Installation manual

HKD 8

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made in germany.

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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.

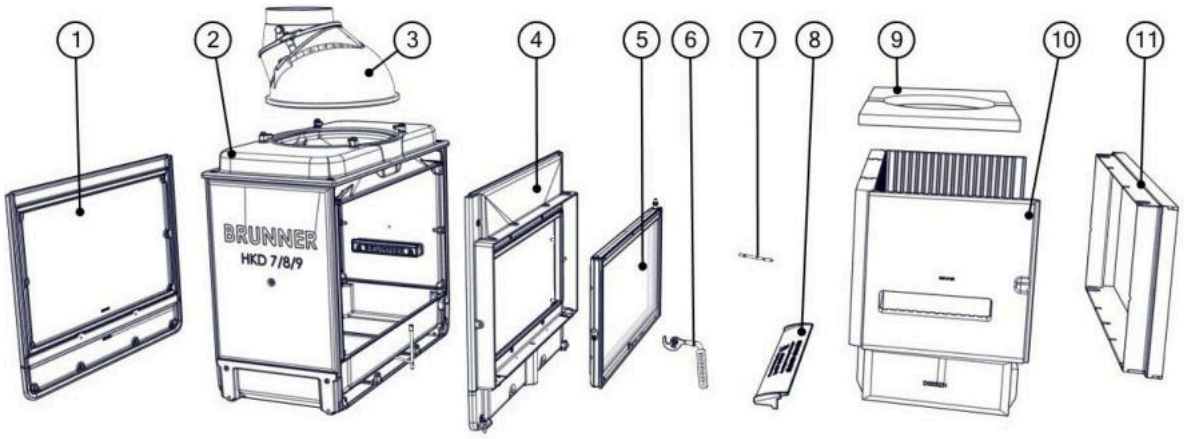
Please keep these instructions.

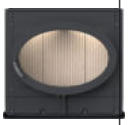
Please also take note of the online product documentation provided by:

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.

2 OVERVIEW HKD 7 / 8 / 9



Pos.	Description / Options		HKD 7	HKD 7 Tunnel	HKD 8	HKD 8 Tunnel	HKD 9	HKD 9 Tunnel
	Korpus:							
1	Rear wall		✓	-	✓	-	✓	-
2	Korpus HKD		✓	✓	✓	✓	✓	✓
	Flue gas connection:							
3	Cast iron dome Ø 200mm		O	O	O	O	O	O
	Cast iron dome Ø 180mm		O	O	O	O	O	O
	Cast iron dome Ø 200 mm low		O	O	O	O	O	O
	Accumulator MAS 440		O	O	O	O	O	O
	Front and door							
4	Front HKD 7		✓	✓	-	-	-	-
	Front HKD 8		-	-	✓	✓	-	-
	Front HKD 9		-	-	-	-	✓	✓
5	Side opening door with simple gass		O	O	O	O	O	O
	Side opening door with double gass		O	O	O	O	O	O
6	Door handle		✓	✓	✓	✓	✓	✓
7	Handle for combustion air control		✓ 1)	✓ 1)	✓ 1)	✓ 1)	✓ 1)	✓ 1)
8	Textplate		✓	✓	✓	✓	✓	✓
9	Deflector plates		✓	✓	✓	✓	✓	✓

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Pos.	Description / Options	HKD 7	HKD 7 Tunnel	HKD 8	HKD 8 Tunnel	HKD 9	HKD 9 Tunnel
10	Fireclay lining set	✓	✓	✓	✓	✓	✓
11	Mountig frame	O	O	-	-	-	-
	Door frame	O	O	O	O	-	-

✓ = required **O** = optional **-** = not deliverable **1)** = only for manual handling

3 PRODUCT DESCRIPTION

The fireplace has been approved according to EN 13229 and can be combined with a metallic radiator or ceramic accumulator for greater efficiency and heating power. It can be fitted with the optional electronic stove control system (EAS/EOS) at delivery or after the fireplace installation has been completed.

Combustion air can be supplied from outside by connecting to a separate air duct.

Combustion air is supplied through a provided connecting piece. The volume of air supplied for combustion can be controlled by using a combustion air regulator.

The HKD series are designed for closed installation without any vents (hypocaust principle). Design of a hypocaust must ensure uninterrupted transfer and even distribution of heat inside the casing, preventing all parts of the heating chamber from overheating. Dimensioning of heat projecting walls of the casing must by adjusted to performance data of the heating device. Thickness of insulation for building walls surrounding the fireplace stated in technical data has been determined during continuous operation with open air vents (safety test according to EN 13229 - heat transfer coefficient of the tested wall at 0,7 W/m2K), and must be amended accordingly for different conditions (for example, by providing air ventilation for walls).

When installing electric or electronic parts (controllers, sensors, cables...) or water-conducting parts, please consider the max. permitted surrounding temperatures for these components.

The door variant (door with left or right hinge) and the option EAS/EOS must already be considered at the time of the order, a change of the door hinge and the upgrade with EAS/EOS ist not possible later.

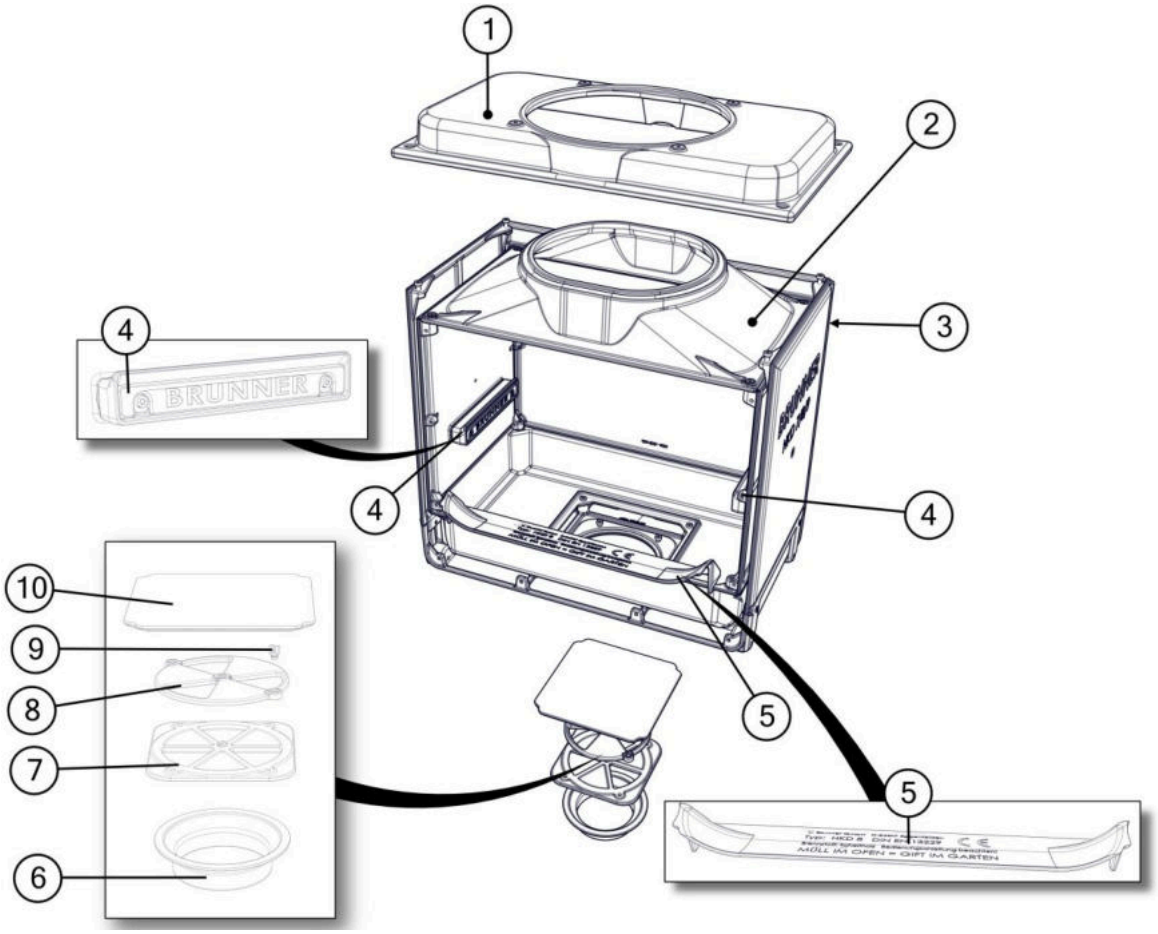
Doors with self-closing are not available.

4 DELIVERY CONTENTS

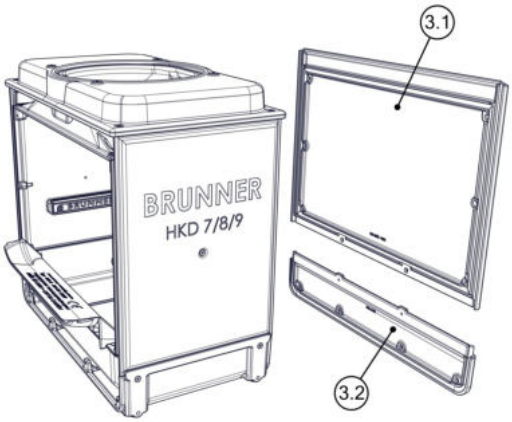
The delivery consists of different packaging units depending on the configuration of the system.

5 DESCRIPTION OF PARTS

5.1 BODY HKD 8

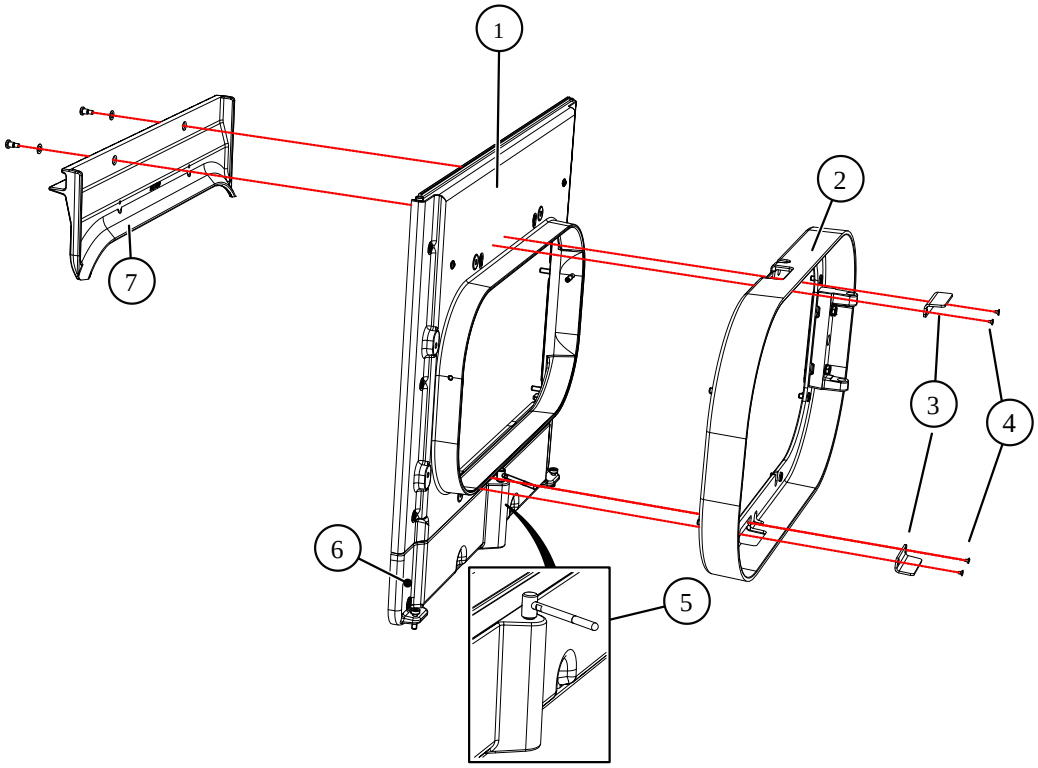


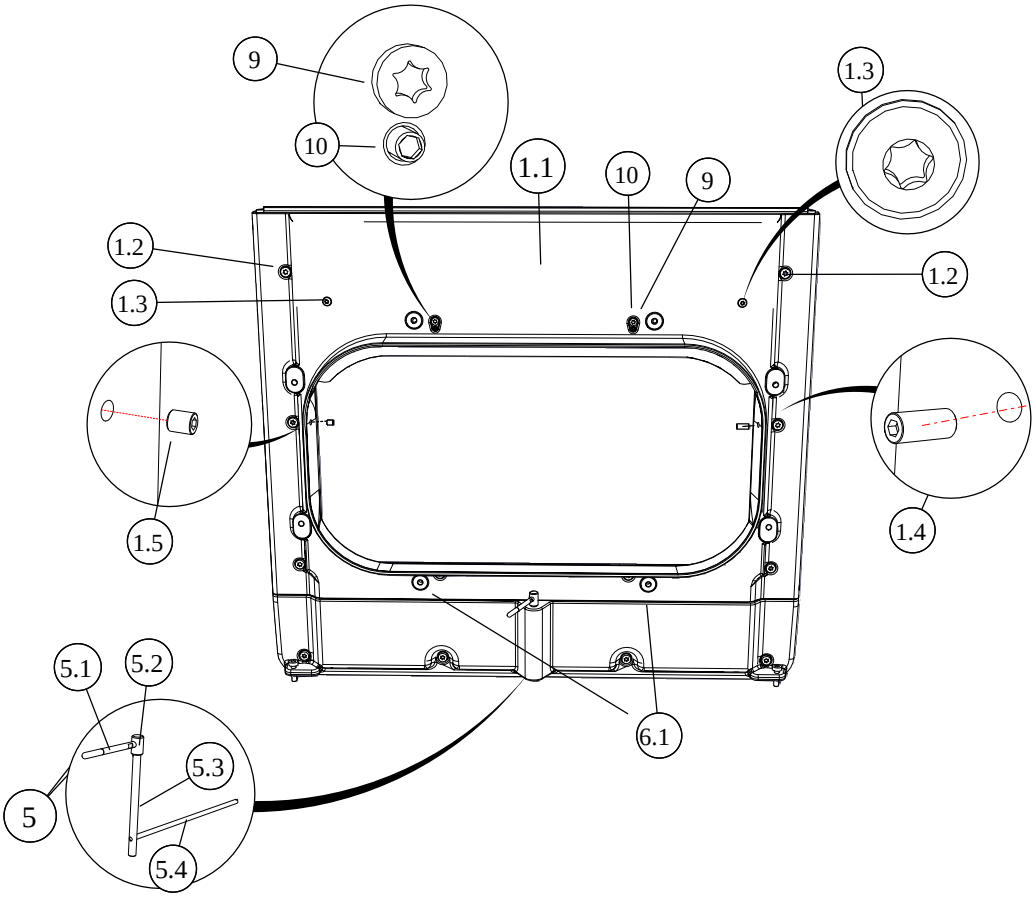
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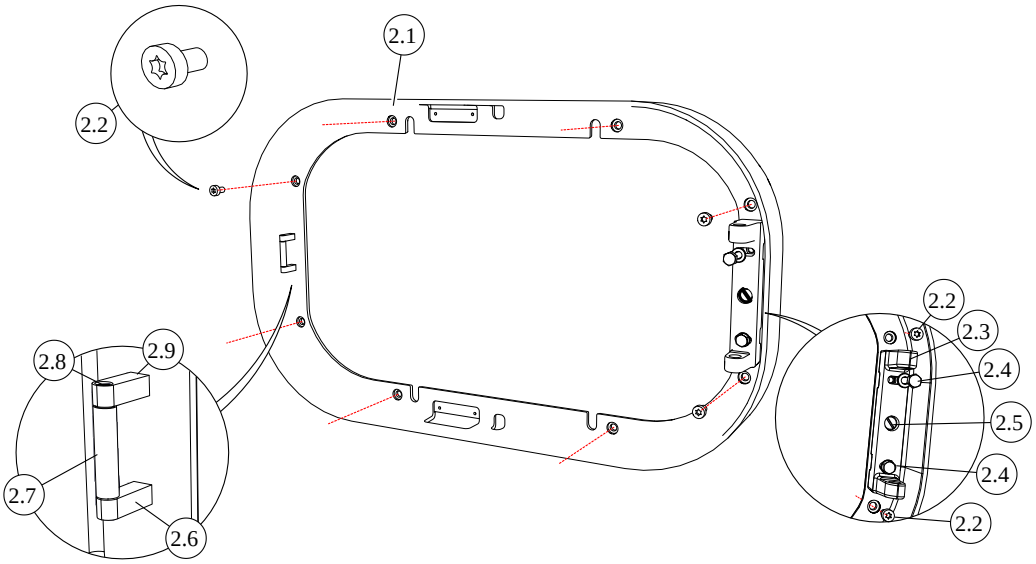


Item	Part-No.	Designation	No.
1	D016090	Inner hood assembly	1
2	D016016	Hood assembly with dome connection	1
3	D016012	Rear wall assembly	1
3.1	D016107	Upper rear wall assembly	1
3.2	D016106	Lower rear wall assembly	1
4	C010058	Air inlet assembly	2
5	D017032	Text plate	1
6	D016087	Combustion air supply nozzle dia.160	1
6	D016117	Optional: Combustion air supply nozzle dia.125	1
7	D016116	Air inlet plate	1
8	D003221	Combustion air turntable	1
9	D003239	Air adjuster mount	1
10	D016019	Revision cover assembly	1

5.2 HKD 8 FRONT ASSEMBLY







Item	PartNo.	Designation	No.
1	D017094	HKD 8 front assembly	1
1.1	D017095	HKR D 8 front	1
1.2	0523	Cylinder screw M8x15	10
1.3	02582	Lens headed screw M5x8	2
1.4	800008	Threaded pin M8x8	1

