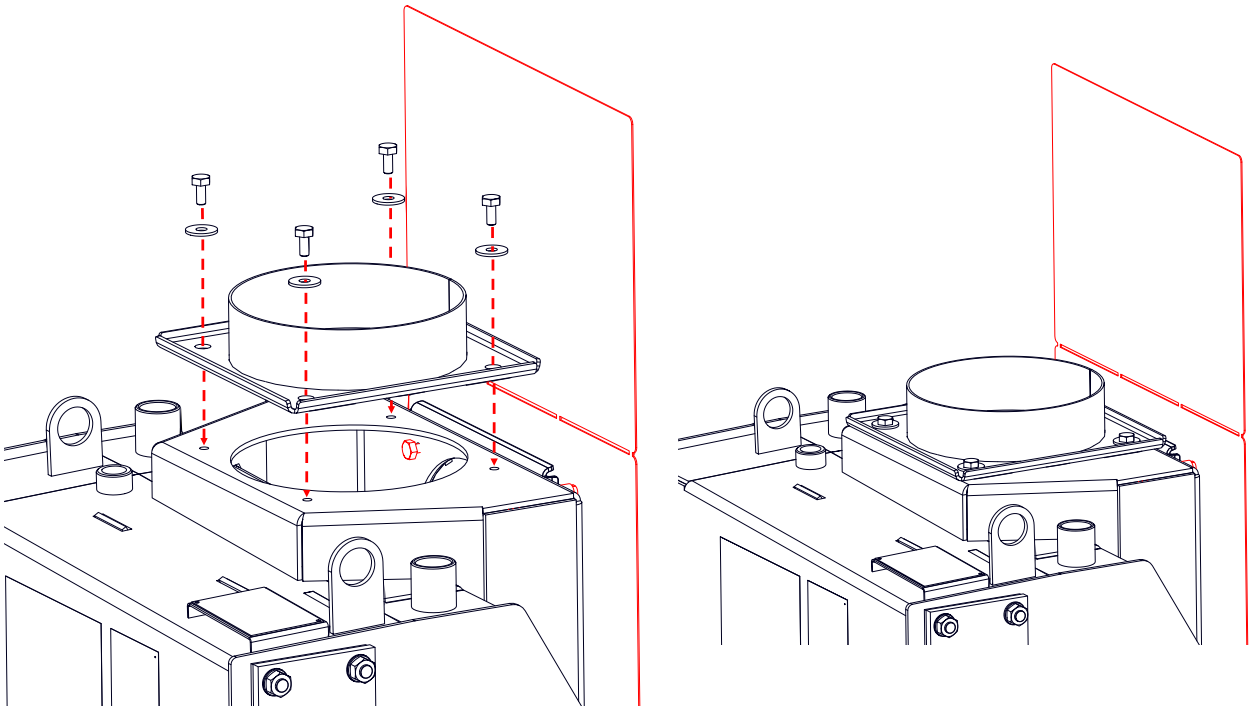
► Fit hexagon head screws with spacer bolts.



► Fit the heat protection plate.

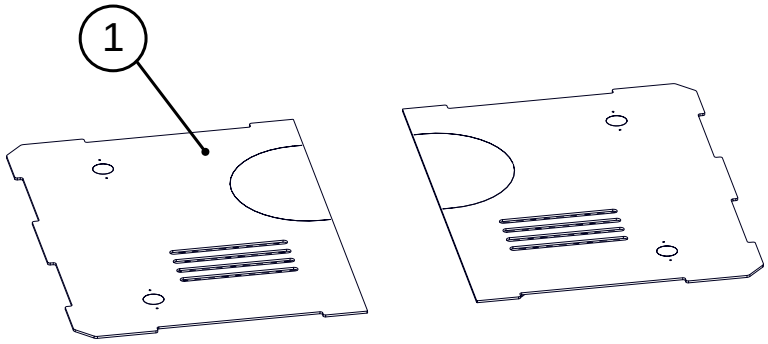


► Refit the flue gas cover.



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3.4 COVER PLATE

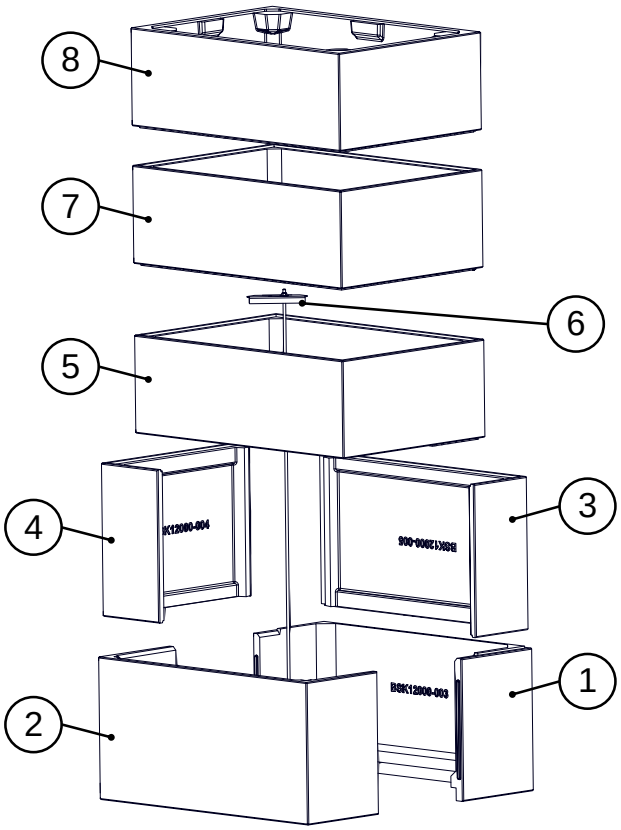


Pos.	Designation	Art.-Nr.	Pcs.
1	Cover plate	BSK12000-011	2

3.5 CLADDING STONES SET

3.5.1 CLADDING STONES SET

Thermal concrete cladding BSK 12.1 (BSK12000-101)



Pos.	Designation	Item no.	Piece
1	Base ring 2	BSK12000-002	1
2	Base ring 1	BSK12000-002	1
3	Side part B	BSK12000-005	1
4	Side panel A	BSK12000-004	1
5	Top ring 1	BSK12000-006	1
6	Clamping unit	BSK12000-128	1
7	Upper ring 2	BSK12000-007	1
8	Top ring cover	BSK12000-010	1

