

FIREPLACE *inserts* *green*



BRUNNER®

made in germany.



Hubertus Brunner & Ulrich Brunner

made in germany.

Humanity is facing one of the greatest challenges of its time – the climate change. It means: A lot will have to change. Of course, this includes heating.

We have accepted the challenge, and we realized the following: We will not get any further just by making improvements only. We have to re-invent our heating devices.

As a result, we developed the BRUNNER "green-line". Fireplaces, which are different from anything you have seen before. So efficient, sustainable and climate-friendly, that the new technology is already patent-pending.

Our new "green-line" contains a whole series of unbeatable advantages: over 40 years of experience and art of engineering made in Germany.



We are BRUNNER.

Hubertus Brunner

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FIRE EXPERIENCE

Fireplace

At first, all fireplaces look the same. They all come with the similar firebox dimensions and glass sizes. But when you take a good look, or at least after some time in operation, you will notice that some products are price-optimized, while other products are developed with their function in mind.

BRUNNER has combined environmental matters and user experience in a perfect way.

**A FIREPLACE EXPERIENCE WHICH IS FUN –
A PERFECT FLAME WITH THE LOWEST EMISSIONS.**

The view of fire is not disturbed by unnecessary parts. The door handle and the frame around the glass are deliberately minimized and thin as much as possible.

BKH flat 42-66 green with lifting door
Cast iron combustion chamber lining



THE NEW GENERATION OF

BRUNNER *fireplaces*

Since 2003, when the Kompakt-Kamins were introduced, we have adapted our product range and the available variants to the desires and needs of our customers and the legal requirements over and over again – this is our understanding of close-to-life technical evolution.

Fireplaces are a good choice, when there is nothing more important than atmosphere. Their design, load of wood and the related heating power are adapted to this basic criterion.

BKH *green*



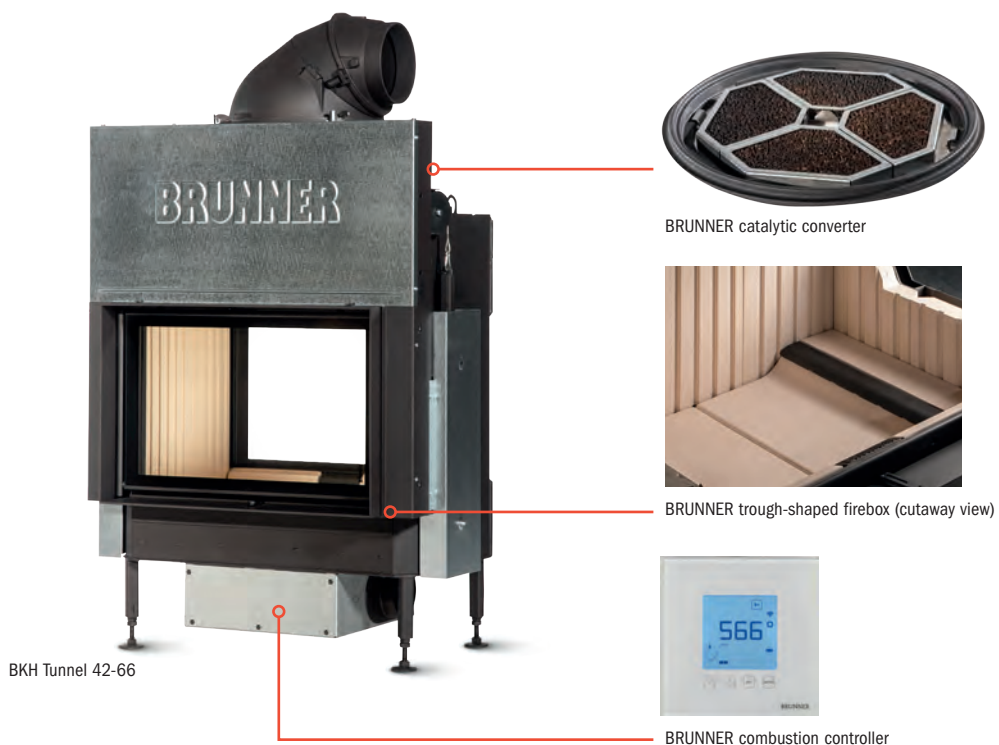
BRUNNER fireplace inserts made of steel are available in many different glass formats, with side-opening or lifting doors, and with various reheating systems – for the perfect fire experience with heating effect on demand.



BKH flat 42-66 green with lifting door
Cast iron combustion chamber lining

WE RE-INVENTED EVERYTHING FROM THE SCRATCH, WITH ONE EXCEPTION: THE FIRE ITSELF. IT WILL ALWAYS BE THE SAME!

Fireplaces with the *green* badge have a unique and patented combustion chamber with a trough-shaped bottom. It is a future-proof solution for perfect flames and lowest emissions. The emissions are significantly below all valid limits, even without any additional equipment.



But there is more. Combined with the electronic stove control systems EAS or EOS and the optional catalytic converter, it is possible to reach the next level: *green*⁺. Perfect conditions for a sustainable future.

THE BEST THING, THAT CAN HAPPEN TO A FIREPLACE!



From left to right:
BKH Tunnel 42-66 green with lifting/side-opening doors,
BKH flat 42-66 green with side-opening door,
BKH corner 42-66-42 r green with side-opening door



The door remains closed.

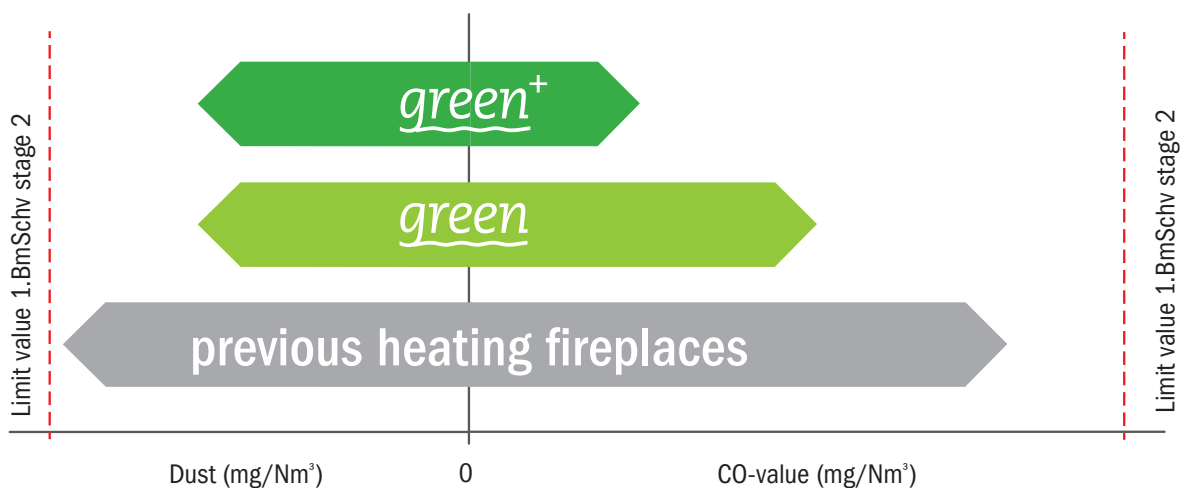
Fireplaces with open doors are causing higher emissions and have reduced efficiency.