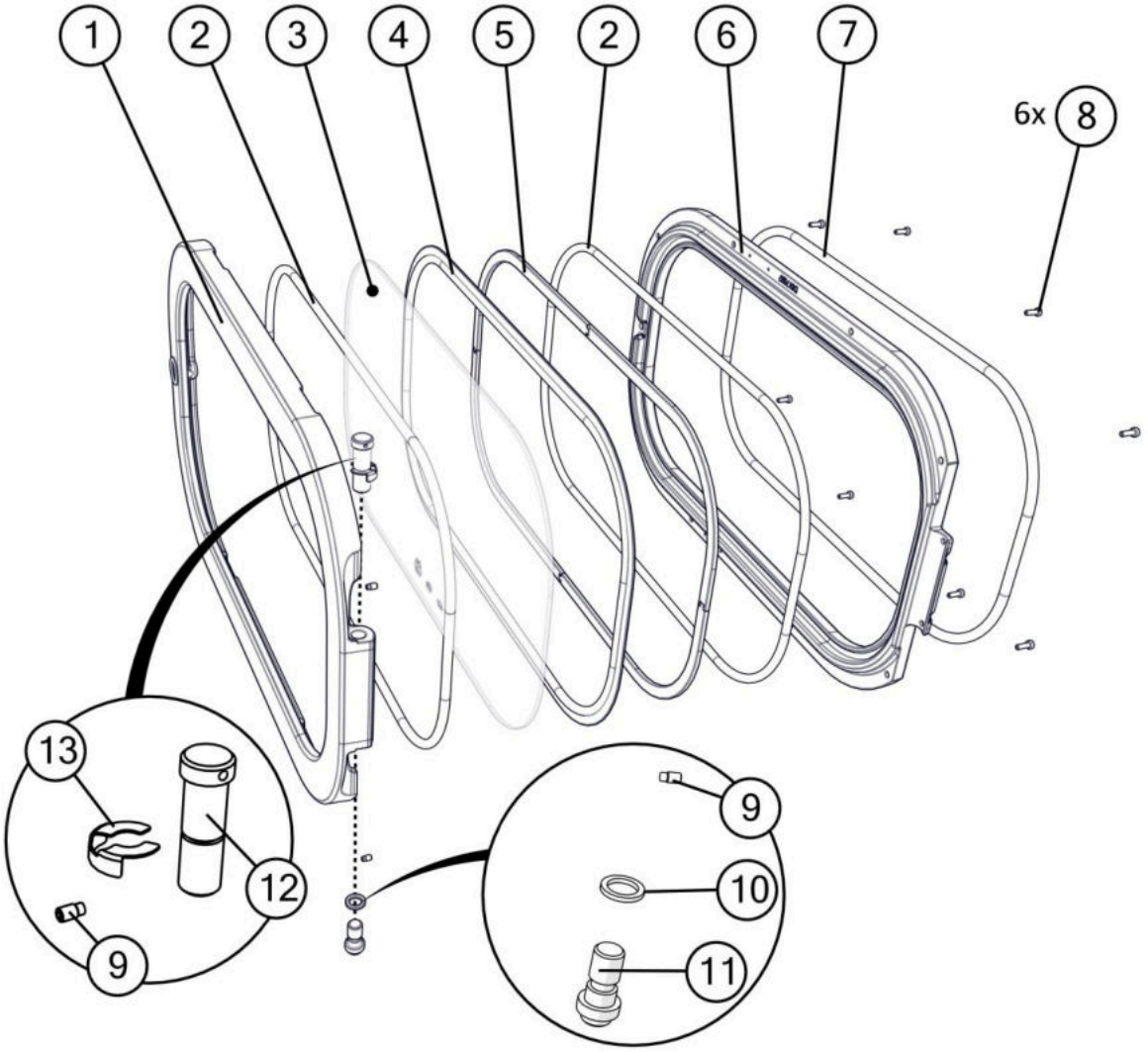
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Item	PartNo.	Designation	No.
1.5	02337	Threaded pin M8x16	1
2	D017066	Door case complete assembly	1
2.1	D017022	Door case	1
2.2	800545	Cylinder screw M8x12	8
2.3	D017015	Door hinge mount	1
2.4	800118	Hexagon screw M8x30	2
2.5	800168	Flat head screw M8x10	1
2.6	D017069	Lower roller cam	1
2.7	D018019	Handle roller 35mm	1
2.8	800540	Shaft screw M6x50	1
2.9	D017068	Upper roller cam	1
3	D017017	Blind insert	2
4	800434	Countersunk screw	4
5	D017062	Air supply adjuster assembly	1
5.1	D003484	Round air adjusting handle assembly	1
5.2	D017064	Air adjusting rod head	1
5.3	D017063	Air adjusting rod	1
5.4	D003237	Air adjusting pusher	1
6	D016105	Front assembly lower part	1
6.1	02522	Cylinder screw M8x16	2
7	D017029	Air adjuster	1
9	800058	Cylinder screw M6x20	2
10	800432	Threaded pin M6x16	2

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5.3 HKD 8 DOOR

Door with single glazing HKD 8 - D017011

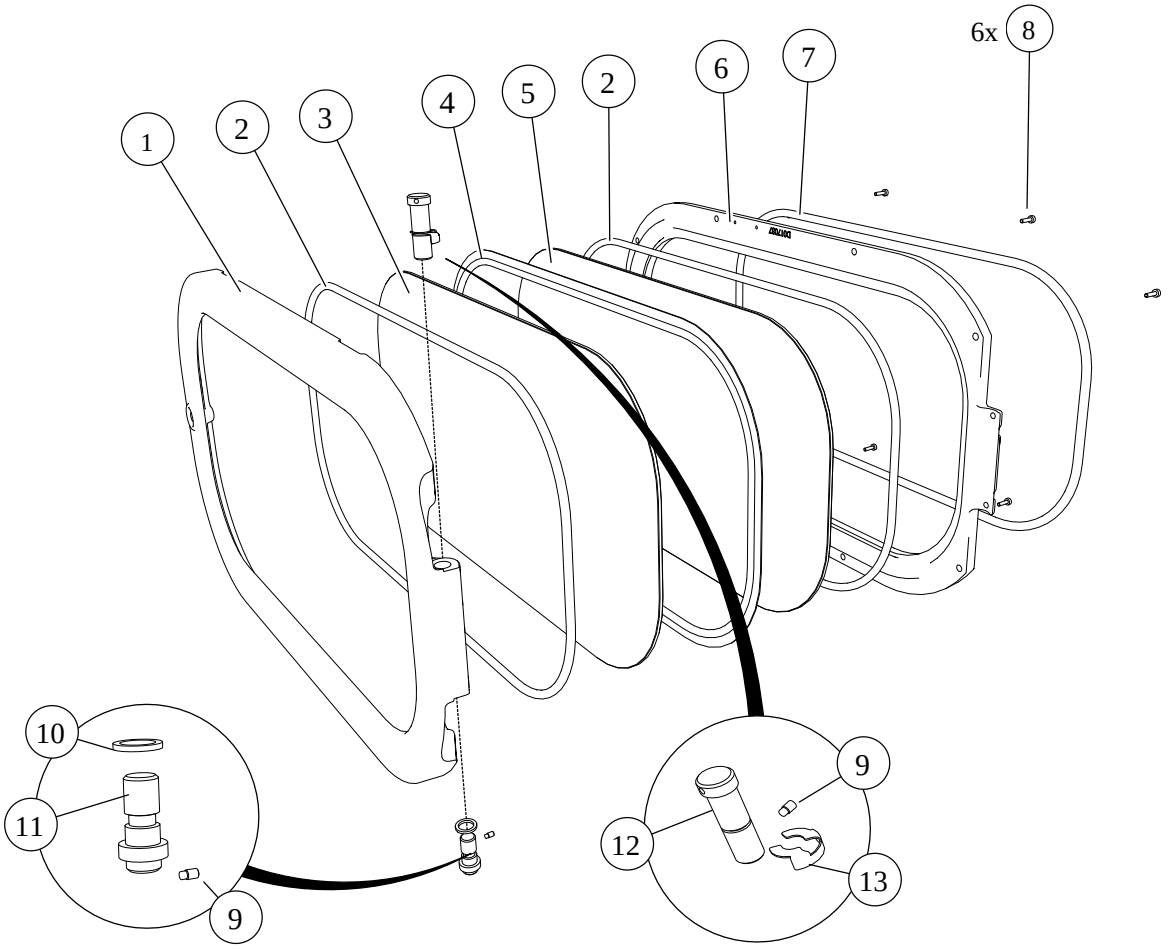


Item	PartNo.	Designation	No.
1	D017035	External door frame	1
2	D017060	Inner door sealing rope	2
3	D017043-01	Glass pane	1
4	D017012	Inner glass pane sealing rope SG	1
5	D017013 + D017014	Insert 1 SG + Insert 2 SG	2
6	D017037	Inner door frame	1
7	D017059	Outer door sealing rope	1
8	02095	Torx cylinder screw M5-16	8
9	00734	Threaded pin M5x8	2
10	900426	Hinge washer	2
11	D017019	Lower hinge bolt	1

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Item	PartNo.	Designation	No.
12	D017053	Hinge bolt	1
13	900824	Plug-in washer	1

Door with double glazing HKD 8 - D017010



Item	PartNo.	Designation	No.
1	D017035	External door frame	1
2	D017060	Inner door sealing rope	2
3	D017043-01	Glass pane	1
4	D017012	Inner glass pane sealing rope SG	1
5	D017044	Inner glass pane	1
6	D017037	Inner door frame	1
7	D017059	Outer door sealing rope	1
8	02095	Torx cylinder screw M5x16	8
9	00734	Threaded pin M5x8	1
10	D017019	Lower hinge bolt	1
11	900426	Hinge washer	1

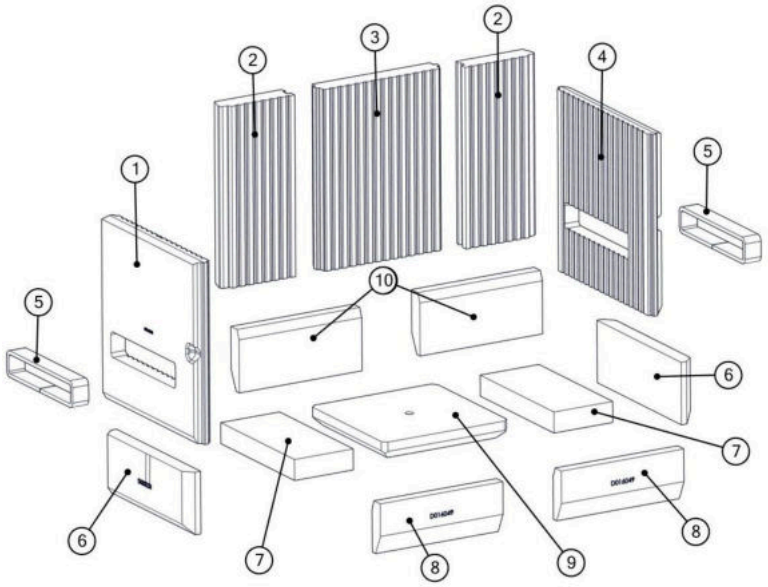
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Item	PartNo.	Designation	No.
12	D017053	Hinge bolt	1
13	900824	Plug-in washer	1

5.4 INNER LININGS FOR HKD 7 / 8 / 9

Assembly D016050

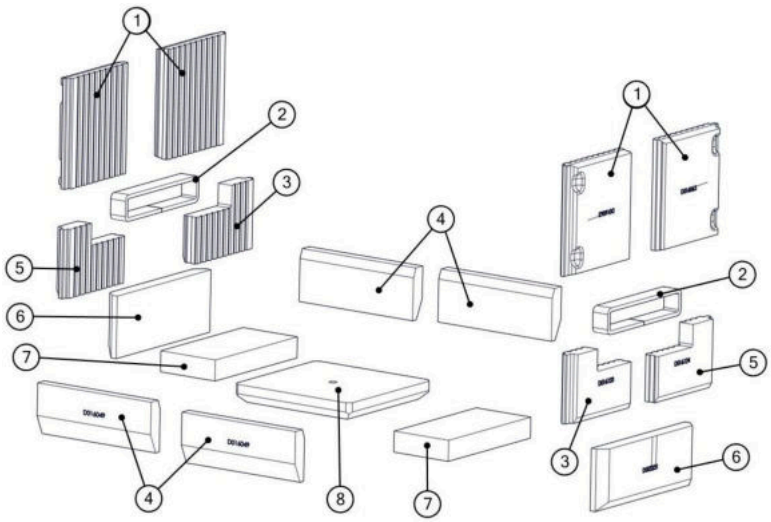
Item	PartNo.	No.	Designation
1	D016108	1	Left side wall stone
2	D016109	2	Rear wall external part
3	D016047	1	Rear wall inner part
4	D016046	1	Right side wall stone
5	20000	2	Ceramic fibre sealing 650x60x25
6	D003231	2	Side wedge
7	D016045	2	Bottom plate
8	D016049	2	Front wedge
9	D003232	1	Bottom plate
10	D016044	2	Rear wedge



Im. 1: Inner linings for HKD 7 / 8 / 9

HKD 7 / 8 / 9 Tunnel Assembly D016062

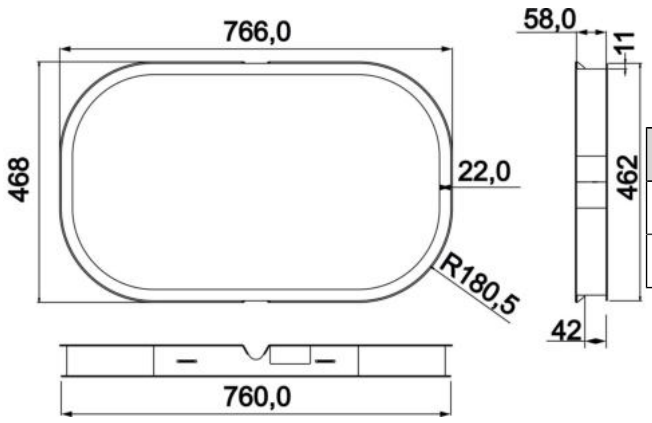
Item	PartNo.	No.	Designation
1	D016063	4	Side wall upper part
2	D016123	2	Side wall lower part 1
3	D016049	4	Front wedge
4	D016124	2	Side wall lower part 2
5	D003231	2	Side wedge
6	D016045	2	HKD 7 bottom plate
7	D003232	1	HKD 2.2 bottom plate



Im. 2: Inner linings for HKD 7 / 8 / 9 Tunnel

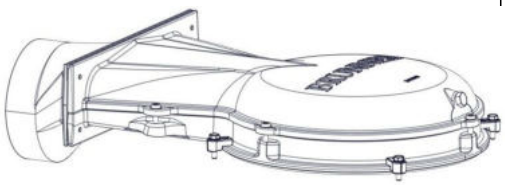
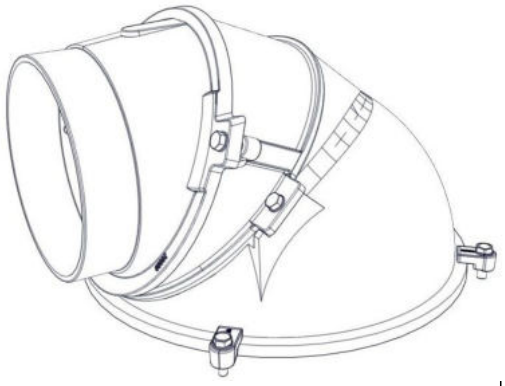
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5.5 DOOR FRAME FOR HKD 8 - PARTNO. D017071

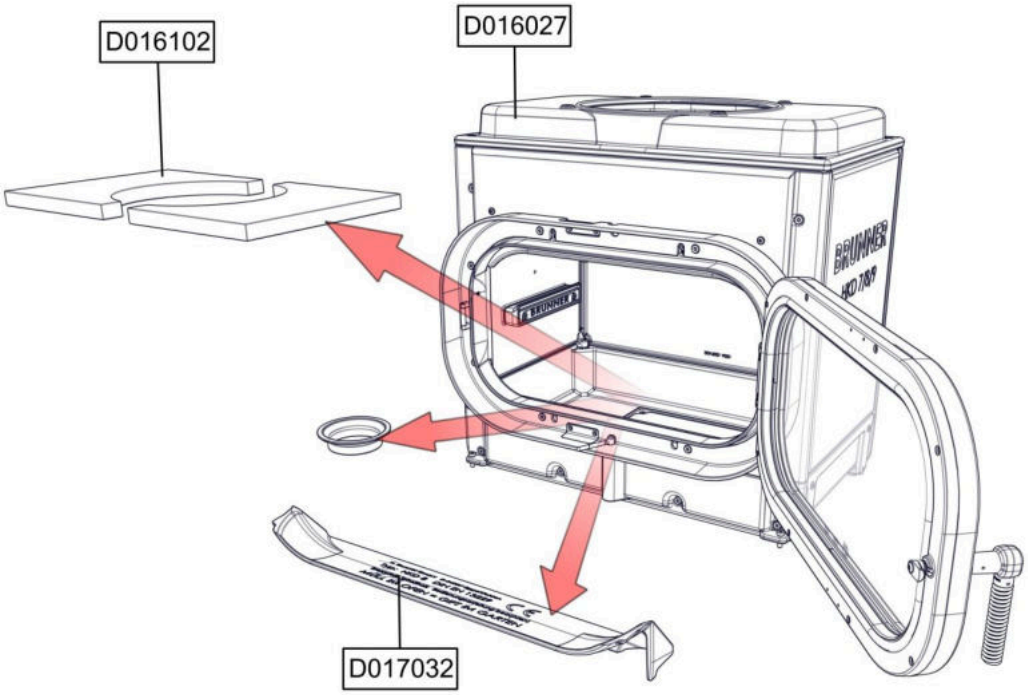


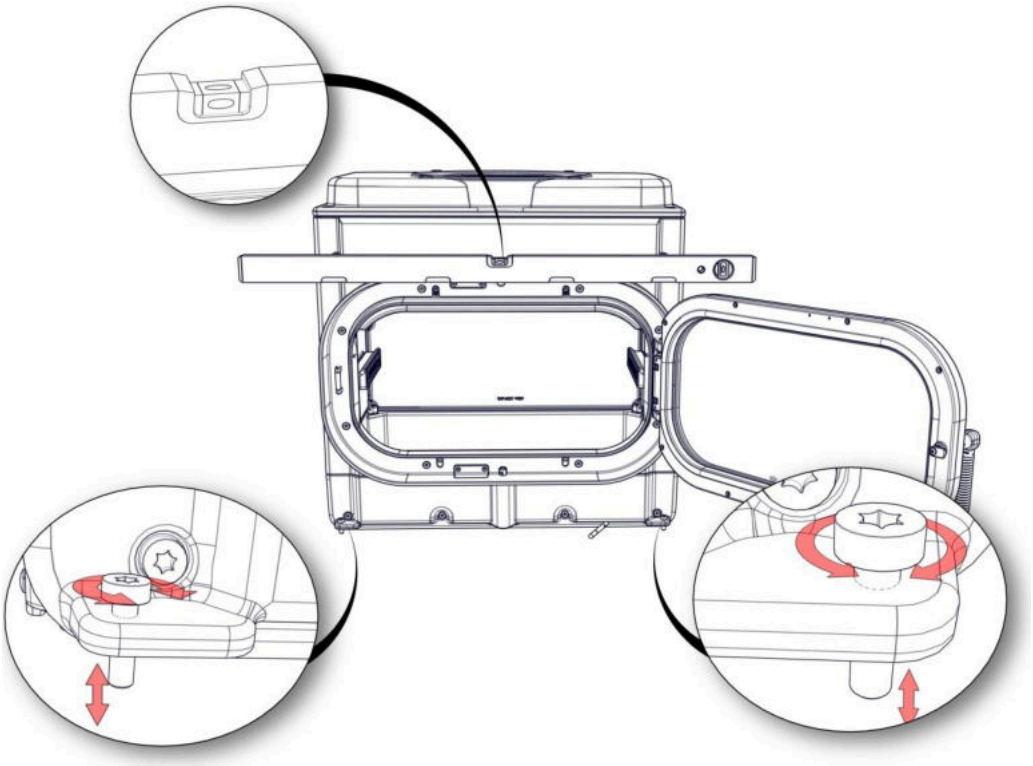
PartNo.	Designation	No.
D017076	HKD 8 mounting frame	1
D017077	Door frame	1