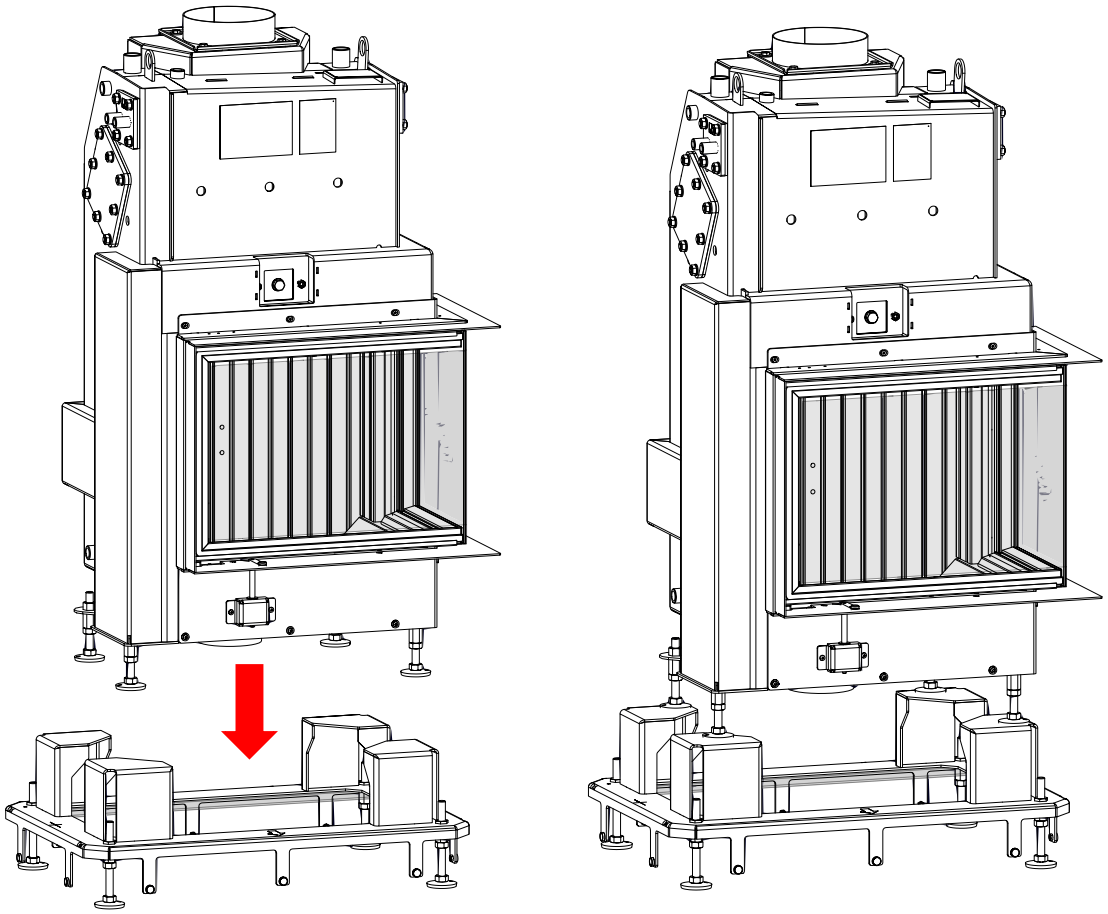
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3.5.2 ASSEMBLY OF THE CLADDING STONES SET