In case of BKH green this mode of operation is not supported! After combustion ends, the door can be opened for loading wood.



HOW GREEN IS YOUR TYPE?

green is the new standard of BRUNNER fireplaces. With the right fuel and proper use it is always possible to achieve verifiable emissions. We do not need a "lab mode" – with us everybody can be green even at home.



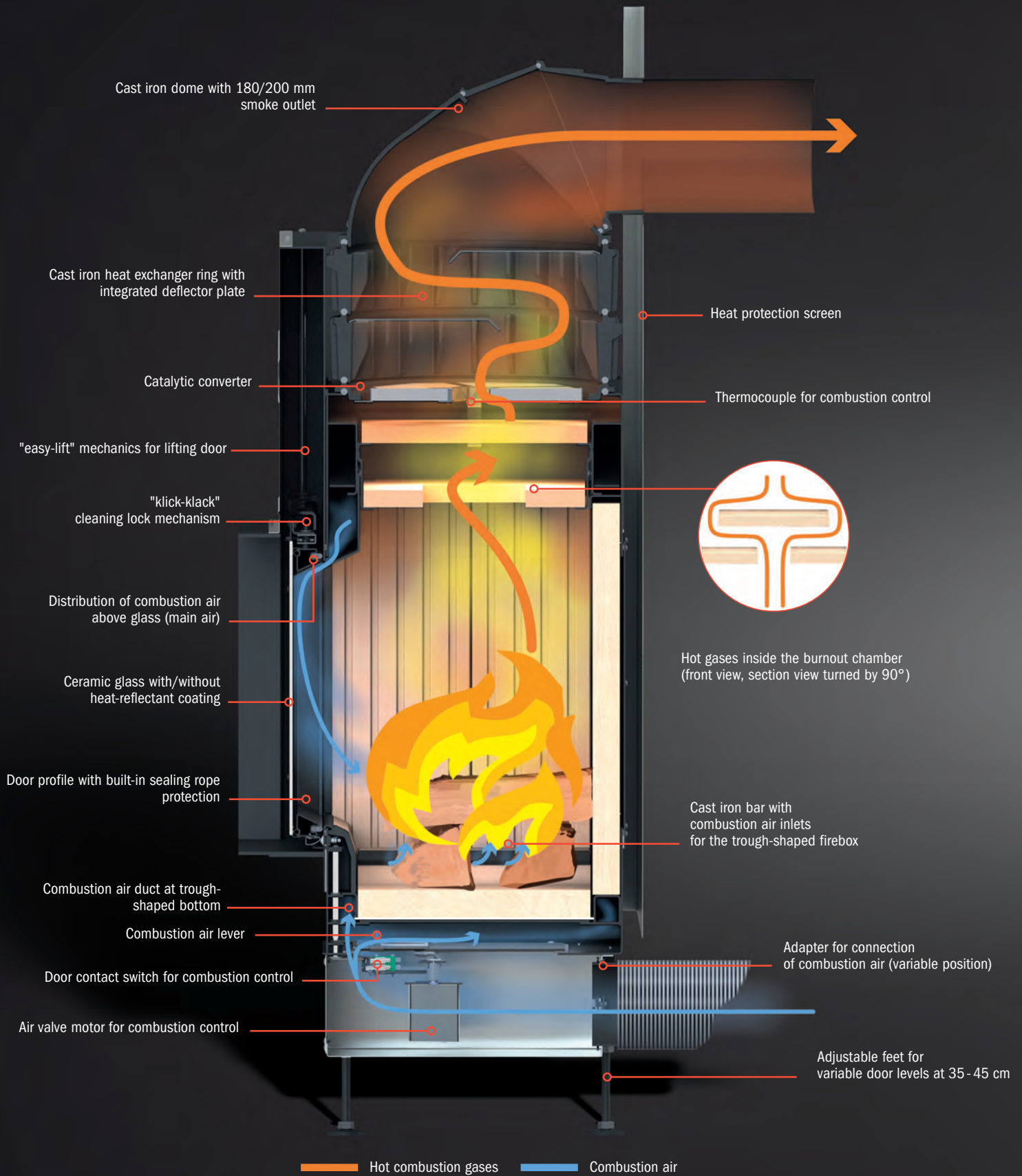
Particulate matter and CO emissions of the current series and the new "green" series of fireplaces (flat glass models). With the integrated catalytic converter as green+. The current limits according to emission-control law (in Germany) are marked in red.

In combination with a catalytic converter and electronic combustion control it is possible to reach the *green+* level.

The decision is up to you and it is possible to upgrade your fireplace later, if you wish to do so.



BKH flat 42-66 green with lifting door
Cast iron combustion chamber lining



BKH FLAT 42-66 *green+* WITH LIFTING DOOR AND CAST IRON HEAT EXCHANGER RINGS

THE IMPORTANT THINGS ARE FOUND INSIDE

The combustion chamber geometry is new and protected by patents. The BRUNNER "trough-shaped firebox" does not need a grating or ashtray at the bottom. Hidden from sight, the combustion air enters at the side of the trough-shaped firebox (primary air) and as glass purging air (secondary air) flows down from the upper door edge into the combustion chamber.

Depending on the situation, the right proportion between primary and secondary air, determined by factory testing, is selected by using the front control lever.

It is no secret, why the BRUNNER fireplaces burn so clean!



Cutaway view: BRUNNER trough-shaped firebox
with chamotte combustion chamber lining

Experience in wood combustion, knowledge of thermal load requirements, and attention to detail – all of the above can be found in BRUNNER fireplace inserts.

BRUNNER *Quality*

WE COULD HAVE MADE IT CHEAPER,
BUT WE DID NOT!

Quality is driven by passion, not by regulations. Our standards are met, when the expectations of our customers are fulfilled, and match their experience, or even exceed them through our constant improvements.

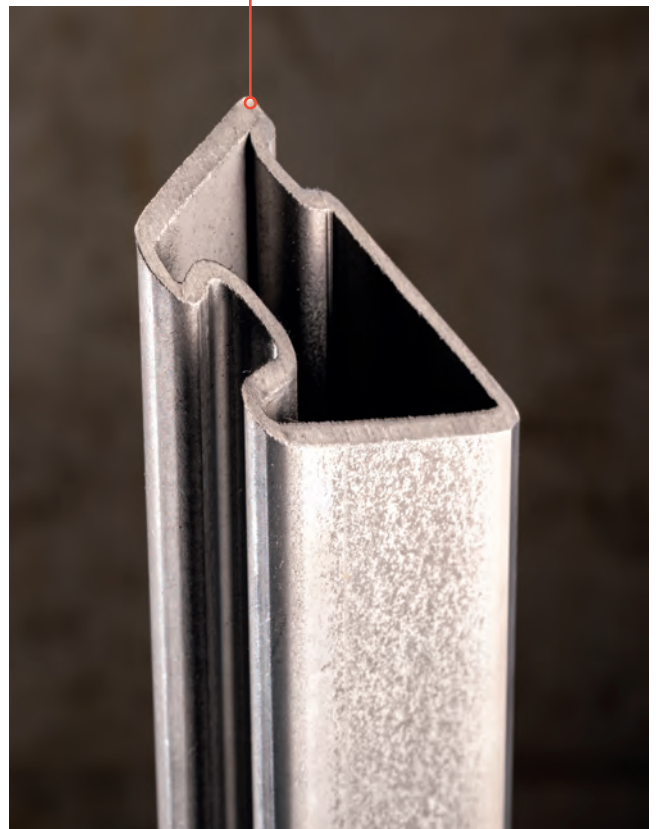
In our products there are many components under high mechanical and thermal loads. It is mostly a matter of experience to make the right choice when selecting details that will ensure long-lasting and good function!

