Installation Guide

BSK 42-66-42

©2023

BRUNNER®

CONTENTS

1 General Information..... 3
2 Tolerances of thermal concrete parts.....6
3 Description of parts..... 8
3.1 Components of the bottom BSK 42-66.....8
3.2 Cladding components BKH 42-66-42..... 9
4 Assembly.....10
4.1 Assembly sequence..... 11
4.2 Fitting heat protection plates.....18
5 Minimal distances..... 22
6 Heat radiation range..... 23
7 Drawings and technical data..... 24

 © 2023 Brunner GmbH

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 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 13	Panorama-Kamin 51/66/50/66 with firetable and support frame
BSK 42-66	BKH 5.0 flat 42-66
BSK 42-66-42	BKH 5.0 corner 42-66-42

© 2023 Brunner GmbH

The above indicated combinations of BSK cladding set and fireplace inserts are tested according to EN 13229. As a result, there are certain distances and insulation thickness data to be followed and applied.

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

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.

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!

© 2023 Brunner GmbH



Please follow the separate installation instructions for the fireplace insert.

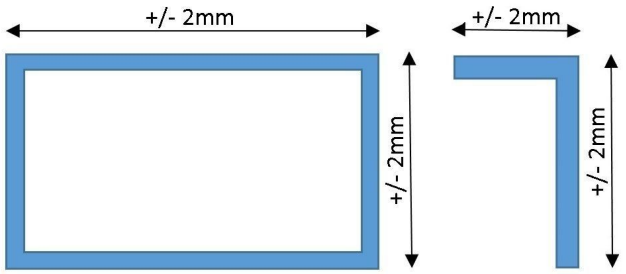
© 2023 Brunner GmbH

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

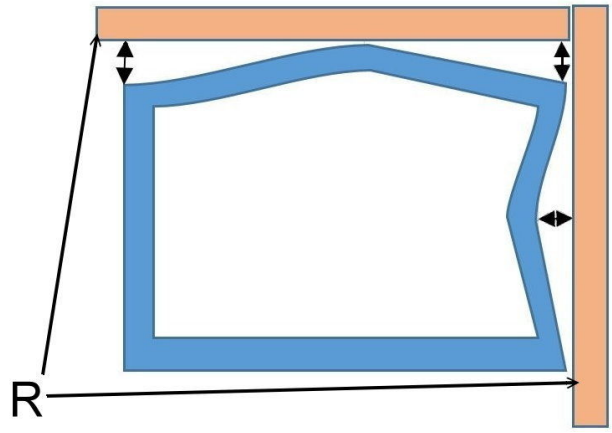
For each part, the indicated tolerances apply.



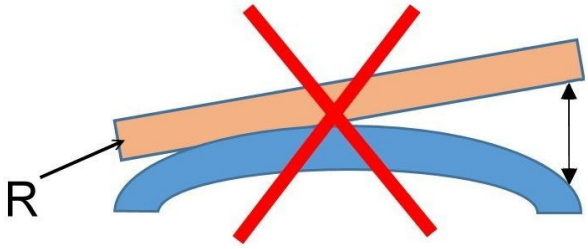
Tolerances of Flatness

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



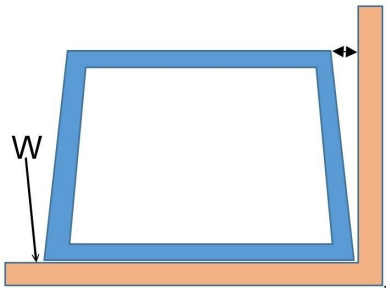
Im. 2: Incorrectly placed leveling board

© 2023 Brunner GmbH

Tolerances of Angle

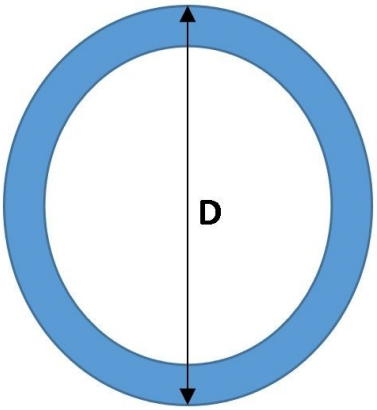
In order to determine the deviations of angles, place the square measuring tool along the long edge!

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.



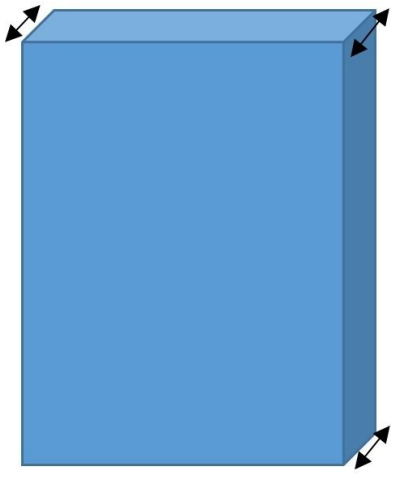
Roundness

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.

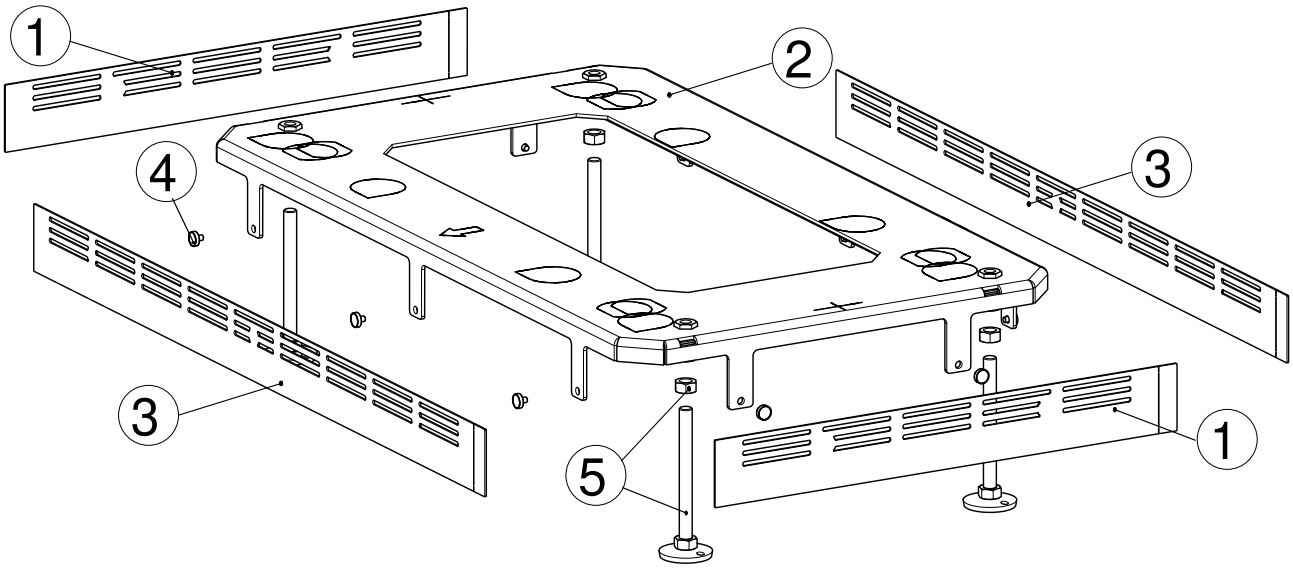


The overall appearance with color shade differences being present or not can be assessed in general only after a longer period of time (several weeks in some cases). The uniformity of color should be assessed from a typical viewing distance.

© 2023 Brunner GmbH

3 DESCRIPTION OF PARTS

3.1 COMPONENTS OF THE BOTTOM BSK 42-66



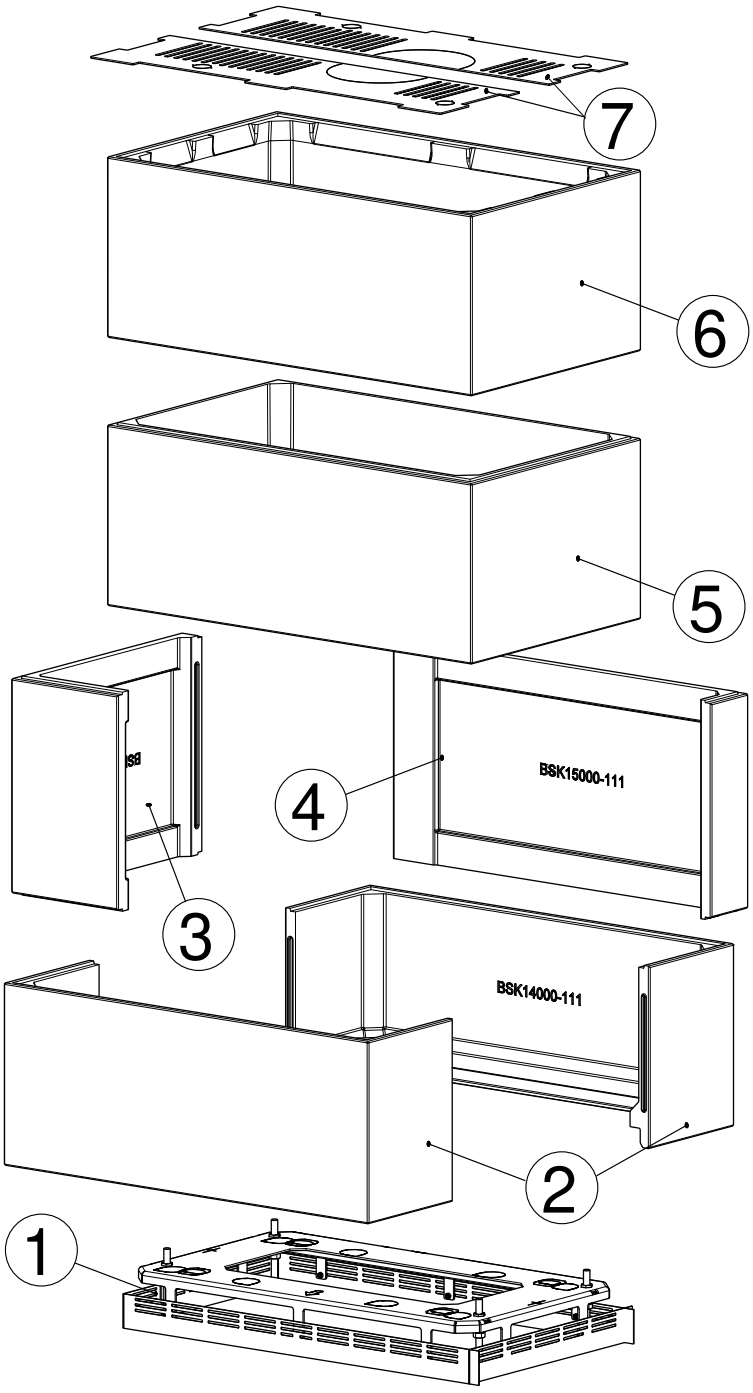
Pos.	Designation	Part no.	Pos.	Designation	Part no.
1	Left-right cover	BSK14000-118	2	Base plate	BSK14000-103
3	Front-rear panel	BSK14000-119	4	Pot magnet M6 x D16 x 45	
5	BG Adjustable foot M14x167	I001400			