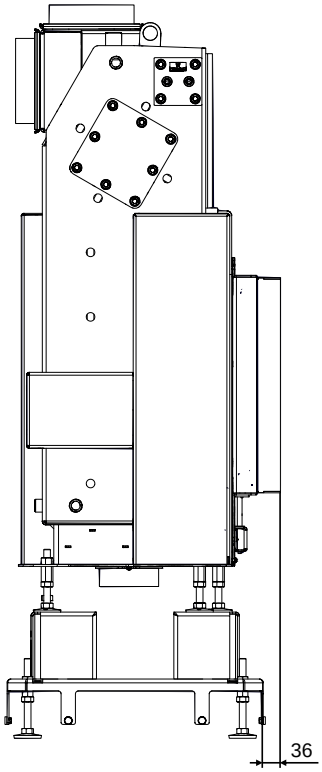
Work steps

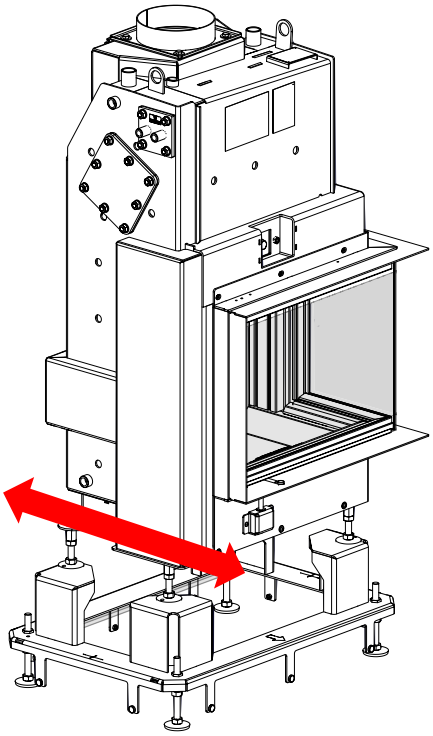
1. Position the heating insert

► Place the heating insert on the base plate

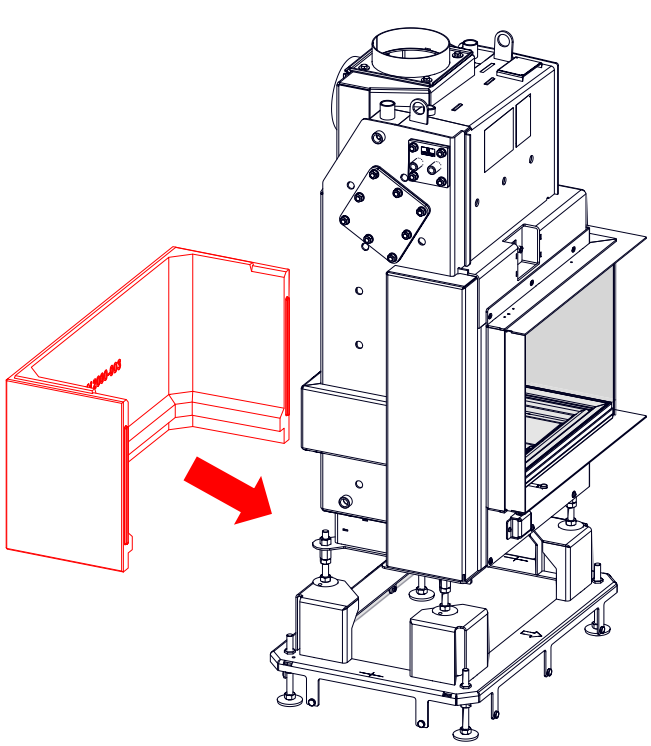


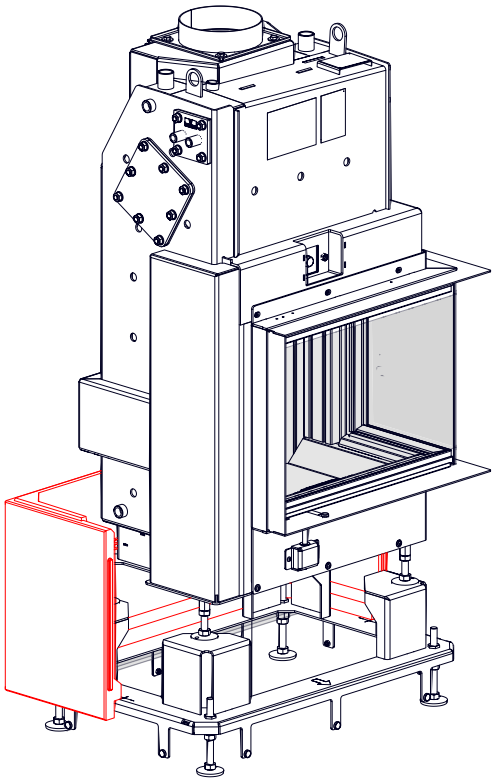
► Adjust the heating insert





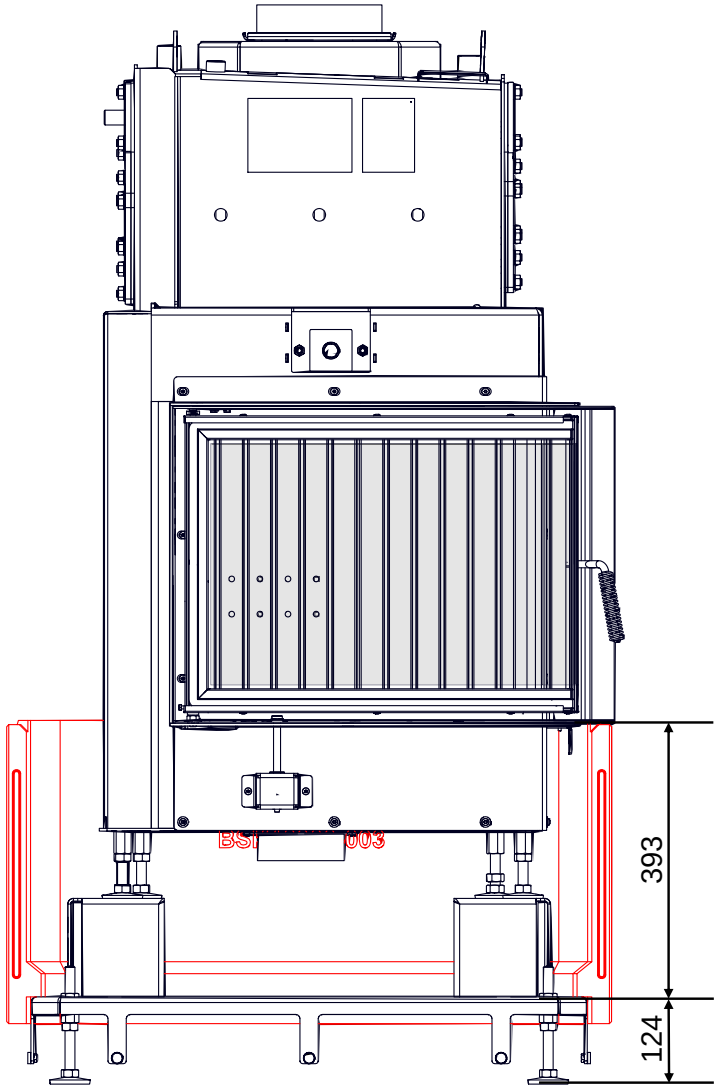
► Place a part of the base ring at the back on the base plate





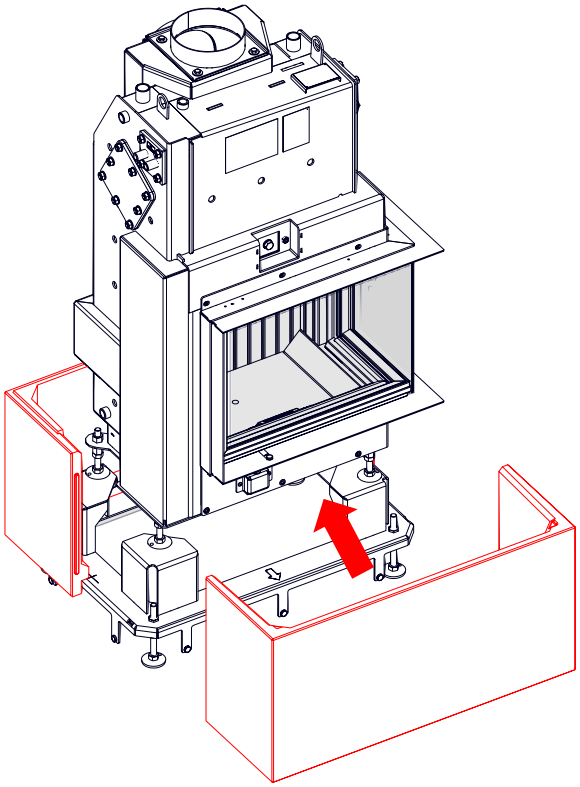
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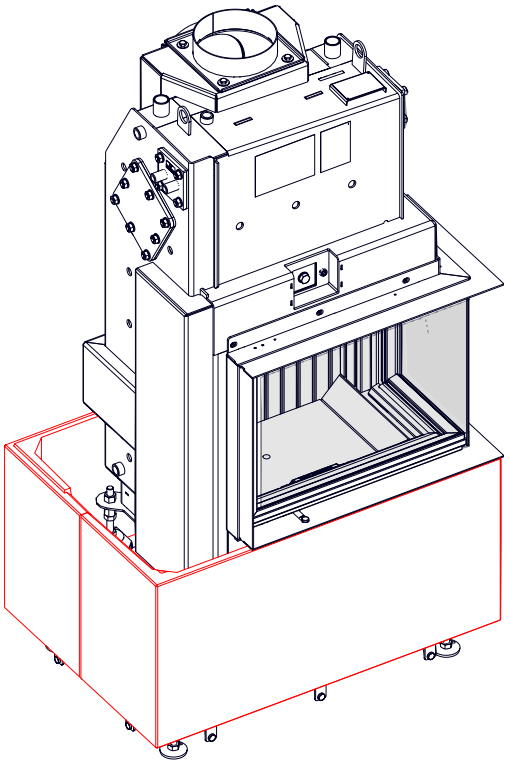
► Adjust the height