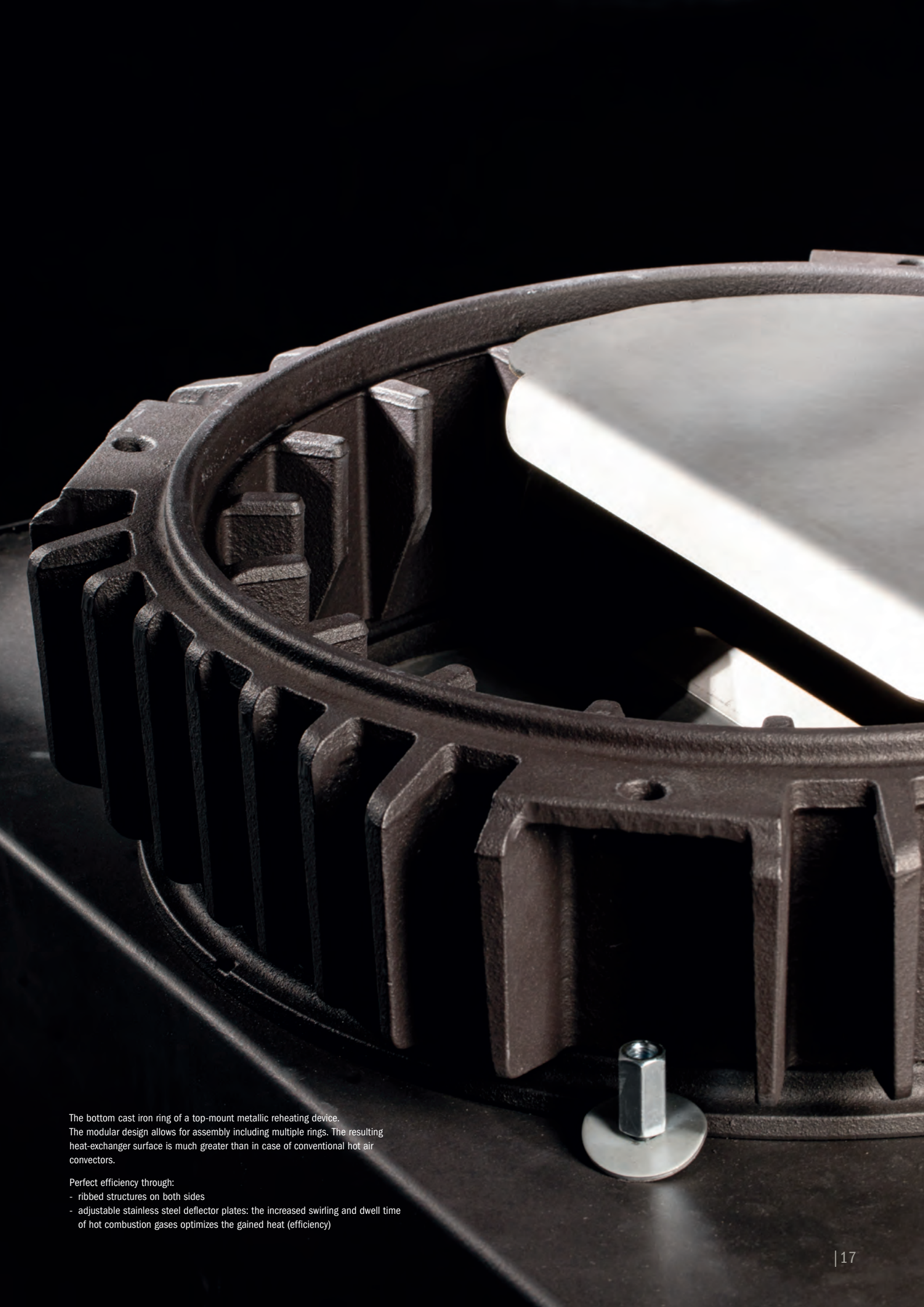
BRUNNER door sealing rope - a flexible sealing hose with a metal spring core. Thermal resistance up to 750° Celsius.

BRUNNER "puzzle-profile" - multiple-bent and torsion-resistant door frame profiles with ducts for sealing ropes and ceramic glass mounting.



BRUNNER full-metal pulleys - heavy-duty design for all lifting door variants (easy-lift). The built-in and laid-open ball bearings are suitable for operation in high temperatures.





The bottom cast iron ring of a top-mount metallic reheating device. The modular design allows for assembly including multiple rings. The resulting heat-exchanger surface is much greater than in case of conventional hot air convectors.

Perfect efficiency through:

- ribbed structures on both sides
- adjustable stainless steel deflector plates: the increased swirling and dwell time of hot combustion gases optimizes the gained heat (efficiency)



Flat fireplaces - available formats

42-50

42-66



BKH flat 42-66 green with lifting door
Cast iron combustion chamber lining

42-98

50-82

50-98

Door dimensions: height - width in cm

THE NEXT

Quality LEVEL



green⁺

MAKING GOOD EVEN BETTER

With the combustion control system and the catalytic converter, the new BRUNNER fireplaces can be raised to a next level – *green⁺*

It is still up to you, if you decide in advance for the comfort of use provided by our electronic stove control system, or if you want to upgrade your fireplace later and install the control system together with the catalytic converter.

Regardless of your decision, you can be sure that it is still possible to react, if the legal requirements and limits will change sometime in the future.



green⁺



green



previous heating fireplaces

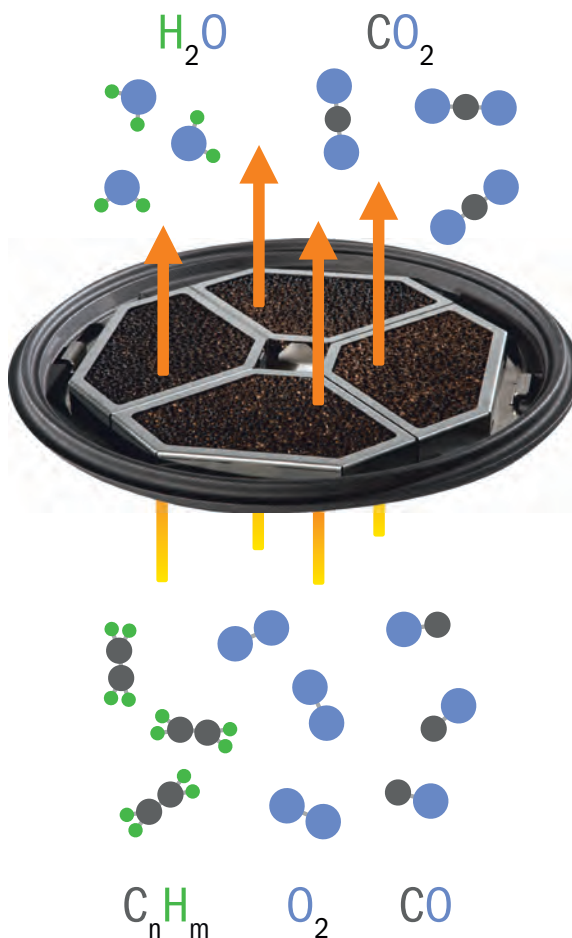


THE CATALYTIC CONVERTER – RETROFITTABLE AT ANY TIME

The catalytic converter is installed directly inside the fireplace insert and can be mounted or cleaned through the combustion chamber.

