

# Installation Guide

HKD 7 SK  
HKD 7 SK Tunnel

©2019

**BRUNNER**<sup>®</sup>  
*made in germany.*

# CONTENTS

|           |  |           |
|-----------|--|-----------|
| <b>1</b>  | <b>Basic informations.....</b>   | <b>3</b>  |
| <b>2</b>  | <b>Product description.....</b>  | <b>4</b>  |
| <b>3</b>  | <b>Delivery contents.....</b>  | <b>4</b>  |
| <b>4</b>  | <b>Description of parts.....</b>   | <b>5</b>  |
| 4.1       | Overview.....  | 5         |
| 4.2       | Body (W051002).....  | 6         |
| 4.3       | Front assembly (W051005-02).....   | 8         |
| 4.4       | Door single glazing (D016006-01).....                                    | 9         |
| 4.5       | Door with double glazing (D016010-01).....                               | 11        |
| 4.6       | Combustion chamber inner lining (W051007-01).....                        | 13        |
| 4.7       | Combustion chamber inner lining at Tunnel version (W051007-02).....      | 14        |
| 4.8       | Rear wall with burn- through hole (W051006).....                         | 15        |
| 4.9       | Door frame (D016065-01).....   | 15        |
| 4.10      | Mounting frame ( D016070-01).....  | 16        |
| <b>5</b>  | <b>Installation.....</b>   | <b>16</b> |
| 5.1       | Alignement.....  | 16        |
| 5.2       | Air supply connection.....   | 17        |
| 5.3       | Flue gas outlet.....   | 18        |
| 5.4       | Installation of the combustion chamber inner lining.....                 | 21        |
| 5.5       | Combustion chamber inner lining- installation of the Tunnel version..... | 24        |
| 5.6       | Installation of the mounting frame.....                                  | 26        |
| 5.7       | Installation of the door frame.....                                      | 28        |
| 5.8       | Installation of the thermocouple.....                                    | 29        |
| 5.9       | Extension cleaning- handle for the boiler (optional).....                | 30        |
| <b>6</b>  | <b>Settings.....</b>   | <b>31</b> |
| 6.1       | Combustion air adjustment.....   | 31        |
| 6.2       | Self-closing adjustment.....   | 33        |
| 6.3       | Direction change of the side-hinged door.....                            | 34        |
| <b>7</b>  | <b>How to replace the ISO hood.....</b>                                  | <b>39</b> |
| <b>8</b>  | <b>How to replace the thermocouple.....</b>                              | <b>44</b> |
| <b>9</b>  | <b>Directives.....</b>   | <b>46</b> |
| <b>10</b> | <b>Drawings and technical data.....</b>                                  | <b>47</b> |

# 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/Allgemein/Allgemeine_Hinweise_für_den_Aufbau_en.pdf)

([https://www.brunner.de/Allgemein/Allgemeine\\_Hinweise\\_für\\_den\\_Aufbau\\_en.pdf](https://www.brunner.de/Allgemein/Allgemeine_Hinweise_für_den_Aufbau_en.pdf))



## 2 PRODUCT DESCRIPTION

**Caution:** The HKD 7 SK / HKD 7 SK Tunnel must not be used without a functional water boiler (please refer to our general Installation Guide for water boilers).

Tiled stove inserts with hot water functionality include a combustion chamber of a specific stove type and a water conducting boiler section. The boilers comply with TRD 702 "Heating water generators" group II and are built from St 37-2 quality steel according to DIN17100; the heat exchanger elements are made according to DIN1626 / DIN1629. All water boilers are designed and approved as heating generator devices for hot water heating systems with max. allowed supply temperatures up to 110 °C (212°F).

Those devices can be used in stand-alone applications or in combination with other heating generator devices. These applications include open installations according to DIN 4751 Part 1 as well, as closed installations with thermostatic safety devices according to DIN 4751 Part 2.

SK series water boilers are in general dimensioned to turn all available energy of the flue gases into hot water. Additional warm air generating or heat accumulating devices cannot be installed behind a water boiler section. The flue gas must be led away into the chimney on shortest possible way.

Some of the waterbearing devices of the SK series can be activated and deactivated by using a special three-way flow control valve (optional "Moritzklappe") installed between the boiler and the chimney entrance. Using this smoke valve you can switch between two available operating modes, hot water (the water boiler mode) and warm air or heat projection (the radiator/accumulator mode). Both flue gas streams (mode 1 or 2) are connected by the three-way flow control valve just before they enter the chimney.

**Note:** Some hot water is produced also, when the system is switched into "warm air" or "heat projection" mode. Please make sure that this hot water can be led away safely into the heating system (for example, into a buffer tank).

### Flue gas flow:

- Z = ceramic fumes
- M = Flue gas branch piece <Moritzflap>
- S = Chimney
- F = flexible shaft
- U = Switch lever
- K = Boiler body
- A = connecting piece

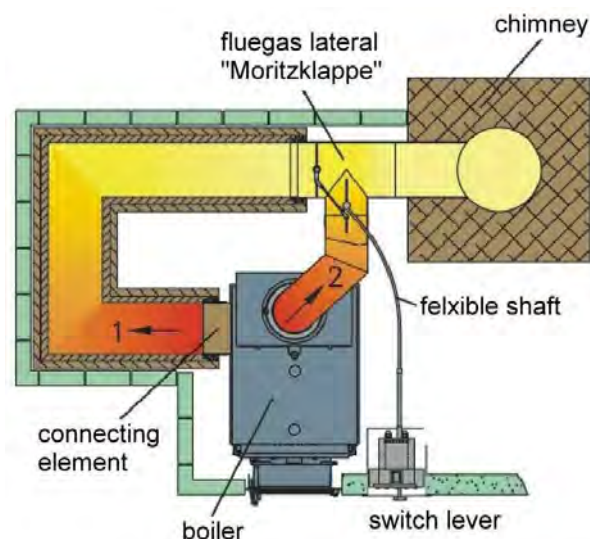


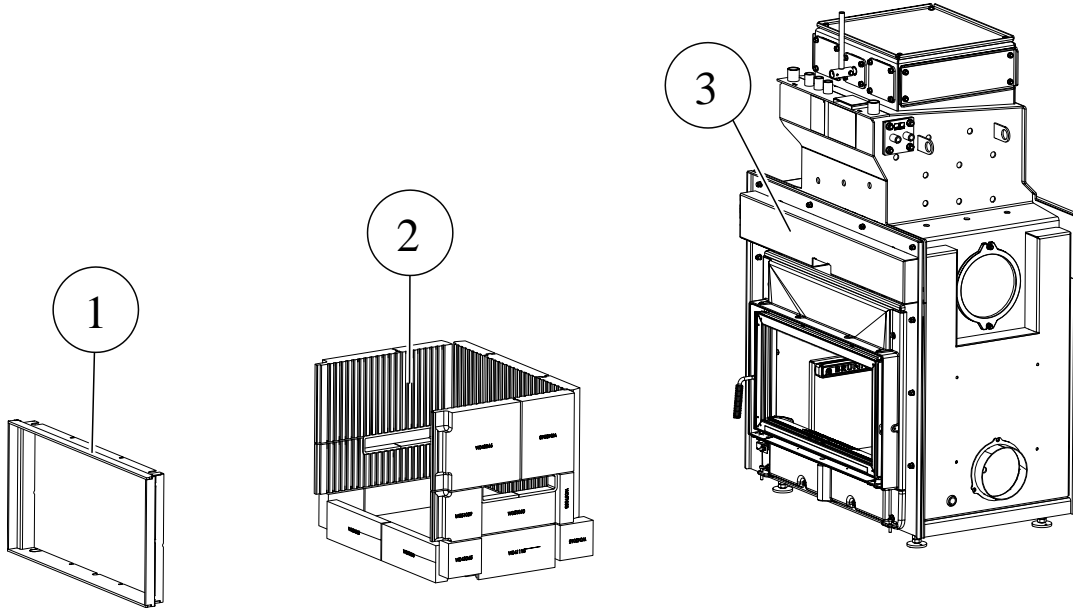
Illustration 1: Gas flow with Moritzflap

## 3 DELIVERY CONTENTS

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

## 4 DESCRIPTION OF PARTS

### 4.1 OVERVIEW

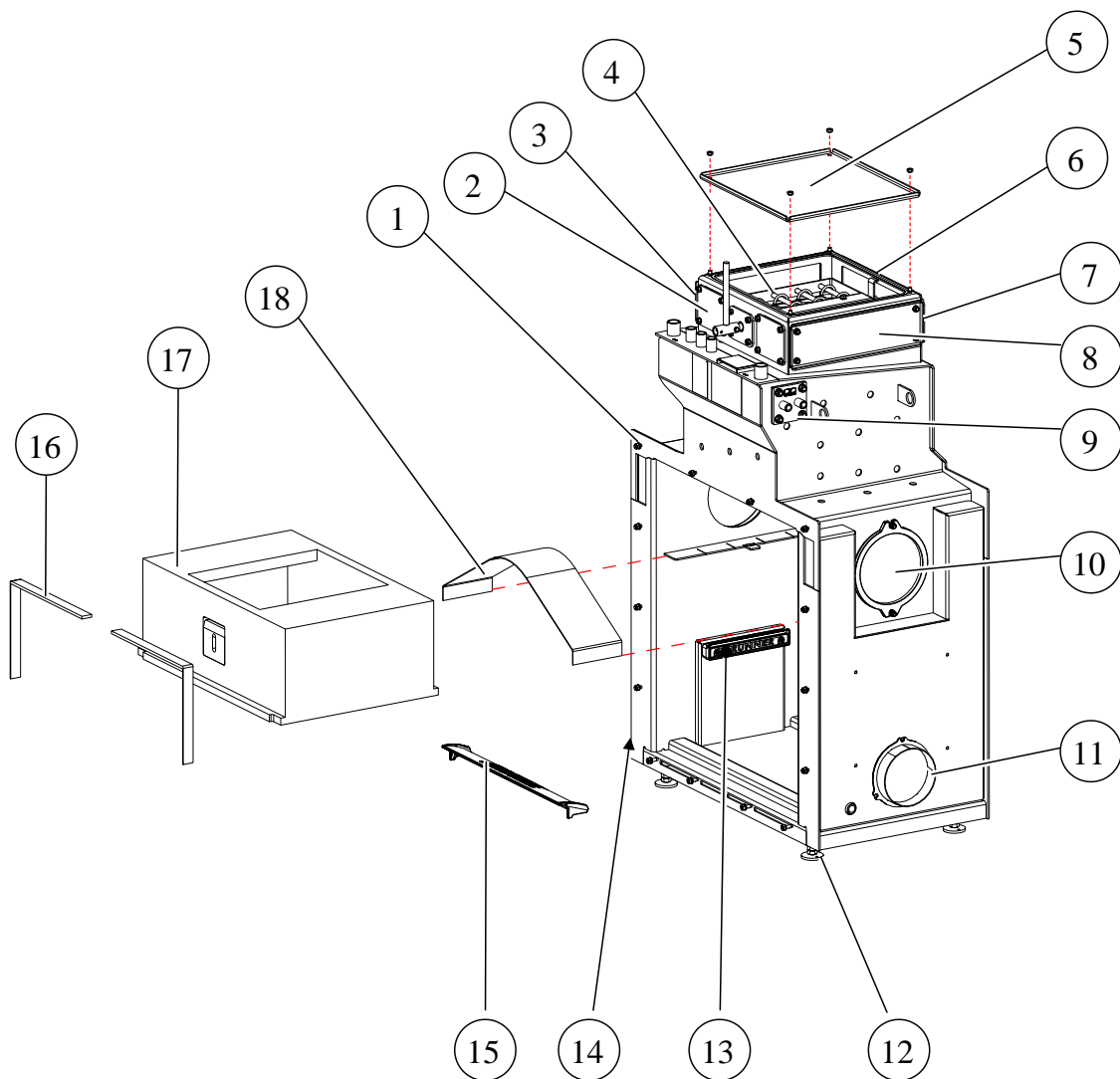


1 Mounting frame/ door frame

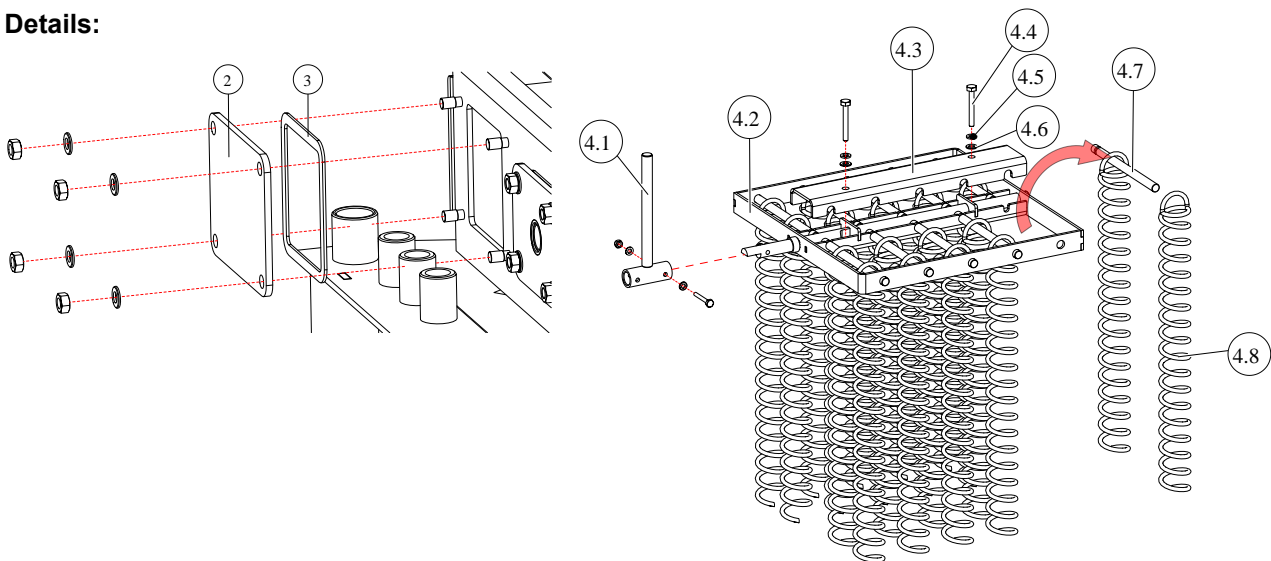
2 Chamotte

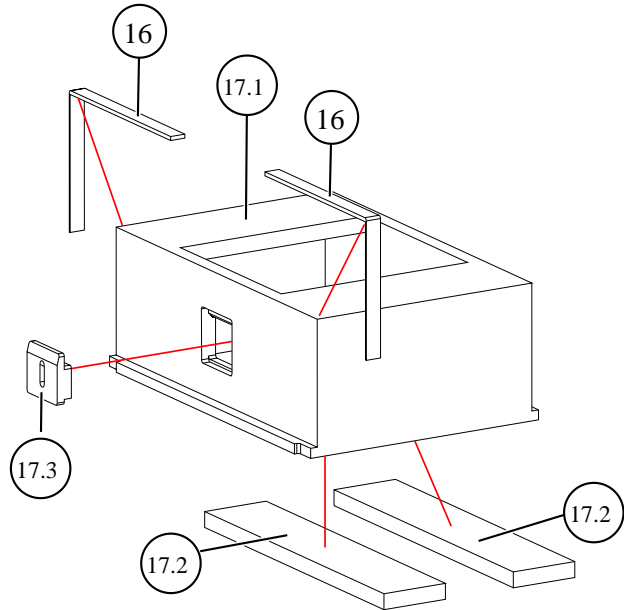
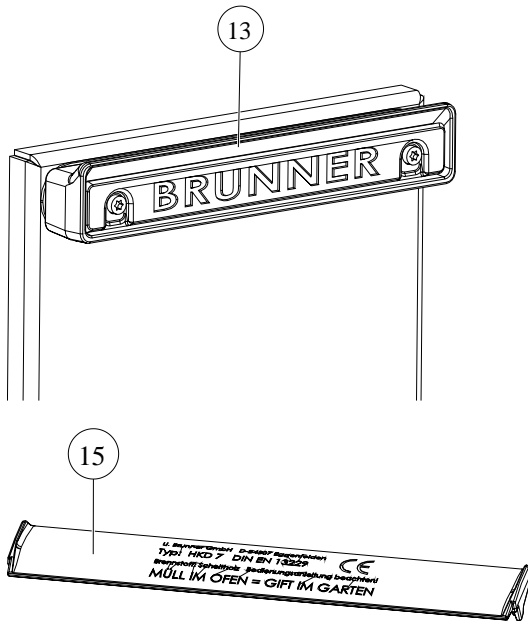
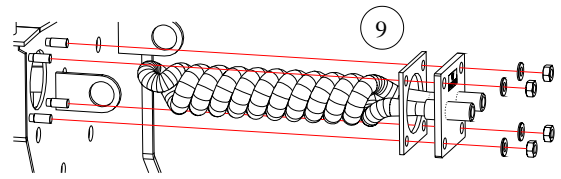
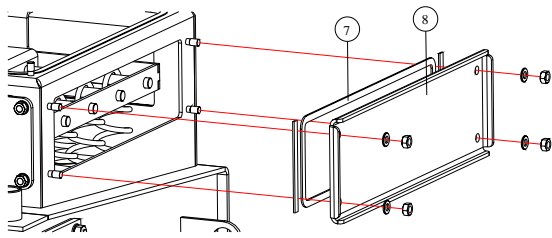
3 Boiler body complete including hood lining