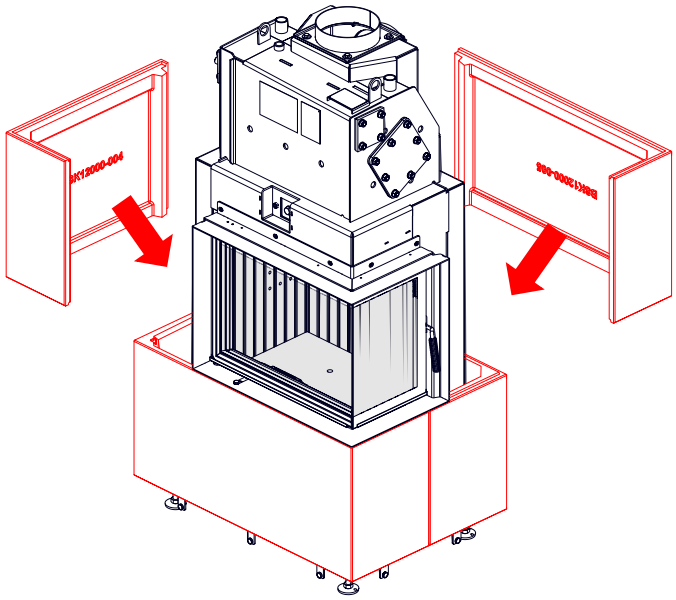
2. Set upp the cladding stones

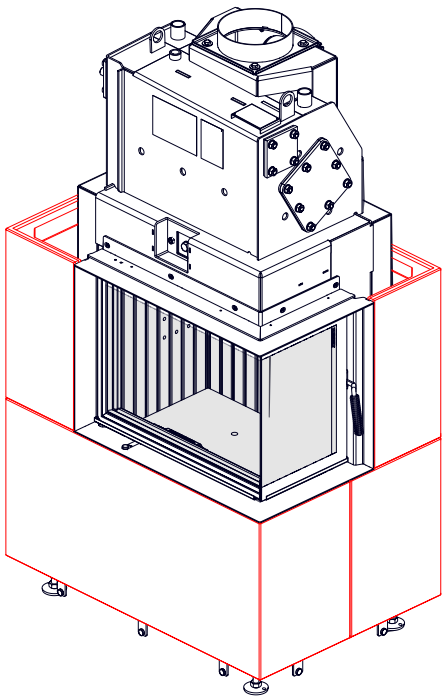
► Place the front part of base ring on the base plate