5.6 HEATING GAS OUTLET

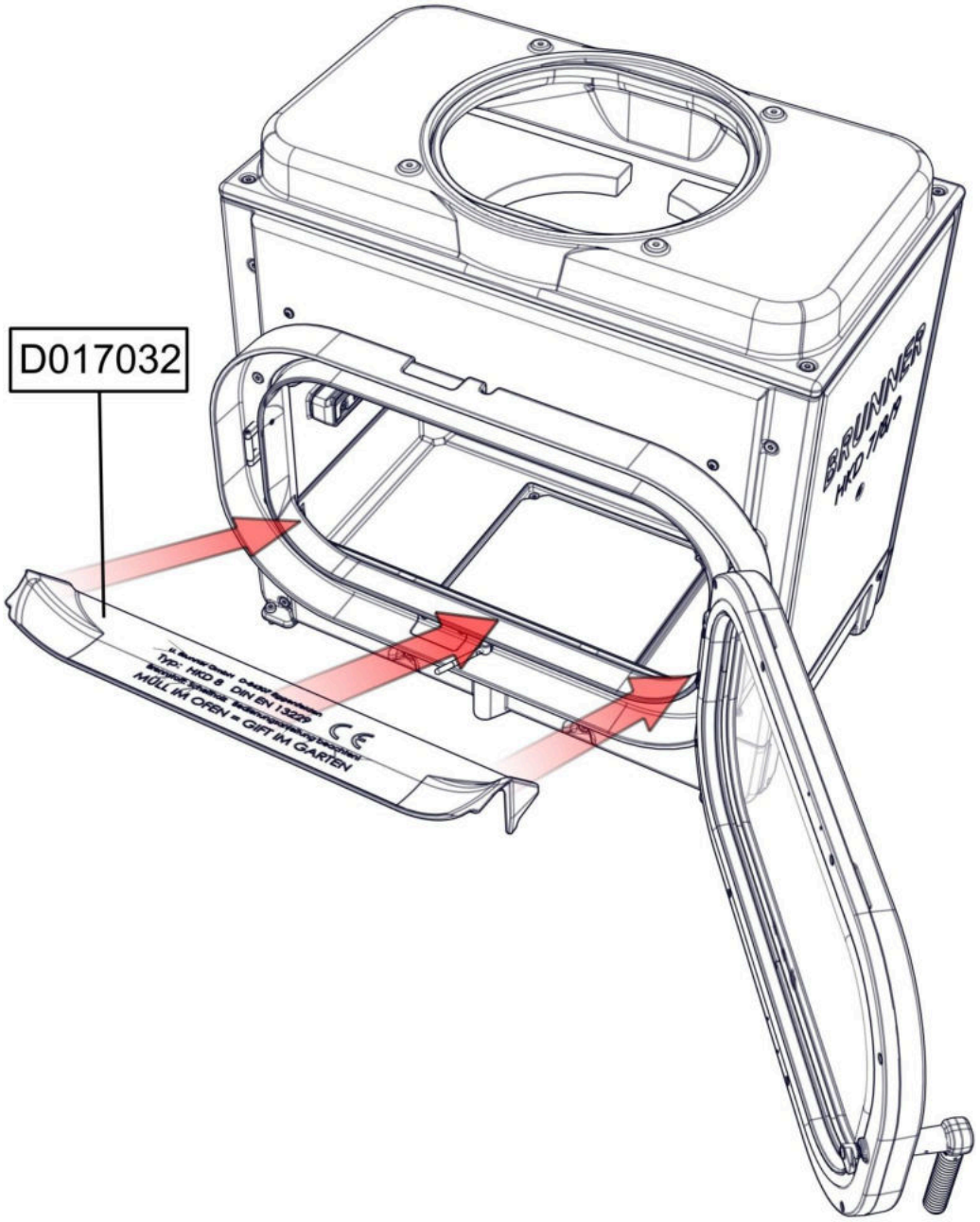
Variants	PartNo.	
Low hood	D016139	
Cast iron hood Ø200	D004181	
Cast iron hood Ø 180	D004186	
Mounting ring MAS 440	10077	

6 INSTALLATION

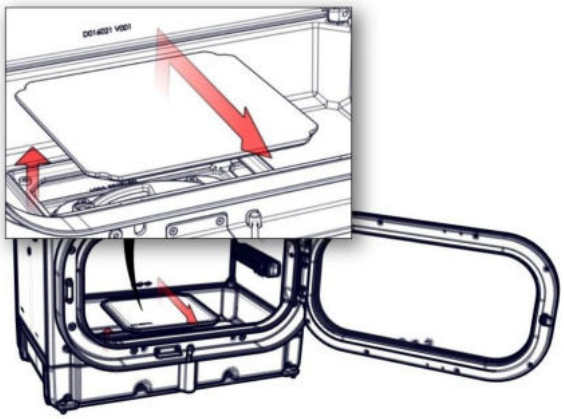


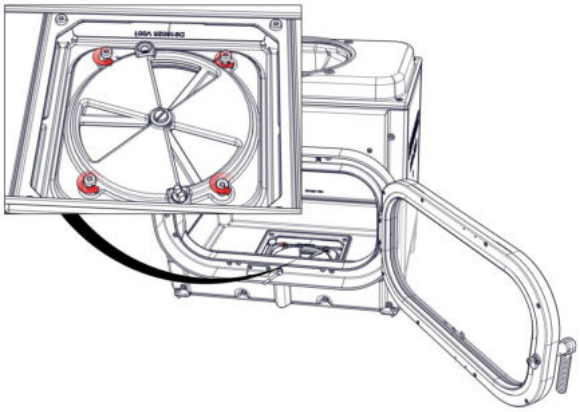


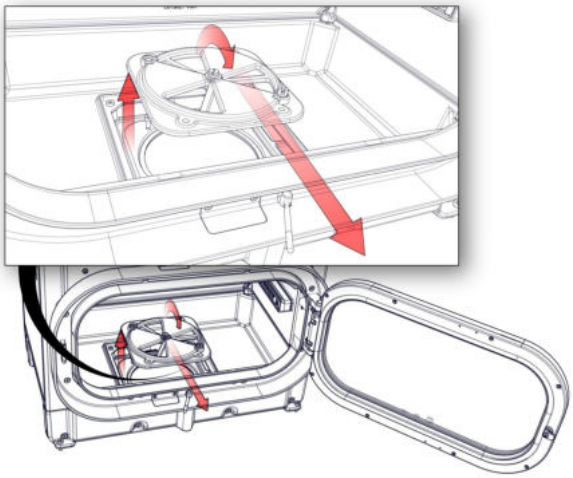
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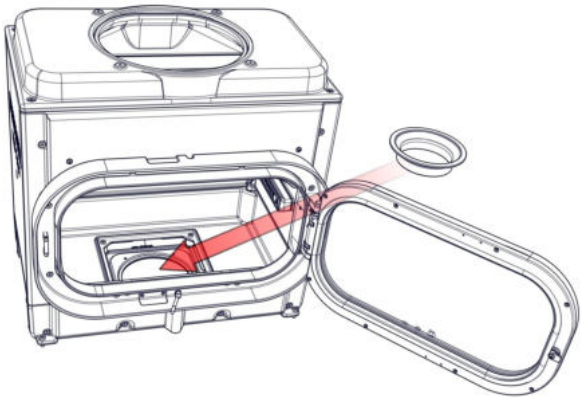

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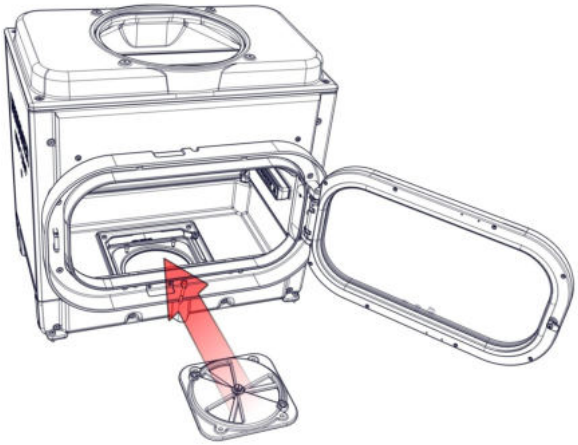
6.1 CONNECTION OF COMBUSTION AIR AT THE NOZZLE

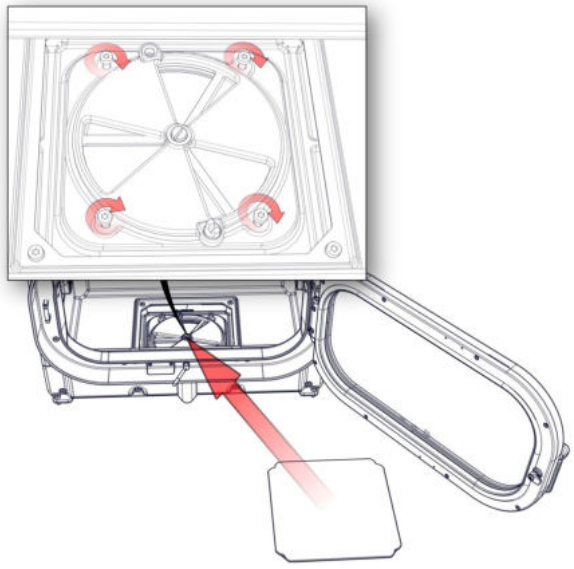








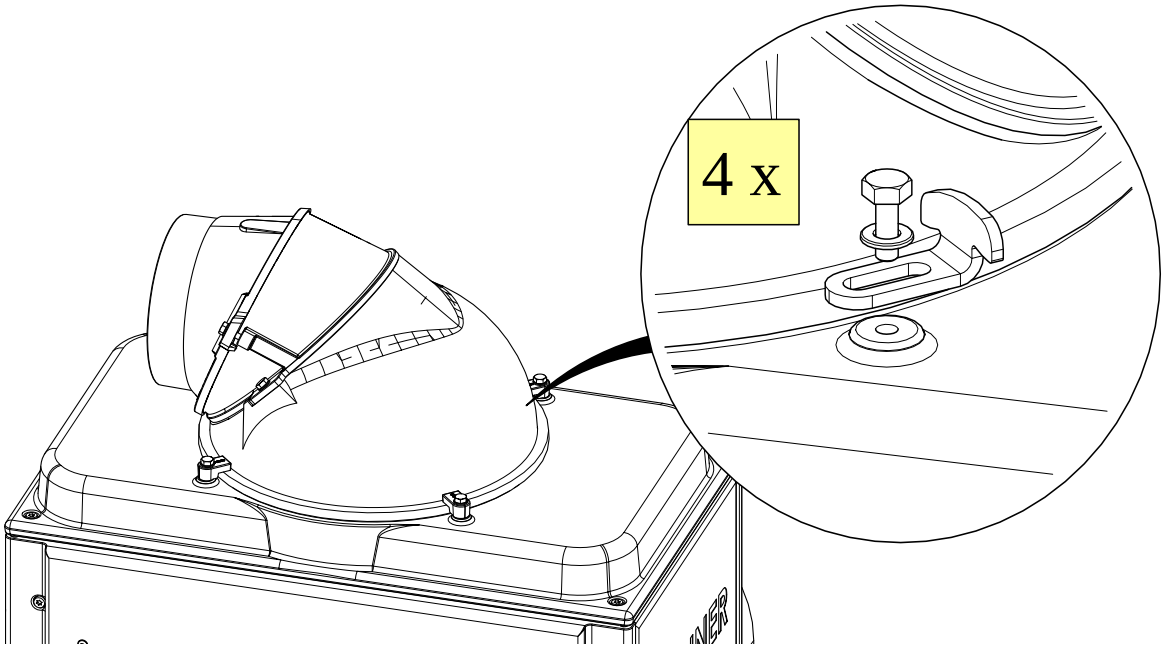




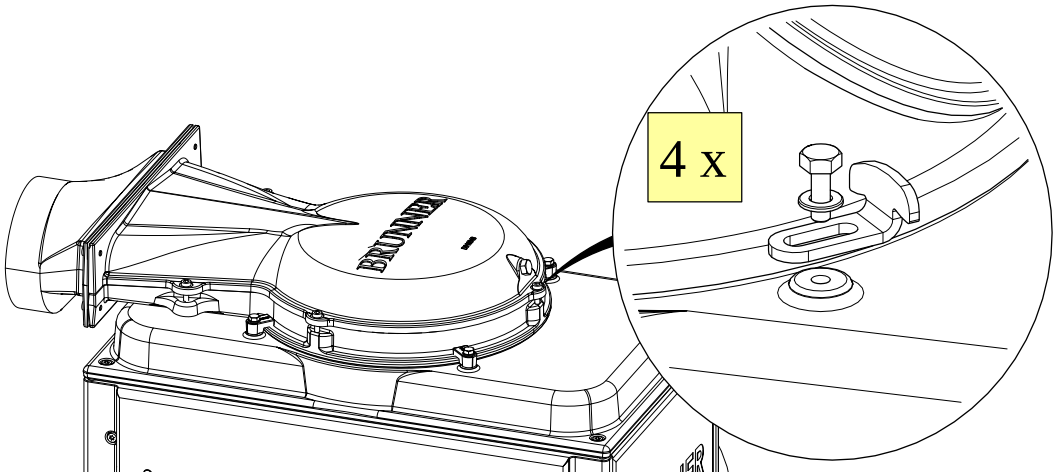
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6.2 INSTALLATION OF THE FLUE OUTLET