## 4.2 BODY (W051002)



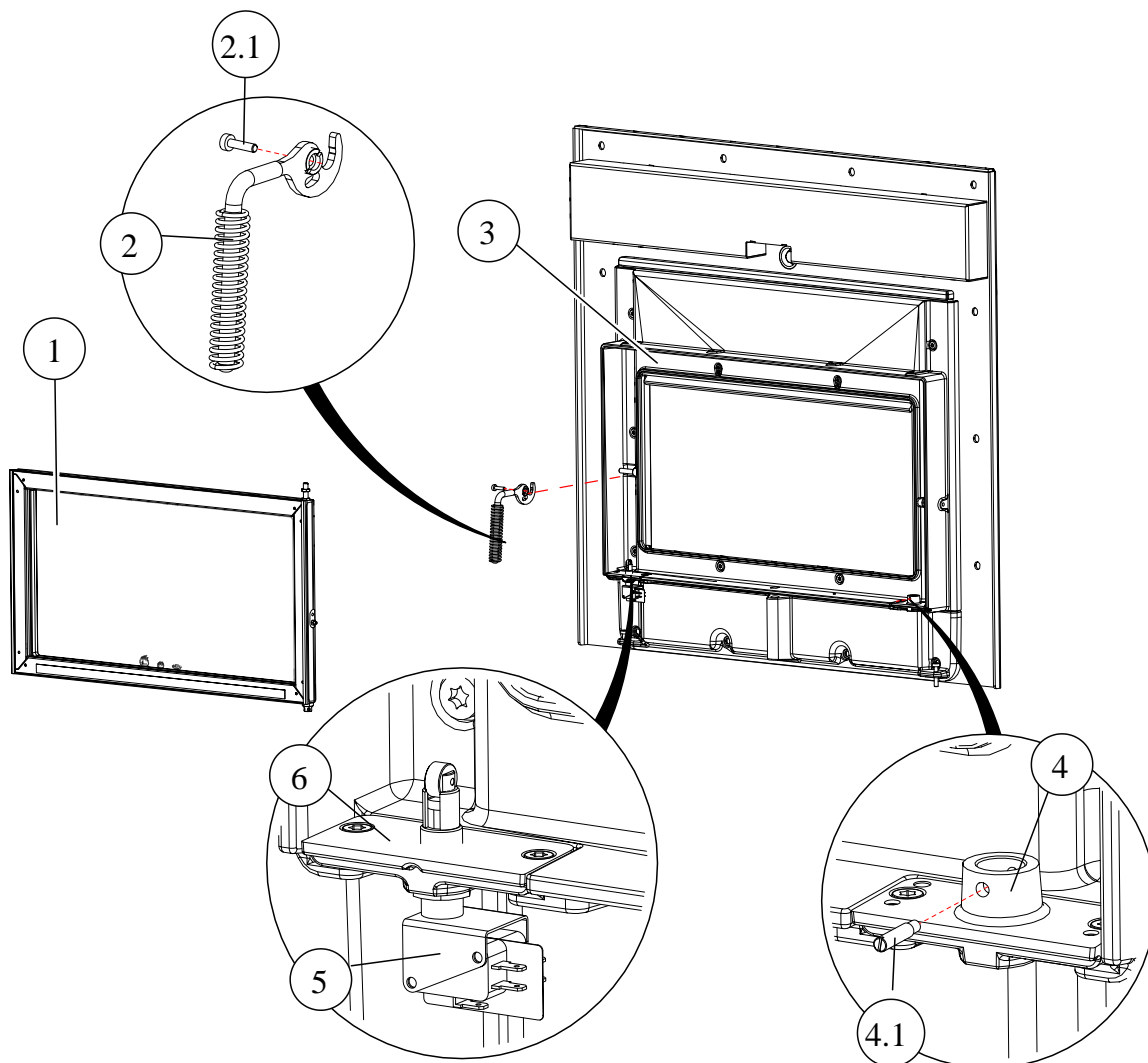
**Details:**





| Pos. | Art.no  | Designation                     | Pcs. | Pos. | Art.no    | Designation                                  | Pcs. |
|------|---------|---------------------------------|------|------|-----------|--|------|
| 1    | W051003 | Boiler body                     | 1    | 8    | W030046   | Blind cover                                  | 3    |
| 2    | W051079 | Revisions cover front           | 2    | 9    | 10666.1   | Safety heat exchanger                        | 1    |
| 3    | W043142 | Revisions cover seal front      | 2    | 10   | 07135     | nozzle cap                                   | 2    |
| 4    | W043045 | Cleaning mechanism with spring  | 1    | 11   | I046109   | Combustion air nozzle 160 kpl                | 1    |
| 4.1  | W030125 | User handle simple              | 1    | 12   | W051090   | Adjustable feet assembly                     | 4    |
| 4.2  | W043081 | Tilting frame                   | 1    | 13   | C010058-1 | Air inlet assembly                           | 2    |
| 4.3  | W043148 | Spindle fastening center        | 1    | 14   | I046127   | Blind cover 160 kpl. (air connection nozzle) | 1    |
| 4.4  | 00639   | Hexagonal screw M8x55           | 2    | 15   | D016032   | Textplate                                    | 1    |
| 4.5  | 00604   | Spring washer M8                | 2    | 16   | 20000     | Ceramic wool seal                            | 2    |
| 4.6  | 00605   | Washer                          | 2    | 17   | W051009   | Iso hood lining assembly                     | 1    |
| 4.7  | W043147 | Support rod cleaning springs    | 8    | 17.1 | W051047   | Iso hood lining                              | 1    |
| 4.8  | W043053 | Cleaning spring                 | 16   | 17.2 | W051046   | Deflector plate                              | 2    |
| 5    | W043079 | Cover sheet smoke gas collector | 1    | 17.3 | W043104   | Iso hood                                     | 1    |
| 6    | W043041 | Sealing rope                    | 1    | 18   | W051044   | Deflector sheet                              | 1    |
| 7    | W030051 | Flue gas outlet seal            | 3    |      |           |  |      |

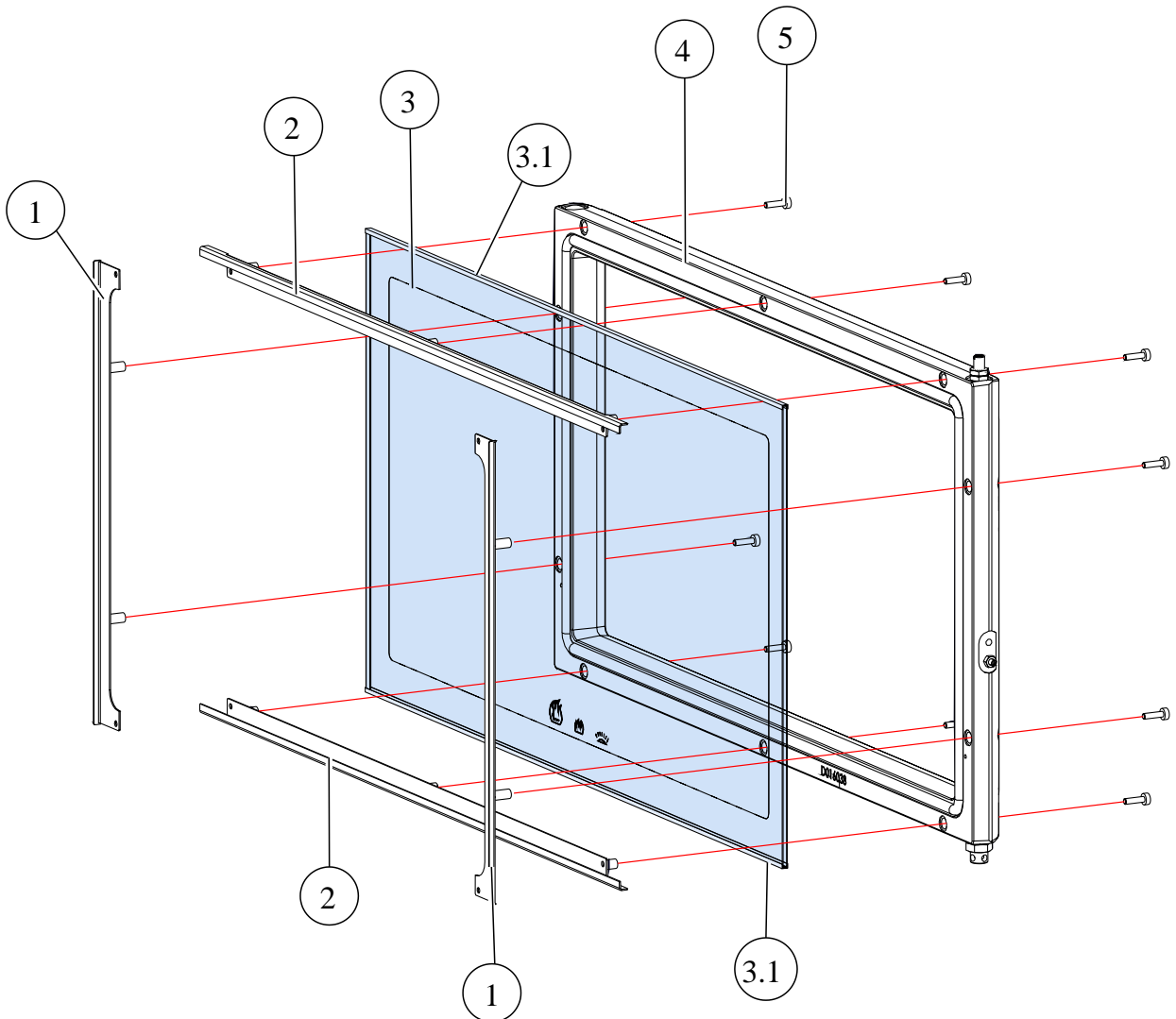
### 4.3 FRONT ASSEMBLY (W051005-02)



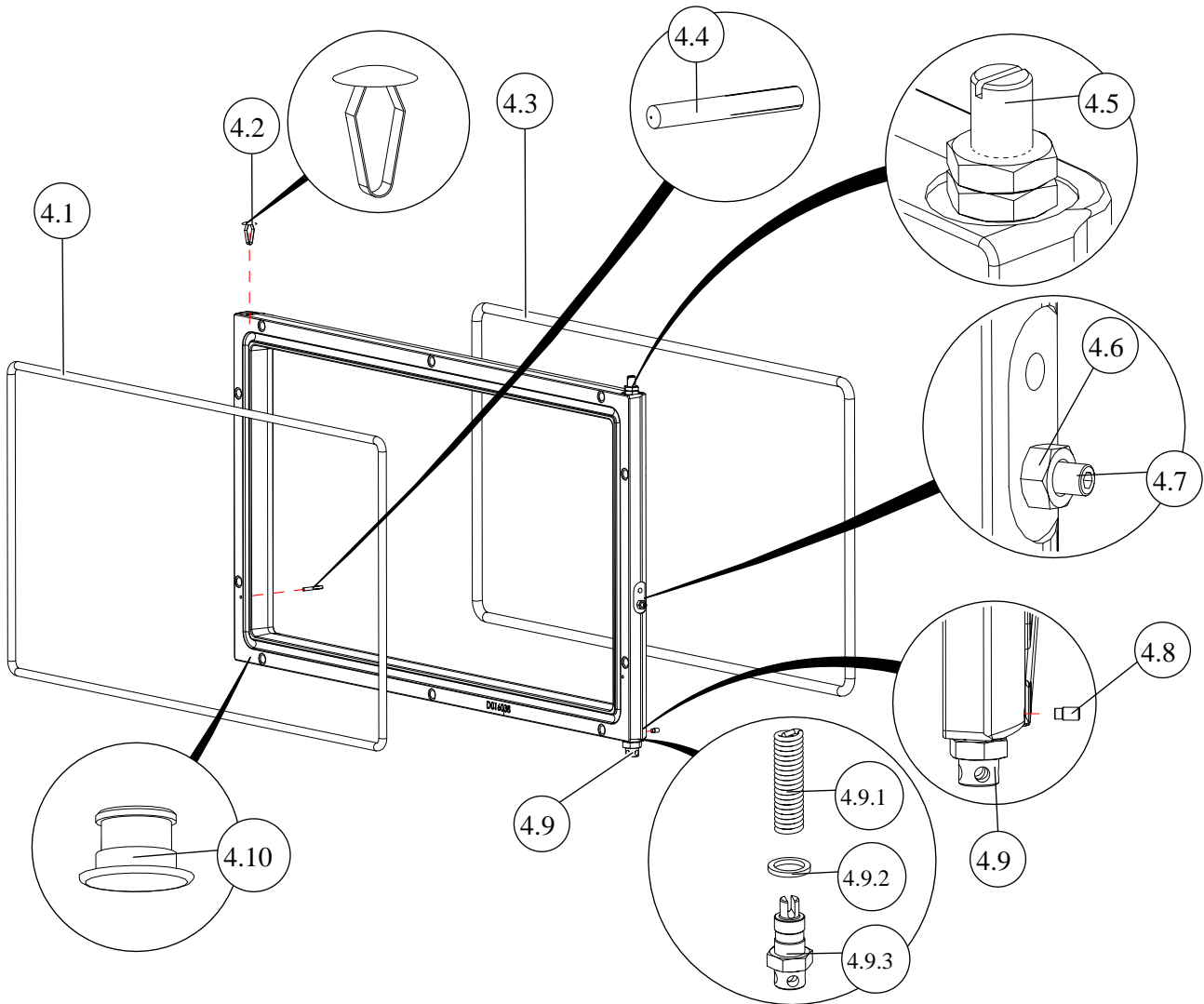
| Pos. | Art.no.    | Designation                           | Pcs. |
|------|------------|---------------------------------------|------|
| 1    | D016010-01 | Double glass assembly                 | 1    |
|      | D016006-01 | Single glass assembly                 |      |
| 2    | 02056      | Door handle M16                       | 1    |
| 2.1  | 800221     | Cylinder screw M6x20                  | 1    |
| 3    | W051019    | Front assembly 7SK                    | 1    |
| 4    | D016118    | Hinge insert                          | 1    |
| 5    | D003488    | Door contact insert HKD2.2            | 1    |
| 6    | D003390    | Assembly of EOS door contact switches | 1    |



## 4.4 DOOR SINGLE GLAZING (D016006-01)

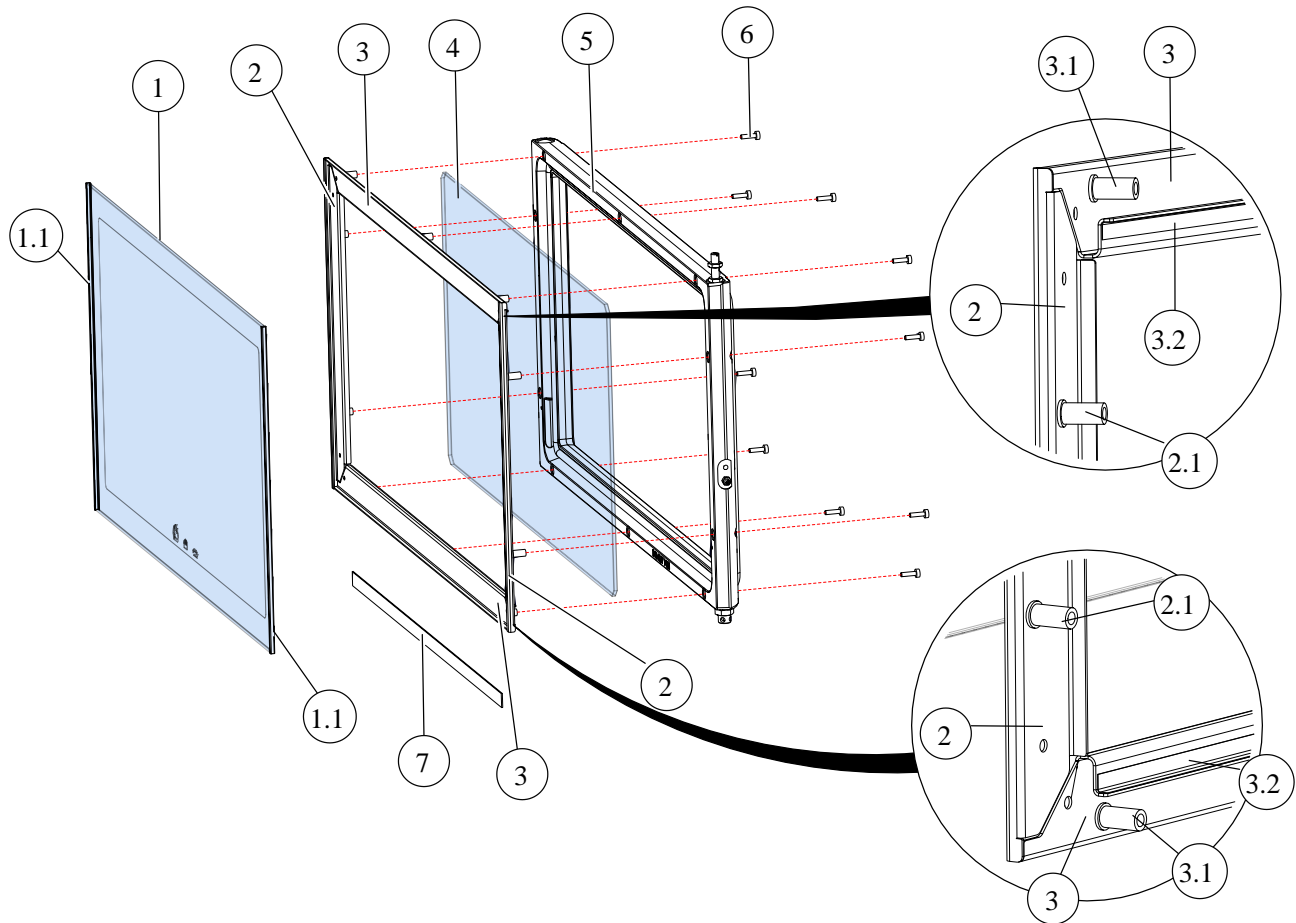


| Pos. | Art.no.    | Designation                                   | Pcs. |
|------|------------|---|------|
| 1    | D016004-01 | Holding frame assembly single glazing le-ri   | 2    |
| 2    | D016040-01 | Holding frame assembly double glazing top-bot | 2    |
| 3    | D016121-01 | Door single glazing assembly                  | 1    |
| 3.1  | D016061    | Sealing tape for the glass pane               | 2    |
| 4    | D016005    | Flat door frame of glass pane                 | 1    |
| 5    | 02095      | Torx cylinder screw M5x16                     | 10   |