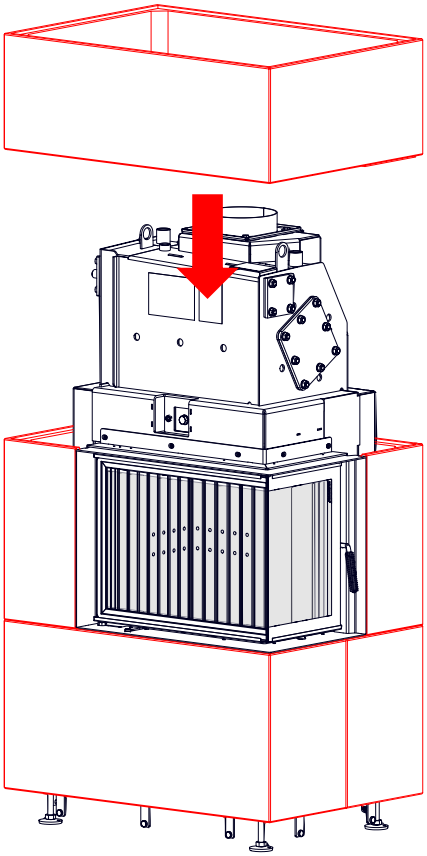
► Place the side parts

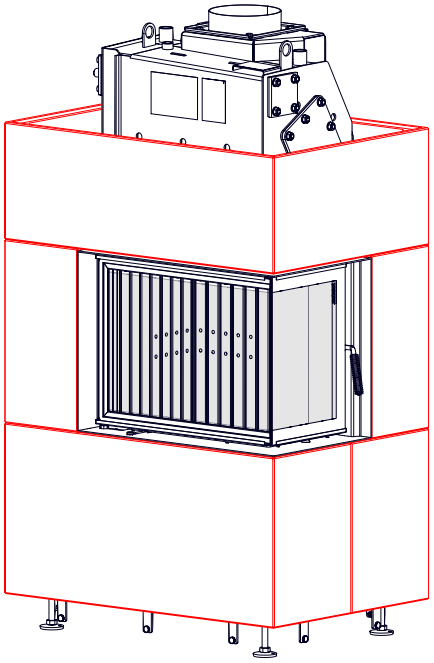




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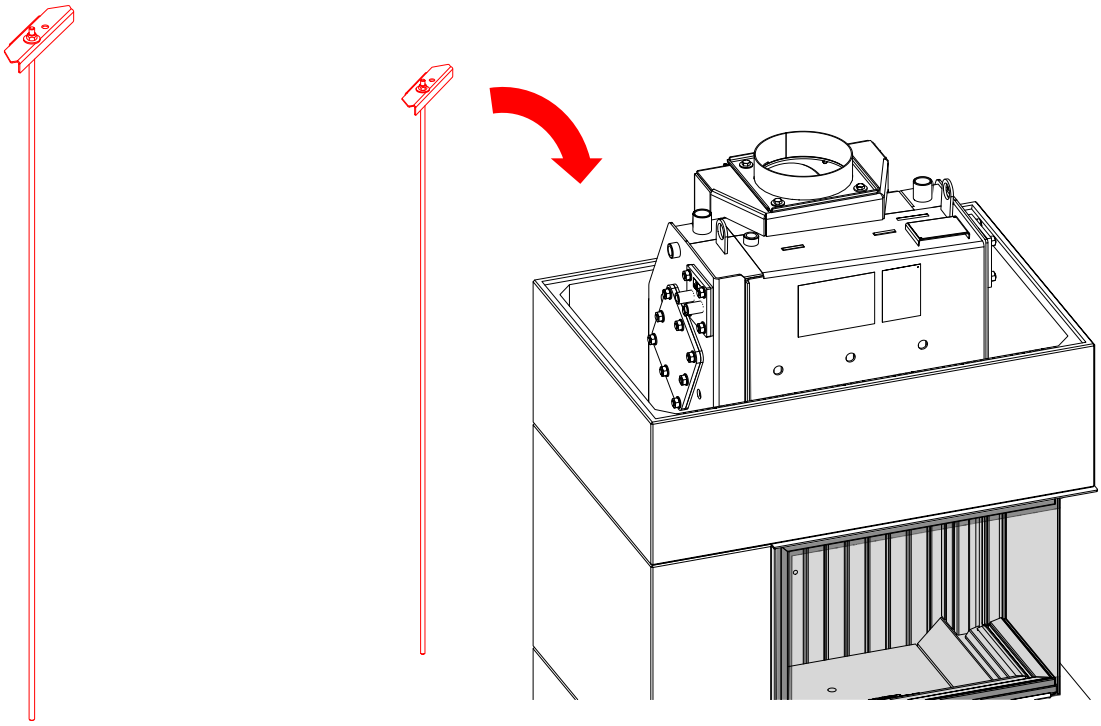
► Fit in top ring 1