with round dome

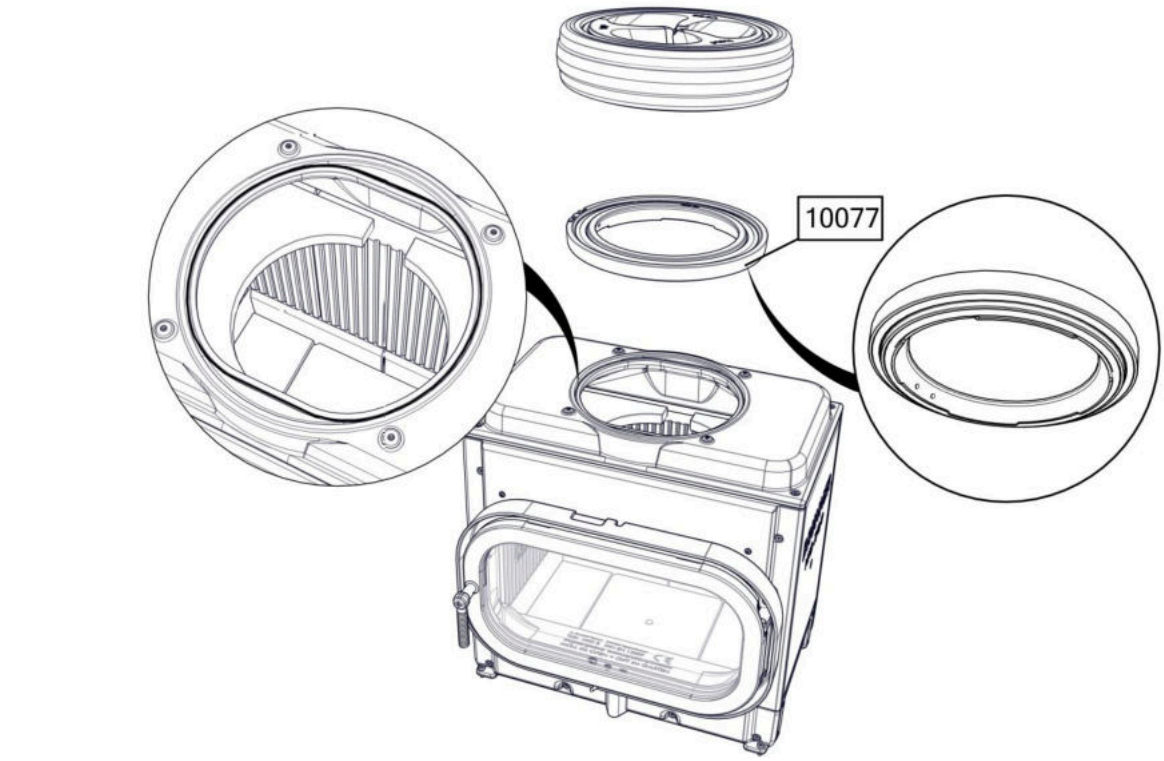


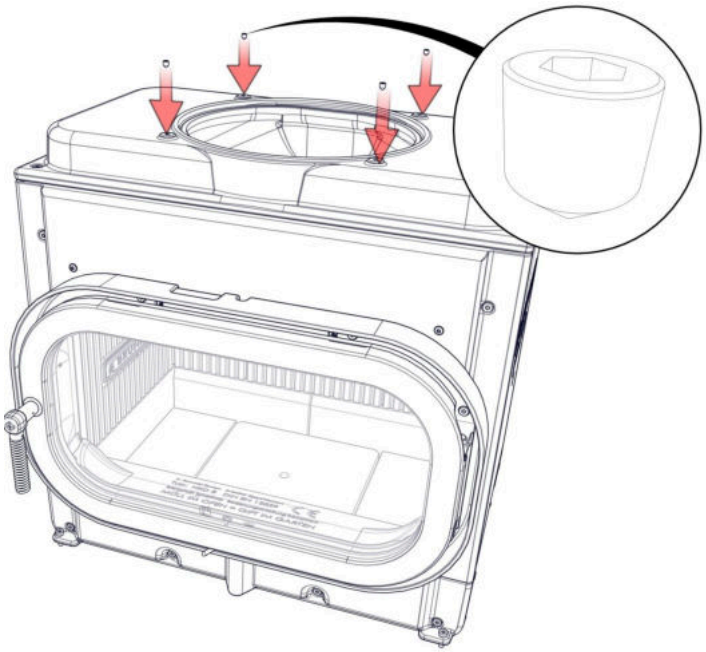
with low dome

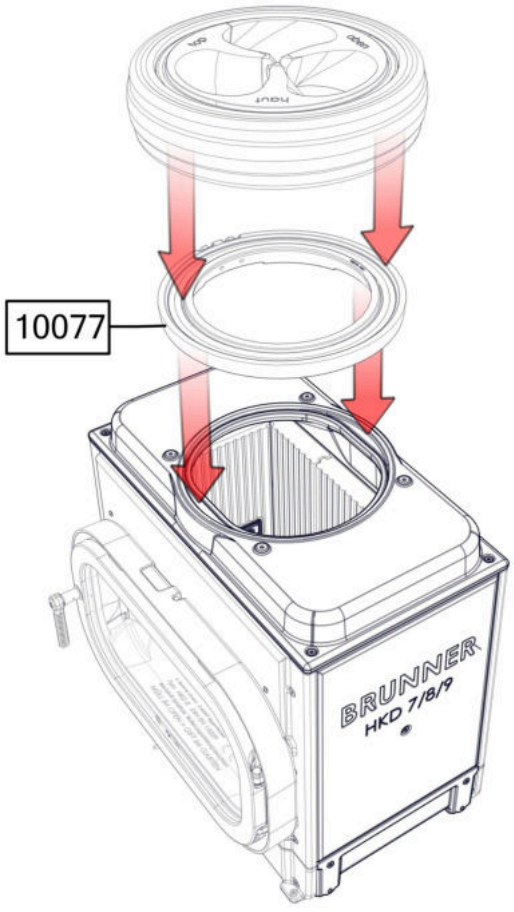


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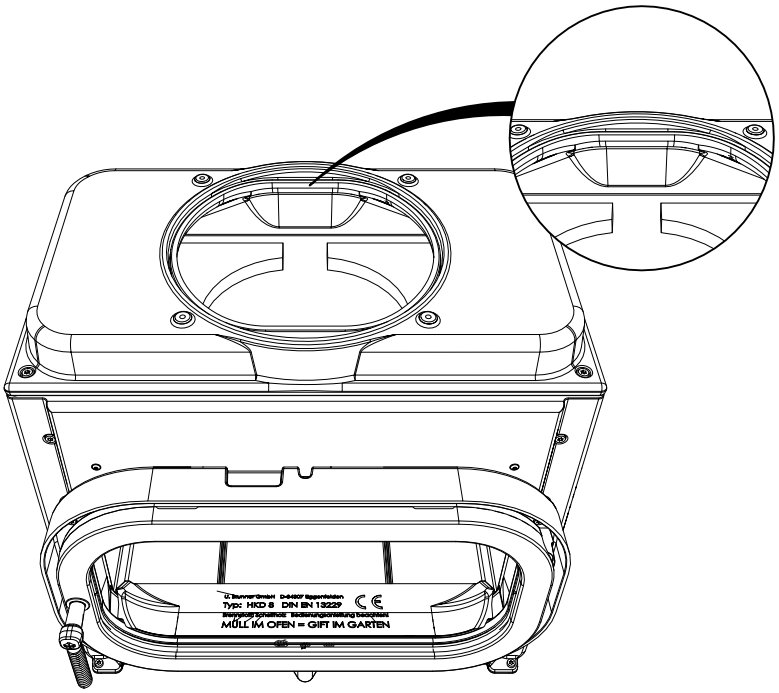
with MAS



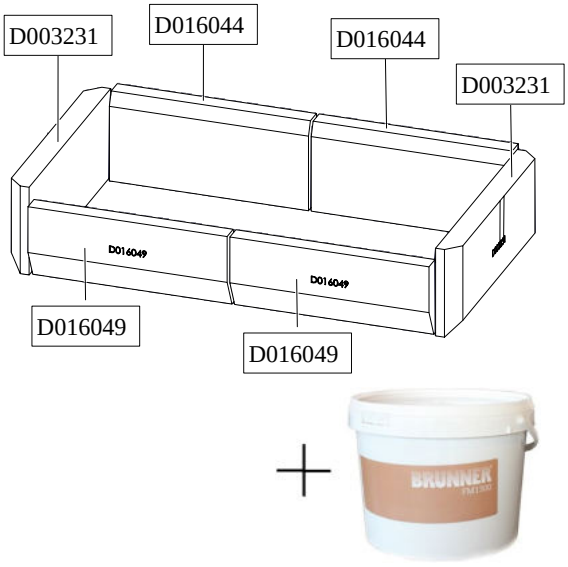


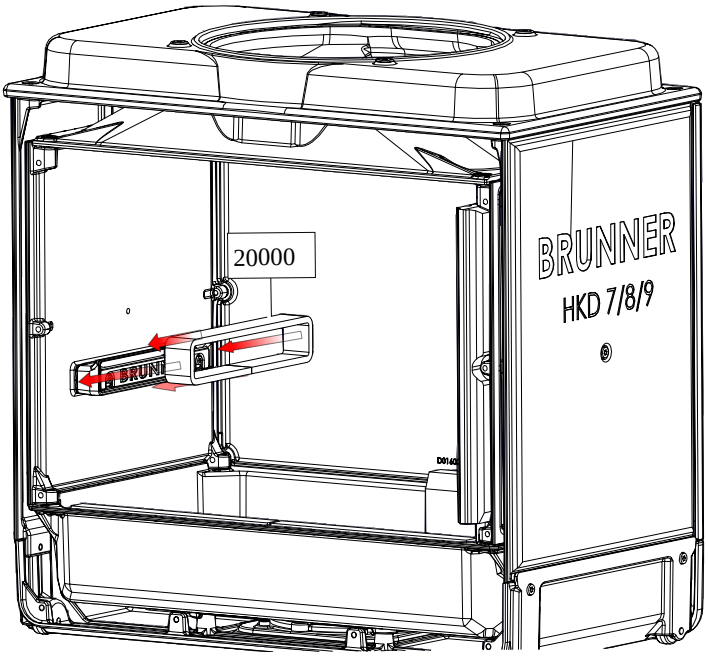


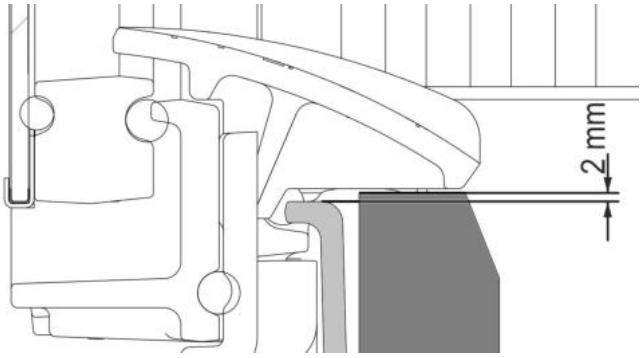
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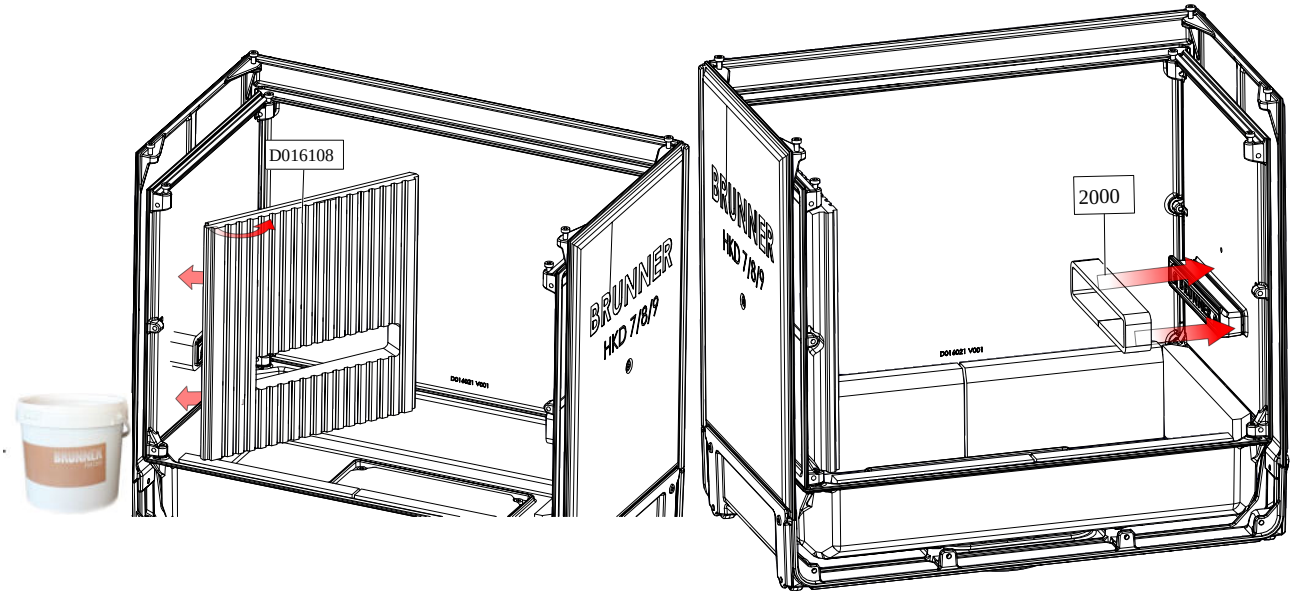
6.3 INSTALLATION OF FIRECLAY LINING HKD 7 / 8 / 9

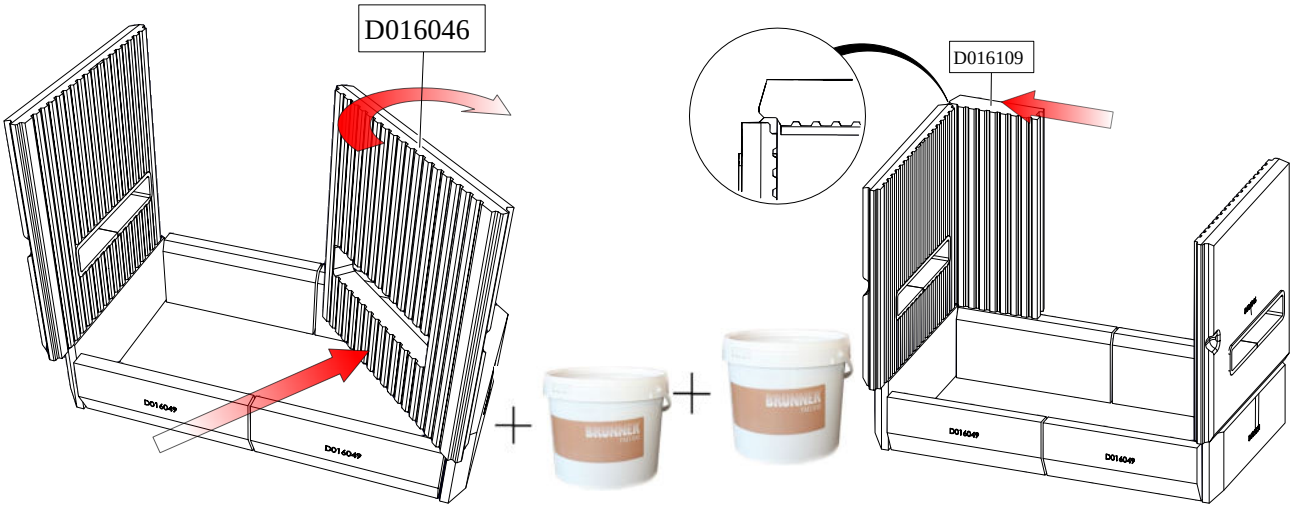




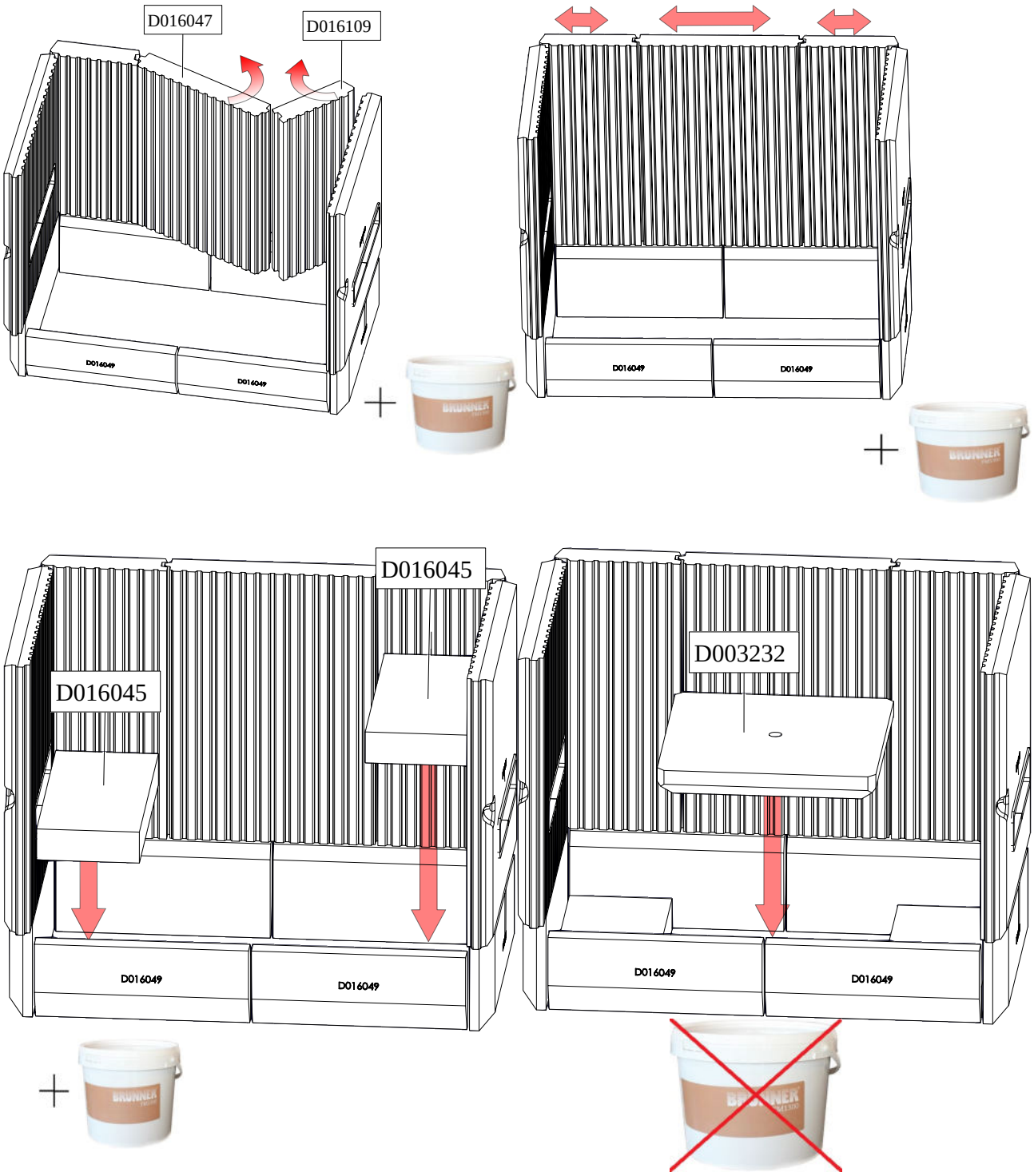


Place the wedge stones so that the upper edge is 2 mm above the floor cast iron plate!