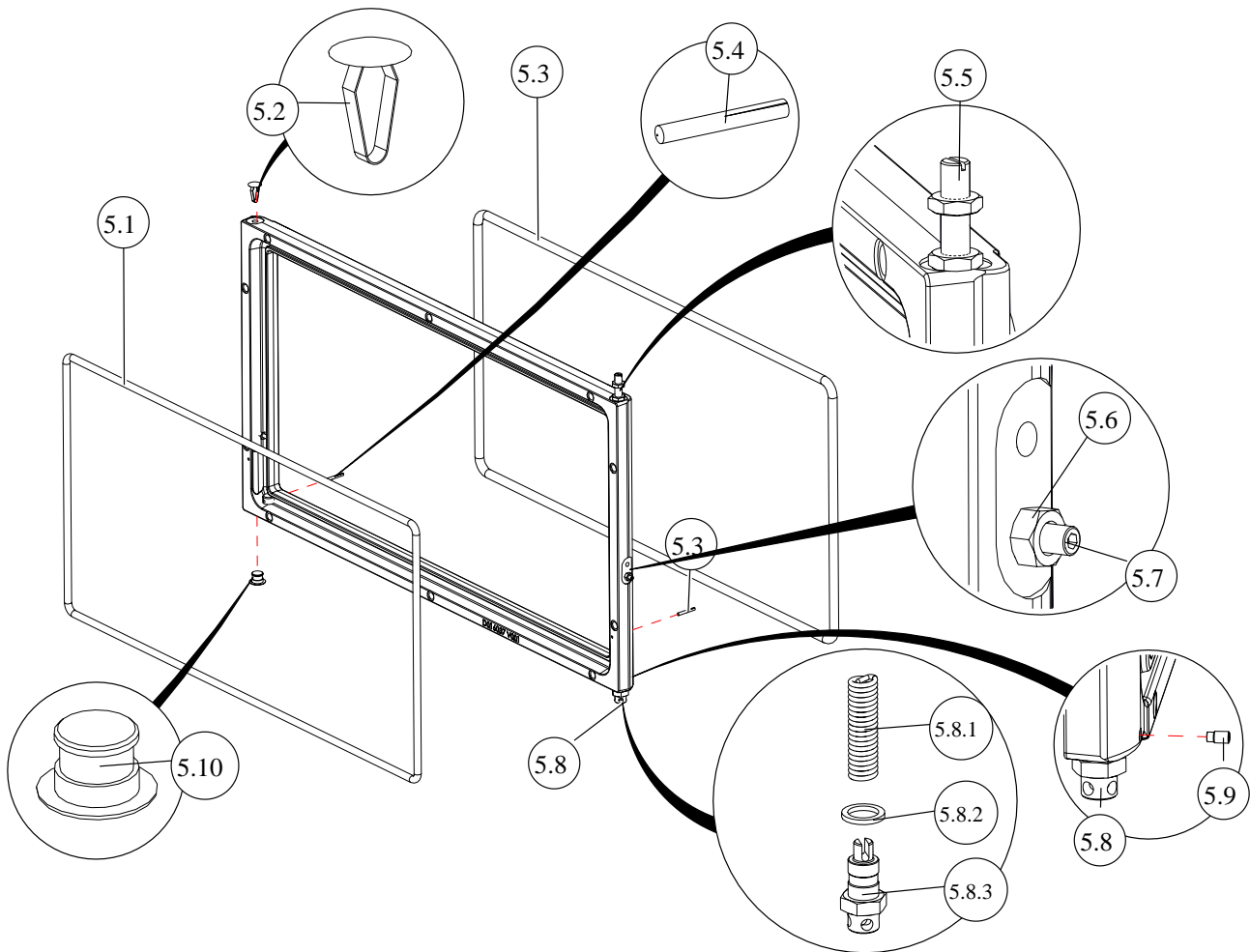


| Pos.  | Art.no. | Designation                                   | Pcs. |
|-------|---------|---|------|
| 4.1   | D016060 | Sealing rope side opening door single glazing | 1    |
| 4.2   | 02079   | Cover clamp                                   | 1    |
| 4.3   | D016059 | Sealing rope, door HKD 7                      | 1    |
| 4.4   | 800538  | Grooved pin D3x24                             | 2    |
| 4.5   | D016092 | Door hinge bolt assembly top                  | 1    |
| 4.6   | 800216  | Hex nut M5                                    | 1    |
| 4.7   | 800212  | Threaded pin M5x16                            | 1    |
| 4.8   | 00734   | Threaded pin M5x8                             | 2    |
| 4.9   | D016133 | BG Door hinge bolt self-closing               | 1    |
| 4.9.1 | I013955 | Self-closing spring                           | 1    |
| 4.9.2 | 900426  | Spacer ring                                   | 1    |
| 4.9.3 | D016132 | Spring clamps                                 | 1    |
| 4.10  | D016122 | Closure plug                                  | 1    |

## 4.5 DOOR WITH DOUBLE GLAZING (D016010-01)

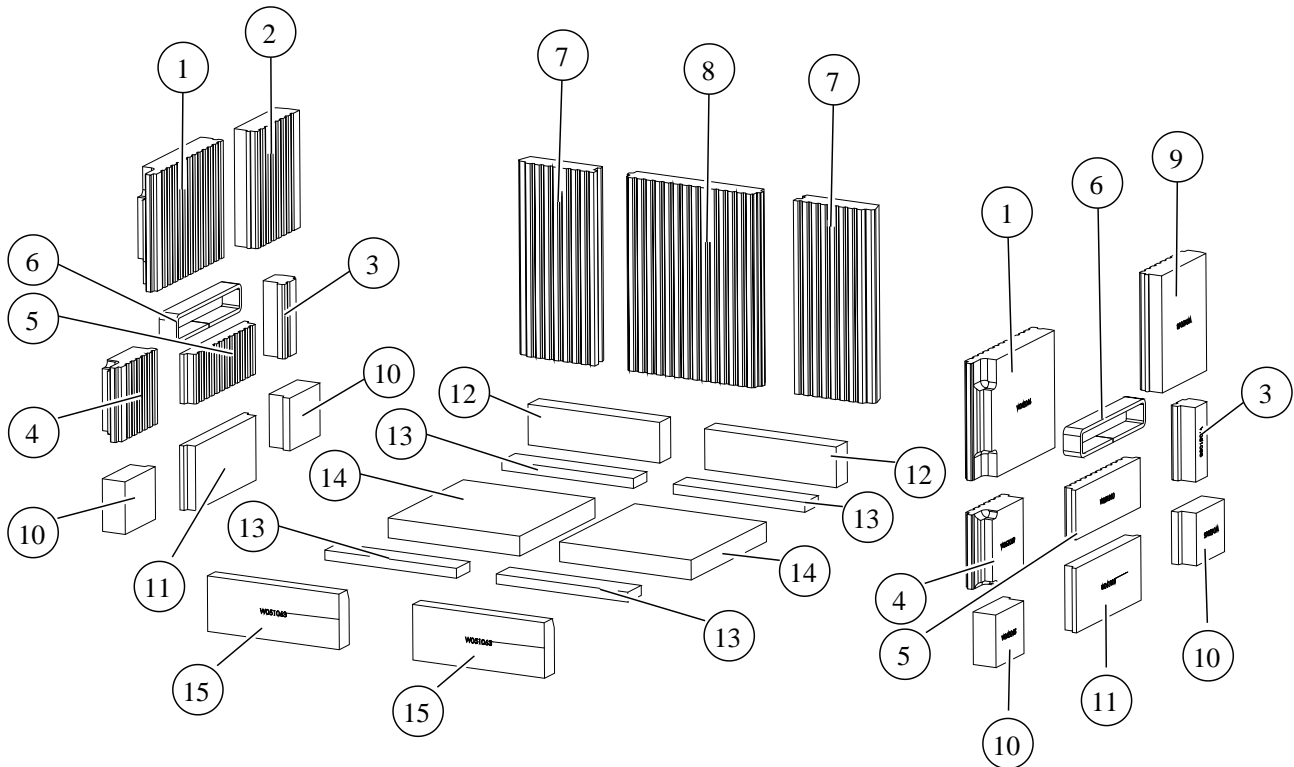


| Pos. | Art.no. | Designation                               | Pcs. |
|------|---------|---|------|
| 1    | D016127 | Outer glass pane with seal                | 1    |
| 1.1  | D016130 | Sealing tape for the glass pane           | 2    |
| 2    | D016008 | Glass pane holding frame                  | 2    |
| 2.1  | 800127  | Inner thread socket                       | 4    |
| 3    | D016128 | Glass support frame inner pane with seal  | 2    |
| 3.1  | 800127  | Inner thread socket                       | 6    |
| 3.2  | D016129 | Sealing tape for glass pane holding frame | 1    |
| 4    | D016034 | Inner washer                              | 1    |
| 5    | D016007 | Flat door frame for double glazing        | 1    |
| 6    | 02095   | Torx cylinder screw M5x16                 | 10   |
| 7    | D016077 | Sealing tape for the glass pane bottom    | 1    |

**Details door frame**


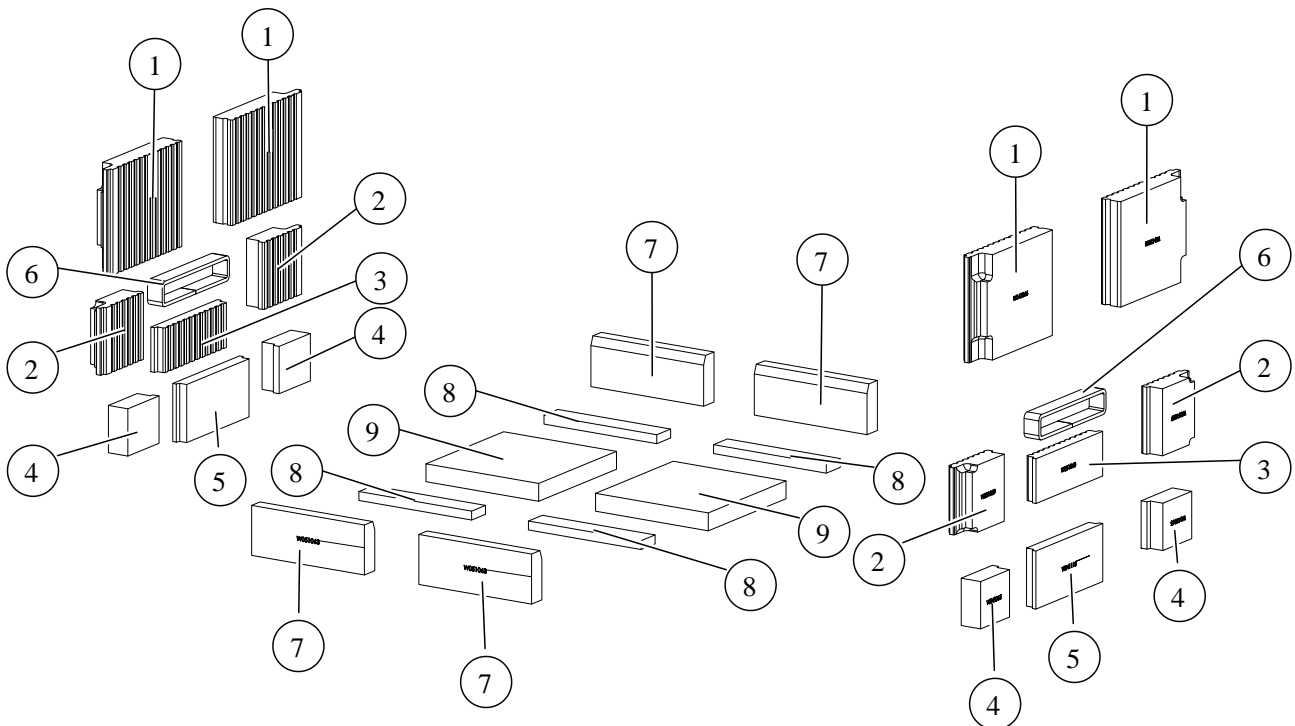
| Pos.  | Art. no. | Designation                                   | Pcs. |
|-------|----------|---|------|
| 5.1   | D016058  | Sealing rope door with double glazing HKD7    | 1    |
| 5.2   | 02079    | Cover clamp for 8mm hole                      | 1    |
| 5.3   | D016059  | Door sealing rope HKD 7                       | 1    |
| 5.4   | 800538   | Grooved pin D3x24                             | 2    |
| 5.5   | D016093  | Door hinge bolt assembly at top with lock nut | 1    |
| 5.6   | 800216   | Hex nut M5                                    | 1    |
| 5.7   | 800212   | Threaded pin M5x16                            | 1    |
| 5.8   | D016133  | Door hinge bolt self-closing                  | 1    |
| 5.8.1 | I013955  | Self-closing spring                           | 1    |
| 5.8.2 | 900426   | Spacer ring                                   | 1    |
| 5.8.3 | D016132  | Spring clamp                                  | 1    |
| 5.9   | 00734    | Threaded pin M5x8                             | 2    |
| 5.10  | D016122  | Closure plug                                  | 1    |

## 4.6 COMBUSTION CHAMBER INNER LINING (W051007-01)



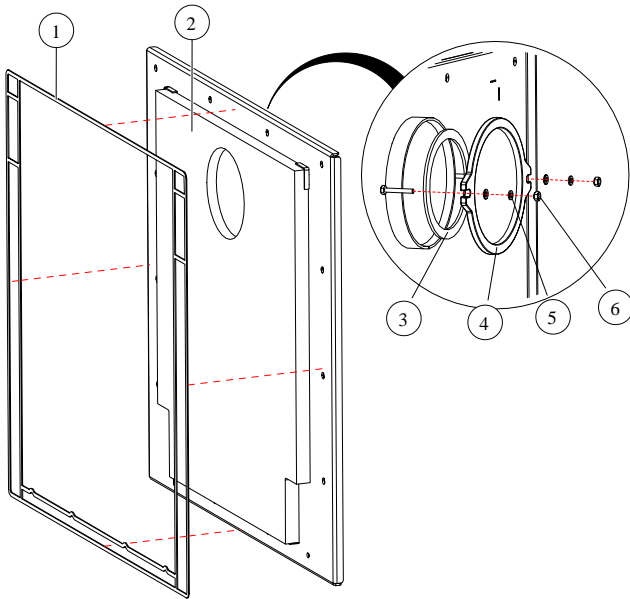
| Pos. | Art.no. | Designation                       | Pcs. |
|------|---------|-----------------------------------|------|
| 1    | W043066 | Side wall stone                   | 2    |
| 2    | W043070 | Rear side wall stone left         | 1    |
| 3    | W051058 | Rear side wall stone              | 2    |
| 4    | W051059 | Rear side wall stone bottom front | 2    |
| 5    | W051060 | Rear side wall stone middle       | 2    |
| 6    | 20000   | Ceramic fiber seal 650x60x25 mm   | 2    |
| 7    | D016109 | Rear wall stone                   | 2    |
| 8    | D016047 | Middle rear wall stone            | 1    |
| 9    | W043068 | Rear side wall stone              | 1    |
| 10   | W043065 | Side wedge                        | 4    |
| 11   | W041118 | Middle wedge                      | 2    |
| 12   | W051057 | Rear wedge                        | 2    |
| 13   | W051056 | Flat bottom stone                 | 4    |
| 14   | W051055 | Bottom plate                      | 2    |
| 15   | W051063 | Front wedge                       | 2    |

## 4.7 COMBUSTION CHAMBER INNER LINING AT TUNNEL VERSION (W051007-02)



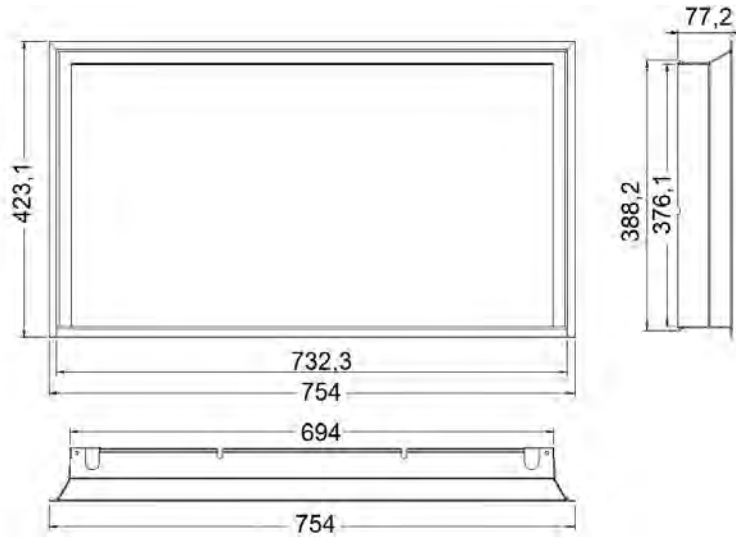
| Pos. | Art. no. | Designation                     | Pcs. |
|------|----------|---------------------------------|------|
| 1    | W043066  | Side wall stone                 | 4    |
| 2    | W051059  | Lower side wall stone, front    | 4    |
| 3    | W051060  | Middle side wall stone          | 2    |
| 4    | W043065  | Side wedge                      | 4    |
| 5    | W041118  | Middle wedge                    | 2    |
| 6    | 20000    | Ceramic fiber seal 650x60x25 mm | 2    |
| 7    | W051063  | Front wedge                     | 4    |
| 8    | W051056  | Bottom stone flat               | 4    |
| 9    | W051055  | Bottom plate                    | 2    |