The hot gases are streaming from the combustion chamber through the porous sponge-like ceramic with catalytic coating. The process of complete combustion, i.e. conversion of CO to CO₂ as well as hydrocarbons to CO₂ and H₂O, starts already at temperatures around 250° Celsius.

A study performed by the German Biomass Research Center has shown: By using a catalytic converter it is possible to reduce up to 80% of CO emissions and over 50% of hydrocarbons.



Catalytic converter
effective from 250° C

Function of oxidating catalytic converters: in temperatures above 250° C, carbon monoxide (CO), hydrocarbons (C_nH_m) and oxygen (O₂) are converted to carbon dioxide (CO₂) and water (H₂O).



The catalytic converter must be cleaned with a vacuum cleaner after approx. 100 combustion cycles. It is also possible to remove the complete unit, when cleaning must be performed outside, or when parts of the catalytic converter have to be replaced.

"Metal cage" for catalytic converter parts

Bypass opening ("gas slit") > 20 cm²

Catalytic converter insert (sponge-like ceramic)

Cast iron ring used to mount the BRUNNER catalytic converter (with bayonett lock)

EAS COMBUSTION CONTROL

Invented by BRUNNER and proven itself useful in over 100,000 stoves and fireplaces. Safety, comfort of use and the easiest way to perfect heating.

BRUNNER control systems are not just for adjusting combustion air supply. They also detect typical errors when loading wood. Too little, damp or unsuitable wood leads to appropriate notifications. Relevant feedback allows for improvement in terms of user actions and combustion quality.

Just light the fire and the control system will do the rest. Even the right moment for loading wood is shown.

This is not just simple and sustainable, but also optimizes efficiency and saves wood.



EAS 3 display unit



BKH corner 42-66-42 r green with lifting door
with EAS combustion control
Chamotte combustion chamber lining



BKH Tunnel 50-98 green with lifting/tilting door
Cast iron combustion chamber lining
Detachable door handle

Tunnel fireplaces - available formats

The fireplace can be operated from one side. The second door on opposite side can be opened or tilted for cleaning by using a tool.

42-50

42-66

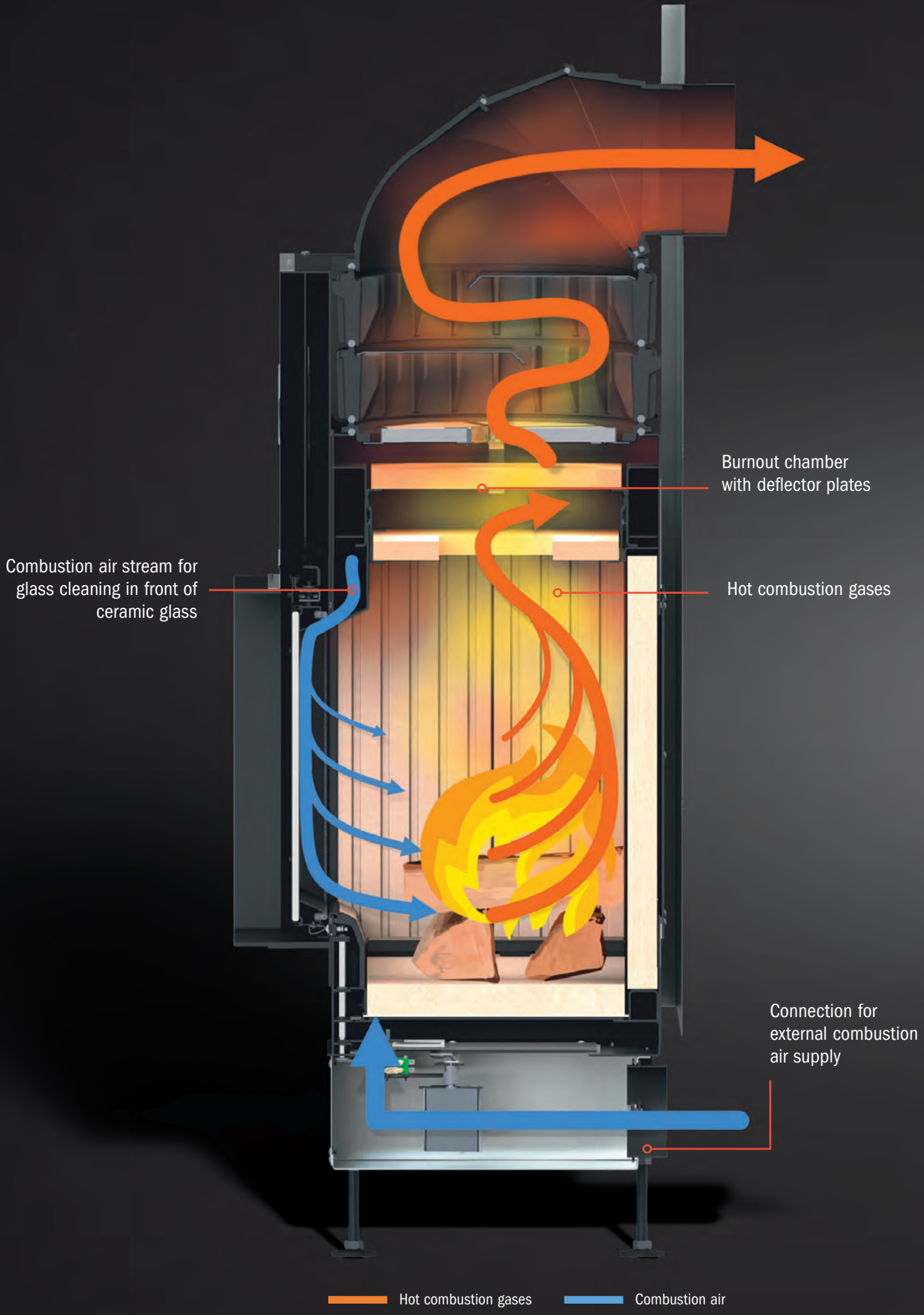


42-98

50-82

50-98

Door dimensions: height - width in cm



4 Reasons

WHY THE GLASS PANES STAY CLEAN FOR LONGER.

Fireplace design, chimney negative pressure, fuel and operation are the significant factors for clean glass panes*.

1. Air-tight structure and clean combustion.

BRUNNER fireplaces are extremely tight structures. The combustion air stream in front of the glass is able to create a stable "air barrier", reducing the deposits of soot and particulate matter.

Flat glass panes remain clean for longer. Two- or three-fold glass formats (corner & Panorama fireplaces), with more turbulent air flow within the corner areas, need to be cleaned more often.

2. Chimney negative pressure

Too high or too low negative pressure is not possible to compensate by adjusting combustion air supply. Under such conditions, complete combustion is not possible and soot build-up is more intense.

3. Humidity and load of wood

Dry wood in prescribed amount and size is another important factor of clean combustion. Only with high-quality fuel and appropriate user action it is possible to achieve the required temperatures and streaming conditions for glass purging.