The scope of delivery includes a touch-up pen for edges that are not black.

© 2023 Brunner GmbH

3.2 CLADDING COMPONENTS BKH 42-66-42



Pos.	Article	Designation	Pos.	Article	Designation
1	BSK14000-102	BG Base cpl.	2	BSK14000-111	Base ring
3	BSK15000-112	Side panel	4	BSK15000-111	Side panel right
5	BSK14000-113	Upper ring 1	6	BSK14000-114	Upper ring 2
7	BSK15000-120	Cover plate BSK 42-66-42 DT			

© 2023 Brunner GmbH

4 ASSEMBLY

Sequence of assembly

For sequence of assembly, please follow the instructions in chapter 'Sequence of assembly'. It shows each and every step of assembly.

Always keep to the specified order!

The single elements must be examined closely before installation to ensure correct position. Don't forget the pointwise bonding of elements with acrylic adhesive.

The assembly sequence of protective panels is only an example and can be different in various cases.

Fireplace insert

To compensate for the different thermal expansions between the fireplace insert and casing, a gap of ca. 2-3 mm must be left around the doors.



If the fireplace casing is in direct contact with the fireplace insert, it leads to damage of the fireplace casings, which are not covered by our warranty.

The mounting frame must have an overlap of about 4 mm.

Breakthroughs and breakouts

Breakthroughs for smoke pipe connection, air gratings or other components within the fireplace casing must be created on site. These are to be made with extreme caution to prevent breakage of the components.

Damage caused by improper work is not covered by the warranty.

The safest way to create the breakthroughs is using a jigsaw.

Setting of the ring elements

The ring elements of the fireplace casings must be lifted over the fireplace insert previously set on the base plate. To avoid damages during setting, it is recommended to place the elements on pieces of wood, and then set down the ring element carefully after pulling out the wood pieces.



Im. 3: Wood pieces as supports

© 2023 Brunner GmbH

Plastering

Before plastering the fireplace casing, the fireplace should have been heated once. As a result, the fireplace casing can expand and break down the biggest stresses. This prevents or reduces subsequent cracks in the surface of the plastered fireplace.

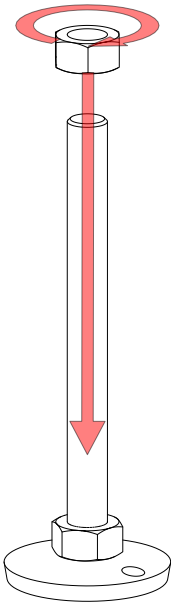
The surface of the fireplace casing must be cleaned with a damp cloth. A pre-wetting of the surface is not required.

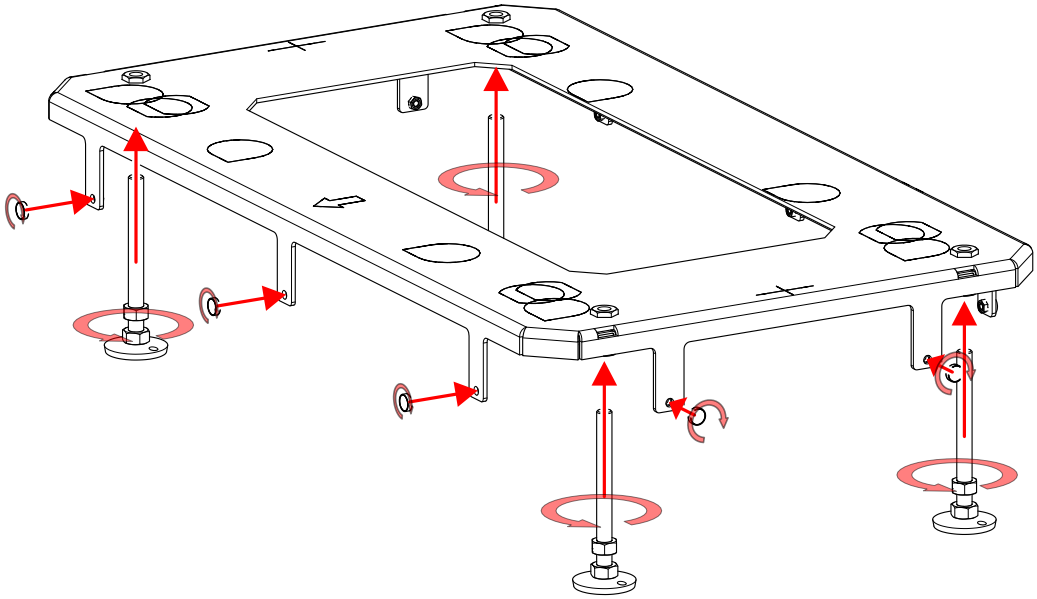
Keep processing temperature above 5°C (41 deg. Fahrenheit).

To avoid stress cracks as much as possible, a fiberglass mesh is applied with adhesive plaster (optional), this is Brunner Universal (Art.Nr.: 900384) or Brunner Spezial (Art.Nr.: 900284) on the fireplace casing.

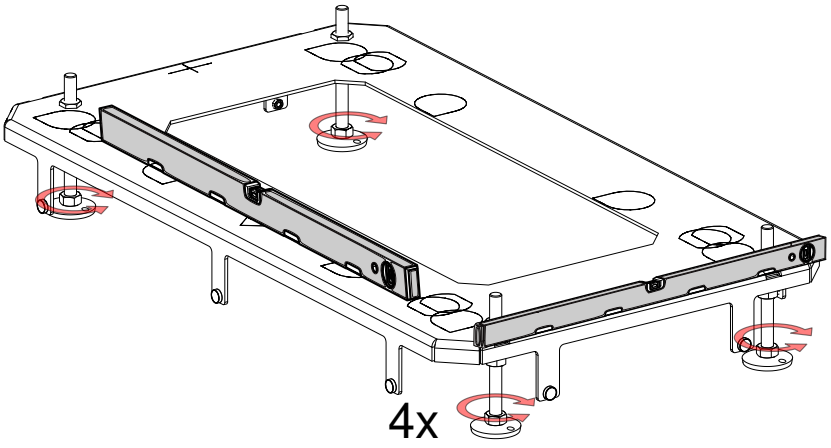
Depending on the desired texture apply two more layers to get the wished texture.

4.1 ASSEMBLY SEQUENCE



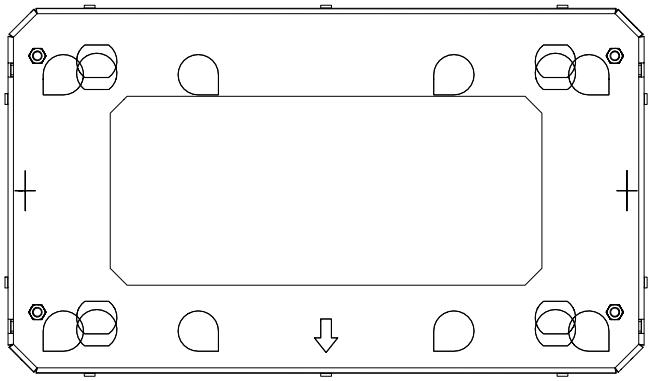


Align the base plate.



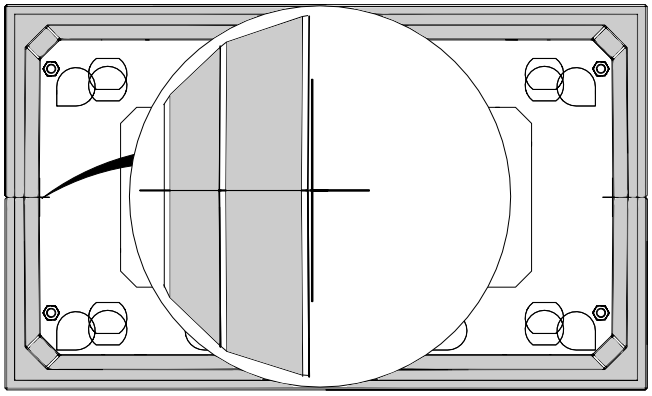
There are a number of markings on the base plate!

The arrow points towards the front!