#### 4.8 REAR WALL WITH BURN- THROUGH HOLE (W051006)



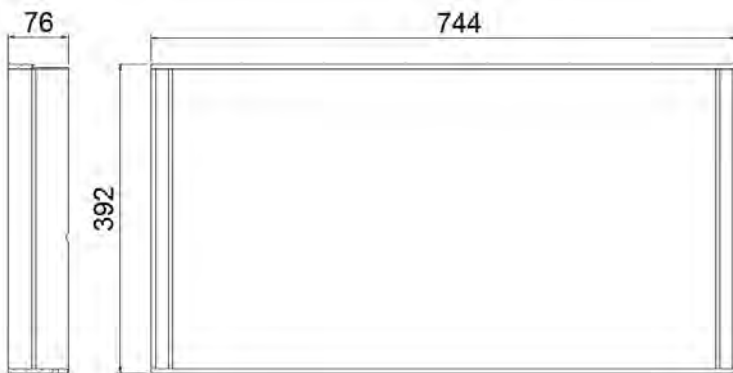
| Pos. | Art no. | Designation                              | Pcs. |
|------|---------|--|------|
| 1    | W051023 | Sealing rear wall                        | 1    |
| 2    | W051026 | Insulation board with burn-through hhole | 1    |
| 3    | W041179 | Flat seal                                | 1    |
| 4    | 07135   | Nozzle cap                               | 1    |
| 5    | 00604   | Spring washer M8                         | 2    |
| 6    | 00606   | Hex nut M8                               | 2    |

#### 4.9 DOOR FRAME (D016065-01)



|            |                          |
|------------|--------------------------|
| D016065-01 | Door frame               |
| 01998      | enclosed bag with screws |

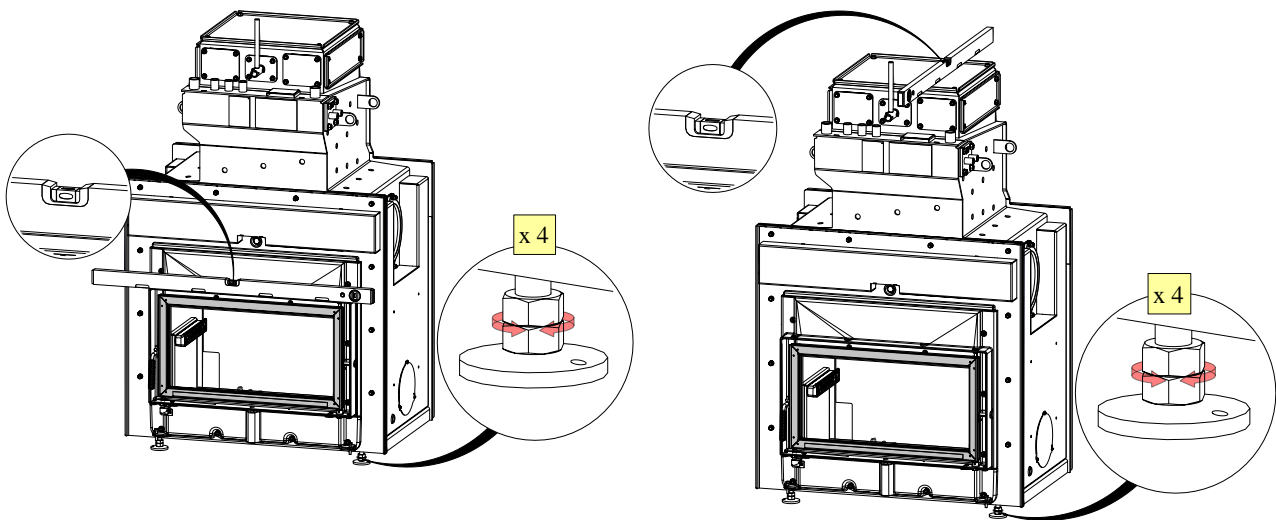
## 4.10 MOUNTING FRAME ( D016070-01)



|            |                          |
|------------|--------------------------|
| D016070-01 | Mounting frame           |
| 01998      | Enclosed bag with screws |

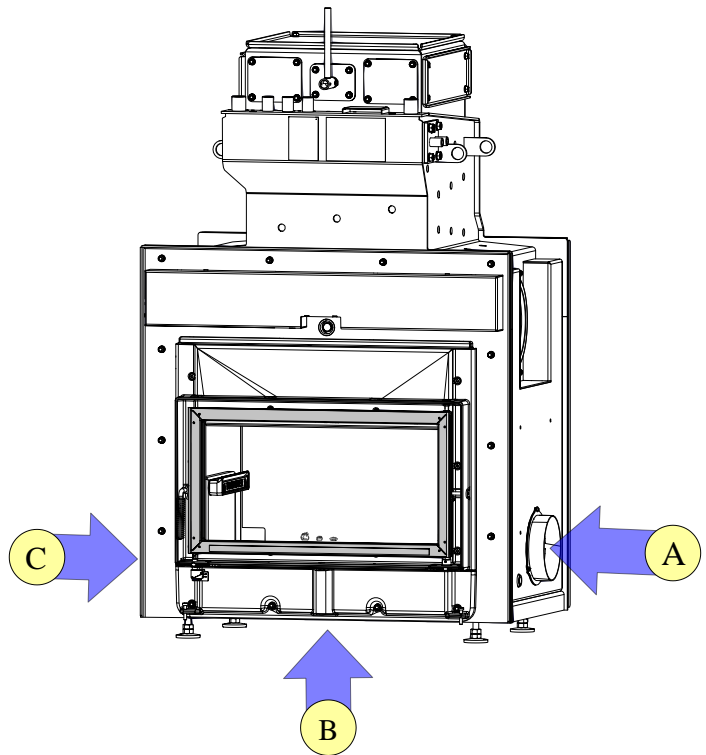
## 5 INSTALLATION

### 5.1 ALIGNEMENT

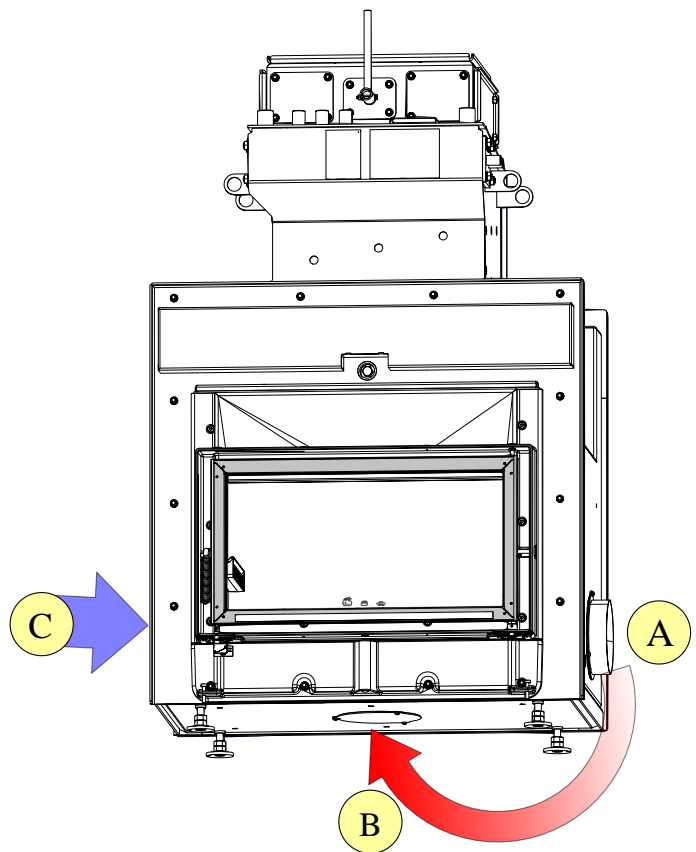


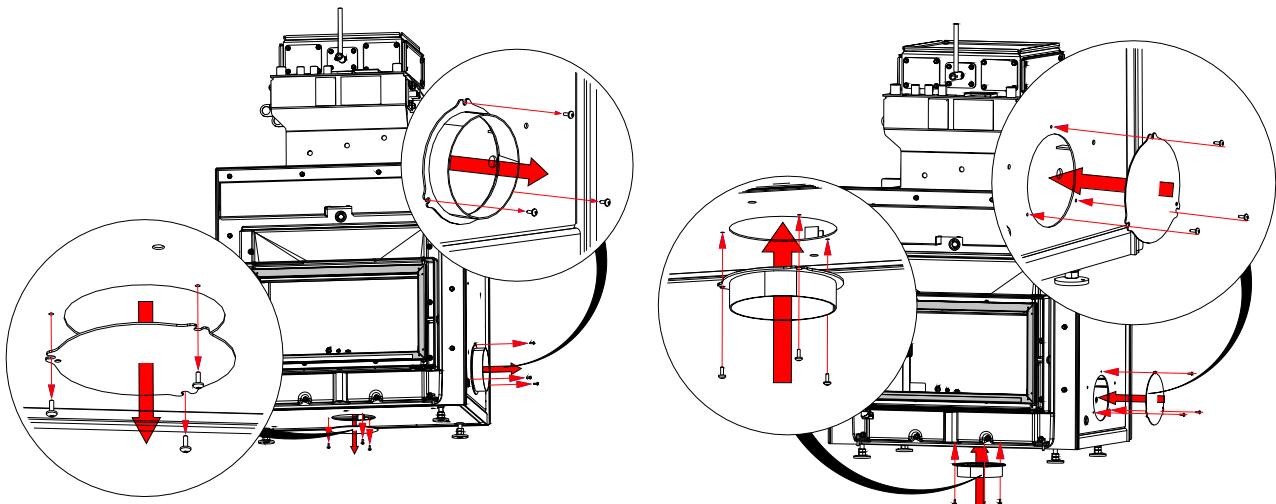


## 5.2 AIR SUPPLY CONNECTION



A => B (analog A => C)