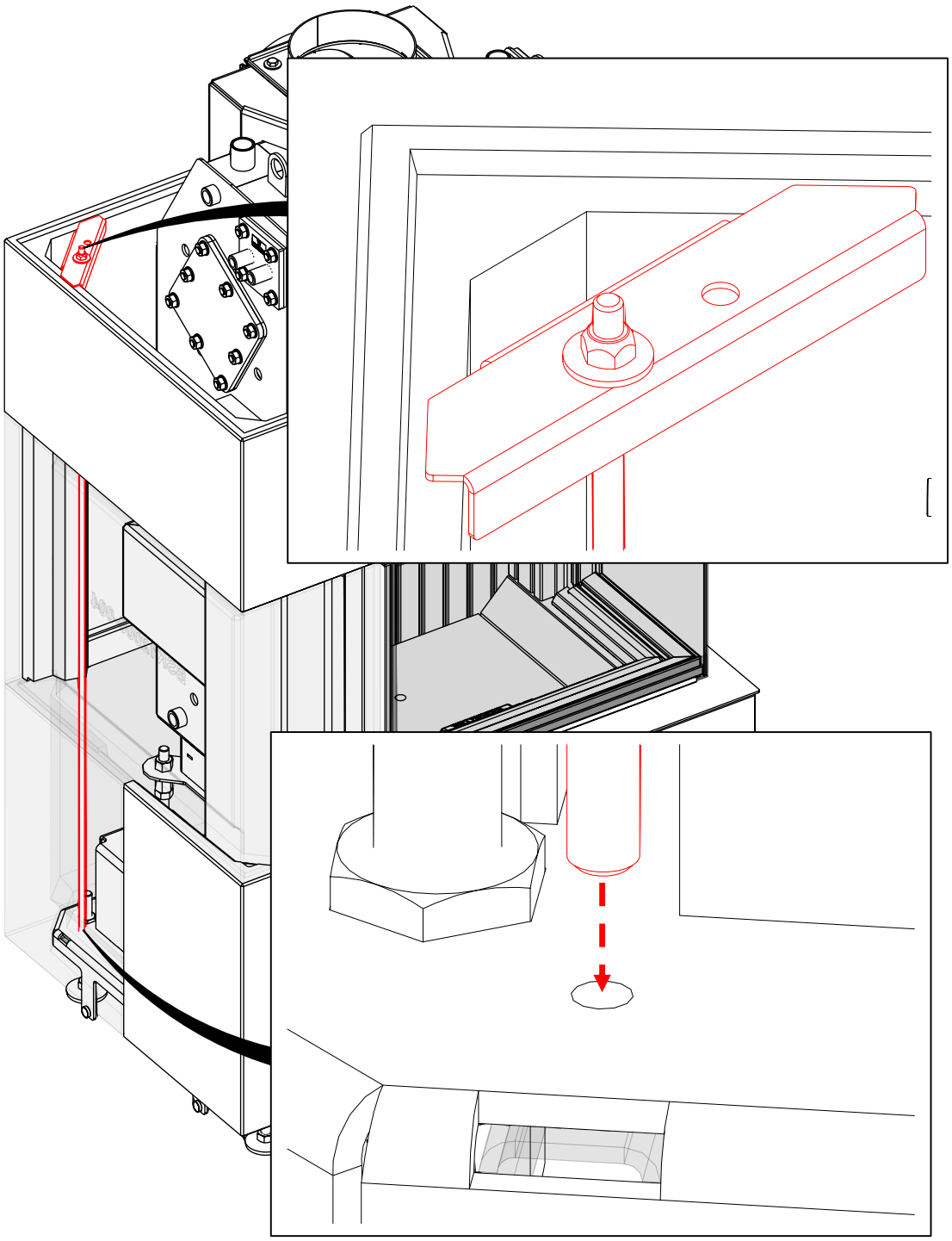
► Fit the clamping unit

Clamping unit

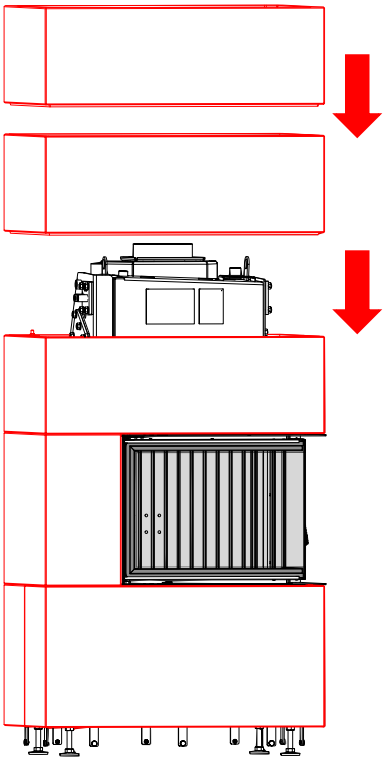


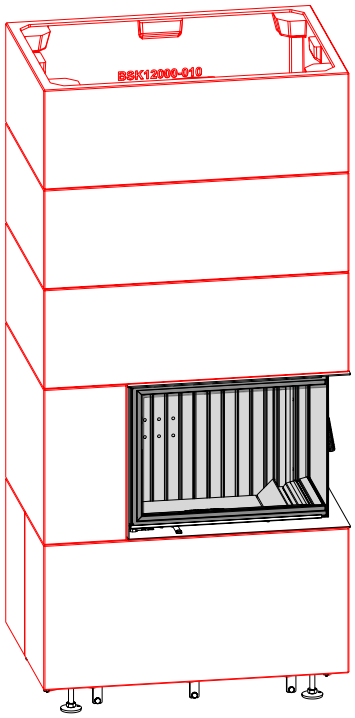
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Place the clamping plate on top of upper ring 1; insert the threaded rod through the hole in the base plate from below.

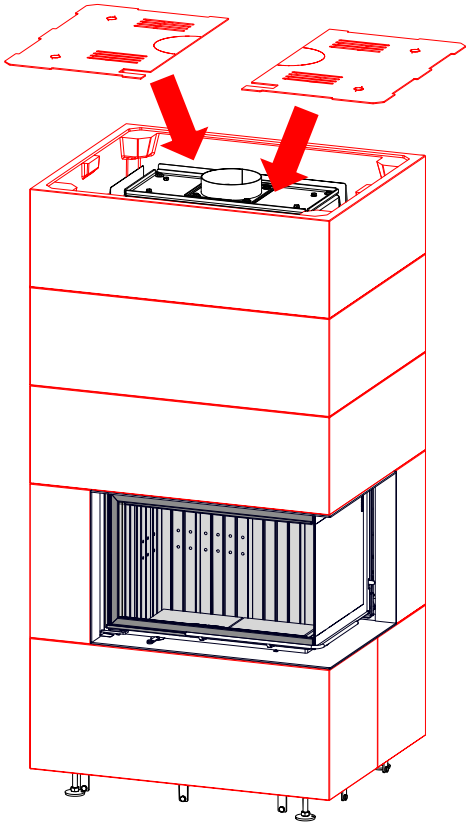


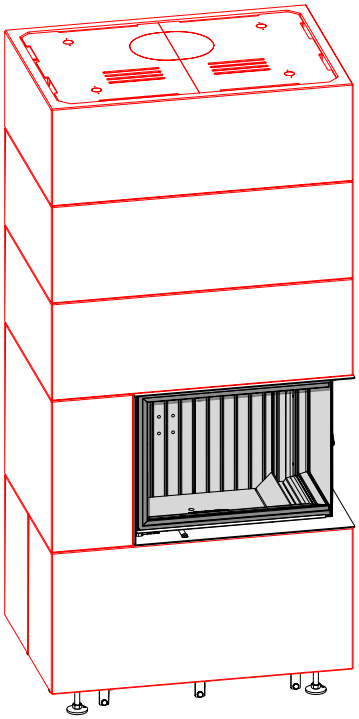
► Fit top ring 2 and 3



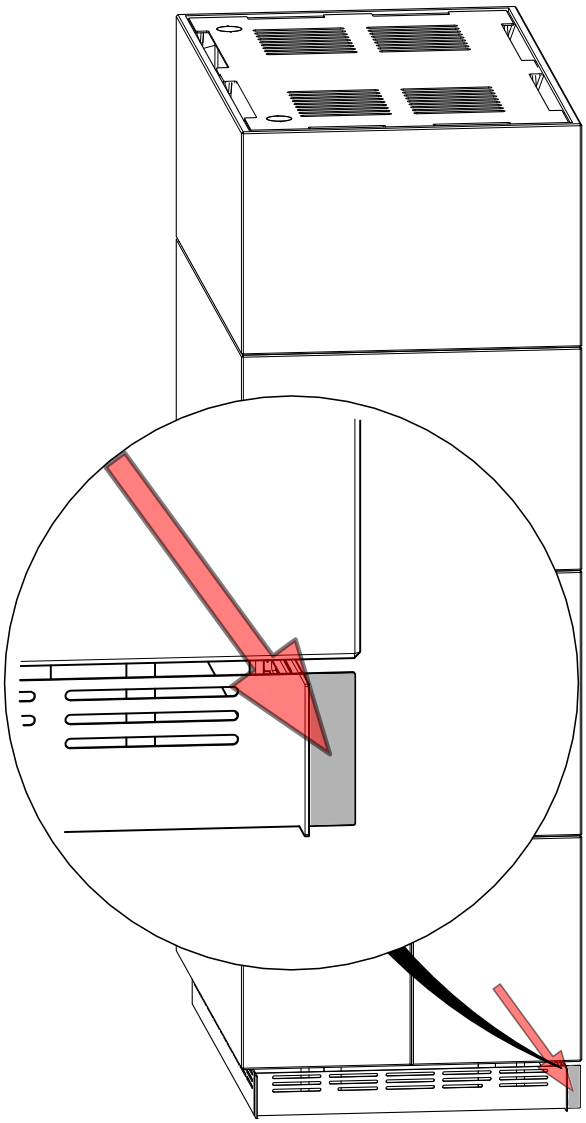


► Fit the cover plates



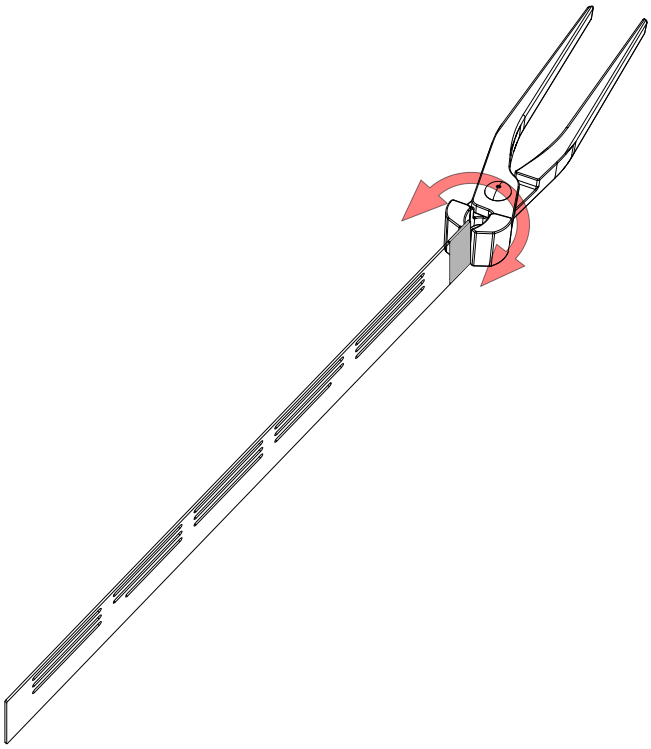


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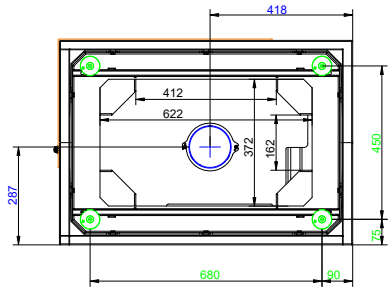