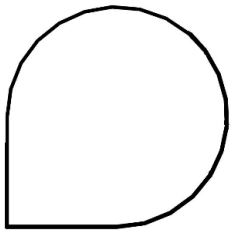


The crosses on the side are intended as a positioning aid for the lower concrete parts.

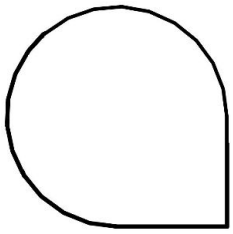
The other markings show the position of the adjustable feet of the various appliances.



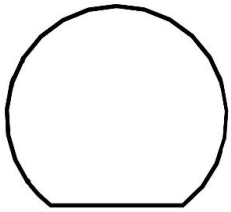
Corner fireplace left



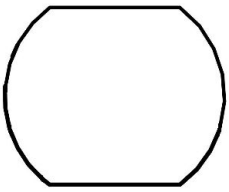
Corner fireplace right



Flat fireplace



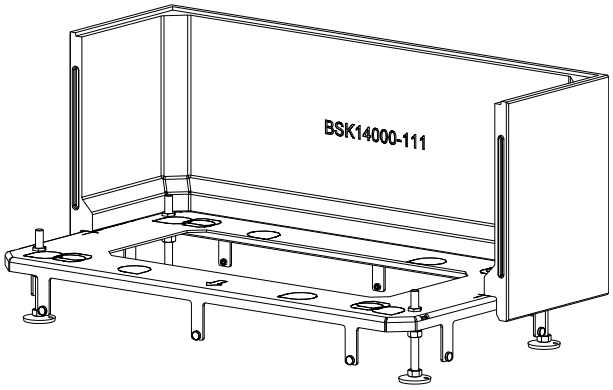
Fireplace tunnel

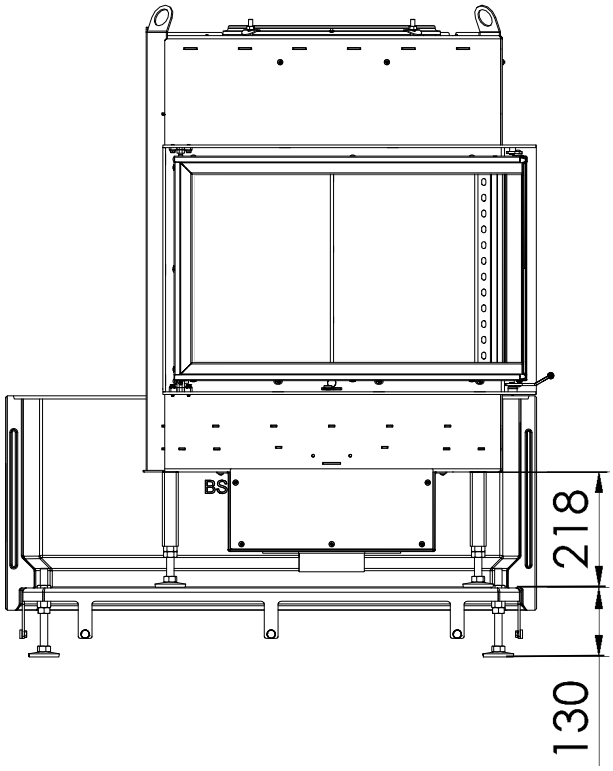




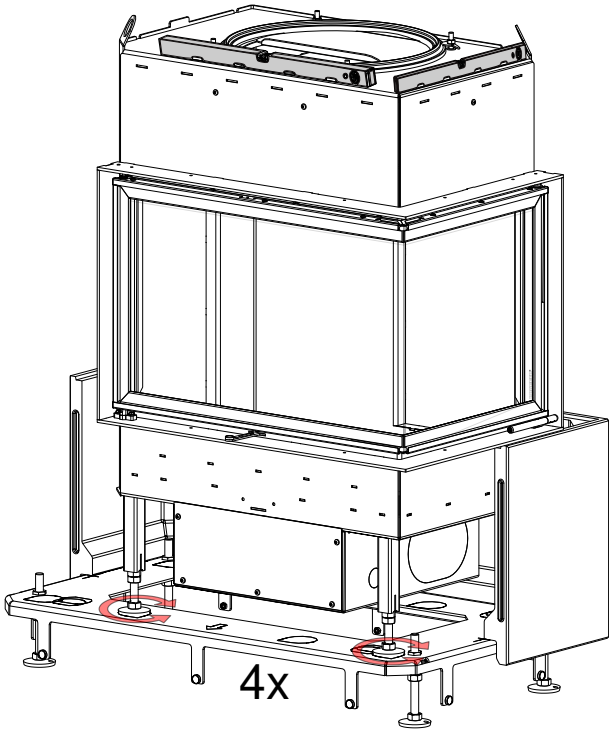
Heavy components! 2 persons required!

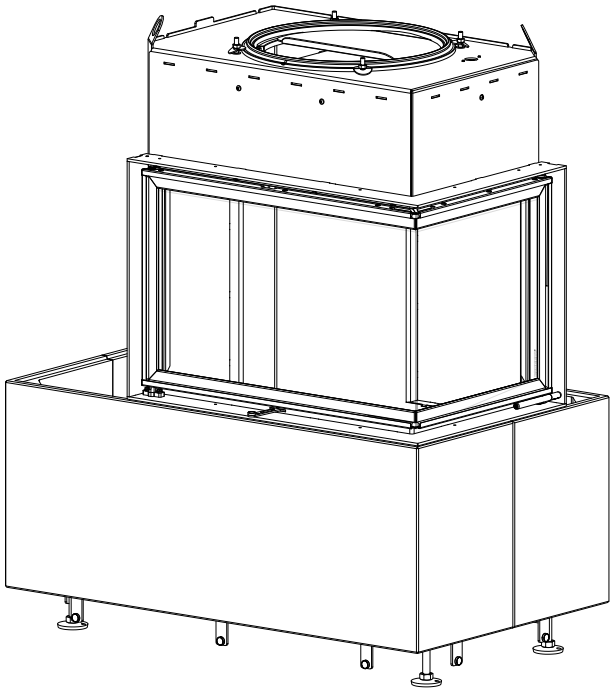
© 2023 Brunner GmbH





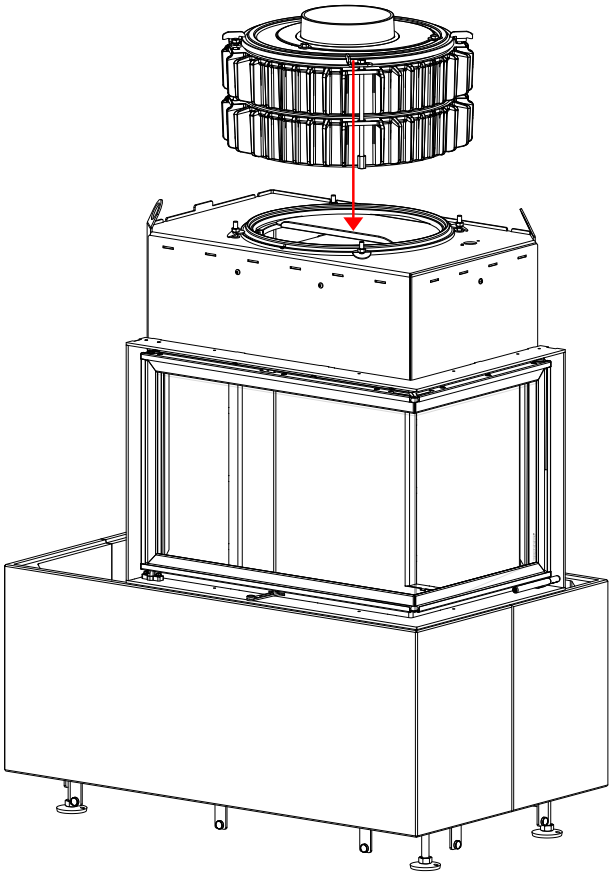
Please also observe the assembly instructions enclosed with the BKH green! If you are planning to install heat protection plates, follow the instructions in chapter ""Fitting heat protection plates""!