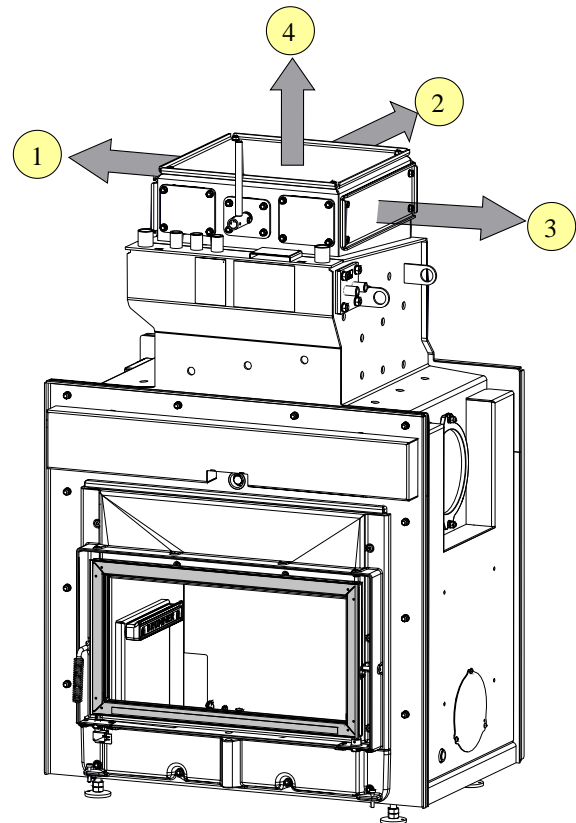
### 5.3 FLUE GAS OUTLET

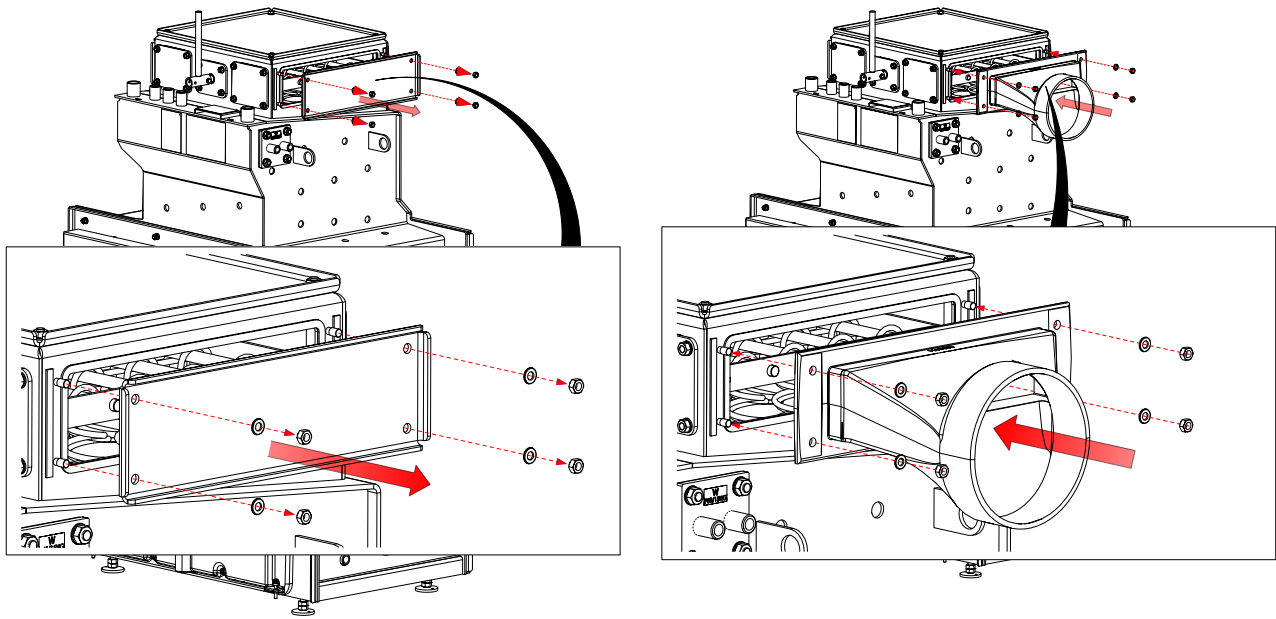
Boiler



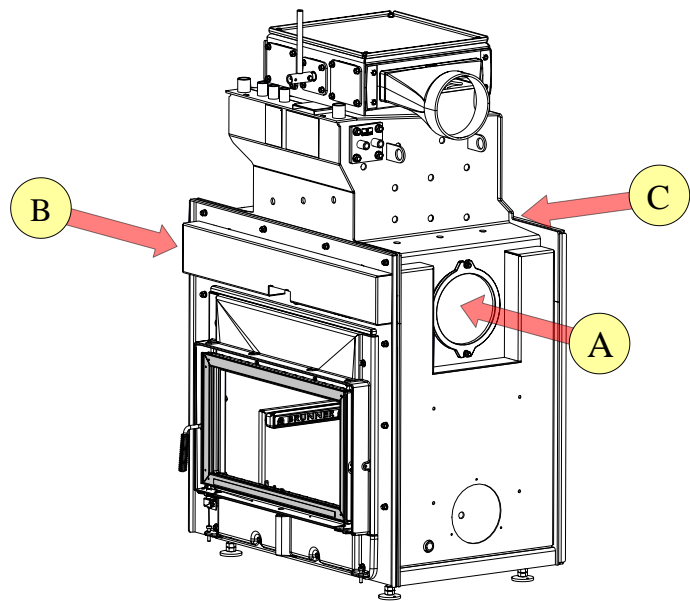
Pos. 1, 2, 3: Art.No.: S003011

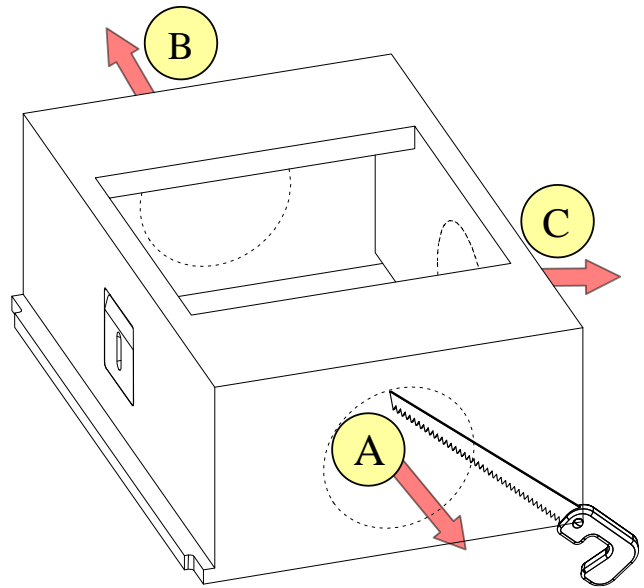
Pos. 4: Art.No. W043140



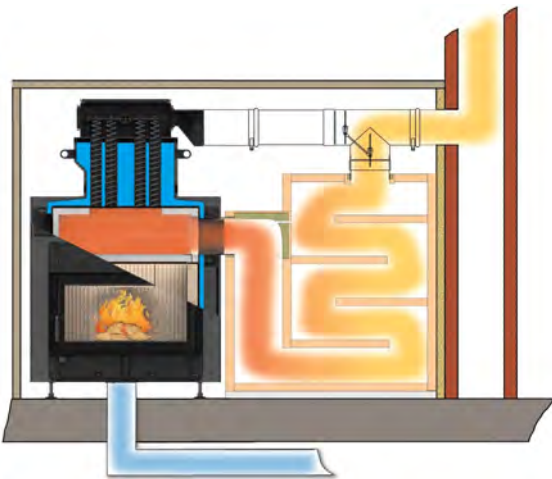


**Heat accumulators**

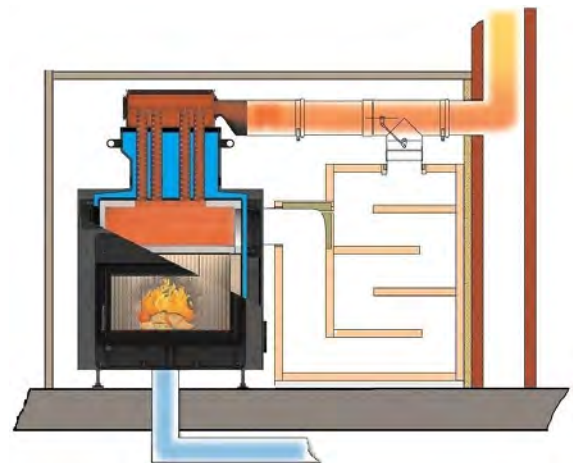




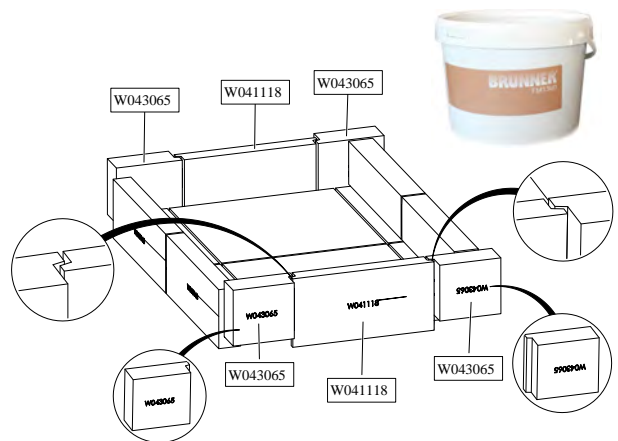
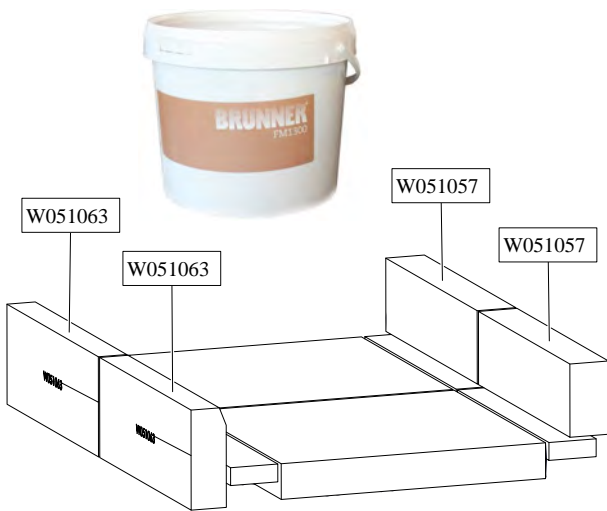
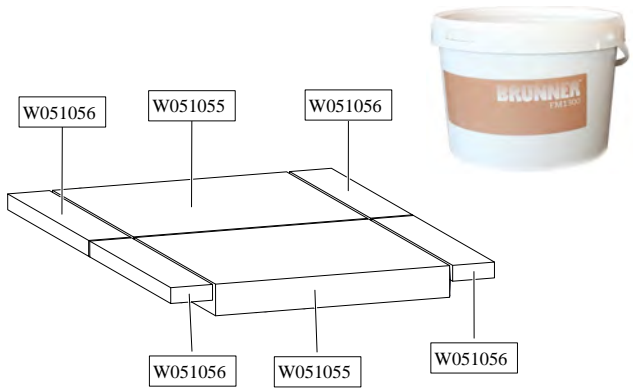
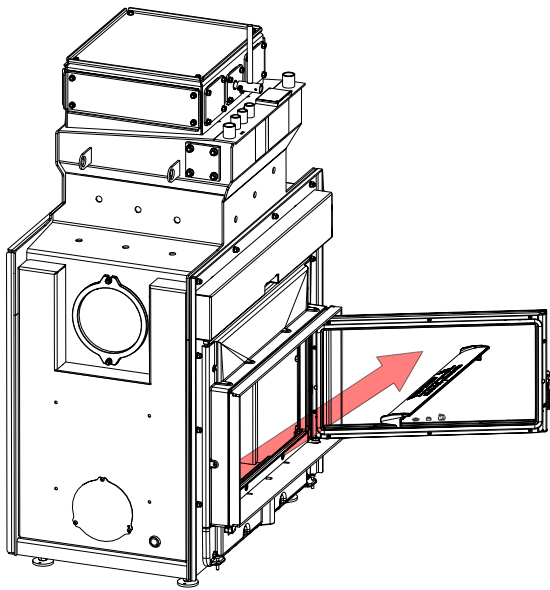
Heat accumulators

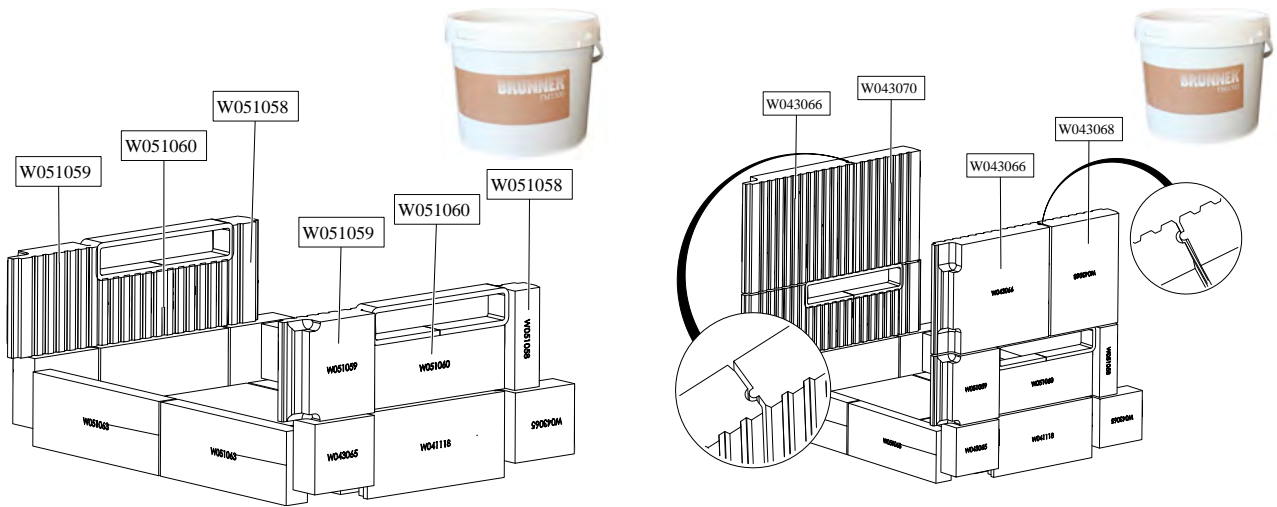
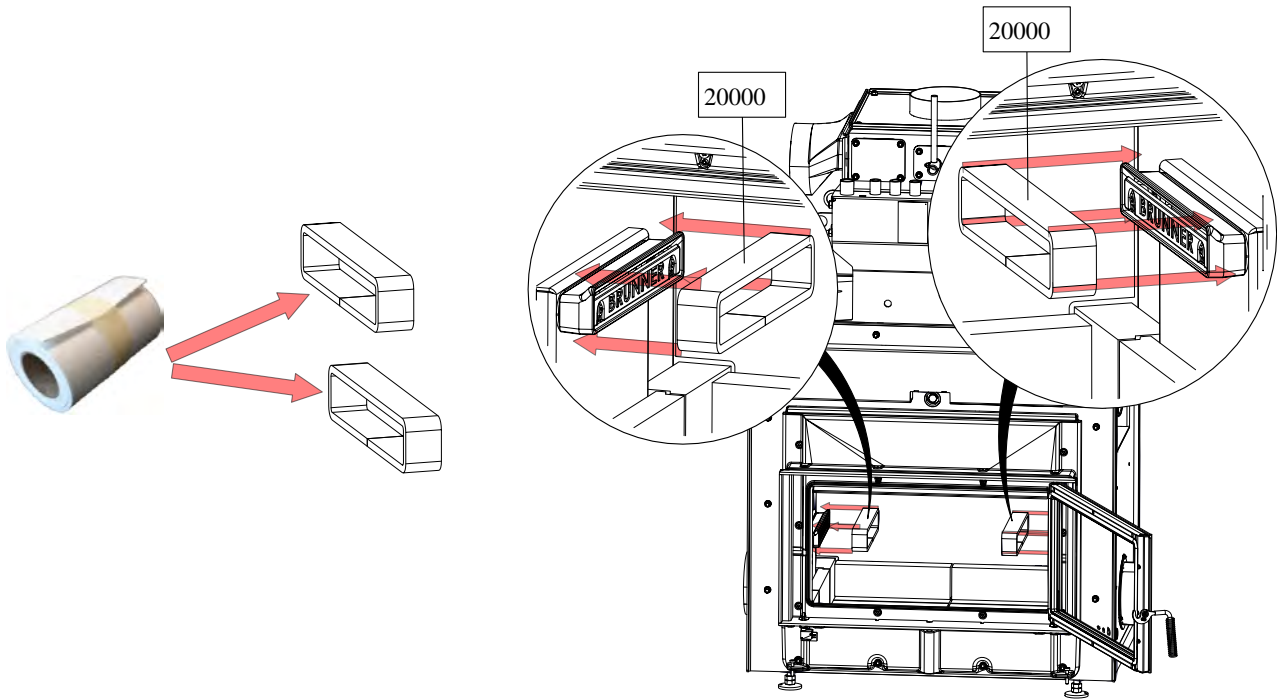


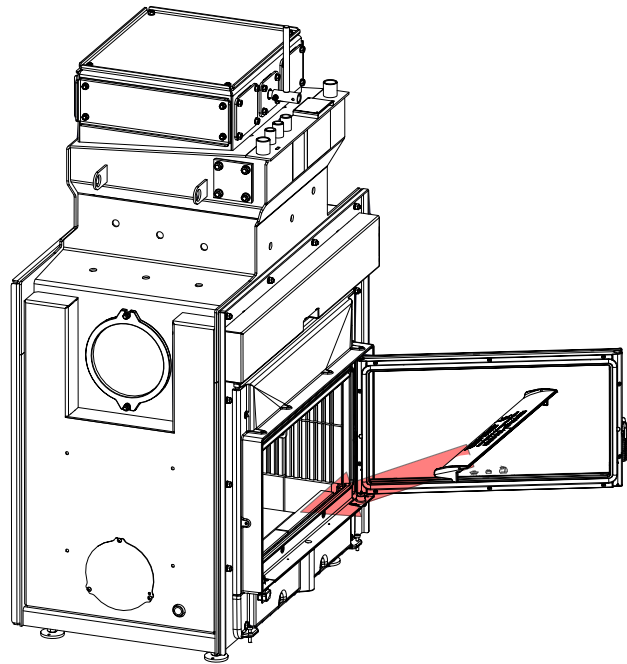
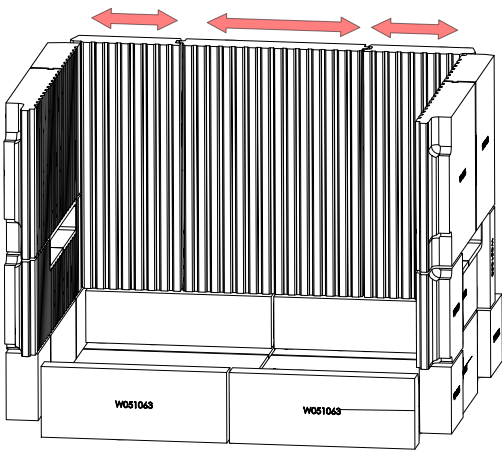
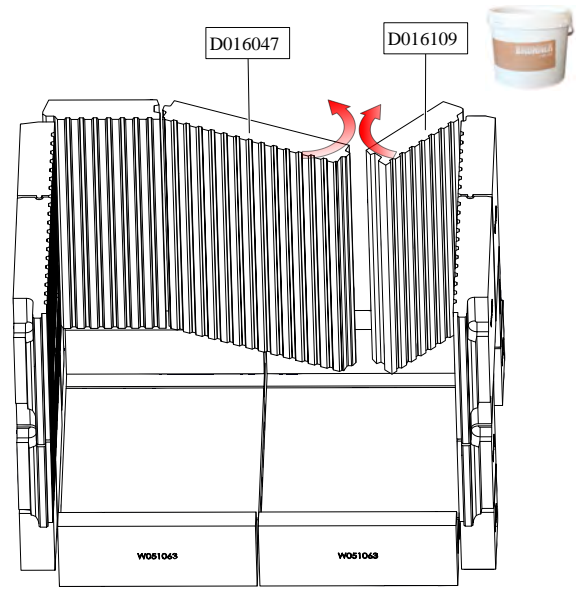
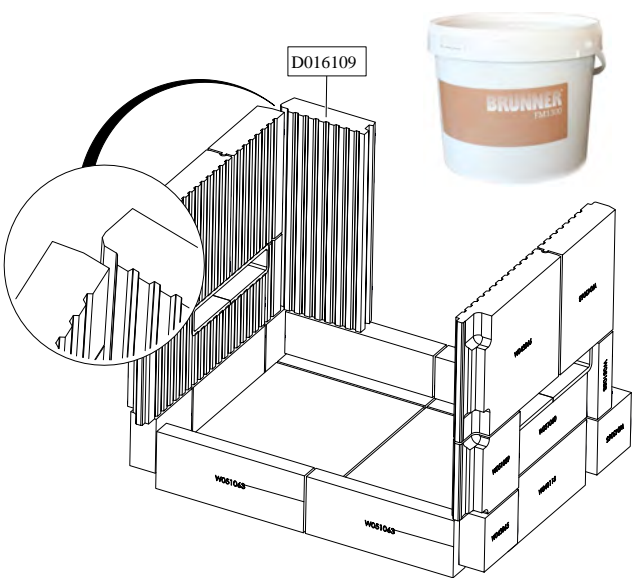
Boiler



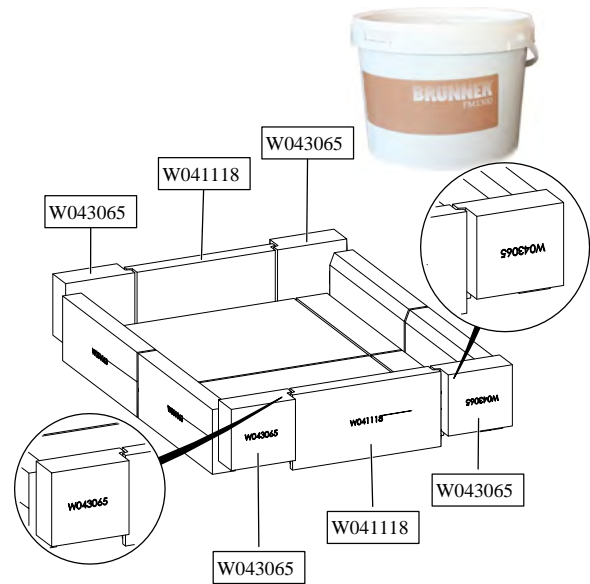
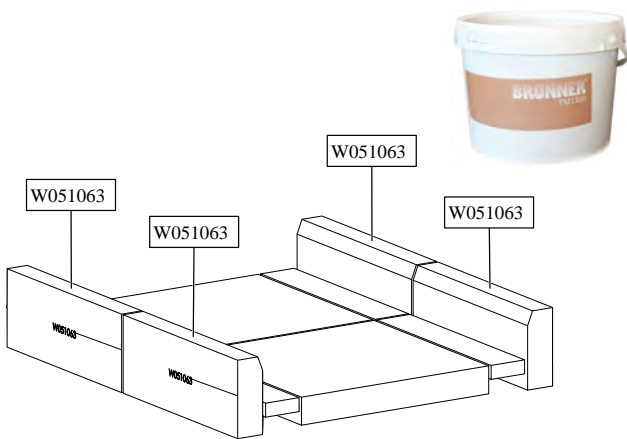
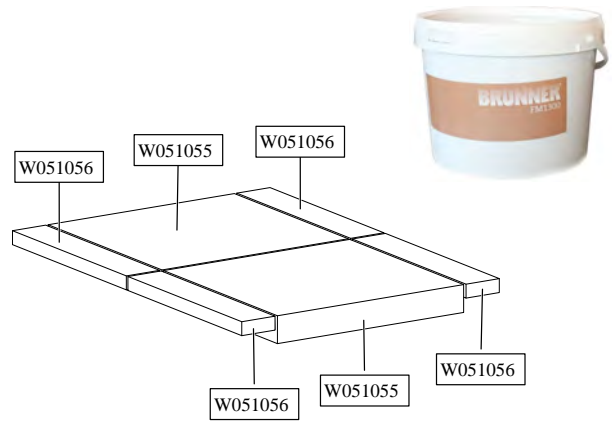
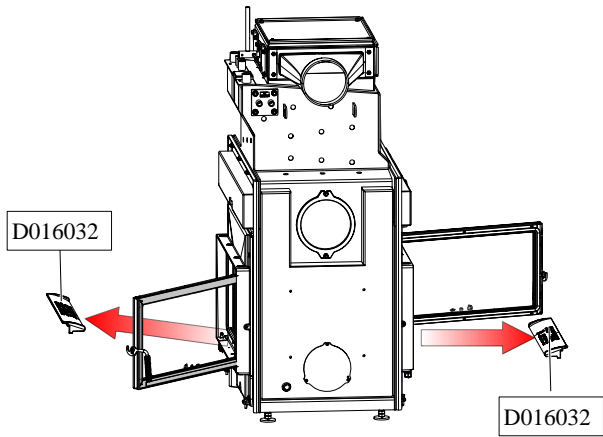
## 5.4 INSTALLATION OF THE COMBUSTION CHAMBER INNER LINING