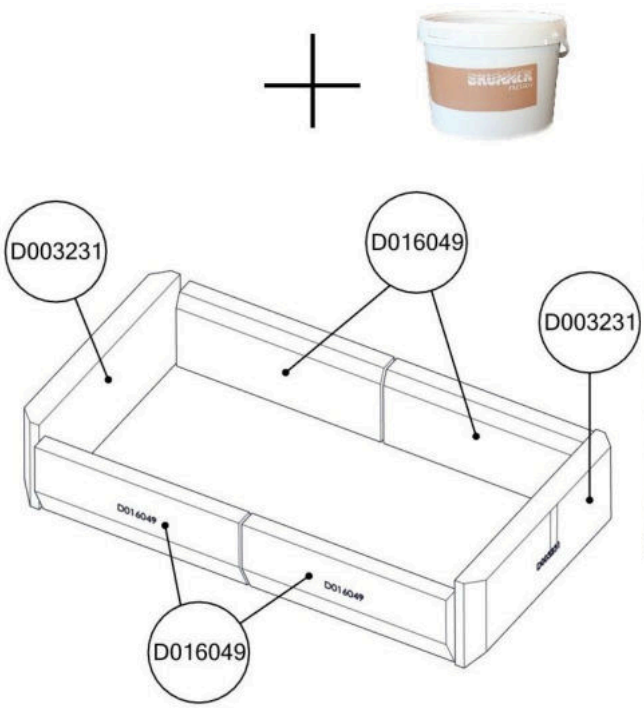


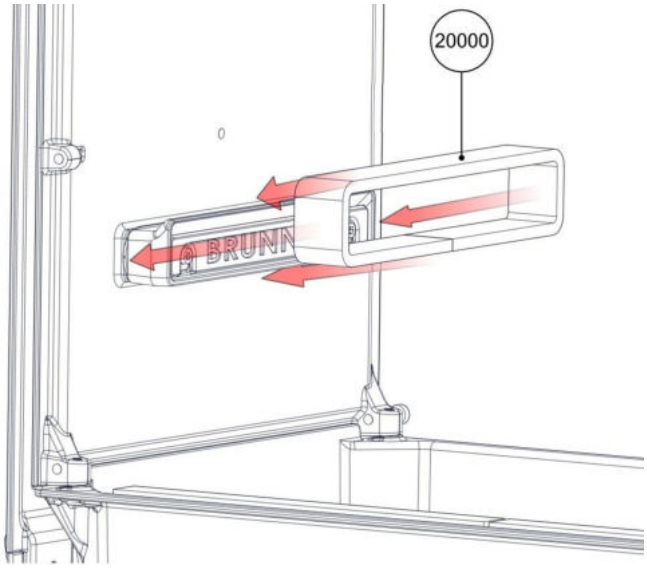


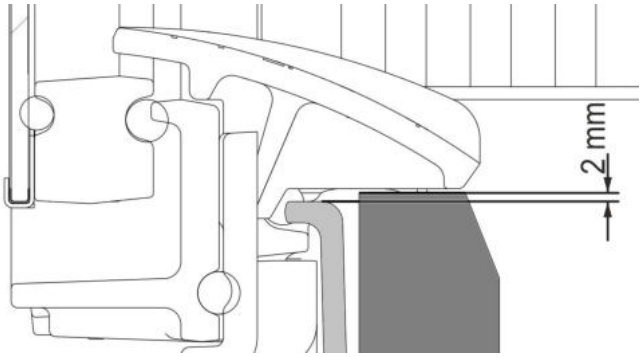
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D016047
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6.4 INSTALLATION FIRECLAY LINING HKD 7 / 8 / 9 DOUBLE FACE

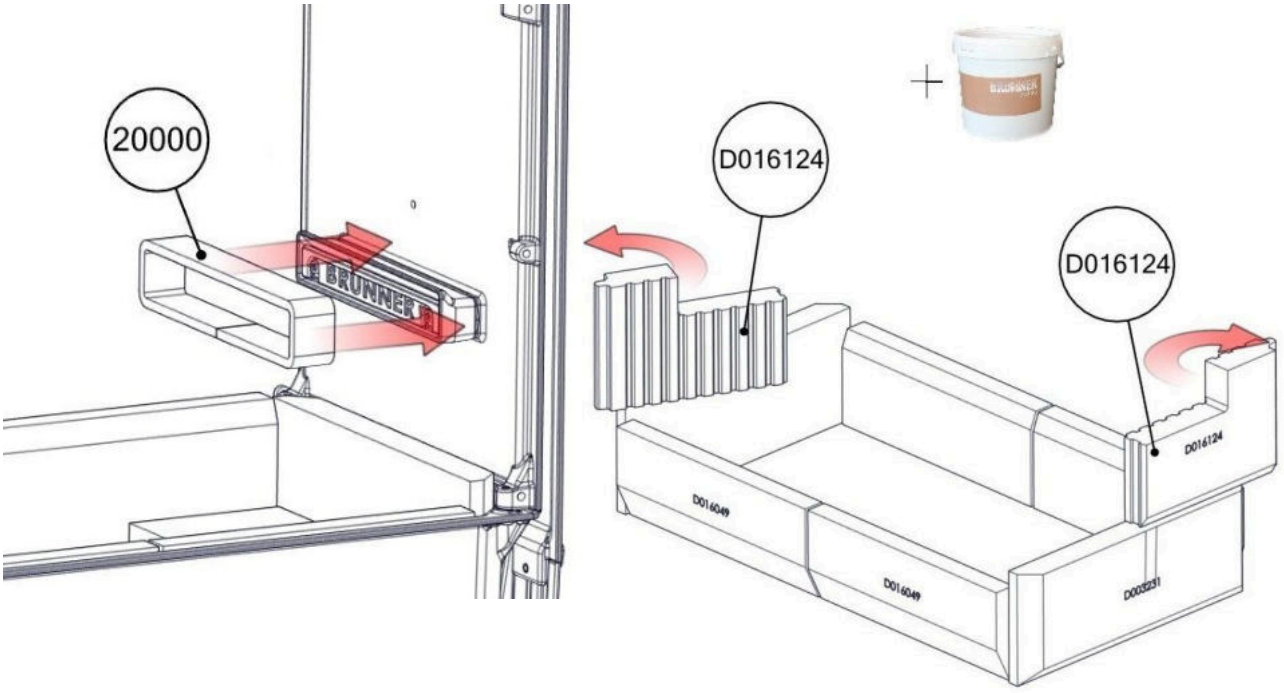


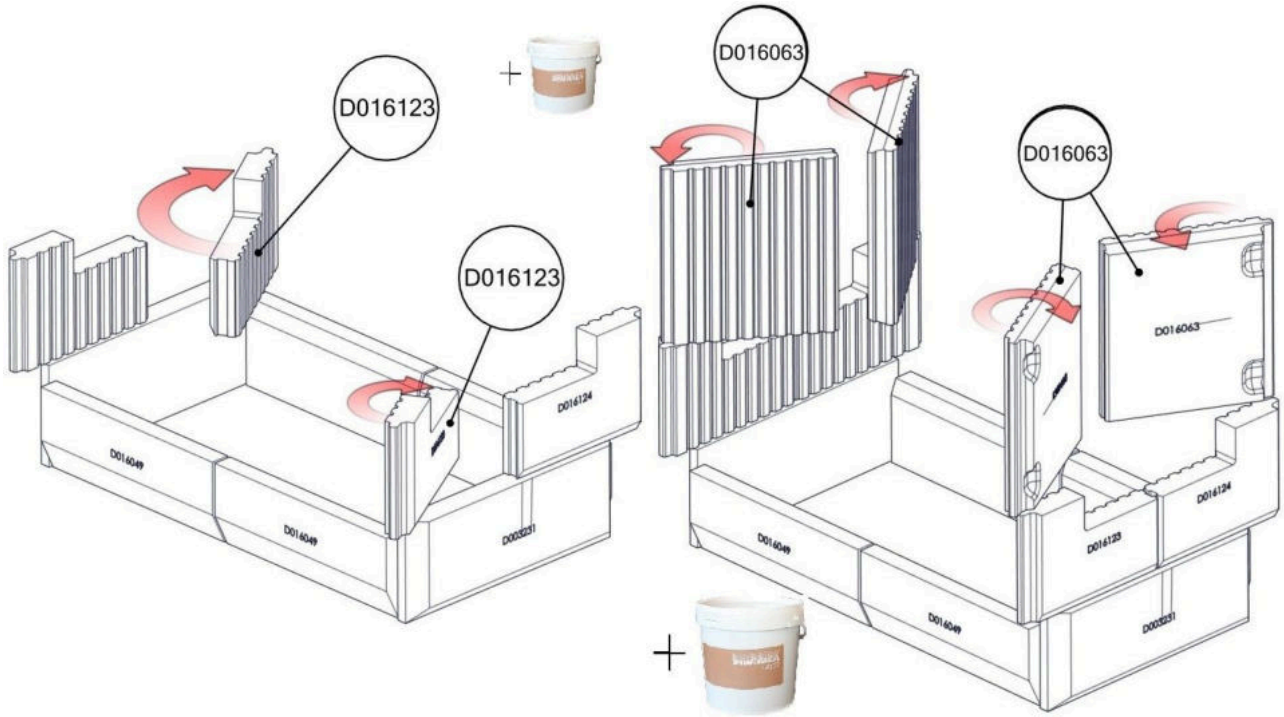


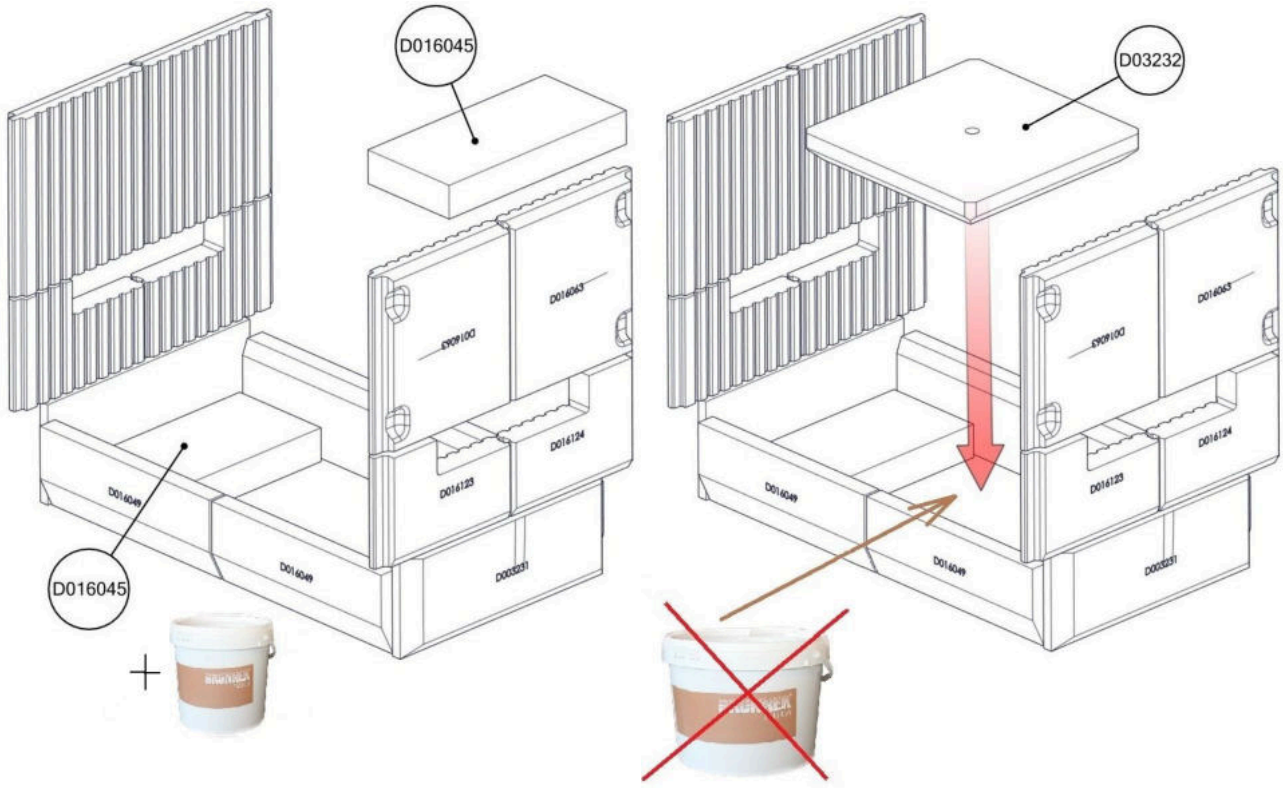


Place the wedge stones so that the upper edge is 2 mm above the floor cast iron plate!

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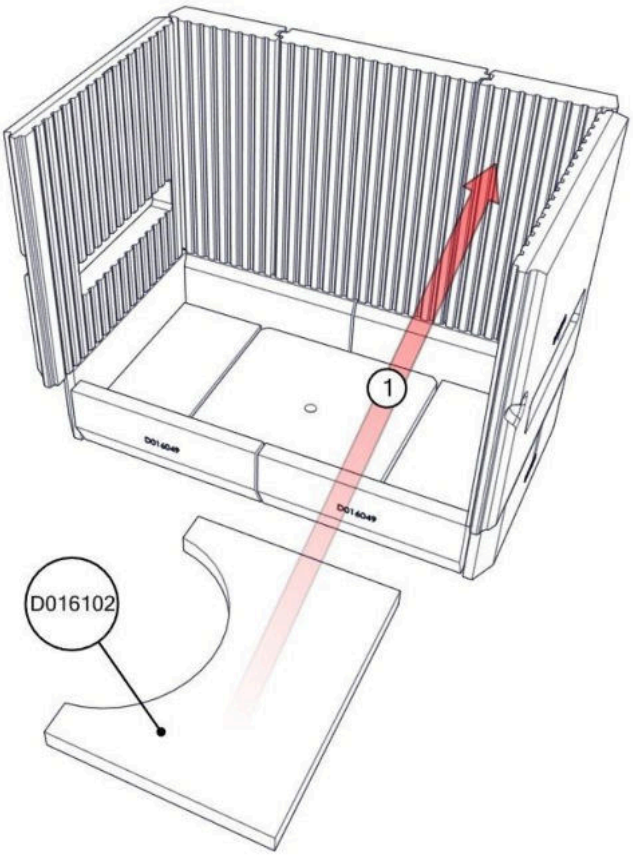

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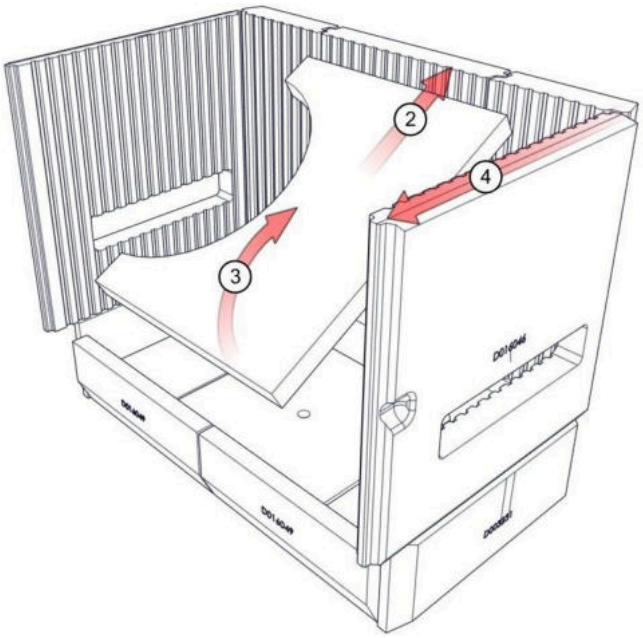
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6.5 INSTALLATION OF THE DEFLECTOR PLATES

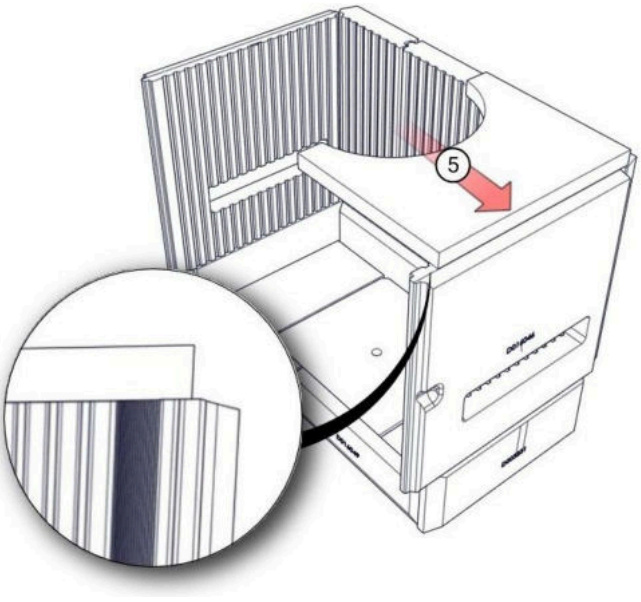
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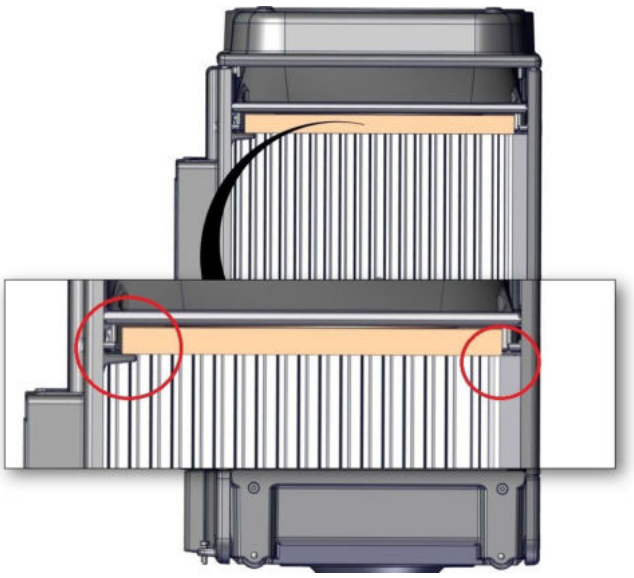
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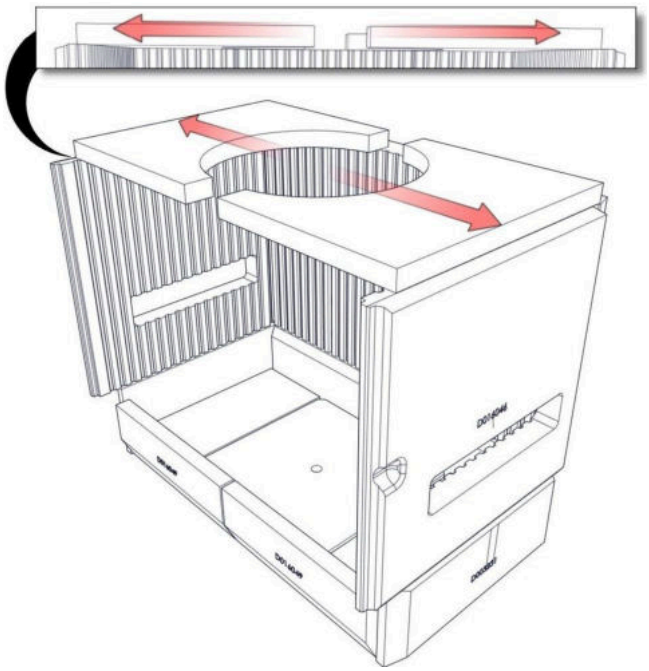
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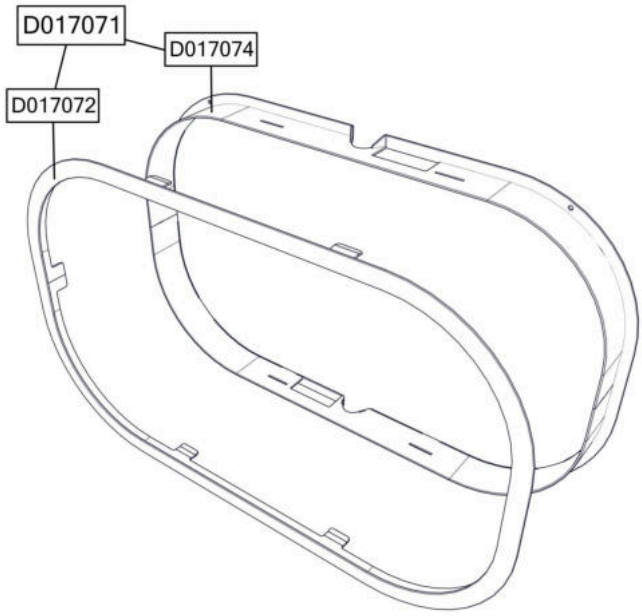
4:



5:

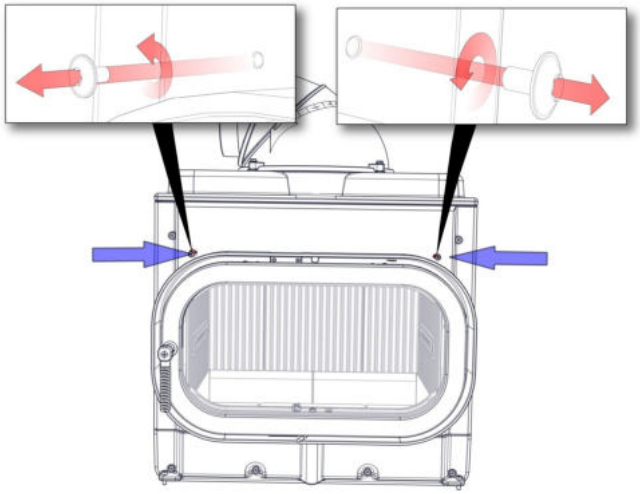


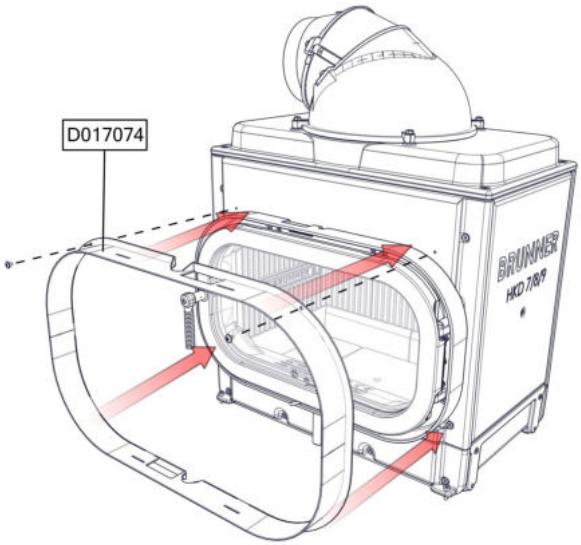
6.6 INSTALLATION OF THE MOUNTING FRAME

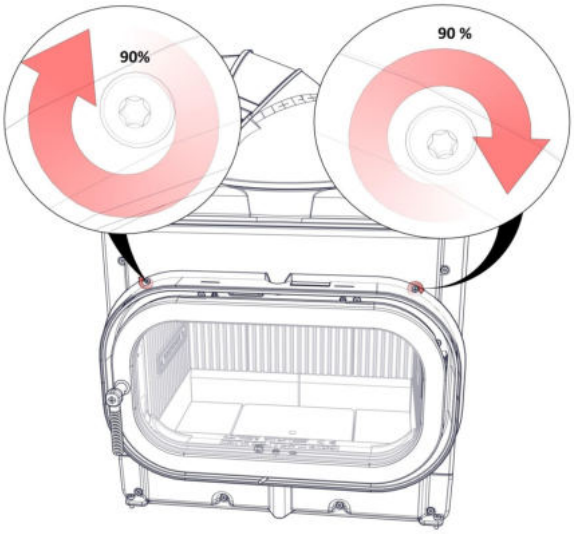


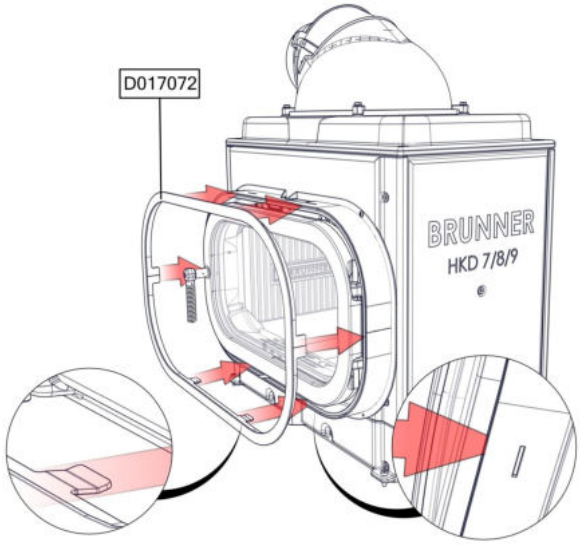


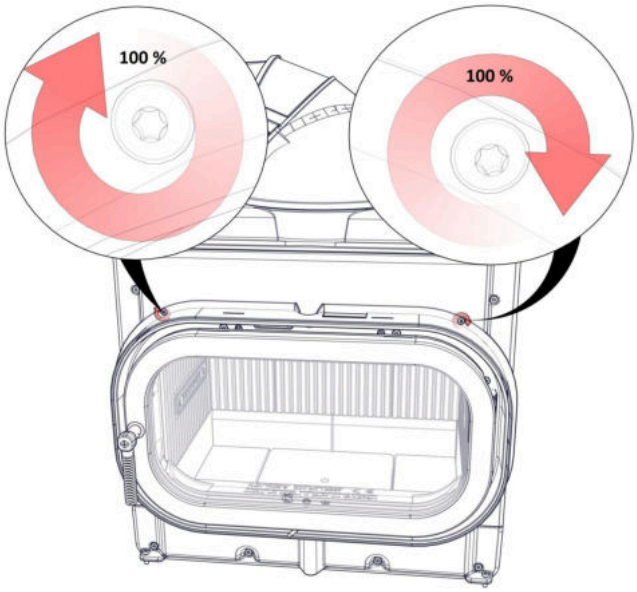
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BRUNNER
HKD 7/8/9


90%
90 %


D017072
BRUNNER
HKD 7/8/9


100 %
100 %

7 COMBUSTION AIR SETTING

The combustion air flows into the appliance above the glass and laterally via combustion air nozzles.

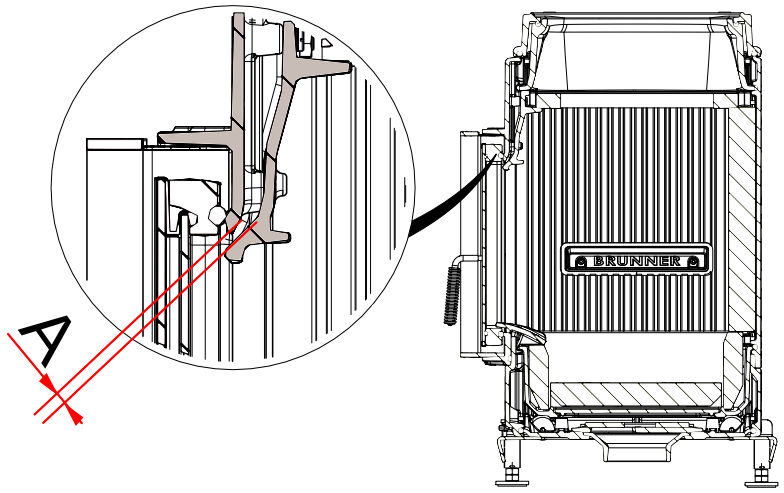
These are set at the factory, but should be checked and readjusted if necessary before commissioning the stove.

In order to obtain a symmetrical flame pattern, it is necessary to set columns A, B and C evenly and symmetrically!

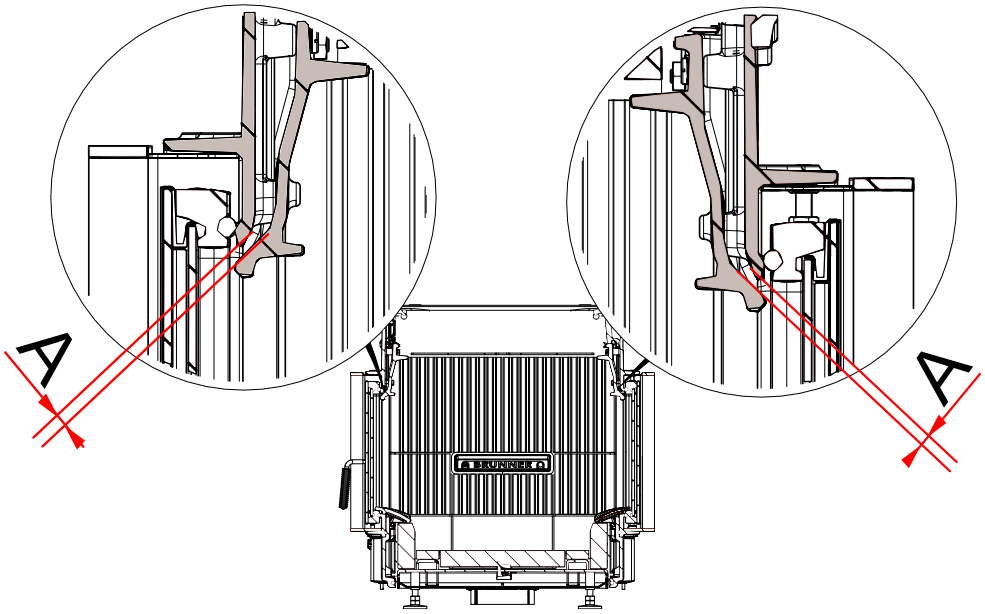
	Gap dimensions for version with one door				Gap dimensions for “tunnel” version (two doors)		
Fuel quantity	**A**	**B**	**C**		**A**	**B**	**C**
3 kg - 8 kg*	6	2	2		4	2	2
8 kg - 12 kg**	8	2	2		6	2	2

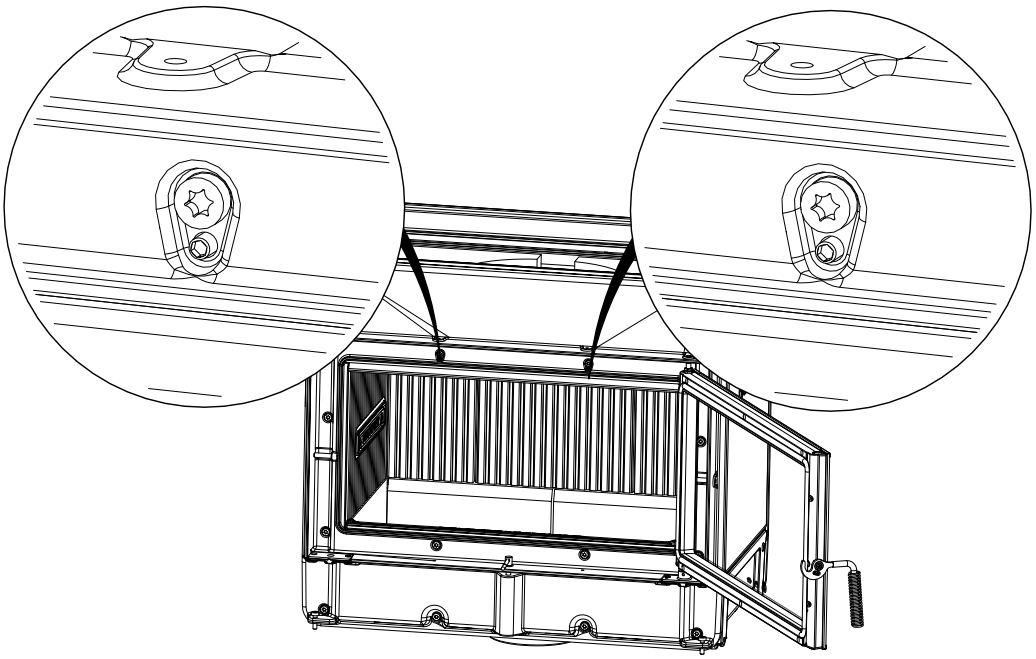
**delivery level / **storage loading*

Setting the windshield purge air:

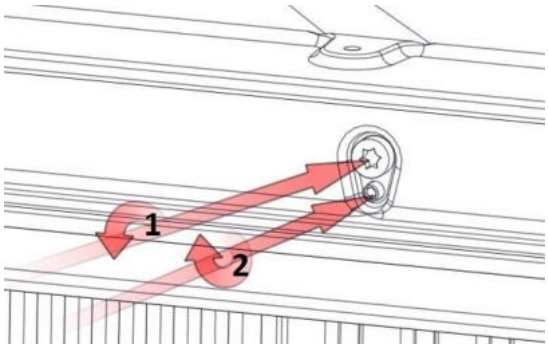


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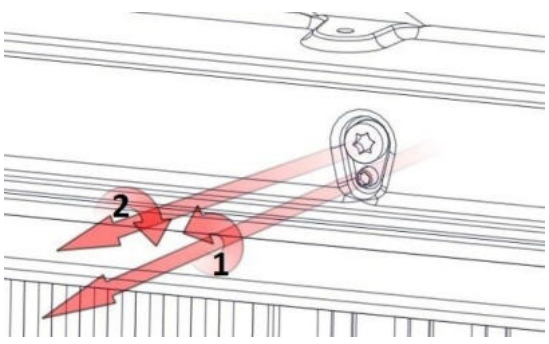