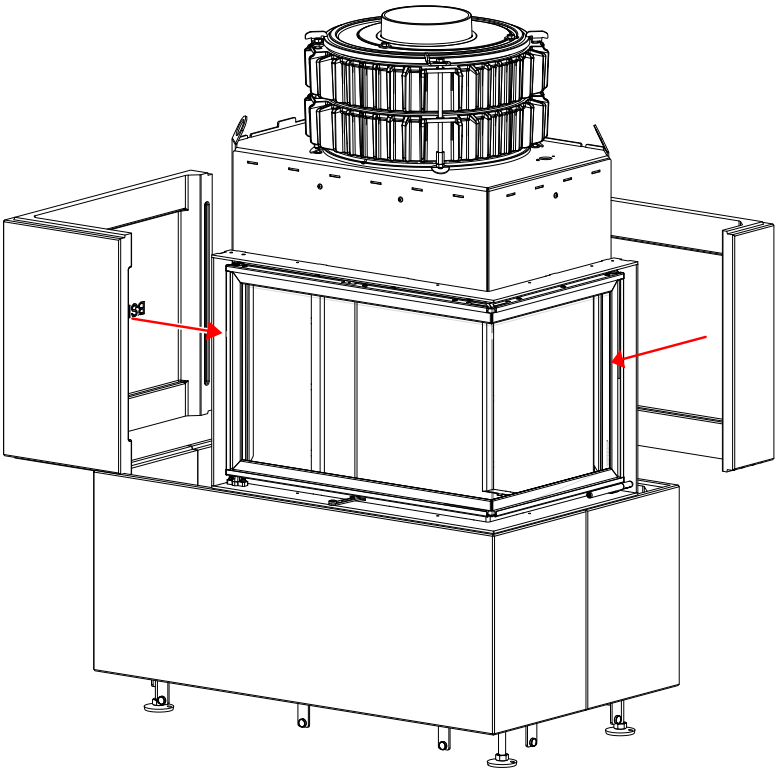




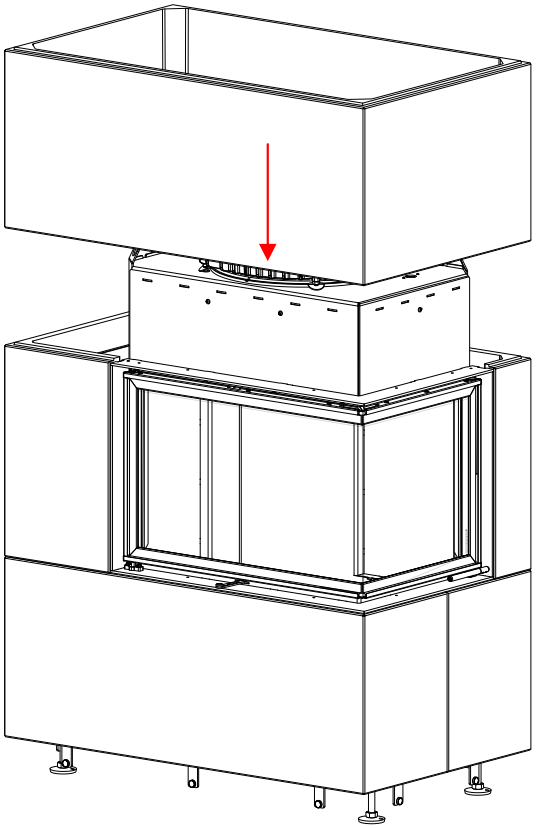
Assembly instructions for the BKH green!

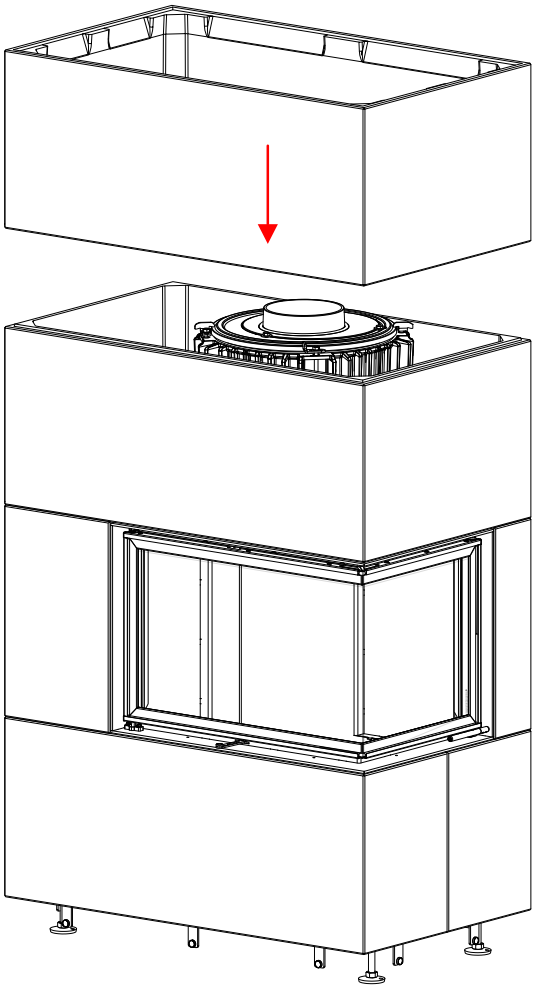


For the BSK 42-66-42 on the left, the side panels must be positioned in mirror image.