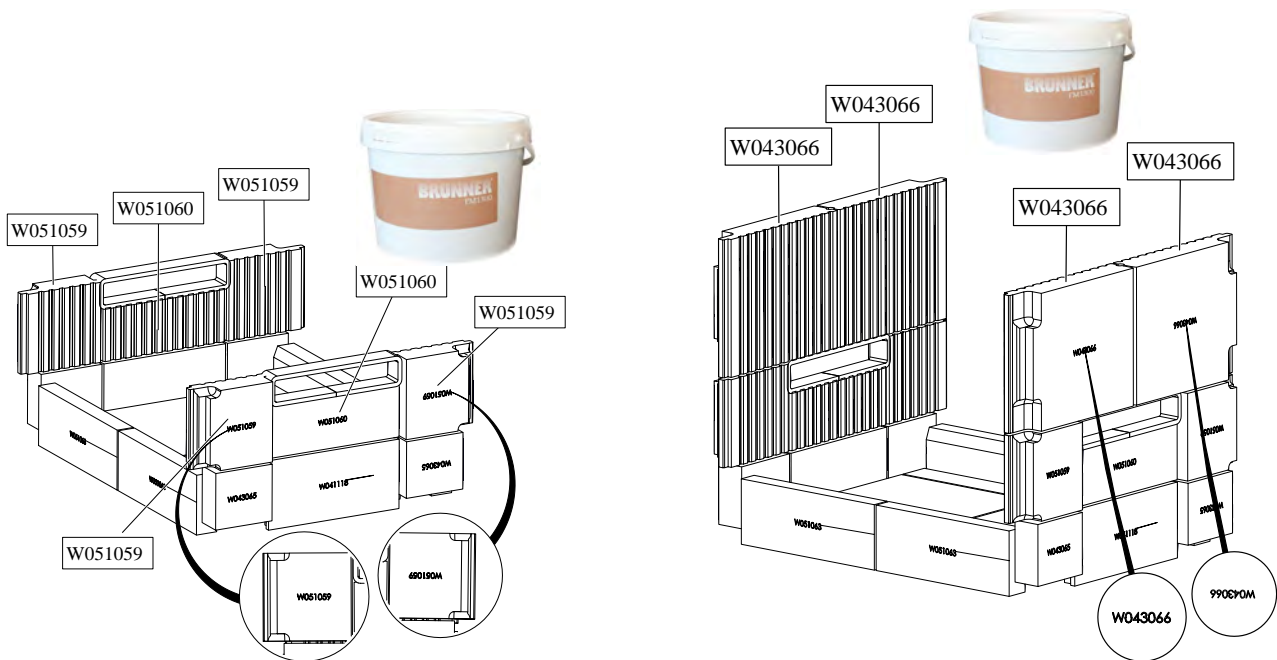
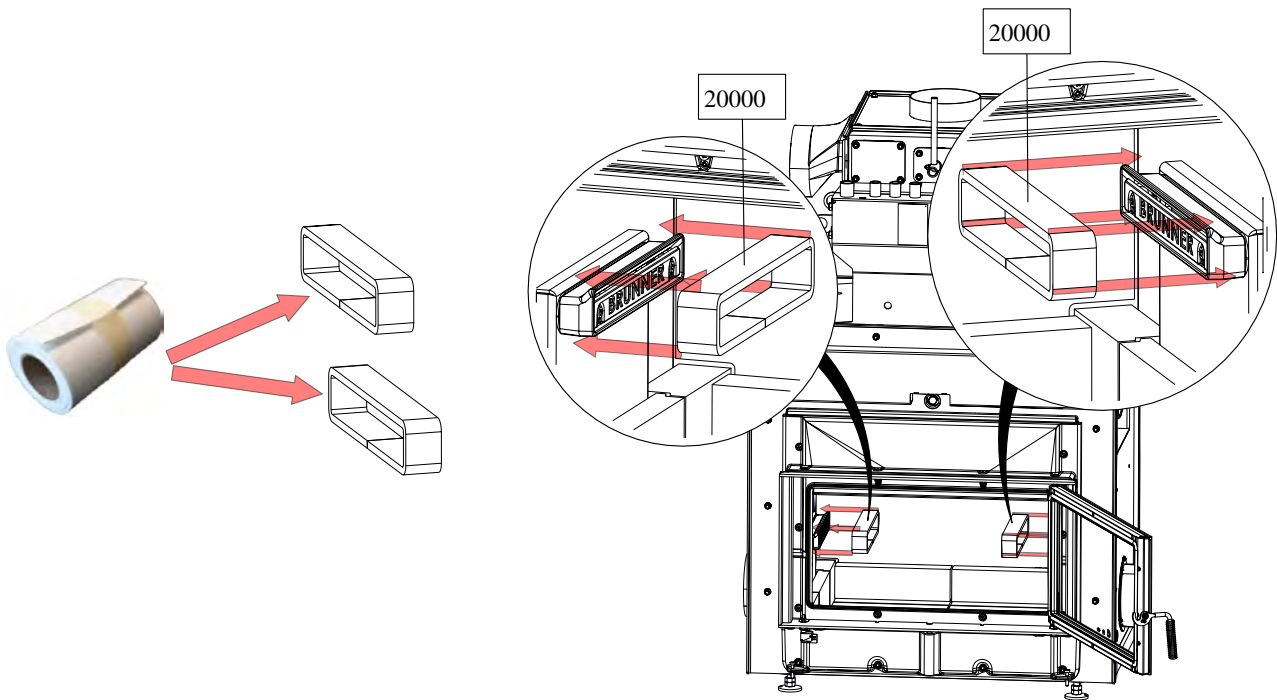


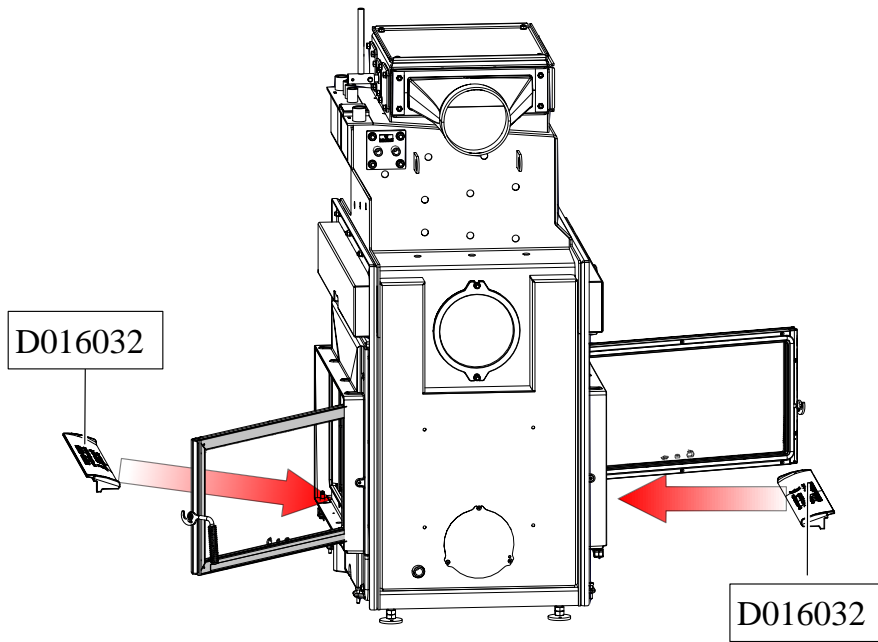


## 5.5 COMBUSTION CHAMBER INNER LINING- INSTALLATION OF THE TUNNEL VERSION

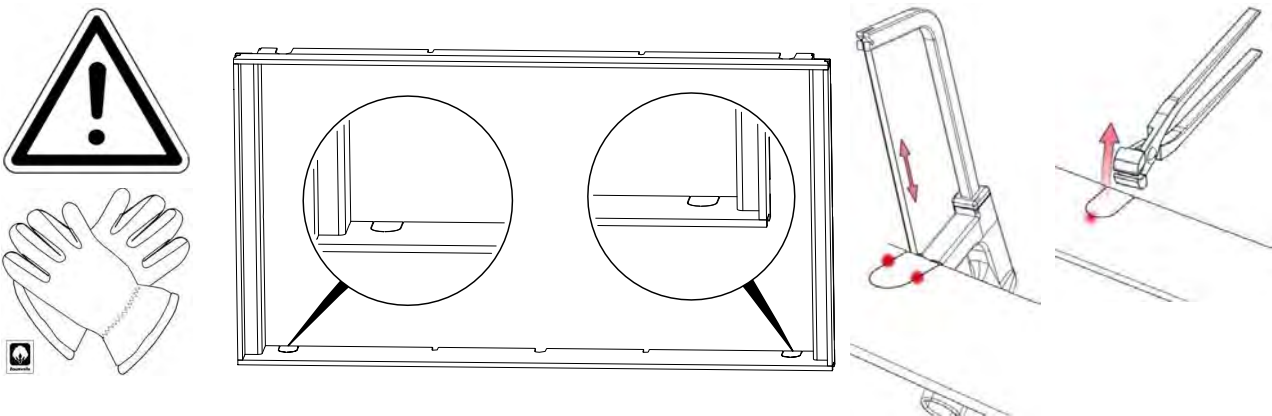


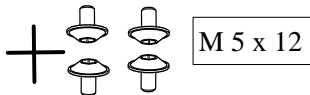
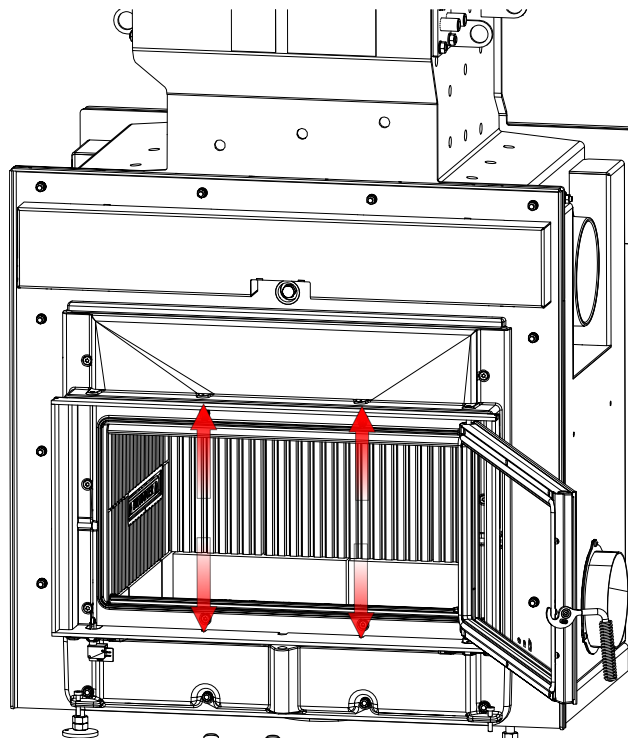
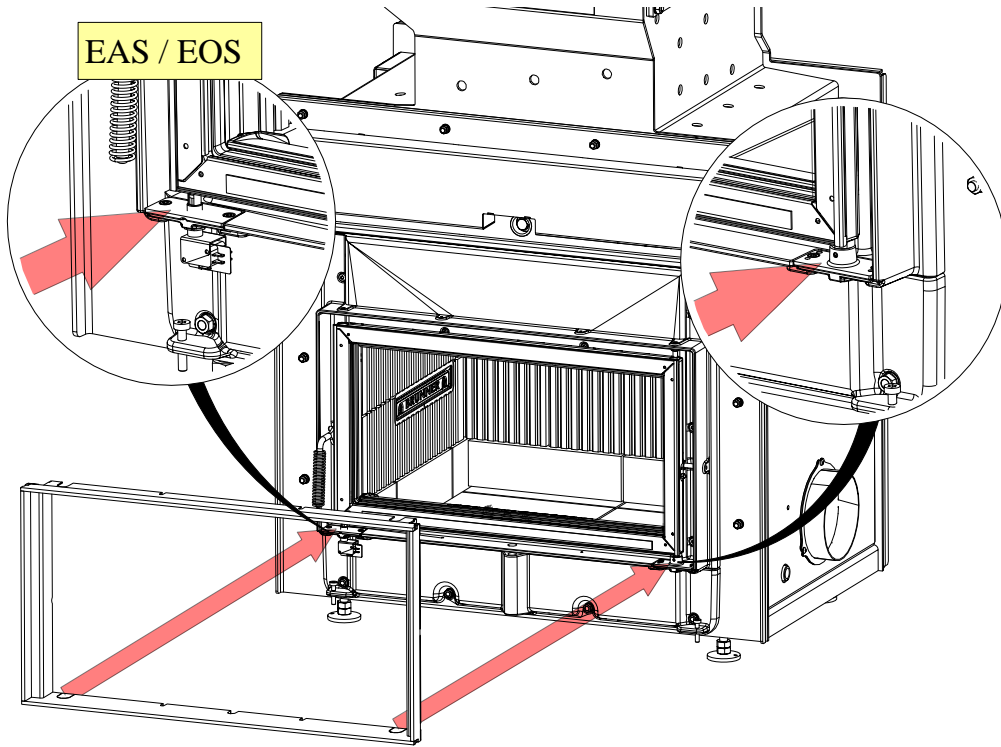




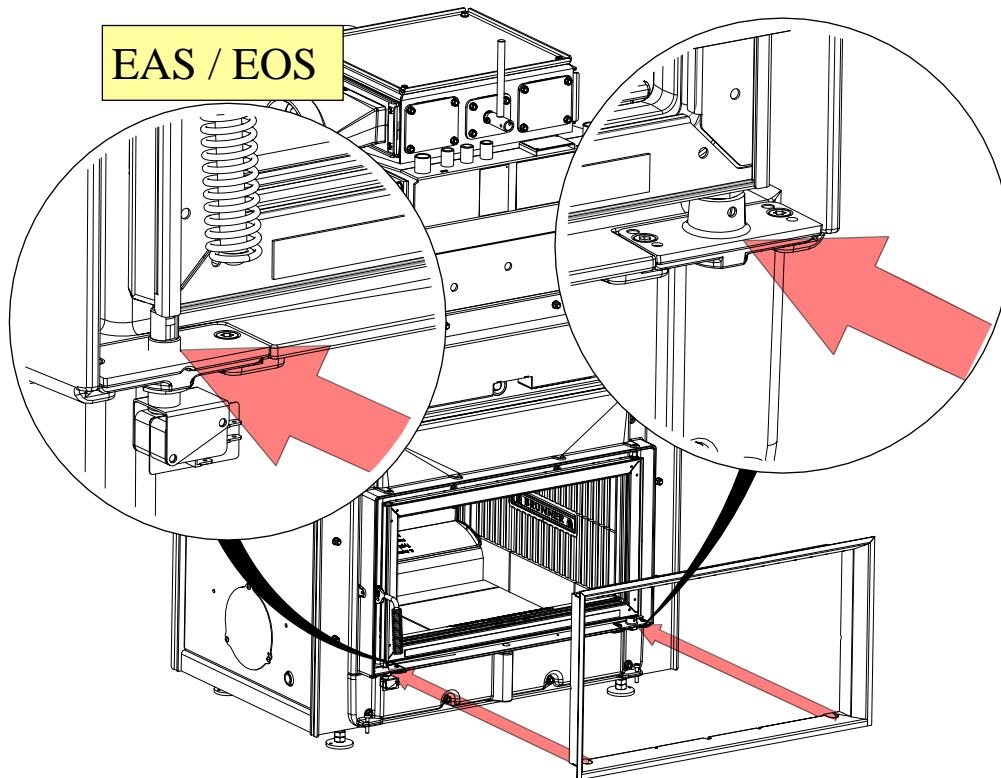
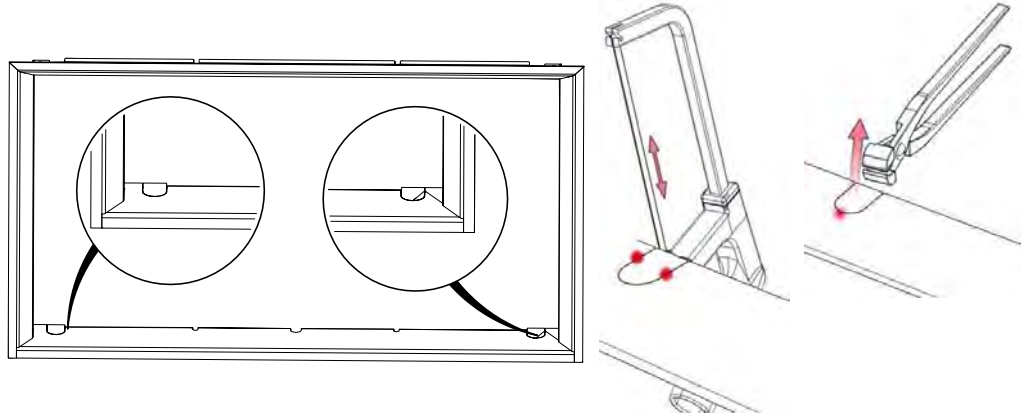