When combustion temperatures are too low, the hot combustion gases condensate on the cold glass surface despite the protective air curtain. The glass fogs up and soot deposits emerge.

4. Appropriate manual operation or combustion control

Even the best fireplace users make errors and sometimes fail to adjust the air supply at the right moment. Electronic combustion control allows for reliable automation of this process and detects common errors during use. Too little, damp or unsuitable wood leads to appropriate notifications.

* depending on the intensity of use and the individual conditions during a combustion process, the glass must be cleaned after 2-10 combustions. Glass cleaning on a regular basis is inevitable.

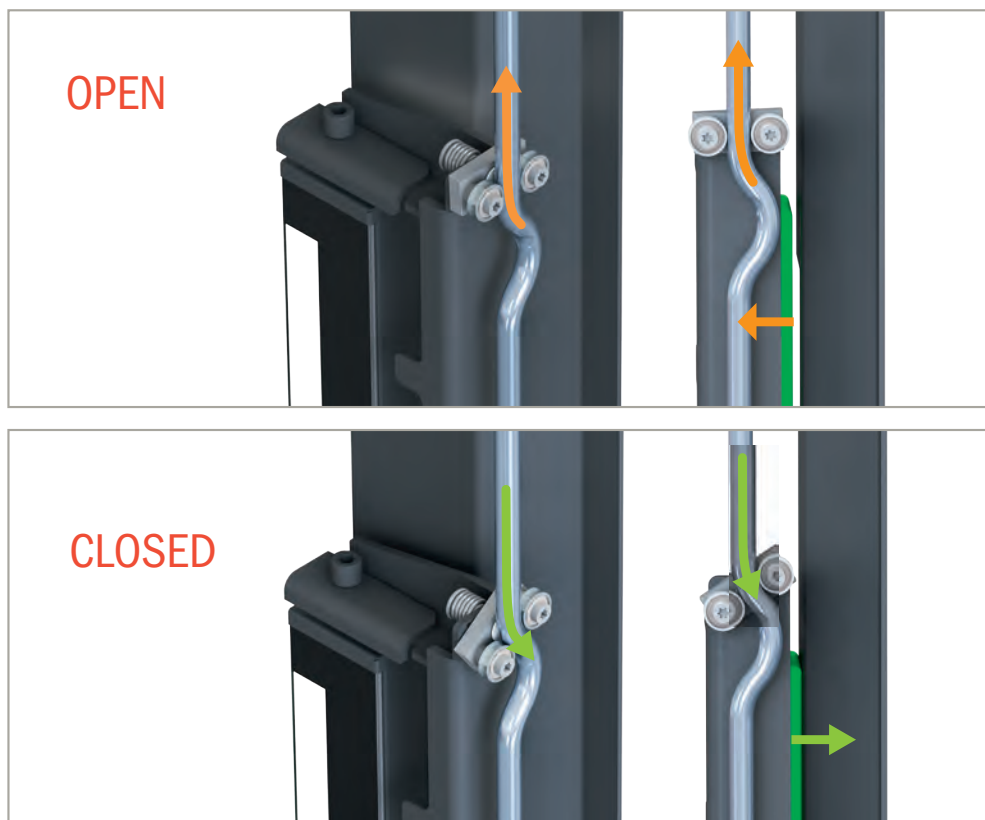
Our DESIGN

“EASY-LIFT” – A BRUNNER INVENTION.

The perfect solution for smooth-running and durable lifting door mechanics.

When the door opens, it lifts off and moves away from the fireplace body, and then glides up with ease. When the door is closed, it touches down and seals off just before the lock engages.

You will not find any other lifting door which is running more smoothly or easier to open!



Principles of "easy-lift" mechanics:

All lifting doors have two pulleys on each side, moving on a massive stainless steel shaft. The secret lies in the pretensioned spring:

- When the door opens, it lifts off and moves away from the fireplace body, and then moves up without force.
- While closing, the door falls into a recess and is pressed against the fireplace body. This mechanism ensures a circumferential and long-lasting sealing surface.



BKH corner 42-66-42 | green with lifting door
Chamotte combustion chamber lining

Our DESIGN

"KLICK-KLACK" – THE SPECIAL CLEANING LOCK.

The glass opens at the push of a button. Preparation of lifting doors for glass cleaning could not be more practical!

Always a clean glass: easy to clean, no special skills required. One click and the door falls open towards the front, or to the side in case of corner fireplaces. The inner glass surface is easy to clean.

THE "KLICK-KLACK" CLEANING LOCK IS AVAILABLE ONLY AT BRUNNER.



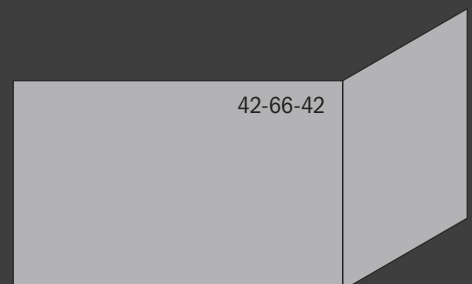


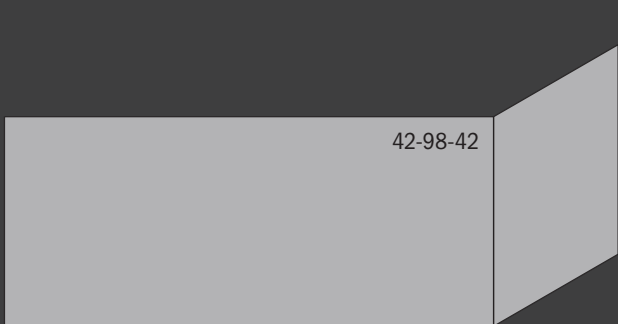
BRUNNER[®]



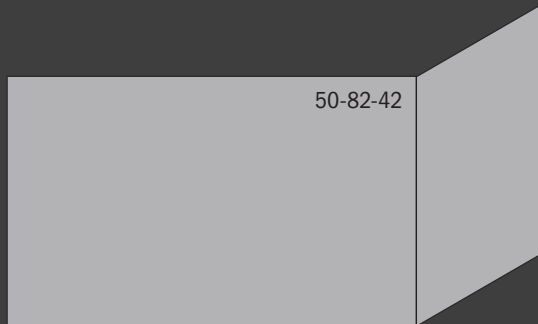
BKH corner 42-66-42 | green with lifting door
Combustion chamber lining

Corner fireplaces – available formats





42-98-42



50-82-42

Door dimensions: height - width - left/right side in cm
Left/right corner variants available