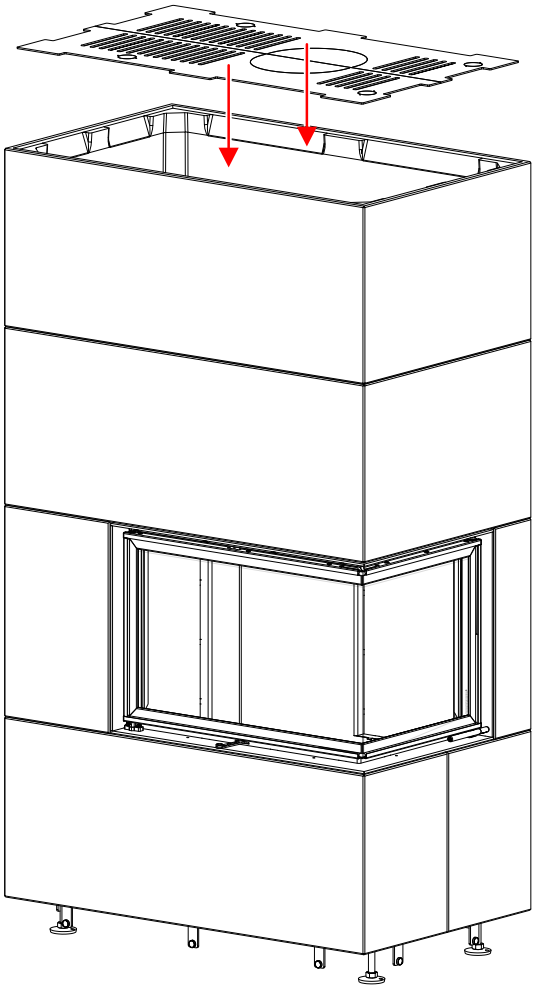


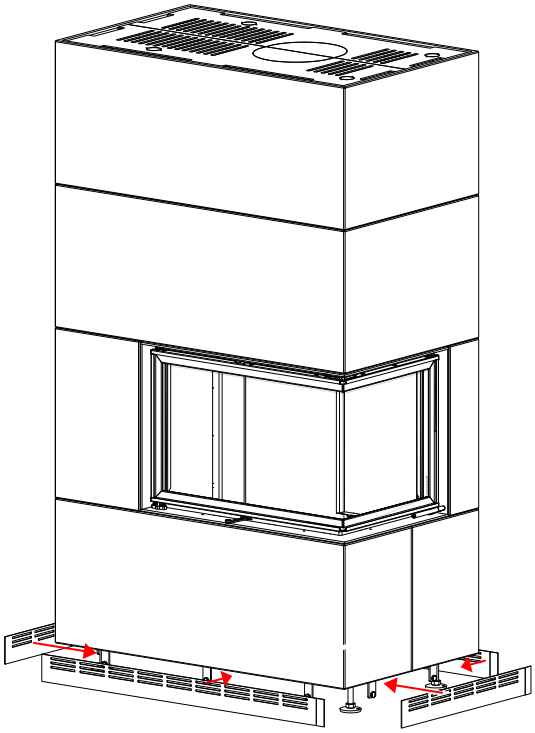
© 2023 Brunner GmbH



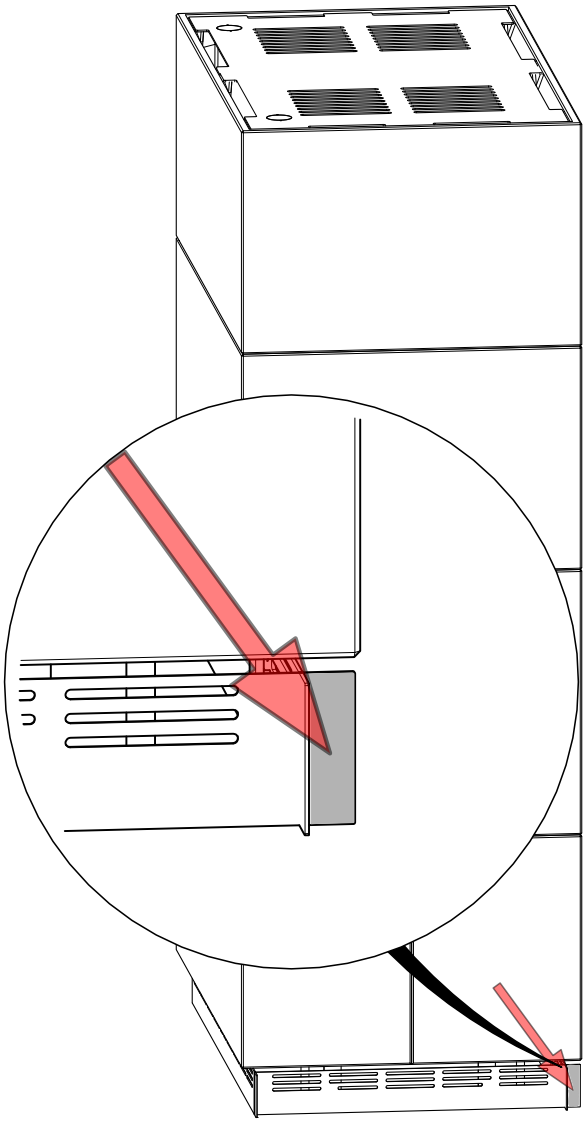


© 2023 Brunner GmbH



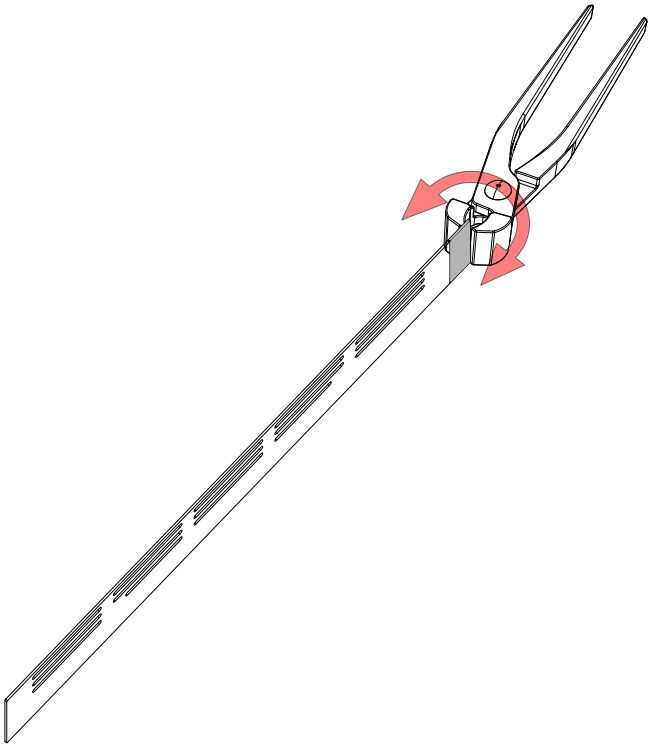


© 2023 Brunner GmbH



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

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

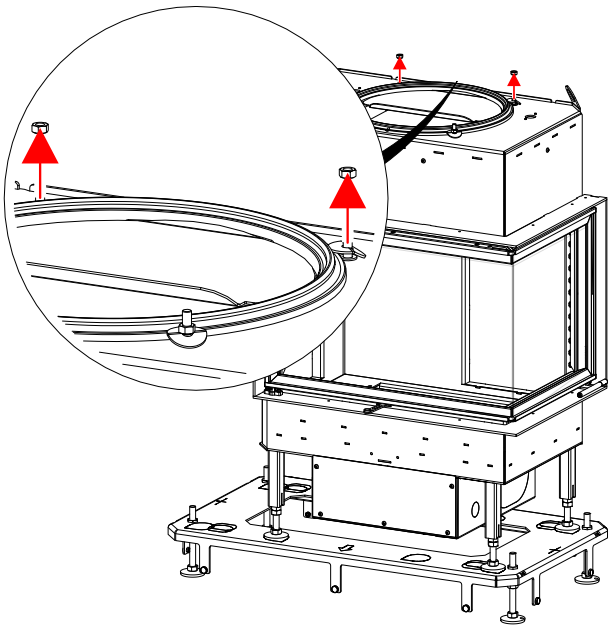


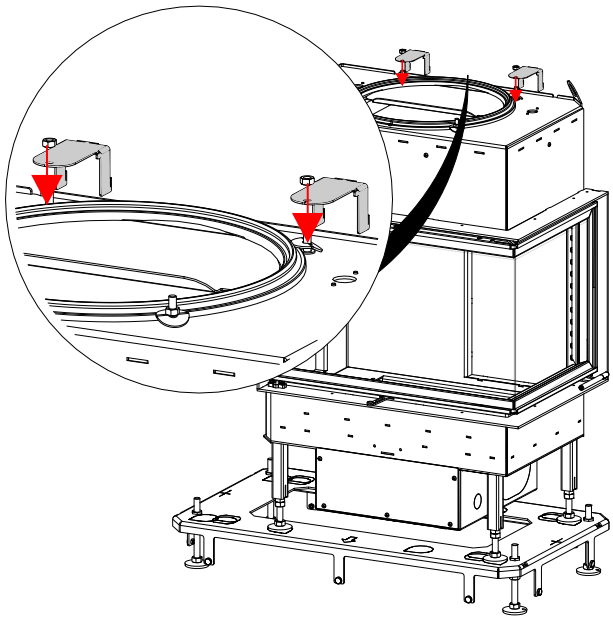
4.2 FITTING HEAT PROTECTION PLATES

The heat protection plates are optional.