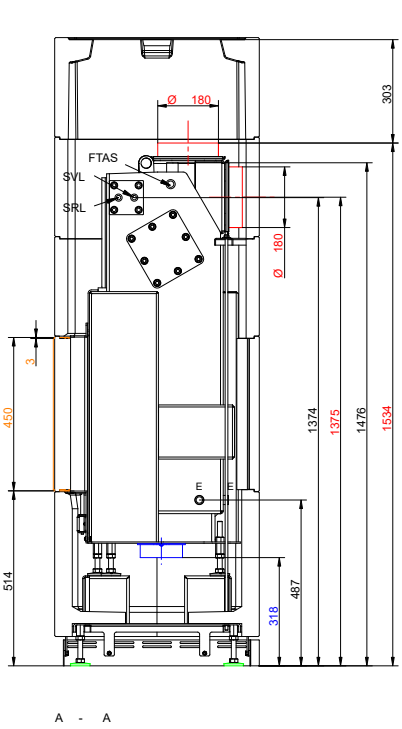
The lower panels are designed so that they are flush with the BSK when the BSK is mounted directly at a wall.

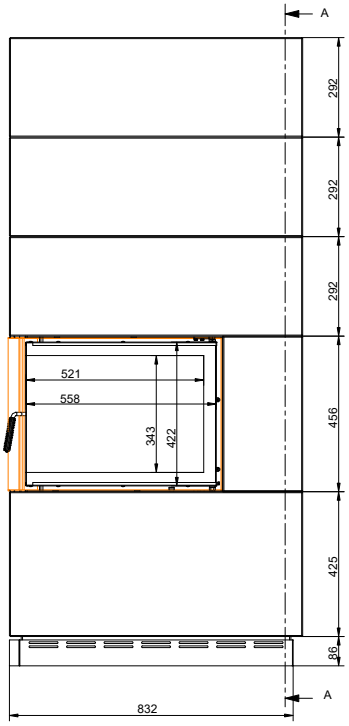
If the BSK is installed free-standing, the 'protruding' sheet metal sections can be cut off at the predetermined breaking point.

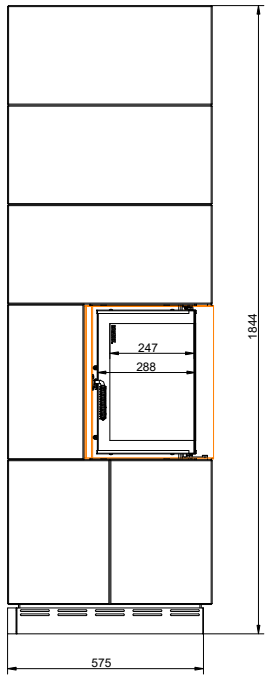


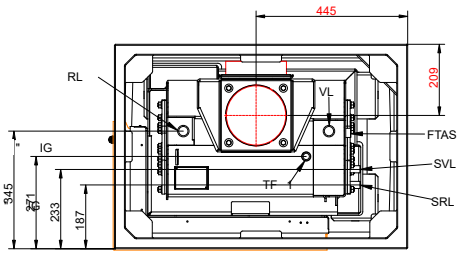
Dimension sheets - BSK 12.1 with Corner fireplace waterbearing 42-57-30

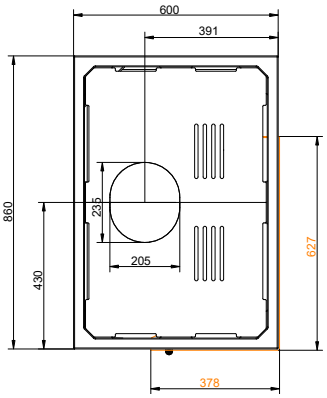








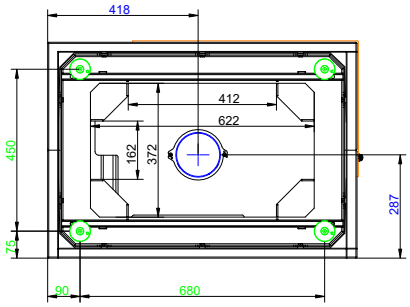


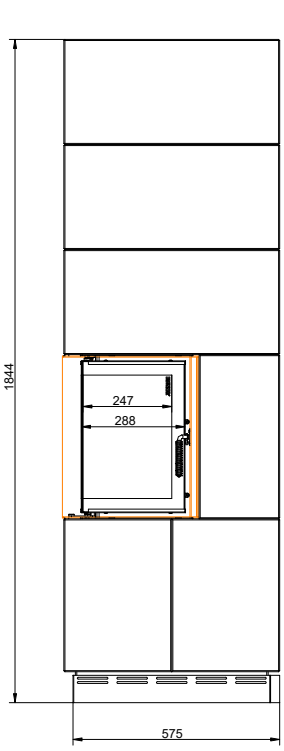


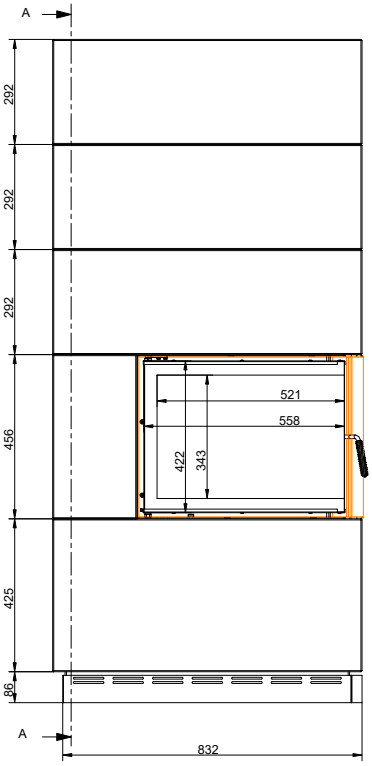
VL	supply 1"ext. th.
RL	return boiler 1"ext.th.
E	drain 1/2"int. th.
SVL	supply cooling pipe outlet ext.th.
SRL	return cooling pipe outlet 1/2"ext.th.
FTAS	socket for thermal safety sensor int.th.
TF	socket 1/2" for sensor int.th.