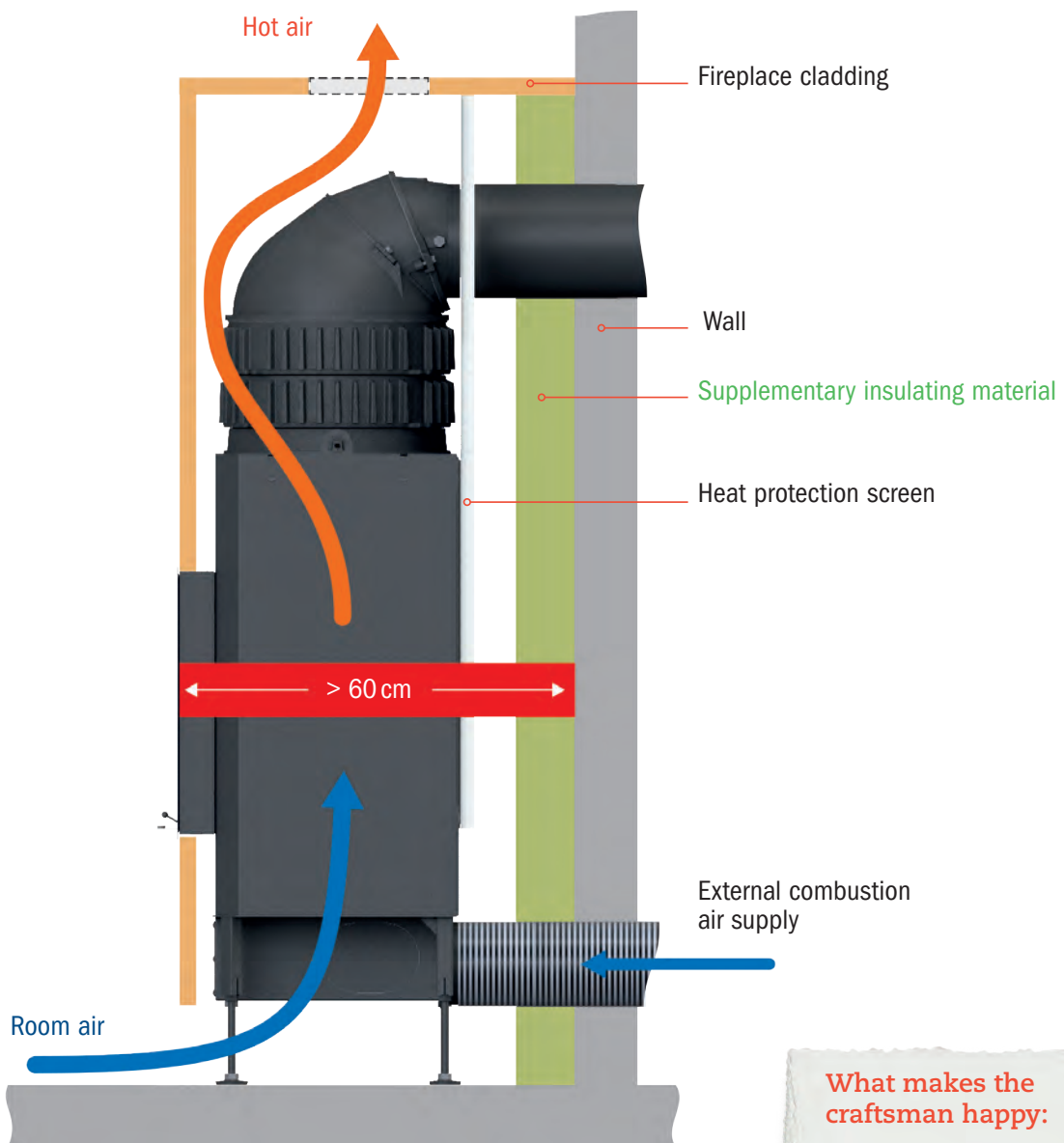
Our DESIGN

FIREPLACES WITH REDUCED DEPTH

Fireplaces are built by craftsmen according to customer wishes. In many cases, the dimensions of the fireplace are adapted to the standard dimensions of furniture.

Together with heat protection screens and supplementary insulating materials, some of our fireplaces allow for reduced installation depth.

A perfect solution, when compact dimensions are required.



With side-opening doors, the insulating concept with heat protection screens and supplementary insulating materials allows for installation depths starting from 60 cm.

What makes the craftsman happy:

- No protruding parts or assemblies on fireplace insert (ref. page 9)
- Quick assembly of fireplace cladding materials up to a thickness of 6 cm
- Less insulating materials



BKH Tunnel 42-66 green with lifting/tilting door
Cast iron combustion chamber lining

Our DESIGN

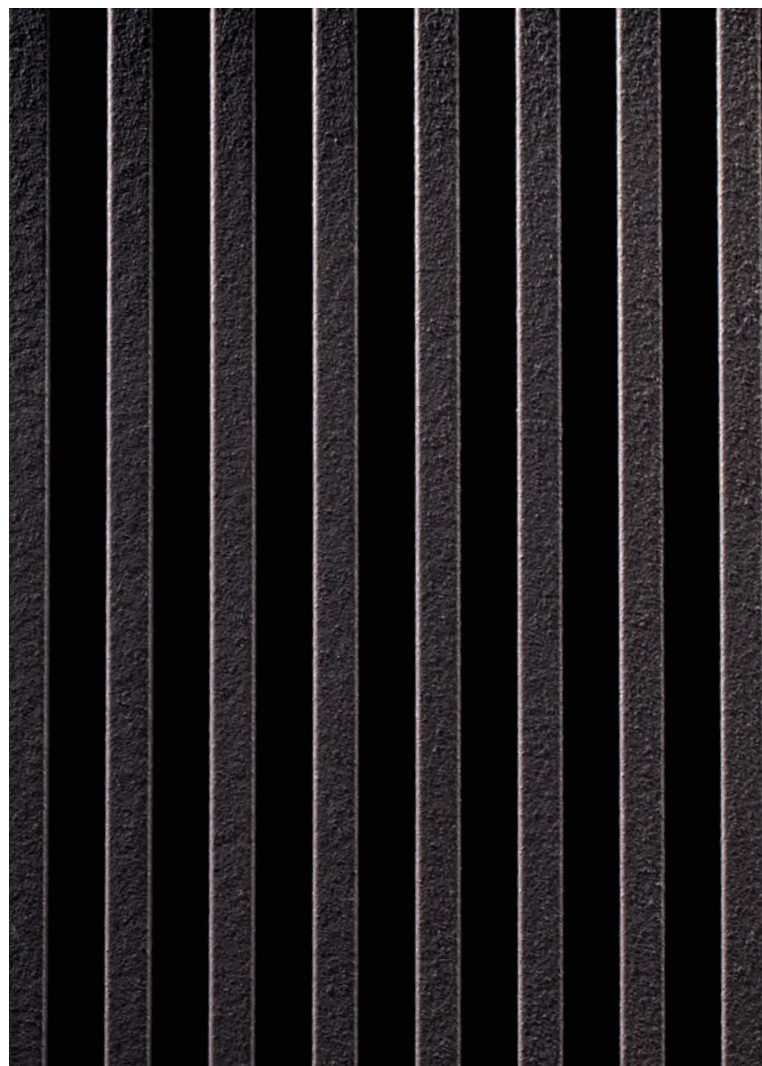
THE FIREBOX – NATURAL COLORS OR BLACK RIBBED

BRUNNER fireplaces are available with two different firebox designs:



Chamotte combustion chamber lining with grooves:

- natural bright with fine-pored surface
- 15% better insulating properties than traditional chamotte



Cast iron combustion chamber lining:

- 15 mm cast iron plates with ribbed surface
- insulated back side (25 mm Vermiculite)