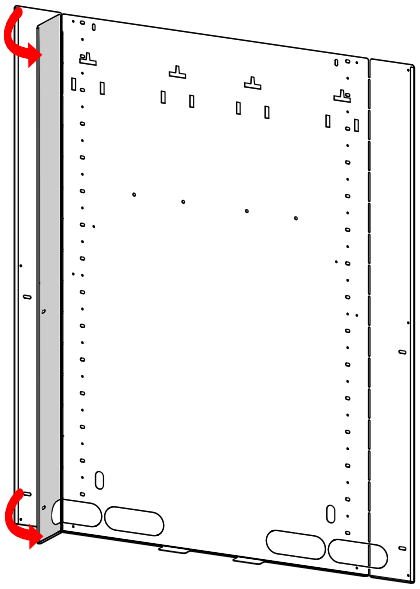
If required, we strongly recommend fitting the heat protection plates before the lower BSK rings and the re-heating surface or dome are installed!

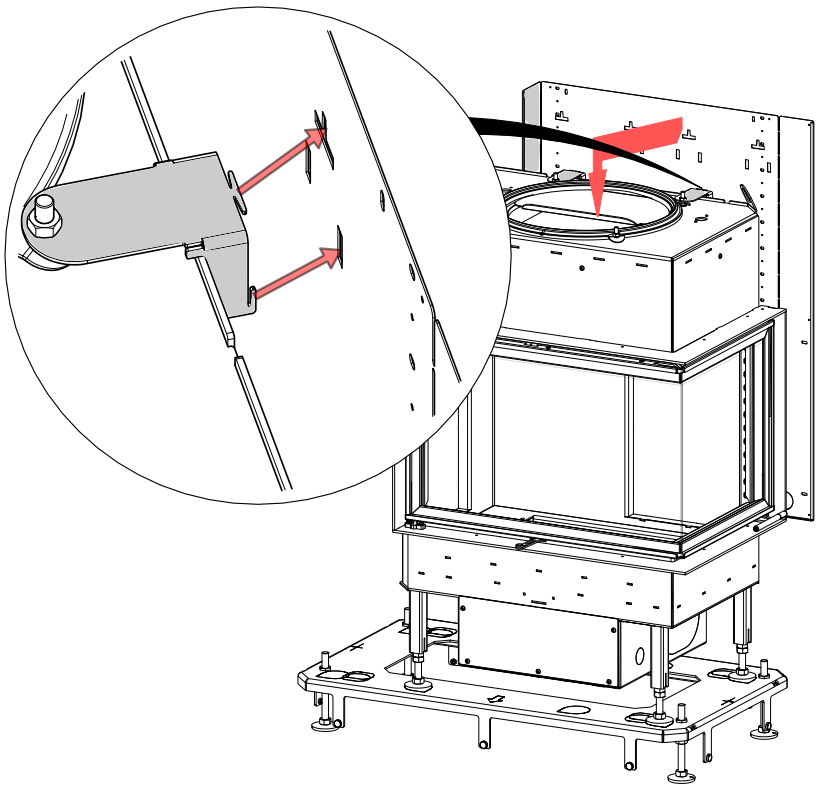
Subsequent installation of the heat protection plates is generally not possible!



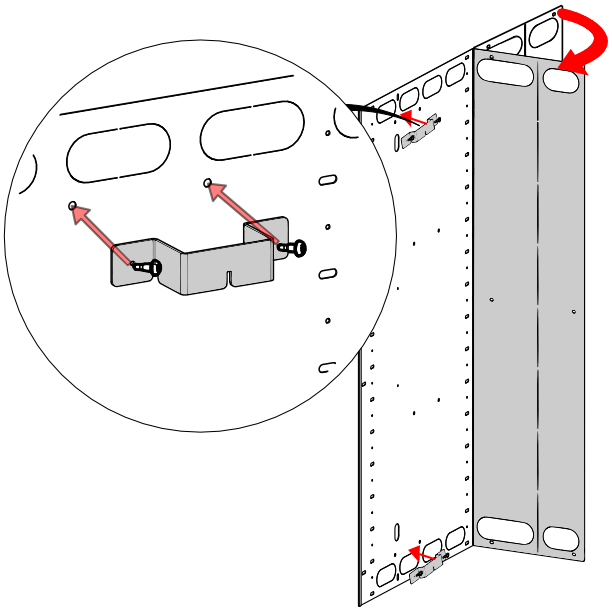


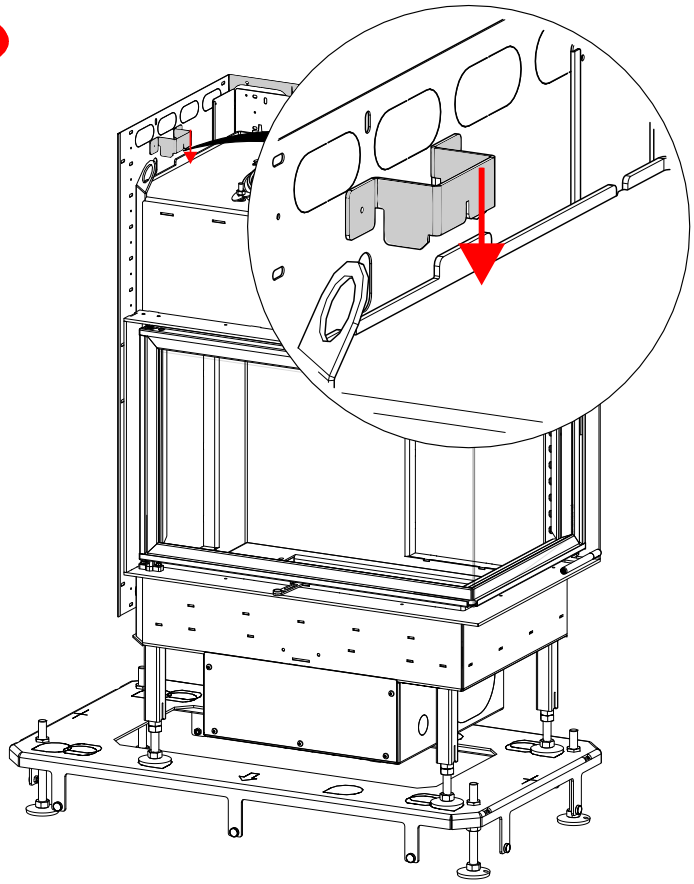
For the BSK 42-66-42 on the left, the right-hand side must be bent by 90°!