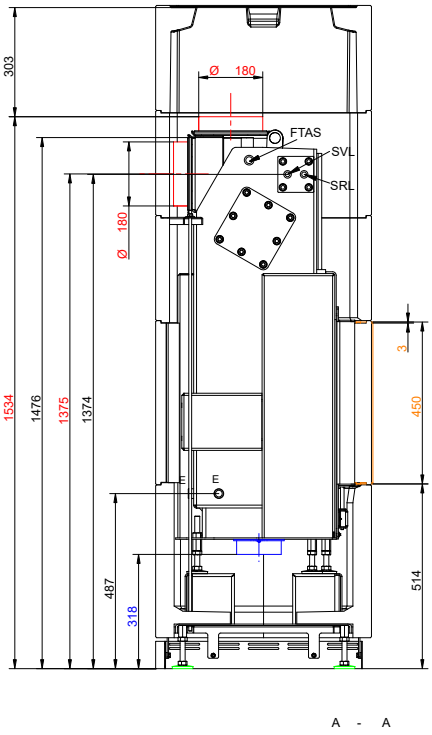
... left

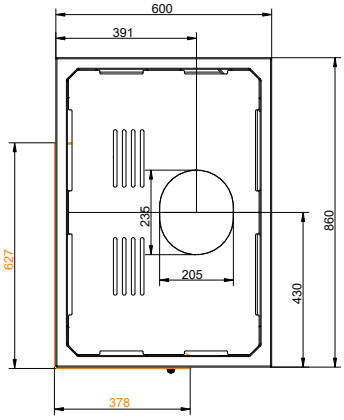
Dimension sheets - BSK 12.1 with Corner fireplace waterbearing 42-57-30

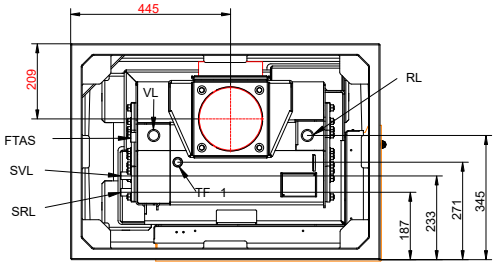












VL	supply 1"ext. th.
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SVL	supply cooling pipe outlet ext.th.
SRL	return cooling pipe outlet 1/2"ext.th.
FTAS	socket for thermal safety sensor int.th.
TF	socket 1/2" for sensor int.th.

... right

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: 2025-04-25

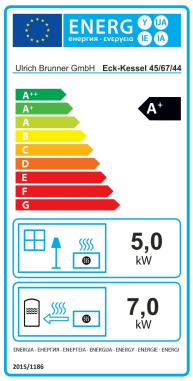
Planning and installation - BSK 12.1 with Corner fireplace waterbearing 42-57-30

Series status		04.2	04.2
Tested according to		EN 13229 W	EN 13229 W
Values measured at		Practical avg.	Rated power
Data for functional demonstration			
Rated heat power	kW	-	8
Room heating power	kW	-	3.5
Water heating power	kW	-	4.5
Fire wood volume	kg/h	5.0	2.5
Flue gas mass flow	g/s	18	8
Flue gas temeperature	°C	220	175
Necessary supply pressure [1)]	Pa	12	12
Combustion air consumption	m^3/h	45	25
Combustion air connection Ø	mm	125	125
Cladding components [2)]			
Foot print (W x D)	mm	860 x 600	860 x 600
Overall height	mm	1844	1844
Height of extension ring	mm	292	292
Minimal distances			
to mounting wall	cm	5	5
to mounting wall with heat protection panels	cm	0	0
to combustible mounting wall	cm	10	10
to combustible mounting wall with heat protection panels	cm	5	5
from top of fireplace to ceiling	cm	40	40
Cross-section of gratings [3)]			
Exhaust warm air	cm^2	906	906
Recirculation air	cm^2	1264	1264
Minimum distances in front of the combustion chamber, Glass ceramic / glass ceramic coated (GKB)			
for combustible parts	cm	≥ 120 / ≥ 80	≥ 120 / ≥ 80
Weight			
Total weight	kg	551	551
Meets requirement/limit values for:			
EU / Germany		Ökodesign / 1. BImSchV (Stufe 2)	

1) Damper flap recommended
2) Quality features of the cladding components in concrete look (fair-faced concrete class 2-3)
   Dimensional tolerances of the casting mold parts
   Straightness: +- 2 mm/m
   Length/width/thickness: +- 2 mm
   Squareness: +- 2 mm
   Flatness: +- 2,5 mm
   Surface to visible side
   Textur: closed and largely uniform; repair areas with color changes and hairline cracks permissible.
   Porosity: max. three holes with diameter <10 mm and depth <10 mm (reference area 100x100 mm).
   Colour shade: uniform, large-area light/dark discolouration and cement haze permissible; no rust and dirt spots as well as different bulk layers.
   Note: deviations in color tone (e.g. extension rings) can be adjusted by applying a glaze-like paint (our recommendation: DecoLasur Matt tinted in the colour shade Schiefer16, Caparol).
   With the BRUNNER revision set (Art. No. 900300), touch-up work can be carried out on the cladding components.
3) Existing convection air openings. If the construction differs from the supplied system kit (e.g. construction up to the ceiling or closed construction), the information in the data sheet is decisive for carrying out the cross section of the convection air openings.

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

Supplier's name or trademark	Ulrich Brunner GmbH
Model identifier:	Kamin-Kessel Eck 45-67-44
Energy efficiency class:	A+
Direct heat output:	5,0 kW
Indirect heat output:	7,0 kW
Energy efficiency index:	109
Fuel energy efficiency (at nominal heat output):	82,0 %
Fuel energy efficiency (at minimum load):	N.A. %
Special precautions: see supplied product documentation	Siehe Produktdokumentation!



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Email: info@brunner.de

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