Chamotte combustion chamber lining



Cast iron combustion chamber lining

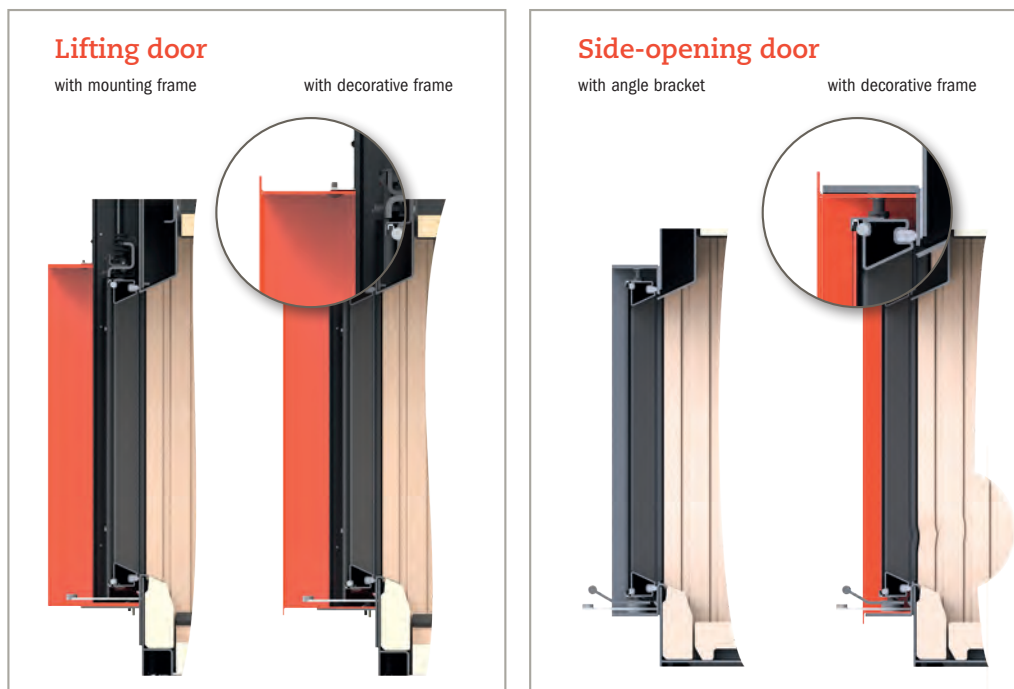
The **FRAME VARIANTS**

PERFECT SCENES FOR BURNING FIRE.

The gap between the fireplace and cladding materials can be arranged in various ways.

Angle brackets or mounting frames allow for a thin and flush effect. The fireplace door is rounded by a 5 mm thick "steel ribbon".

A seamless and perfect transition between the fireplace and cladding materials is provided by decorative door frames.



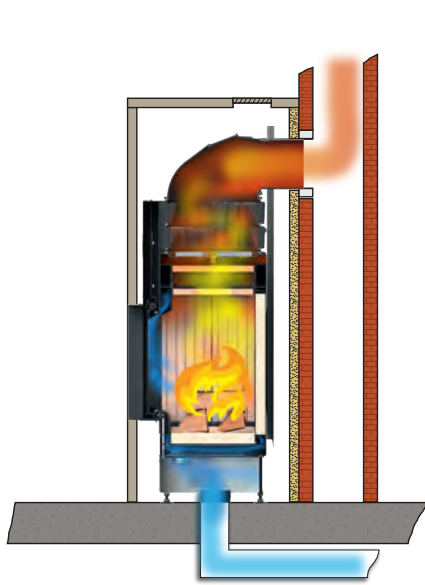
Black coated decorative and mounting frames (shown in red) in case of lifting door models are attached with screws to the fireplace insert. All models with side-opening door have a circumferential, fixed angle bracket. Decorative frames can be attached to it. Decorative frames have a 90° bend and a width of 12 mm all around. Mounting frames are made of 5 mm thick material and have a mounting depth of 60 mm. Corner fireplaces with lifting doors are available only with mounting frames.



BRUNNER

60 mm mounting frame for BKH flat with lifting door.
The door handle for all lifting door models is a detachable stick handle with a stainless steel spiral.

Fireplace systems **BY BRUNNER**

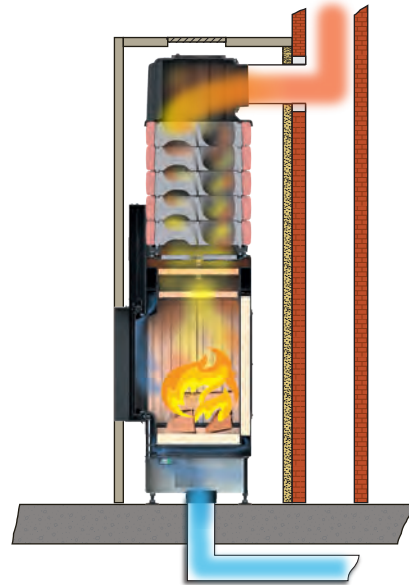


HOT AIR CONVECTION FIREPLACE

with top-mount cast iron rings.

The hot combustion gases are streaming through metallic rings. Their ribbed structure and the integrated deflector plates provide a great heat-exchanging surface.

This is a perfect solution, when high convection power is desired despite the small available space.



ACCUMULATION FIREPLACE

with top-mount accumulation rings

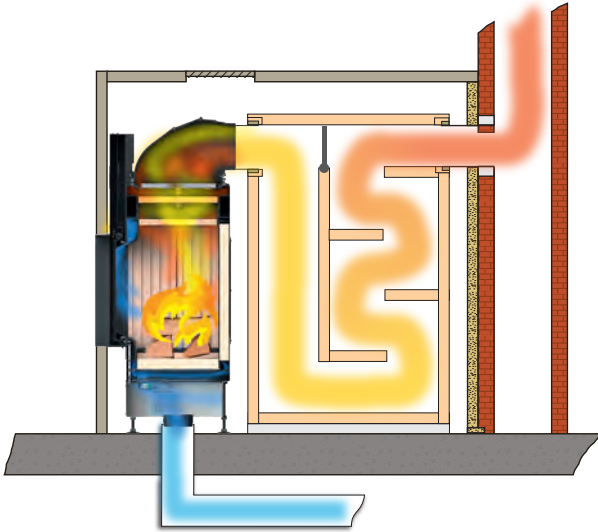
The hot combustion gases are streaming through ceramic accumulator parts. The spiral internal structure of the rings includes three hot gas channels.

This is a great option, when a fireplace with tiled-stove heating effect and a small footprint is required.





More information can be found in our thematic folder about water-bearing fireplaces and stoves

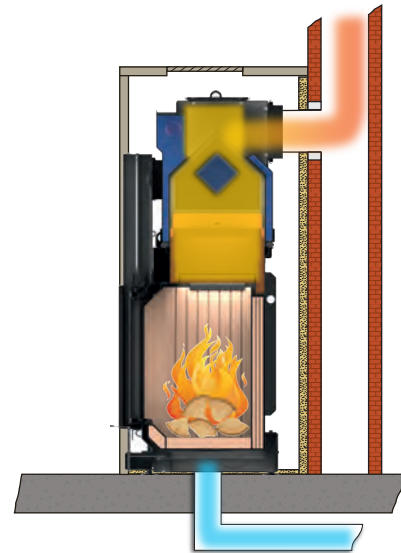


ACCUMULATION FIREPLACE

with adjacent heat storage mass

The hot combustion gases are fed through a compact cast iron dome into a separate ceramic accumulator block. These are perfect conditions for a prolonged tiled-stove heating effect.