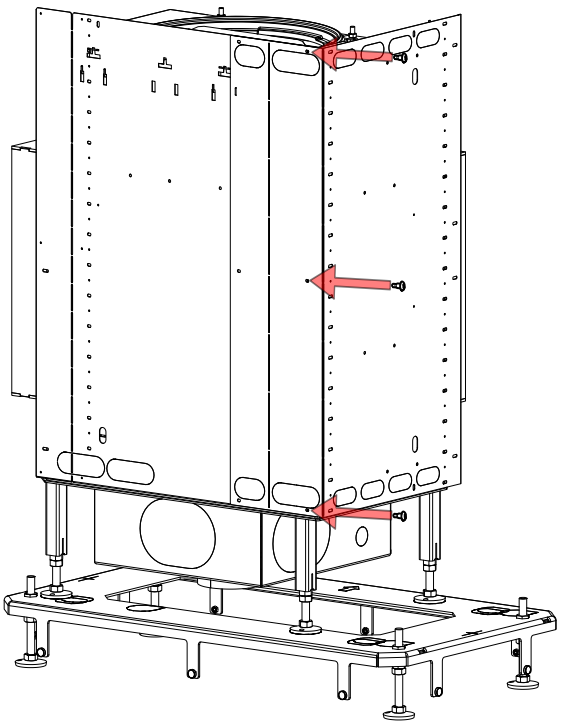


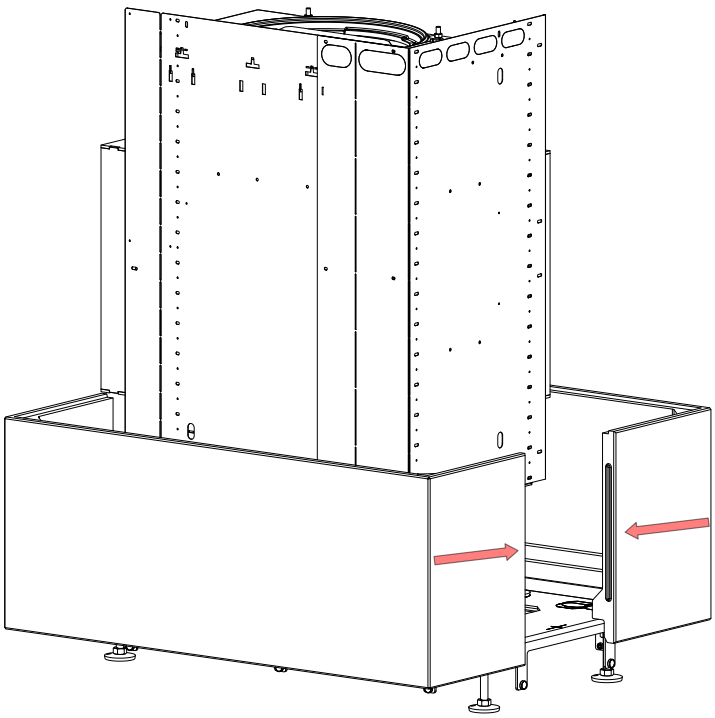


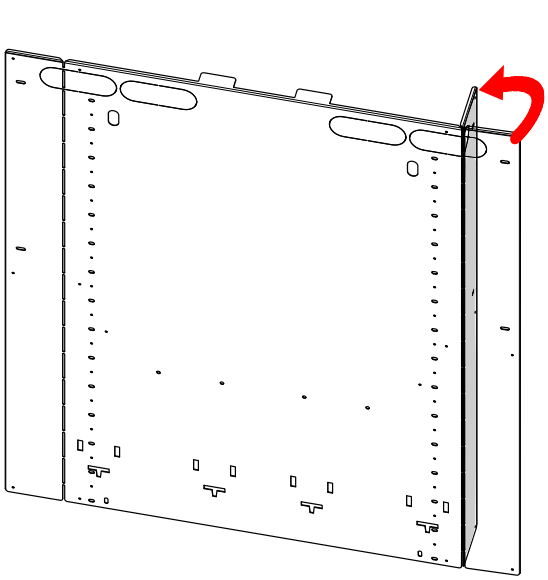
© 2023 Brunner GmbH

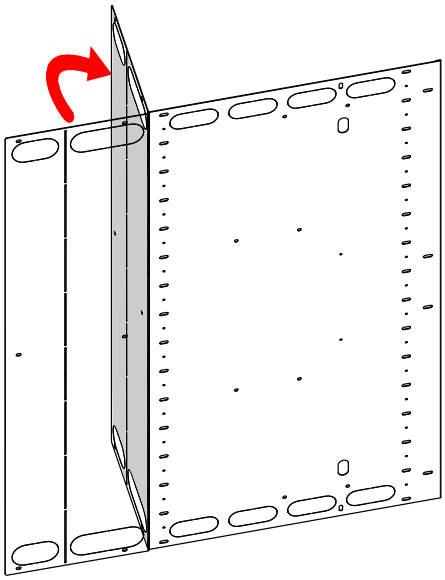


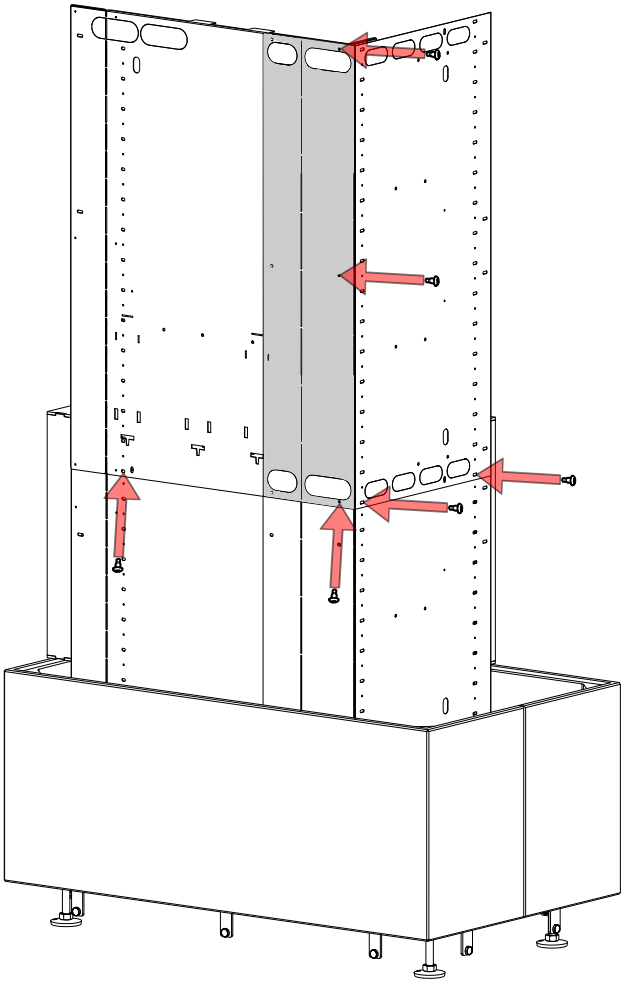


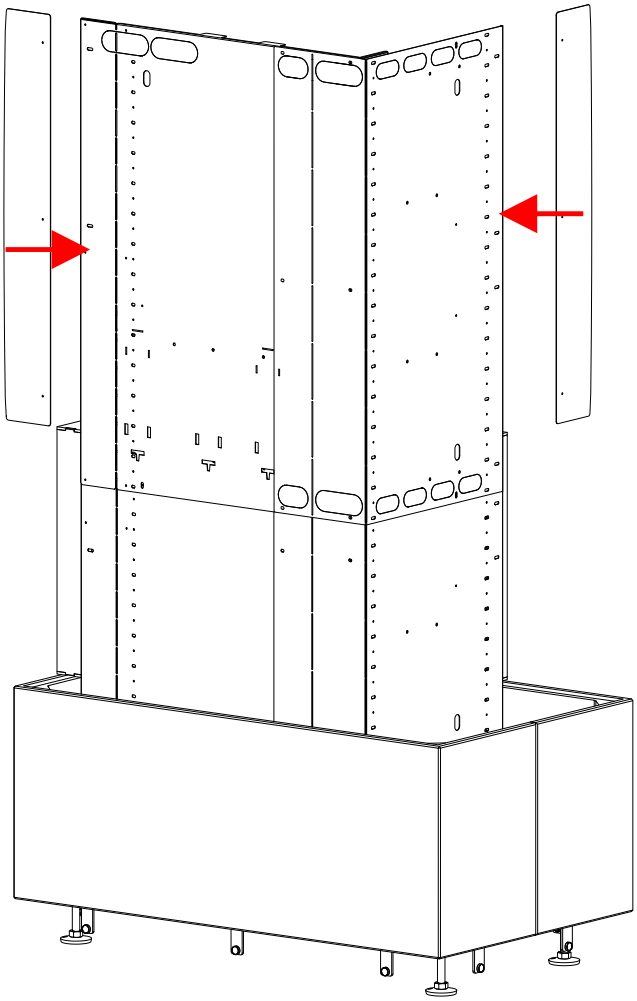




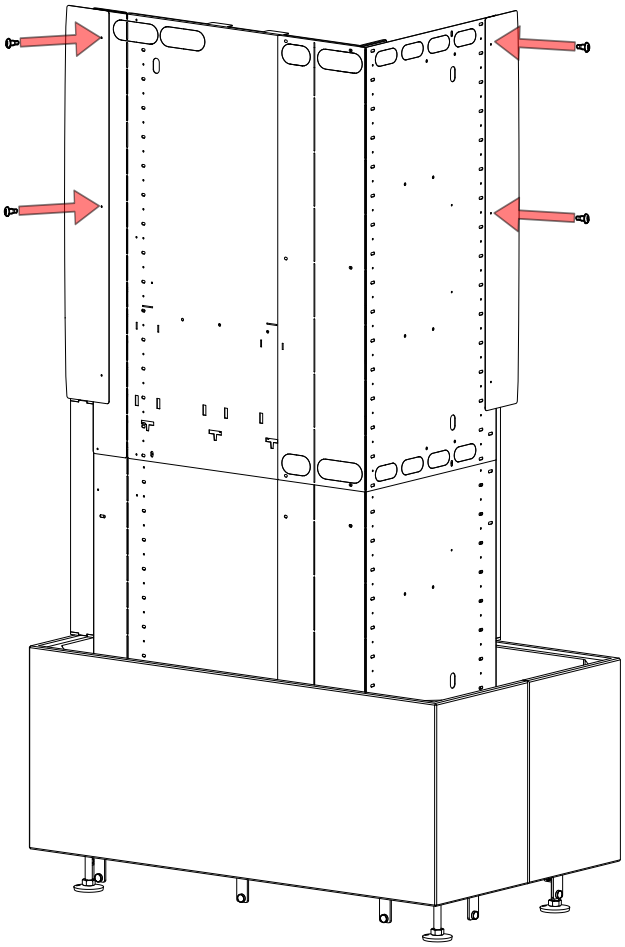








© 2023 Brunner GmbH

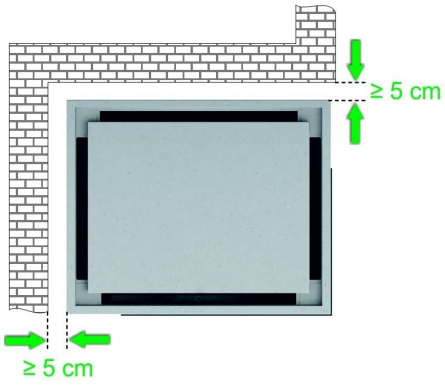


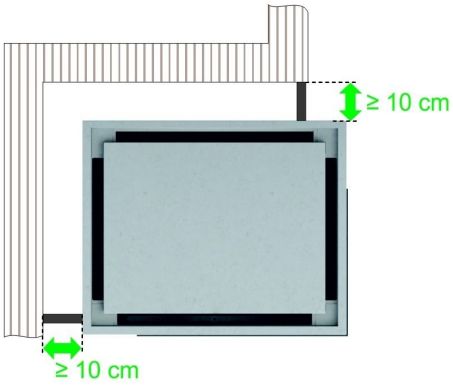
5 MINIMAL DISTANCES

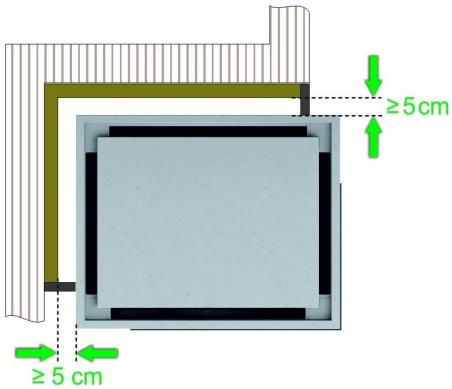
Minimal distances to adjacent walls

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.

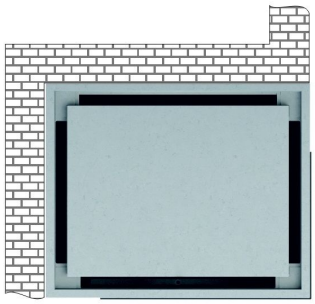
Without heat protection screen:

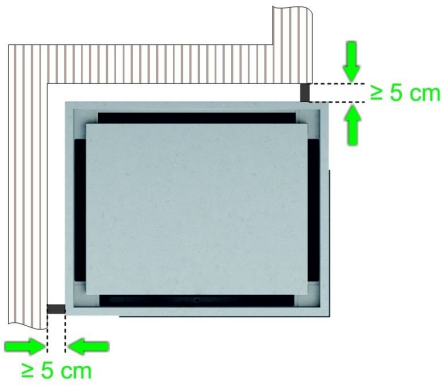


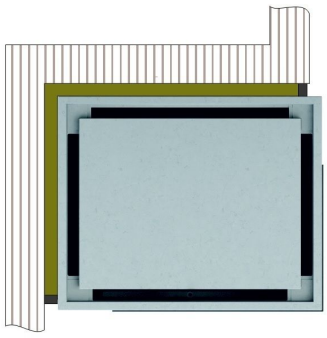




With installed heat protection screens:







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

Thermal concrete slabs (assembled by craftsman, with exposed joints)

Non-flammable wall, not requiring protection (other walls)