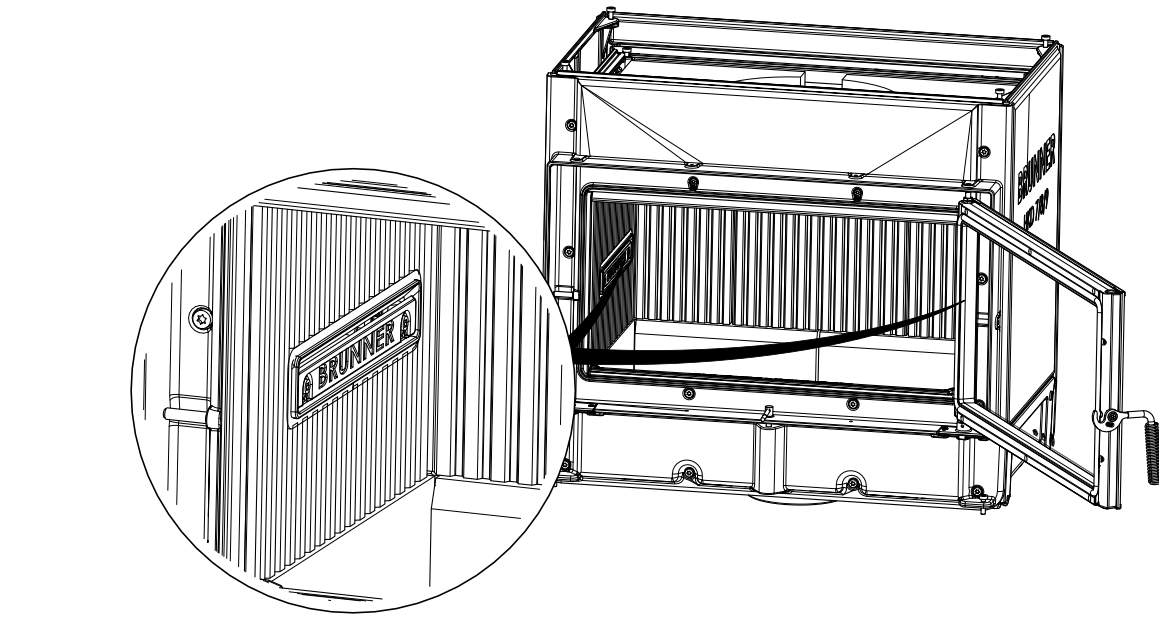
A >

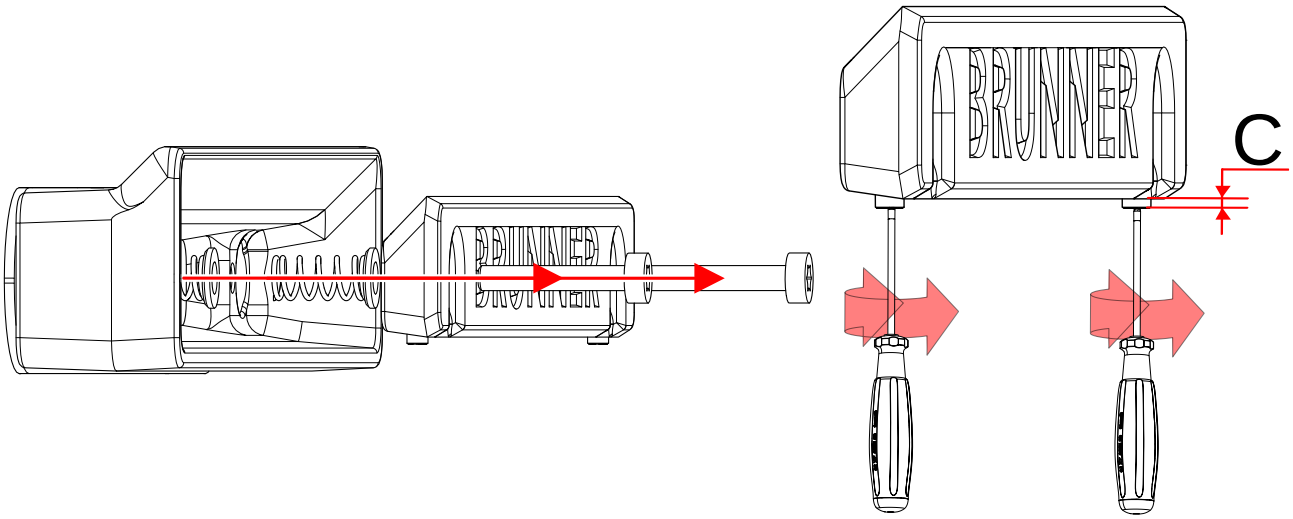


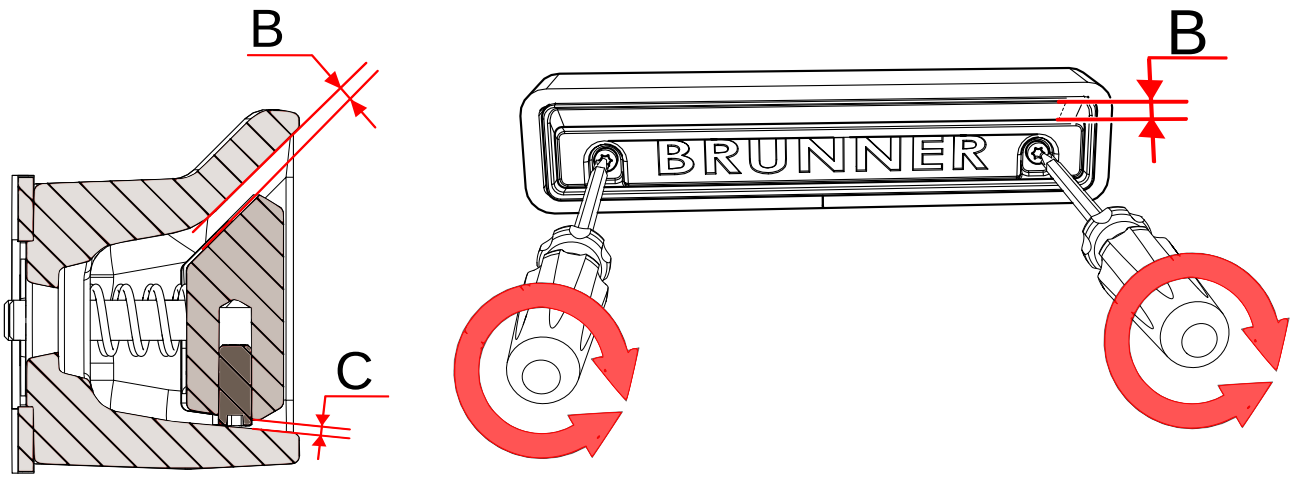
A <



Adjusting the side combustion air nozzles:

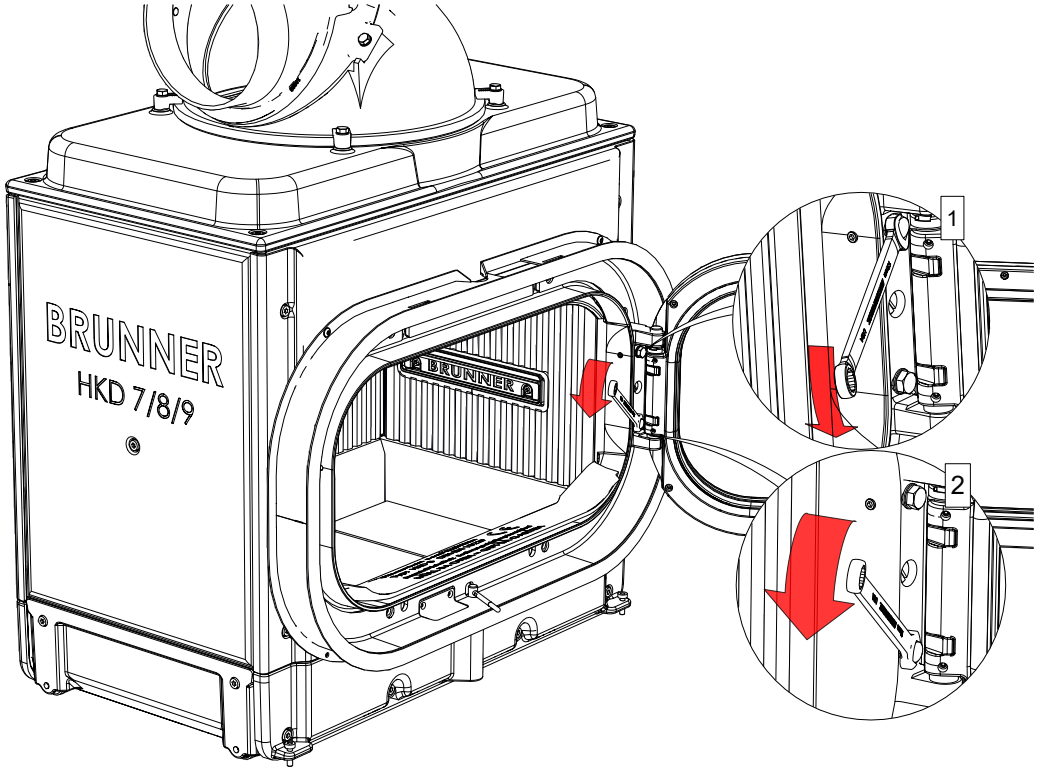


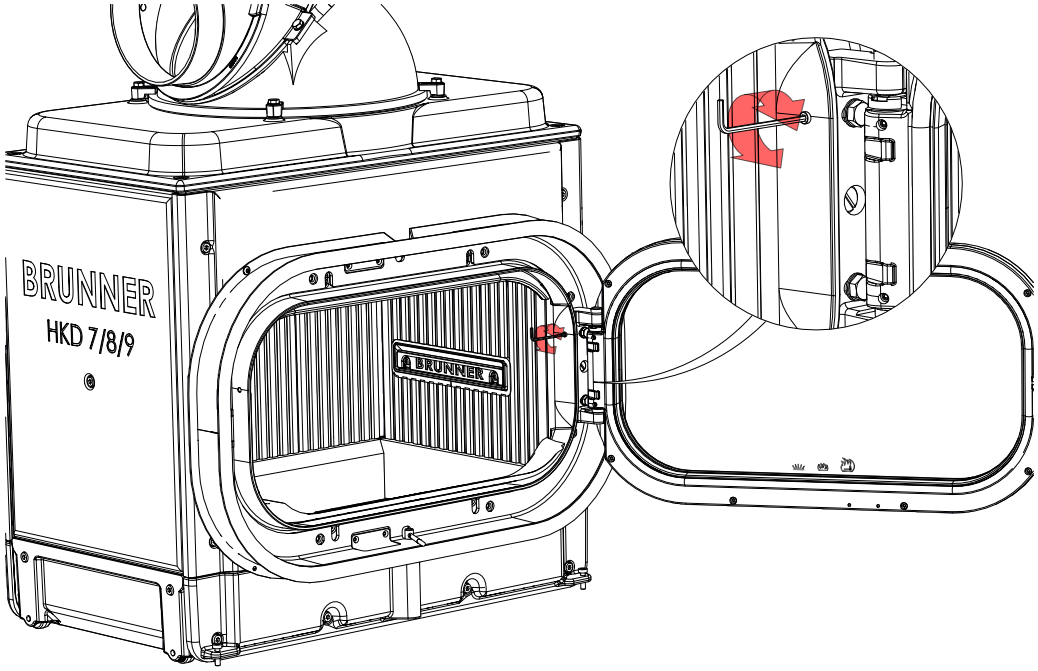


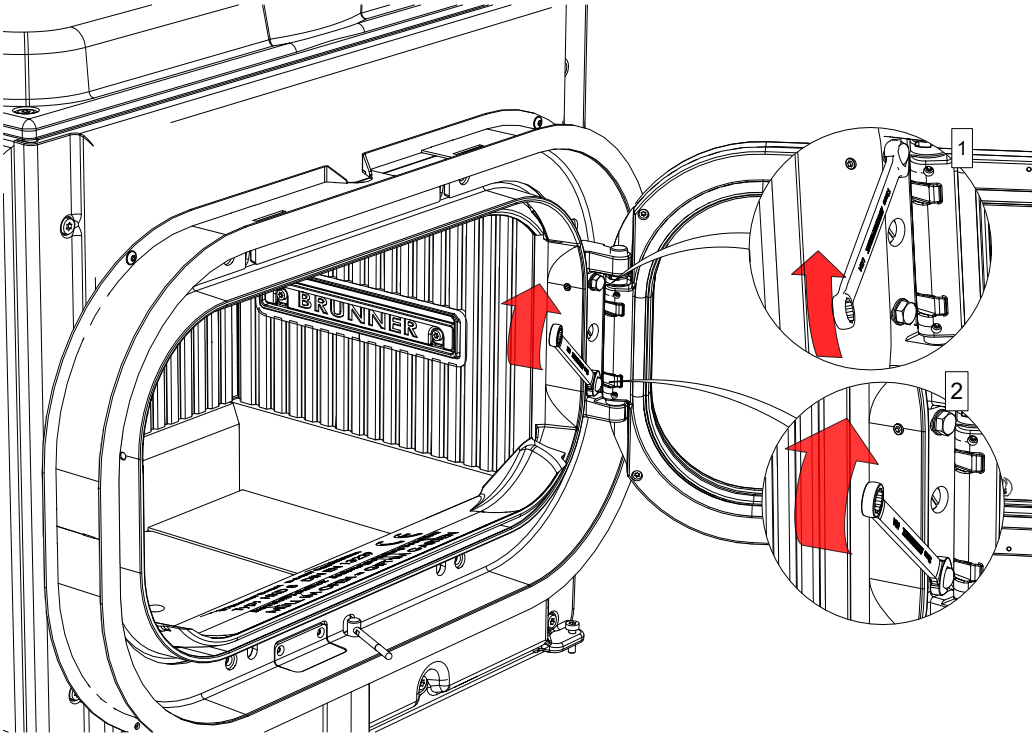


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8 ADJUSTING OF THE DOOR HINGE

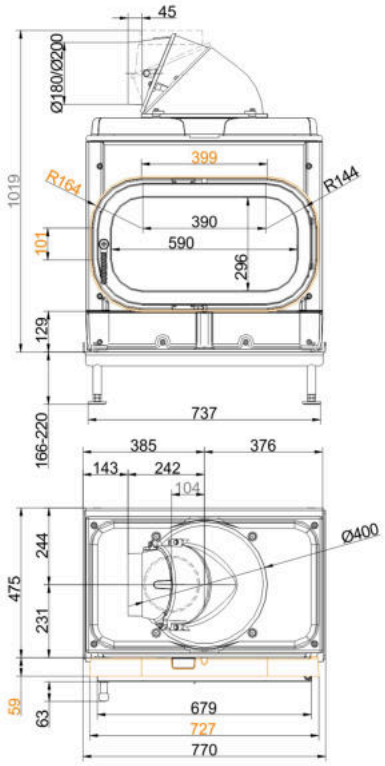


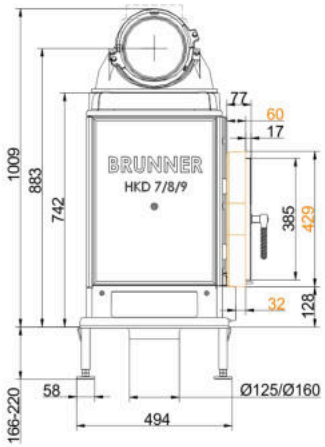




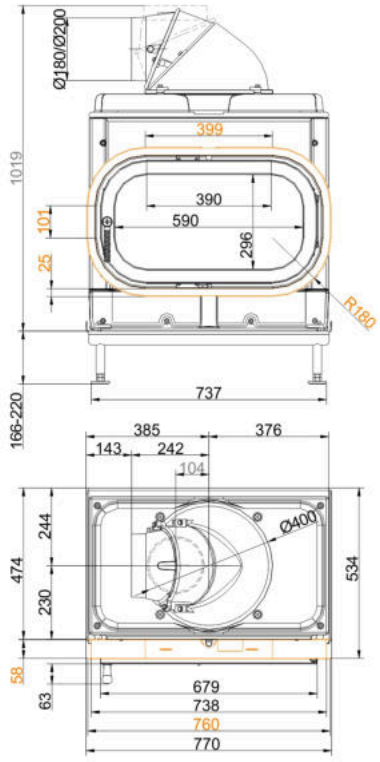
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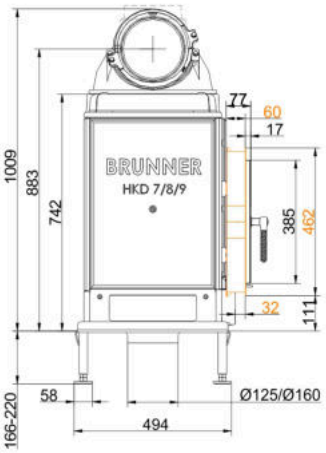
Dimension sheets - HKD 8





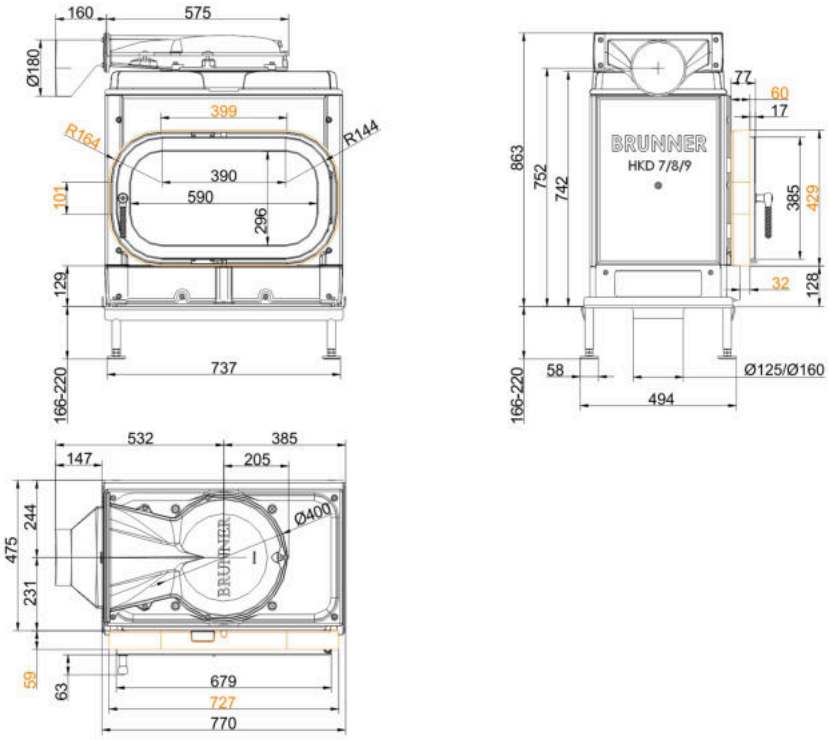
… mounting bracket with cast iron dome



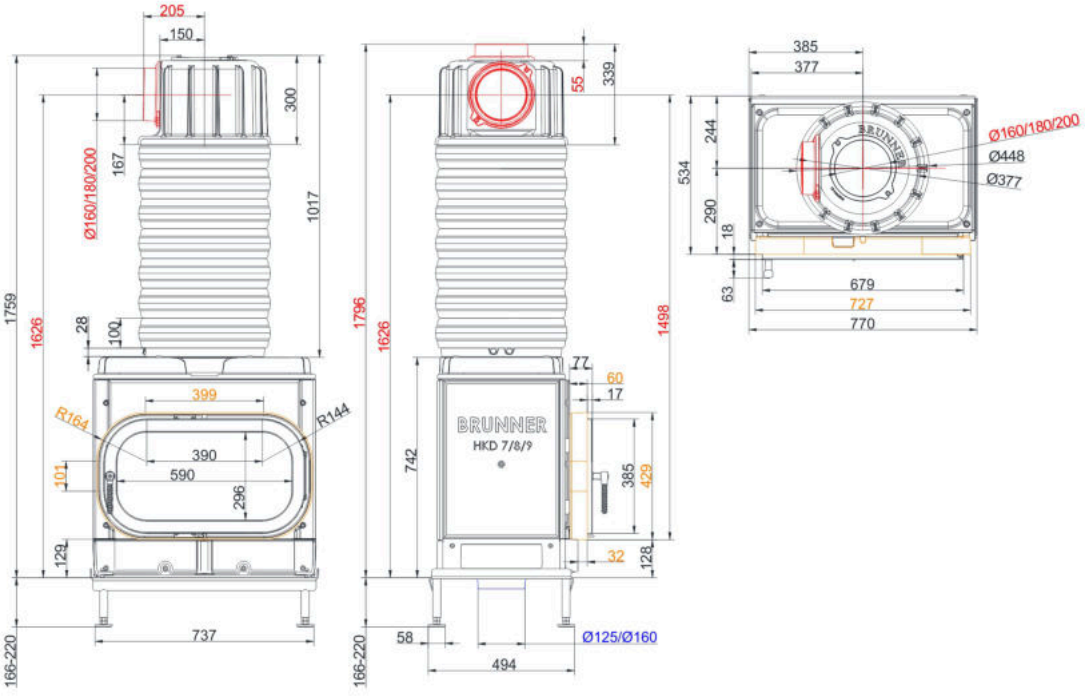


… door frame and cast iron dome

Dimension sheets - HKD 8



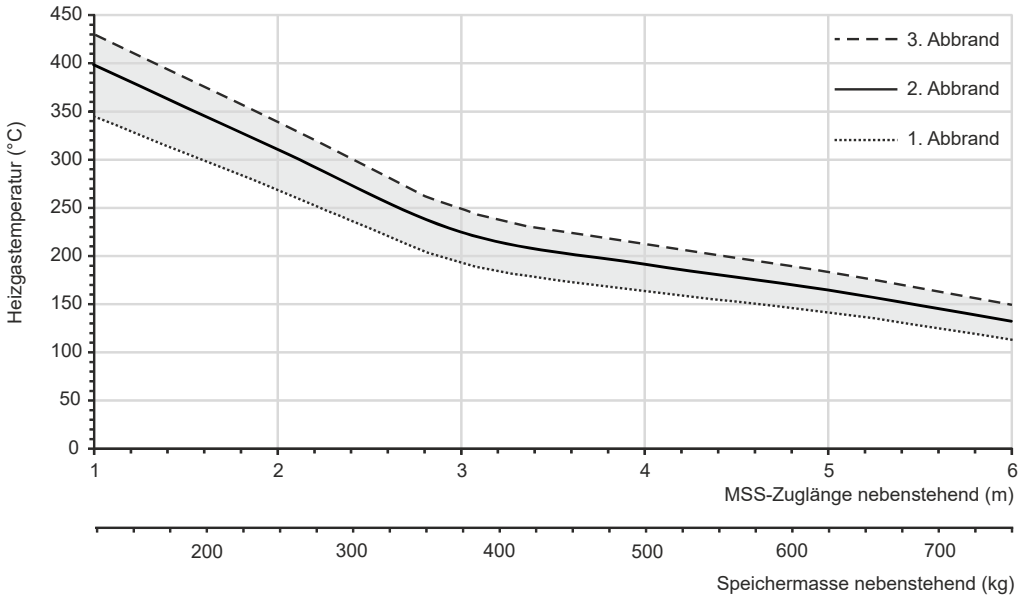
… mounting bracket with cast iron dome low