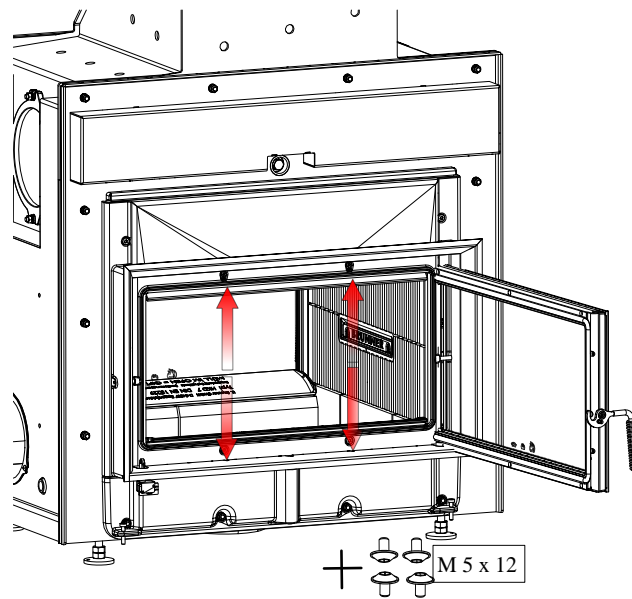
## 5.6 INSTALLATION OF THE MOUNTING FRAME



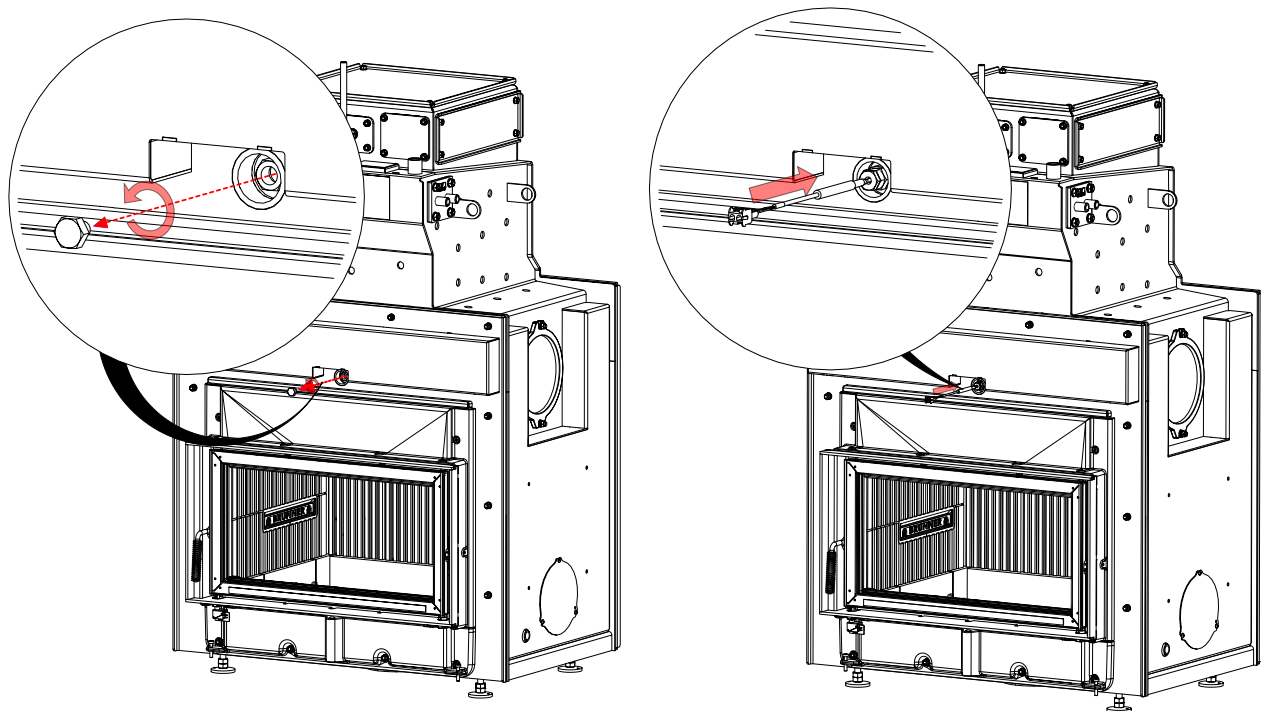


## 5.7 INSTALLATION OF THE DOOR FRAME





## 5.8 INSTALLATION OF THE THERMOCOUPLE



## 5.9 EXTENSION CLEANING- HANDLE FOR THE BOILER (OPTIONAL)



*Illustration 2: Plug handle vertical (Art.Nr. BSO5000-123)*



*Illustration 3: Traction element on the side (Art.Nr. W043135)*



*Illustration 4: Plug handle horizontally (Art.Nr.11726)*



## 6 SETTINGS

### 6.1 COMBUSTION AIR ADJUSTMENT

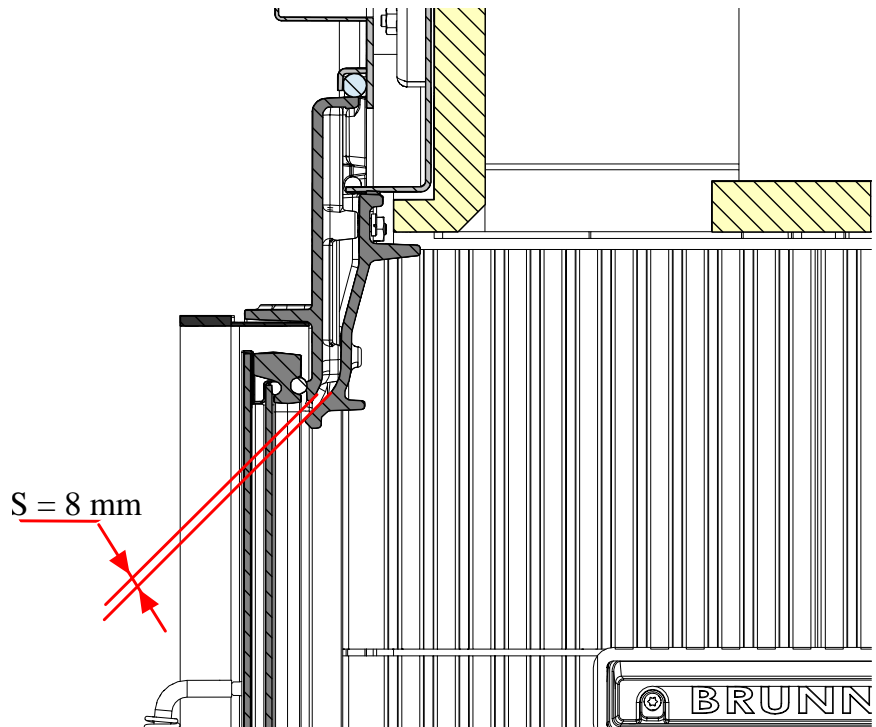
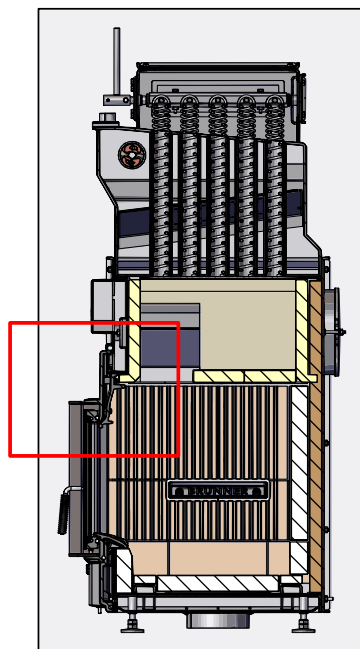
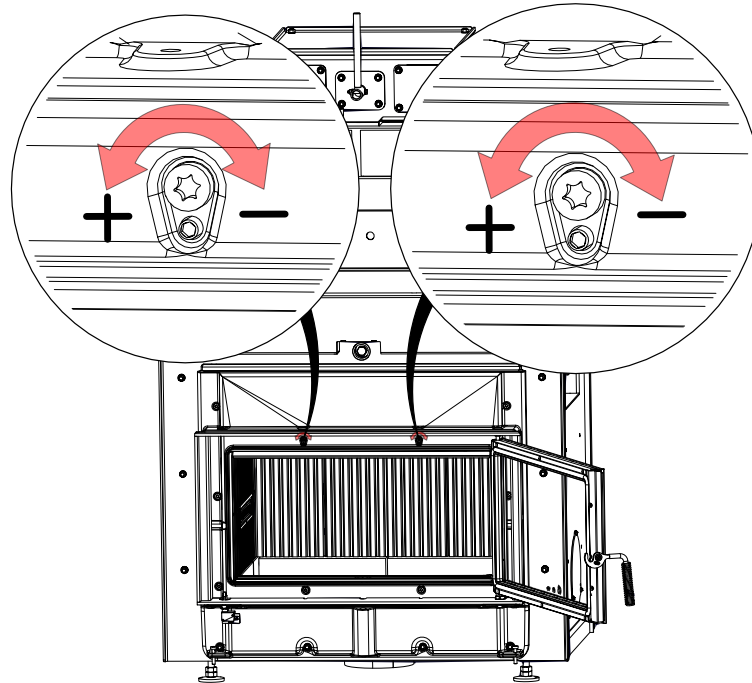


Illustration 5: HKD 7 SK

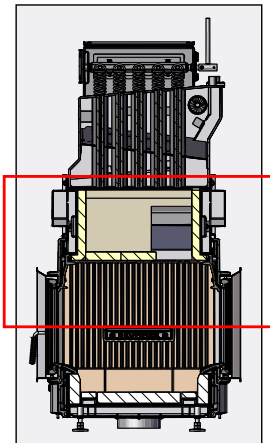
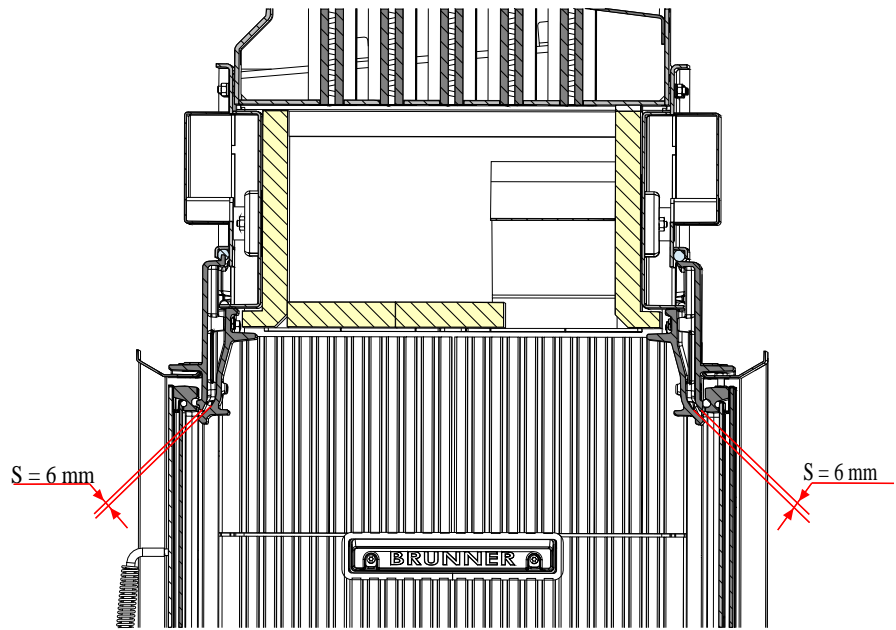
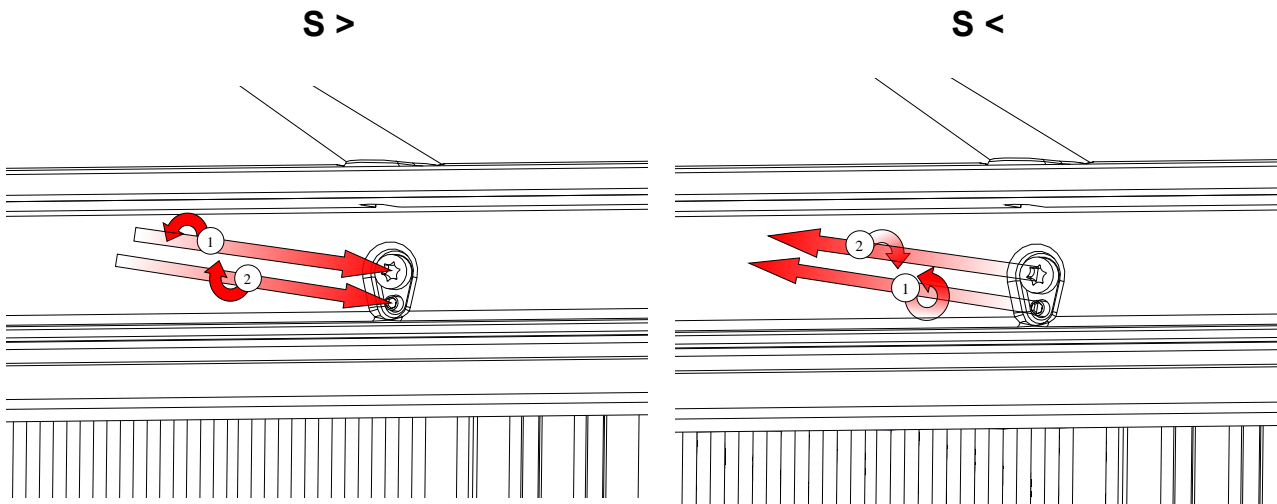


Illustration 6: HKD 7 SK Tunnel

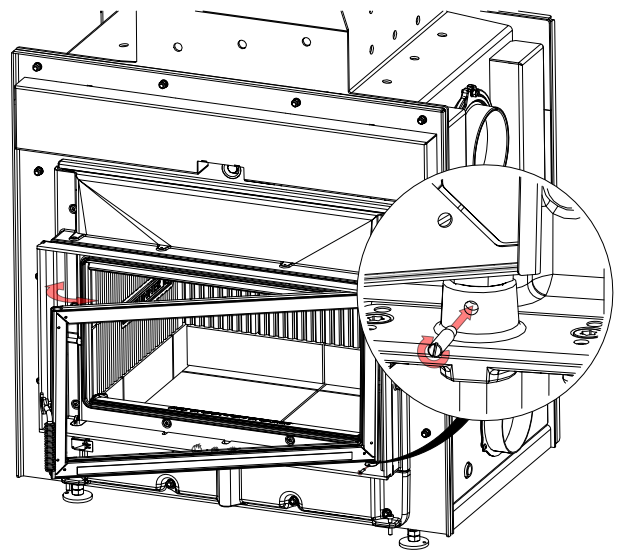
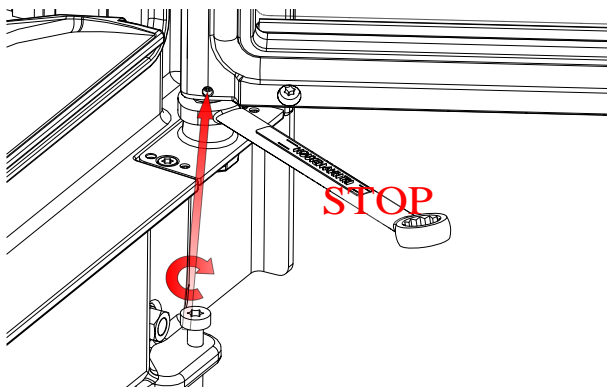
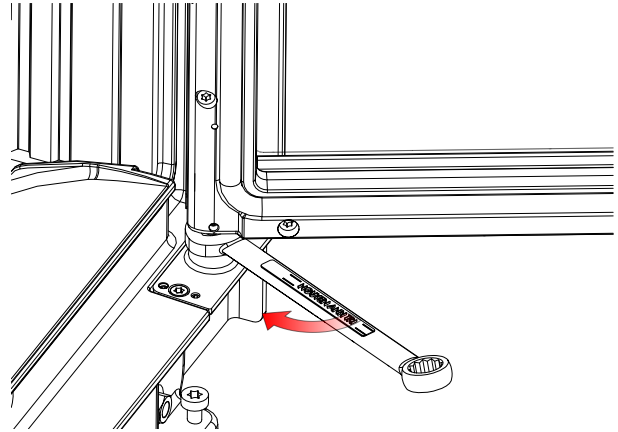
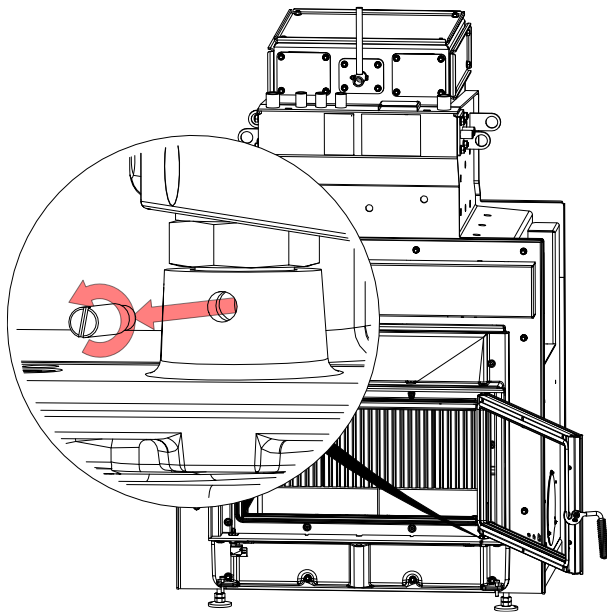