Flammable walls requiring protection

Brick lining or equivalent alternative insulation material, insulating panel

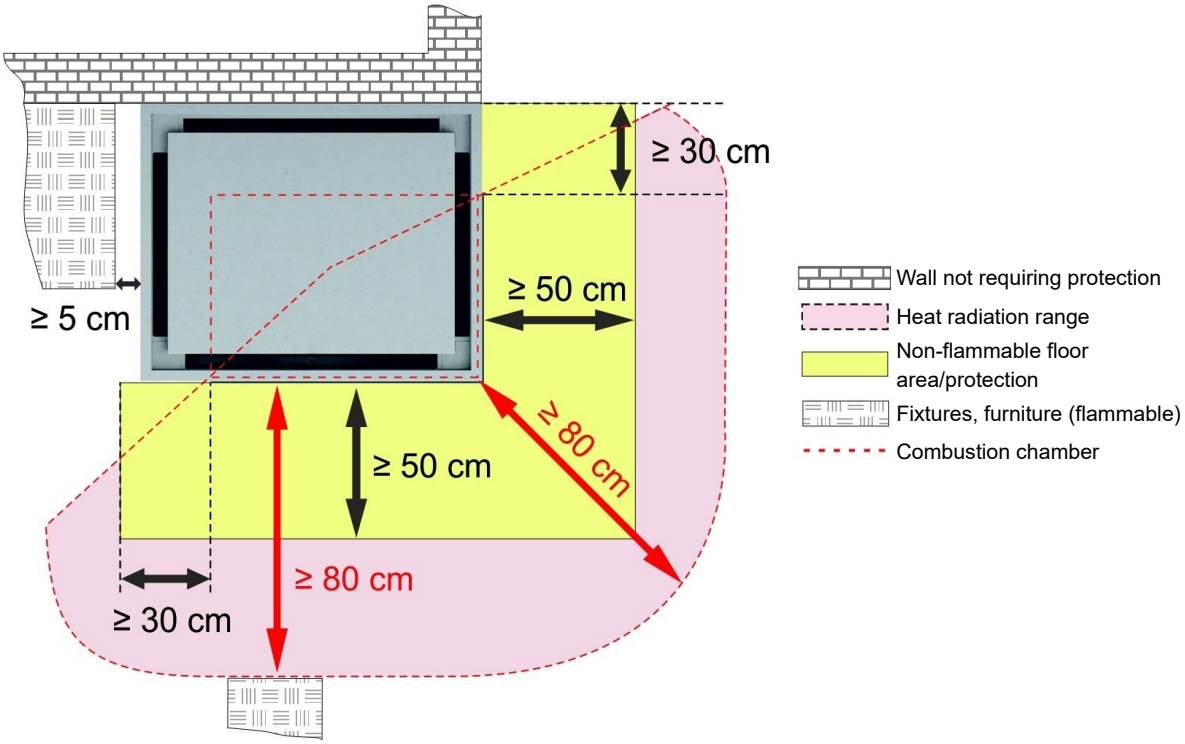
© 2023 Brunner GmbH

6 HEAT RADIATION RANGE

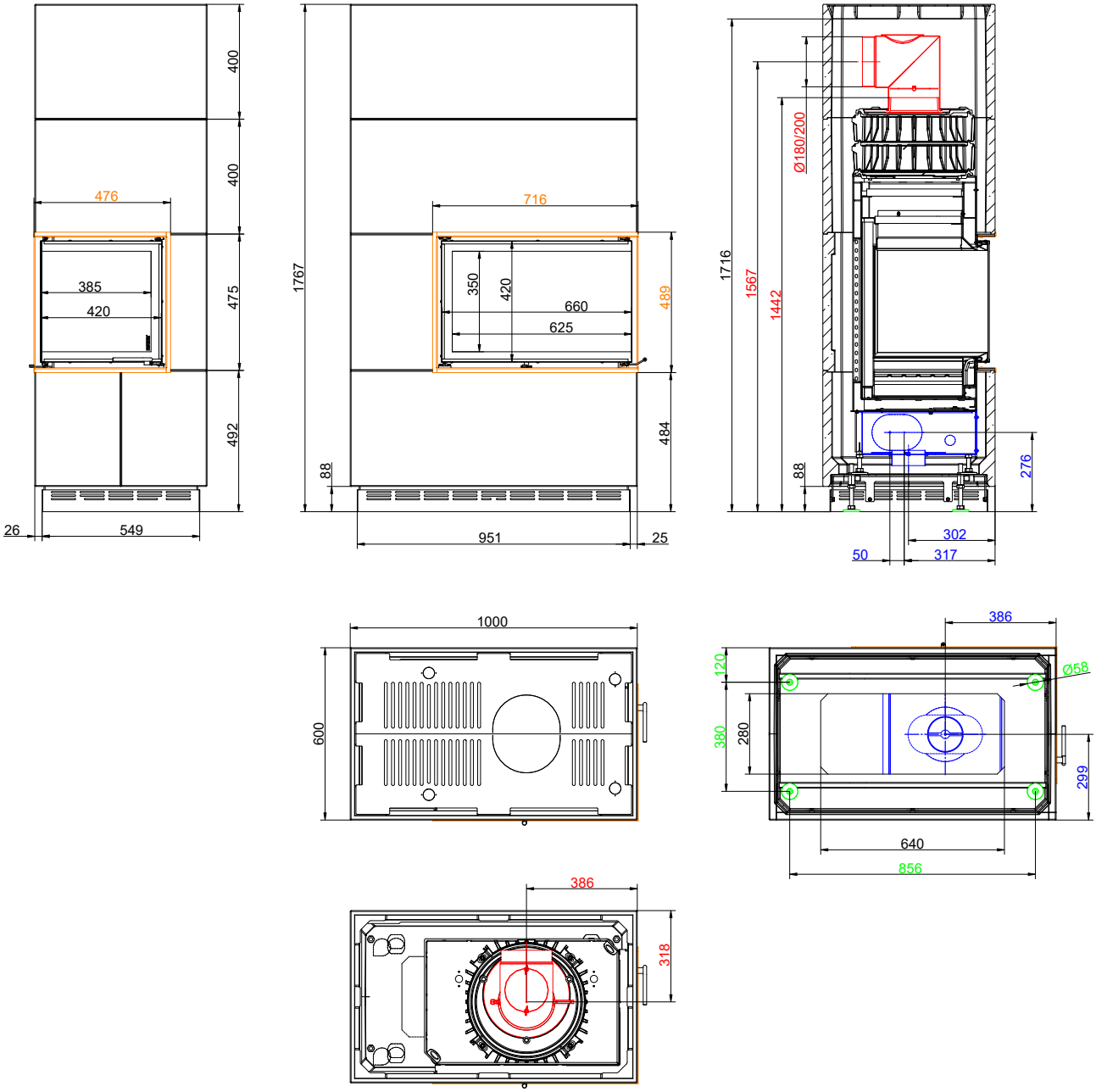
Within the range of heat radiation through the fireplace door (glass pane) there must be a minimal distance to all flammable parts (e.g. built-in furniture, fixtures) of at least 80 cm.

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.



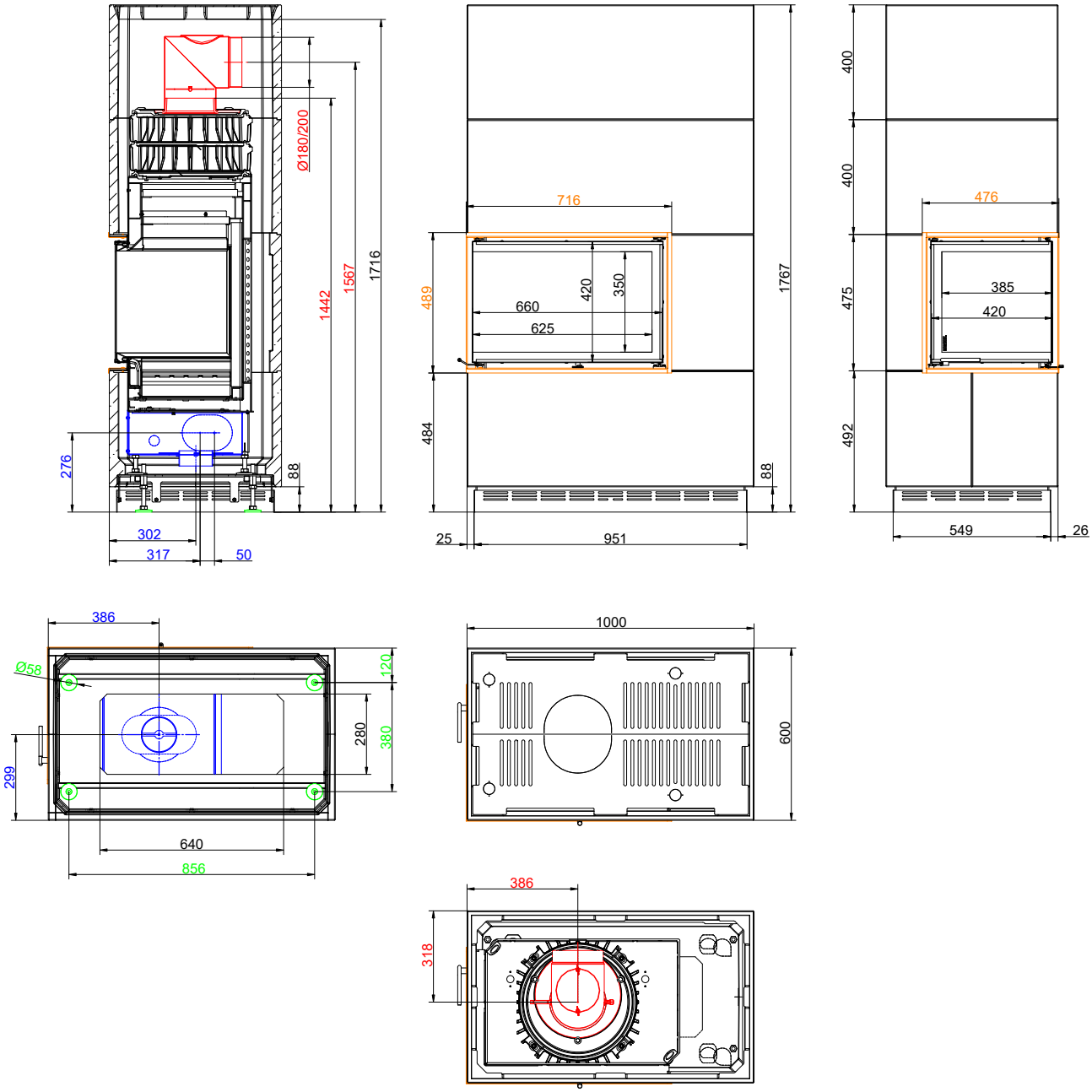
Dimension sheets - BSK Eck 42-66-42 green side-opening door



… right, frame (orange), combustion air nozzle (blue), levelling feet (green)

Stand: 2023-12-19

Dimension sheets - BSK Eck 42-66-42 green side-opening door



… left, frame (orange), combustion air nozzle (blue), levelling feet (green)

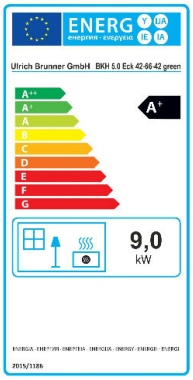
We suggest for CAD planning Palette CAD. Permanent updated drawings: www.brunner.de
Frames/ flue gas outlet connection/ combustion air supply connection/ front variants/ support bearing are marked in color.

Planning and installation - BSK Eck 42-66-42 green side-opening door

Tested according to		EN 13229
Data for functional demonstration		
Rated heat power	kW	9
Fire wood volume	kg/h	2.8
Flue gas mass flow	g/s	10.0
Flue gas temeperature	°C	200
Necessary supply pressure [1)]	Pa	12
Combustion air consumption	m^3/h	30
Combustion air connection Ø	mm	125
Cladding components [2)]		
Foot print (W x D)	mm	1000 x 600
Overall height	mm	1767
Height of extension ring	mm	-
Minimal distances		
to mounting wall	cm	5
to mounting wall with heat protection panels	cm	0
to combustible mounting wall	cm	10
to combustible mounting wall with heat protection panels	cm	5
from top of fireplace to ceiling	cm	50
Cross-section of gratings [3)]		
exhaust warm air	cm^2	992
Recirculation air	cm^2	680
Weight		
Total weight	kg	564
Meets requirement/limit values for:		
Germany/ Austria / Switzerland / Norway		1.BImSchV (Stufe 2) / 15a BVG (2015) / LRV / NS 3059

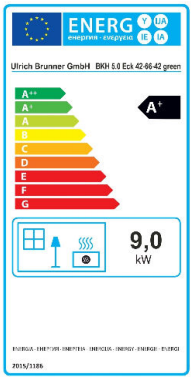
1) Damper flap recommended
2) Quality features of the cladding components in concrete look (fair-faced concrete class 2-3)
   Dimensional tolerances of the casting mold parts
   Straightness: +- 2 mm/m
   Length/width/thickness: +- 2 mm
   Squareness: +- 2 mm
   Flatness: +- 2,5 mm
   Surface to visible 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:	BKH 5.0 Eck 42-66-42 green DTL
Energy efficiency class:	A+
Direct heat output:	9,0 kW
Indirect heat output:	N.A. kW
Energy efficiency index:	111
Fuel energy efficiency (at nominal heat output):	84,0 %
Fuel energy efficiency (at minimum load):	N.A. %
Special precautions: see supplied product documentation	

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



Supplier's name or trademark	Ulrich Brunner GmbH
Model identifier:	BKH 5.0 Eck 42-66-42 green DTR
Energy efficiency class:	A+
Direct heat output:	9,0 kW
Indirect heat output:	N.A. kW
Energy efficiency index:	111
Fuel energy efficiency (at nominal heat output):	84,0 %
Fuel energy efficiency (at minimum load):	N.A. %
Special precautions: see supplied product documentation	

Ulrich Brunner GmbH
Zellhuber Ring 17-18
D-84307 Eggenfelden
Tel.: +49 (0) 8721/771-0 / Fax: +49 (0) 8721/771-100
Email: info@brunner.de

Technical and assortment changes as well as errors and misprints reserved.
Reprinting and reproduction, even in part, only with the express permission of the publisher.

Art.-Nr.: 202947