… mounting bracket and MAS

Stand: 2023-07-25

Dimension sheets - HKD 8



Design characteristics for adjacent storage mass

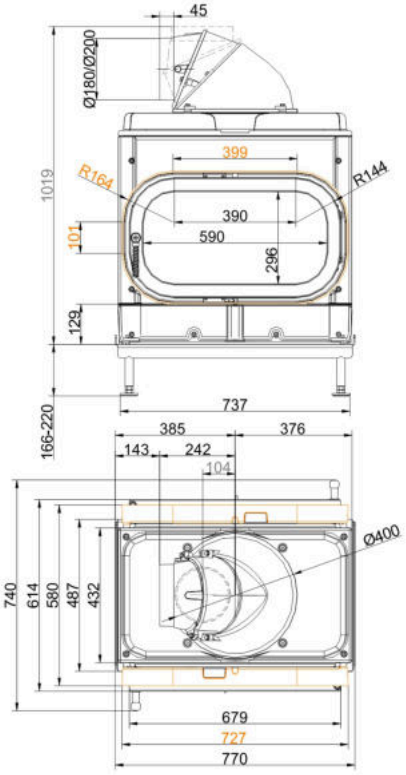
We suggest for CAD planning Palette CAD. Permanent updated drawings: www.brunner.de
Frames/ flue gas outlet connection/ combustion air supply connection/ front variants/ support bearing are marked in color.

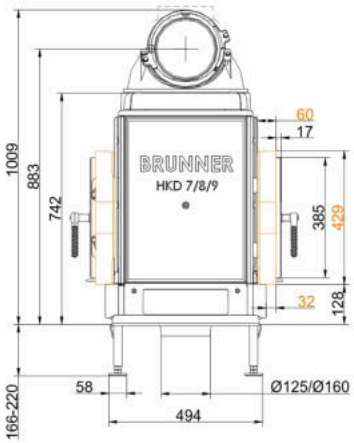
Planning and installation - HKD 8

Tested according to		EN 13229 W	EN 13229 WA
Values measured at		Rated power [1]	Storage operation [2]
Suitable for all construction types according to rules		OK	OK
Data for functional demonstration			
Rated heat power	kW	9	-
Fire wood volume	kg/h	2.7	5.5
Combustion performance	kW	10.5	22.0
Flue gas mass flow	g/s	8.5	20.0
Outlet temperature (before reheating surface)	°C	460	540
Flue gas temperature after:			
1 x adjoining cast iron radiator (GNF 8/10)	°C	180	215
7 x accumulation rings incl. MAS casted cover [3]	°C	220	-
4,9 m ceramic accumulator [4]	°C	-	180
3,4 m accumulation stones (MSS) [4]	°C	-	190
Necessary supply pressure	Pa	12	15
Combustion air consumption	m³/h	25	48
Combustion air connection Ø	mm	125 / 160	125 / 160
Heating gas temperature (before the hood/dome variant)			
cast iron dome	°C	460	540
Heat distribution			
Insert / reheating surface	%	40 / 40	40 / 40
Glass pane (single / double)	%	- / 20	- / 20
Cross-section of gratings [5]			
exhaust warm air	cm²	700 / 300 / 500	700 / 300 / 500
Recirculation air	cm²	700 / 300 / 500	700 / 300 / 500
Minimal distances of the fireplace			
to cladding, insulation layer	cm	8	8
to mounting floor	cm	15	15
Thermal insulation without / with air gratings [6]			
Mounting wall	cm	12 / 10	12 / 10
Floor	cm	0	0
Ceiling	cm	22 / 16	22 / 16
Brick lining for combustible wall	cm	10	10
Weight			
Fireplace / combustion chamber	kg	254 / 66	
Meets requirement/limit values for:			
Germany/ Austria / Switzerland / Norway		1.BImSchV (Stufe 2) / 15a BVG (2015) / LRV / -	

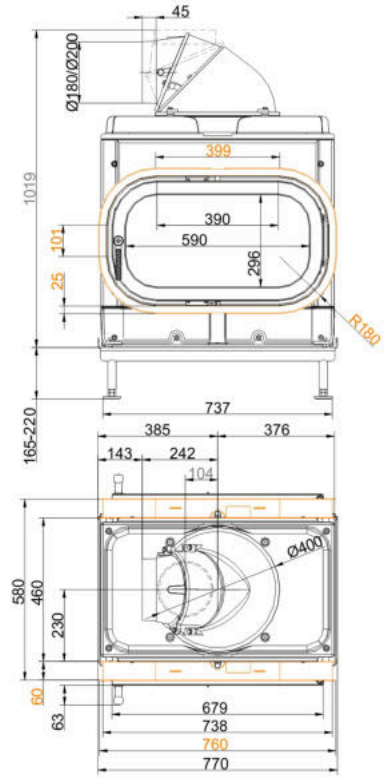
1) Indications to “Rated power” determined with metallic reheating surface
2) Indications to “Storage operation” for the manual execution of the reheating surface (guide values).
3) Damper flap recommended
4) Approximate value. Determination according to design characteristics for adjacent storage mass or proof of function provided by calculation
5) for fireplace inserts / flue gas pipe / metallic reheating surface
6) Values determined with upper air cross- sections; stove cladding is heat emitting

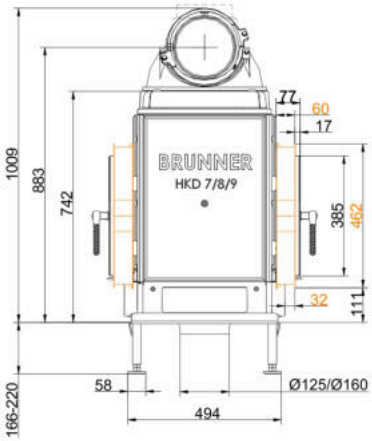
Dimension sheets - HKD 8 Tunnel





… mounting bracket with cast iron dome

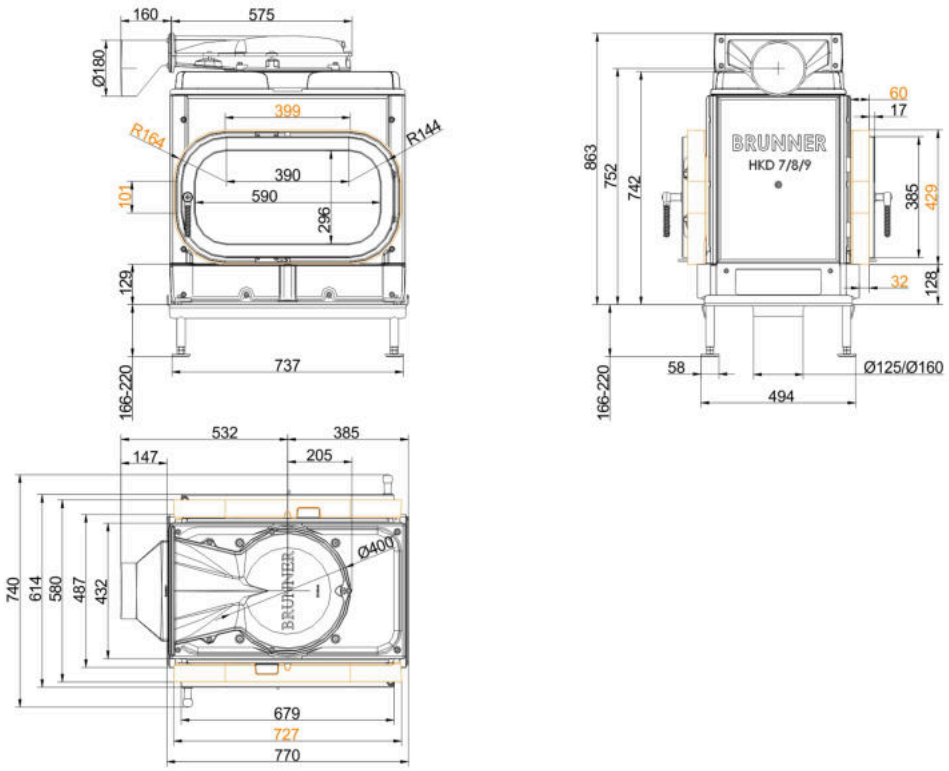




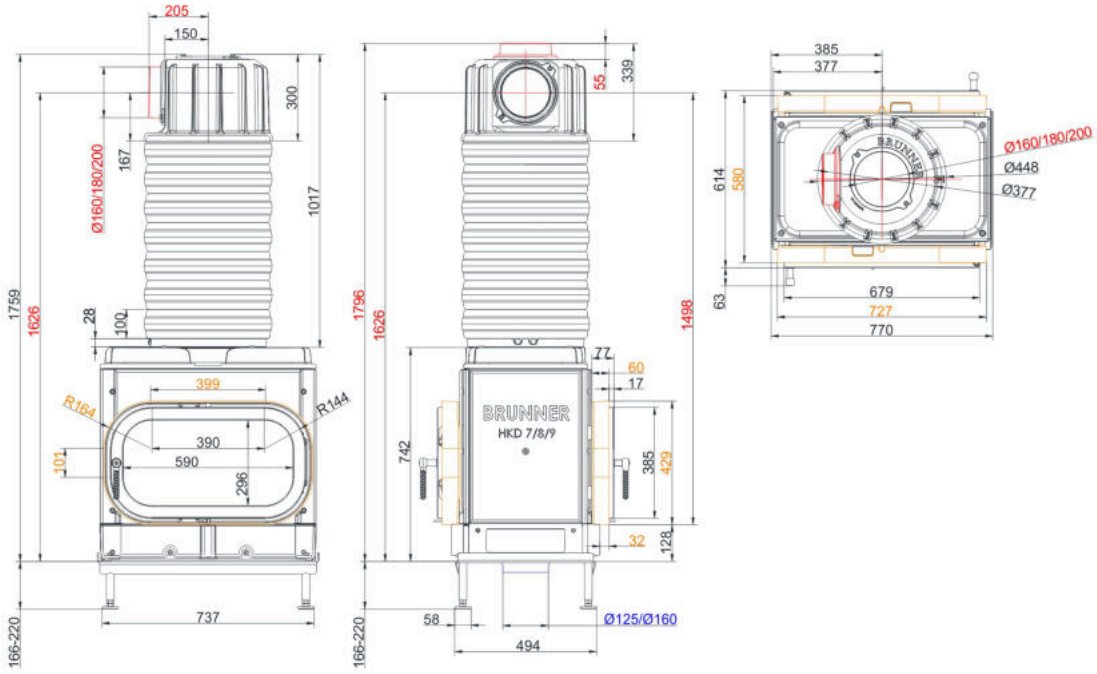
… door frame and cast iron dome

Stand: 2023-07-25

Dimension sheets - HKD 8 Tunnel

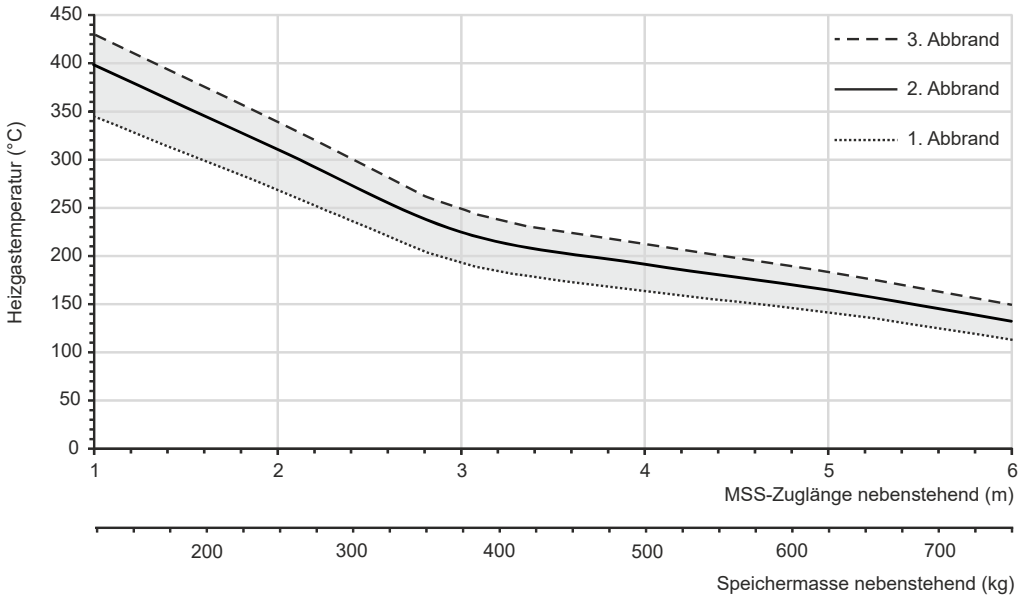


… mounting bracket with cast iron dome low



… mounting bracket and MAS

Dimension sheets - HKD 8 Tunnel



Design characteristics for adjacent storage mass

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.

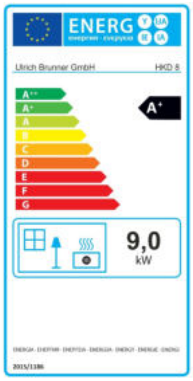
Planning and installation - HKD 8 Tunnel

Tested according to		EN 13229 W	EN 13229 WA
Values measured at		Rated power [1]	Storage operation [2]
Suitable for all construction types according to rules		OK	OK
Data for functional demonstration			
Rated heat power	kW	9	-
Fire wood volume	kg/h	2.7	5.5
Combustion performance	kW	10.5	22.0
Flue gas mass flow	g/s	8.5	20.0
Outlet temperature (before reheating surface)	°C	460	540
Flue gas temperature after:			
1 x adjoining cast iron radiator (GNF 8/10)	°C	180	215
7 x accumulation rings incl. MAS casted cover [3]	°C	220	-
4,9 m ceramic accumulator [4]	°C	-	180
3,4 m accumulation stones (MSS) [4]	°C	-	190
Necessary supply pressure	Pa	12	15
Combustion air consumption	m³/h	25	48
Combustion air connection Ø	mm	125 / 160	125 / 160
Heating gas temperature (before the hood/dome variant)			
cast iron dome	°C	460	540
Heat distribution			
Insert / reheating surface	%	30 / 40	30 / 40
Glass pane (single / double)	%	- / 30	- / 30
Cross-section of gratings [5]			
exhaust warm air	cm²	700 / 300 / 500	700 / 300 / 500
Recirculation air	cm²	700 / 300 / 500	700 / 300 / 500
Minimal distances of the fireplace			
to cladding, insulation layer	cm	8	8
to mounting floor	cm	15	15
Thermal insulation without / with air gratings [6]			
Mounting wall	cm	12 / 10	12 / 10
Floor	cm	0	0
Ceiling	cm	22 / 16	22 / 16
Brick lining for combustible wall	cm	10	10
Weight			
Fireplace / combustion chamber	kg	307 / 46	
Meets requirement/limit values for:			
Germany/ Austria / Switzerland / Norway		1.BImSchV (Stufe 2) / 15a BVG (2015) / LRV / -	

1) Indications to “Rated power” determined with metallic reheating surface
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5) for fireplace inserts / flue gas pipe / metallic reheating surface
6) Values determined with upper air cross- sections; stove cladding is heat emitting

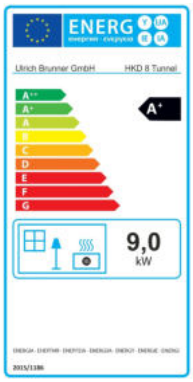
Product data sheet according to (EU) 2015/1186:

Supplier's name or trademark	Ulrich Brunner GmbH
Model identifier:	HKD 8
Energy efficiency class:	A+
Direct heat output:	9,0 kW
Indirect heat output:	N.A. 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	



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

Supplier's name or trademark	Ulrich Brunner GmbH
Model identifier:	HKD 8 Tunnel
Energy efficiency class:	A+
Direct heat output:	9,0 kW
Indirect heat output:	N.A. 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	



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Art.Nr.: 200258