This is the best solution, when a bigger fireplace shall act as a radiant heater.



WATER-BEARING FIREPLACE

with integrated boiler

The hot gases are fed into the integrated water-bearing heat exchanger.

This solution is recommended, when apart from the fireplace heating effect, the system shall support the central heating.



Your CHECKLIST

OUR STATEMENT.

With the BRUNNER Fireplace System in 2003 we have started a small revolution. Besides flames as usual, various heating effects, craftsmanship and technical innovations have found their way into the world of fireplaces.

In BRUNNER fireplaces, there is experience, knowledge, German engineering and lots of passion.

Compared to other manufacturers, our approach can be clearly described as optimized function and performance in every detail!

BRUNNER QUALITY FEATURES *green*

**Must
have!**

<input checked="" type="checkbox"/>	Trough-shaped firebox: <ul style="list-style-type: none">• Brunner standard of emissions for wood-burning devices (patented)• Emissions during practical use are lower than required by regulations• Firebox without grate at the bottom	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Firebox design for "cleaner glass pane": <ul style="list-style-type: none">• Air-tight construction – complete welding of all body parts• Tightly closing, torsion-resistant door• Leakproof combustion air supply with air curtain above glass pane• Optimized flow dynamics (CFD simulation technique, factory testing)	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Great view of burning fire: <ul style="list-style-type: none">• The door handle and the frame around the glass are deliberately minimized and thin as much as possible.• Thin frames for a sleek finish against the fireplace cladding	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Glass pane with two variants: <ul style="list-style-type: none">• Transparent ceramic glass• Heat-reflectant coating - reduced radiation range	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Simple operation: <ul style="list-style-type: none">• One single control lever for all combustion air fractions• Smoothly-running air supply valves (sliding plates with Teflon coating)	<input type="checkbox"/>

BRUNNER QUALITY FEATURES *green⁺*

<input checked="" type="checkbox"/>	Catalytic converter for hot gases. <ul style="list-style-type: none"> • Future-proof and ready for new requirements • Retrofittable 	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Electronic combustion control: <ul style="list-style-type: none"> • App connectivity via WLAN • Comfort of use • Detecting of errors • Optimizes system efficiency 	<input type="checkbox"/>
<input checked="" type="checkbox"/>	BRUNNER Fireplace System: <ul style="list-style-type: none"> • Top-mount reheating devices for high efficiency • Heating effects: accumulation, hot air convection 	<input type="checkbox"/>

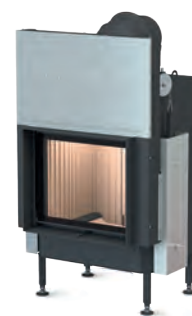
BRUNNER INNOVATIONS

<input checked="" type="checkbox"/>	"easy-lift" <ul style="list-style-type: none"> – smooth-running and tightly closing lifting door mechanics 	<input type="checkbox"/>
<input checked="" type="checkbox"/>	"klick-klack" <ul style="list-style-type: none"> • the special cleaning lock for glass panes 	<input type="checkbox"/>
<input checked="" type="checkbox"/>	"puzzle-profile" <ul style="list-style-type: none"> • multiple-bent, torsion-resistant door profile for ceramic glass mounting 	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Combustion chamber lining: <ul style="list-style-type: none"> • Sleek, bright chamotte plates with grooved surface • Robust, black cast iron plates with ribbed surface 	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Reduced depth: <ul style="list-style-type: none"> • Heat protection screens for reduced insulation thickness • Fireplace dimensions can be adapted to standard furniture dimensions 	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Low wear <ul style="list-style-type: none"> • Protected mounting of sealing ropes • Full-metal pulleys 	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Safety: <ul style="list-style-type: none"> • Safety devices (negative pressure monitoring) and integrated external air supply connection for operation together with ventilation systems 	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Maintenance-friendly <ul style="list-style-type: none"> • all moving parts accessible through the combustion chamber • components of combustion control system can be replaced through the combustion chamber 	<input type="checkbox"/>

The **VARIANTS**

SIDE-OPENING

LIFTING DOOR



BKH Flat

42-50

42-66

42-50



BKH Tunnel

42-50

42-66

42-50



BKH Corner

42-66-42 l/r

42-66-42 l/r

Type name = door height/width dimensions in cm

BKH Tunnel: The fireplace can be operated from one side. The second door on opposite side can be opened or tilted for cleaning by using a tool.



42-66



42-98



50-82



50-98



42-66



42-98



50-82



50-98



42-98-42 l/r



50-82-42 l/r



The VARIANTS

green FOR PANORAMA MODELS FROM 2024

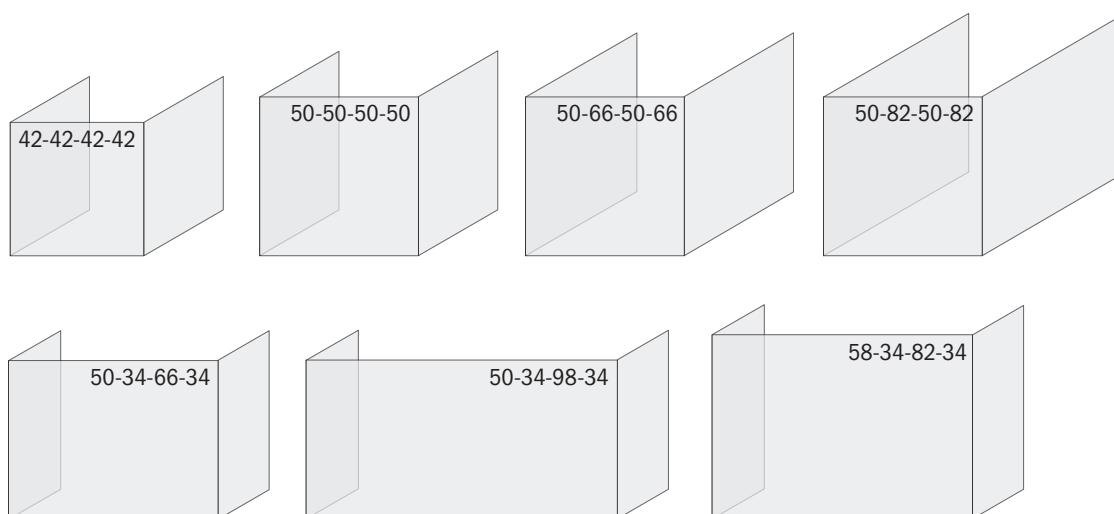
Probably the most attractive fireplace variant!

Panorama fireplaces by BRUNNER expose an unobstructed view of fire from three sides.

After the successful launch of the green series, the combustion chamber concept will be complemented in 2024 with the depicted Panorama models.

During this transition period, the corresponding fireplace inserts from our previous series are still available.

BKH Panorama



Type name = door height/side dimensions in cm



Let's make it clear:

A fireplace is for a lifetime. Because we know what it means, the components of BRUNNER fireplaces comply to the highest quality standards.

“Only the best is good enough for your fireplace.”

Therefore, insist on genuine BRUNNER. We guarantee with our good name for every piece of our fireplace components.

Eggenfelden, November 2023

Hubertus Brunner

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BKH Tunnel 42-66 green with lifting door
Cast iron combustion chamber lining

BRUNNER®