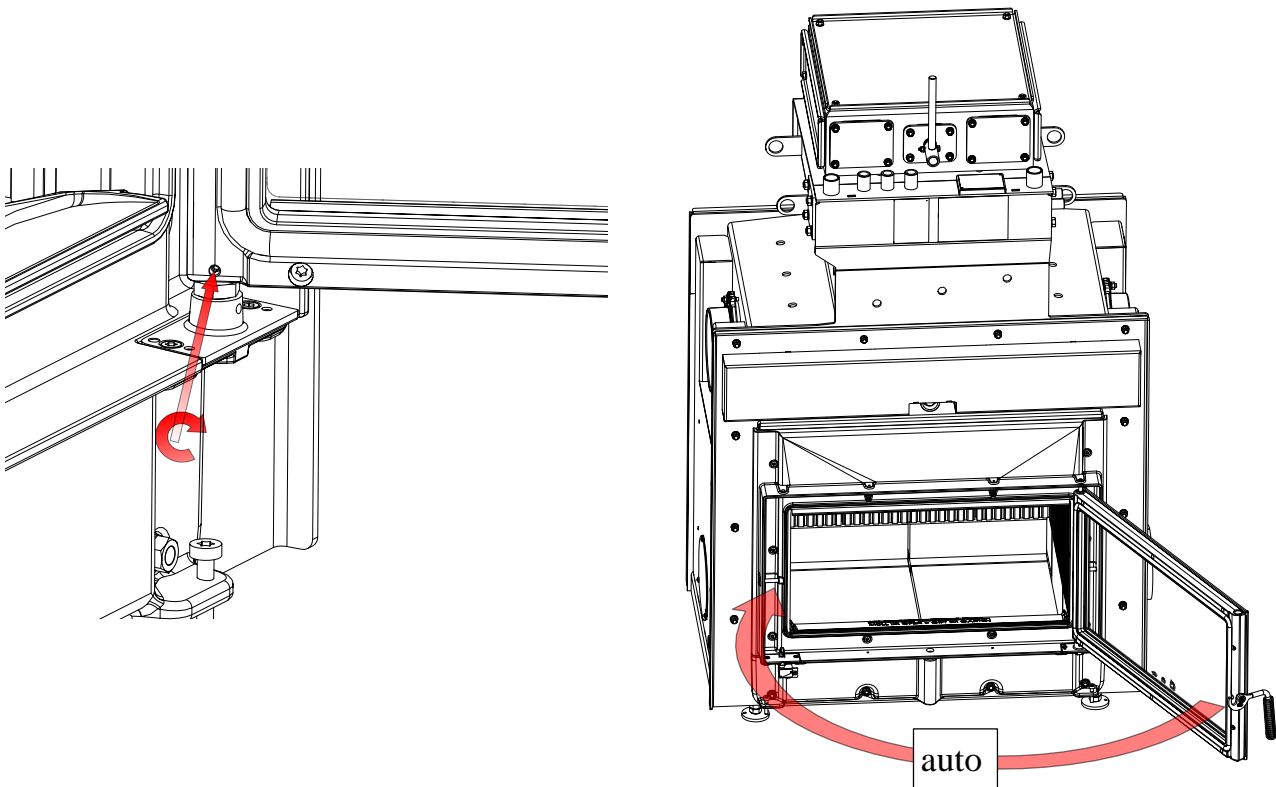
Adjusting:



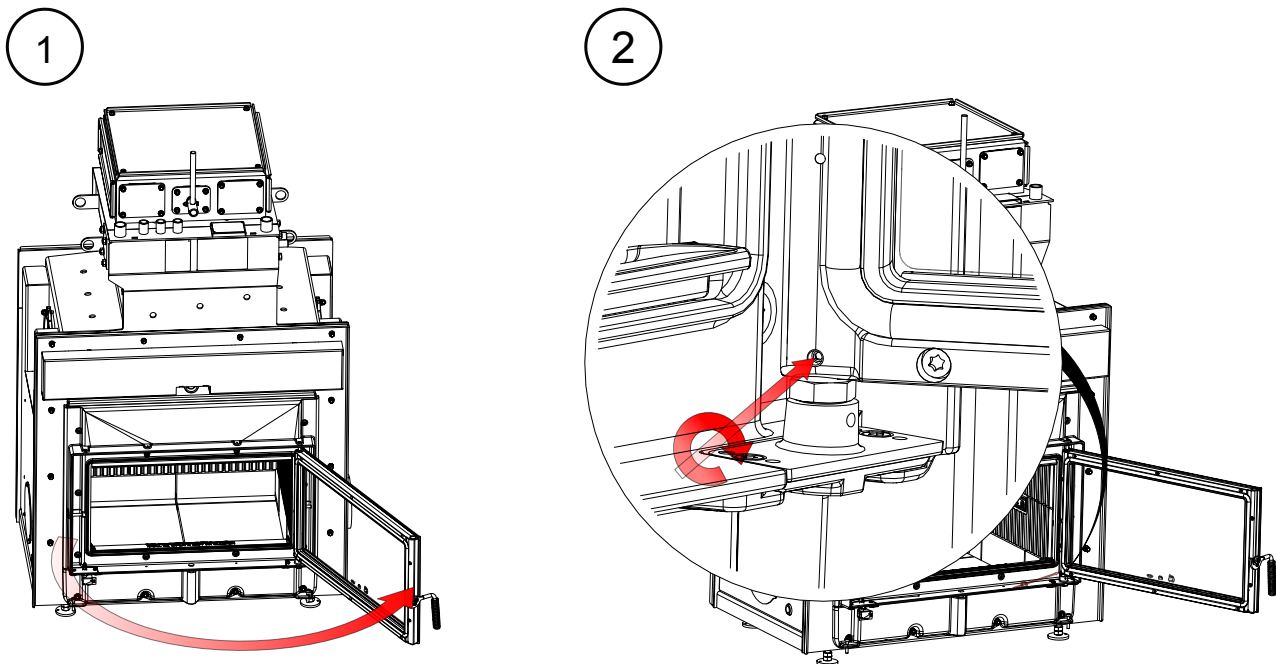


## 6.2 SELF-CLOSING ADJUSTMENT

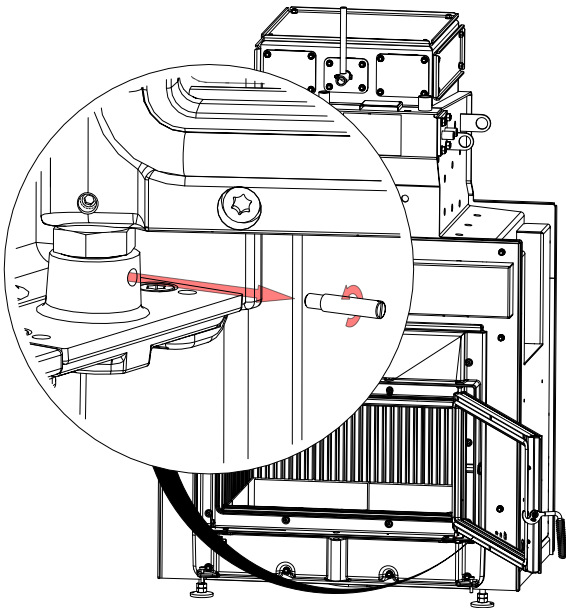




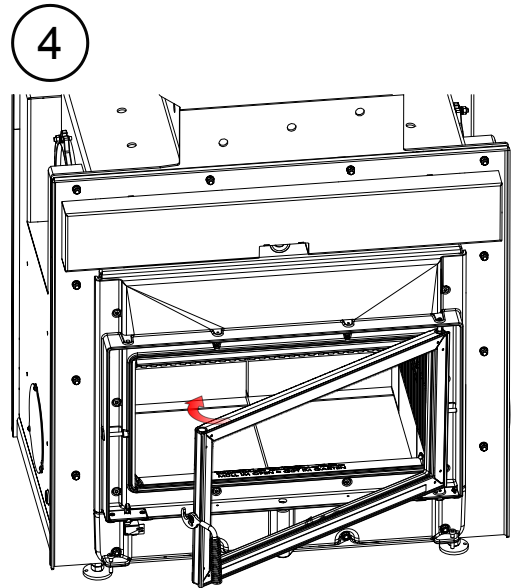
### 6.3 DIRECTION CHANGE OF THE SIDE-HINGED DOOR



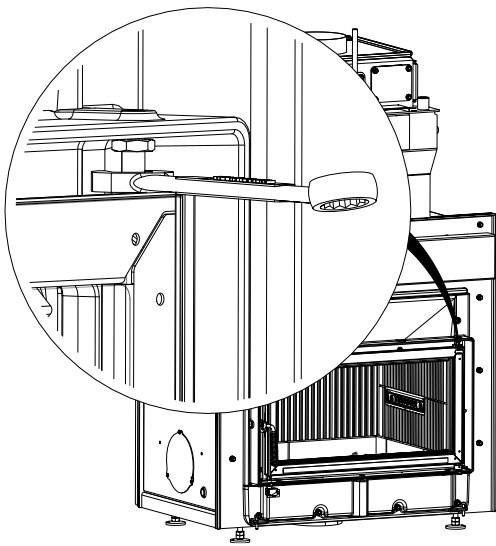
3



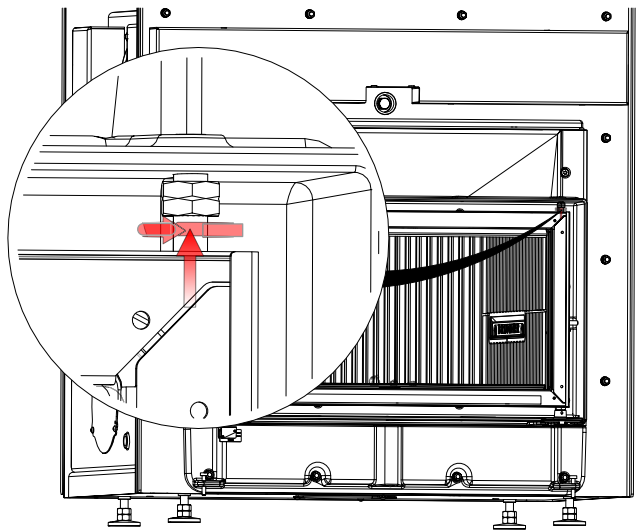
4



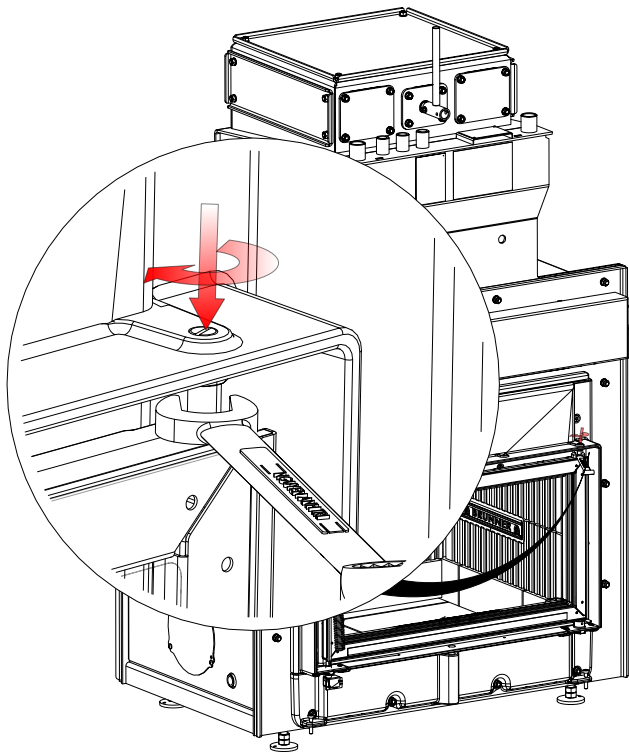
5



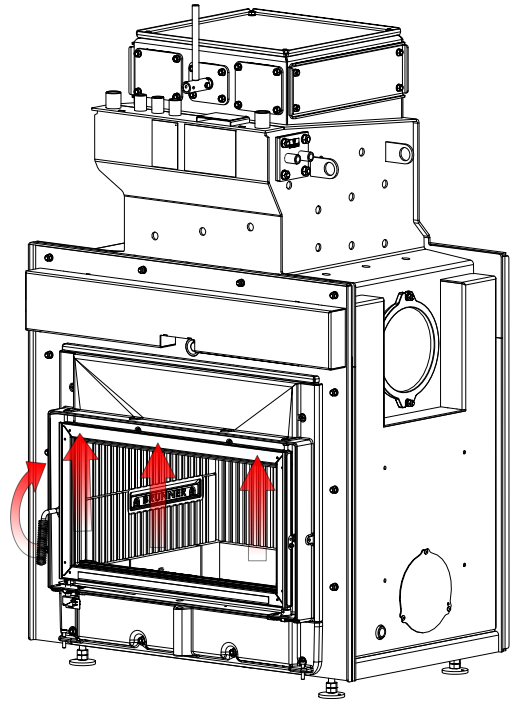
6



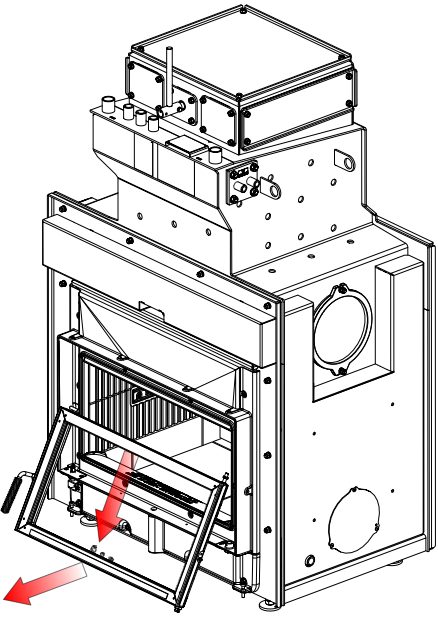
7



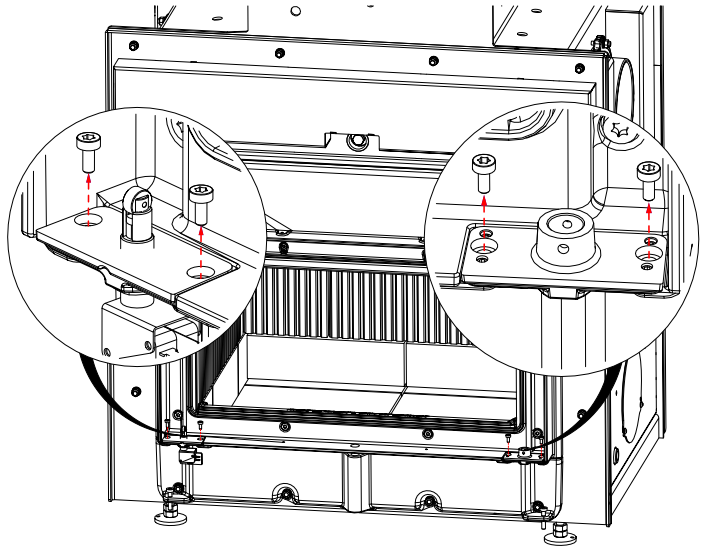
8

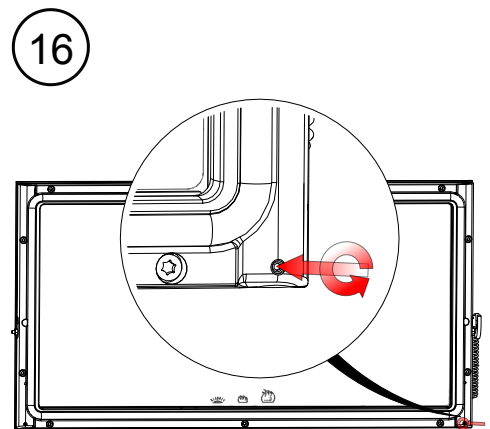
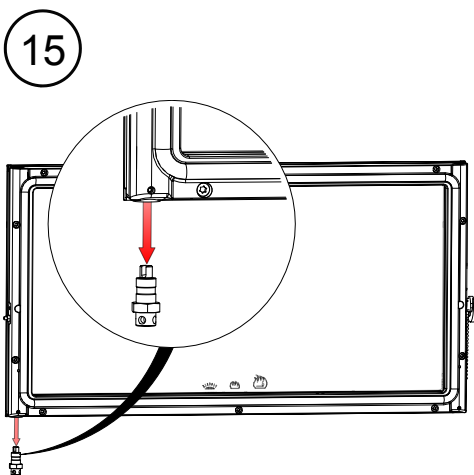
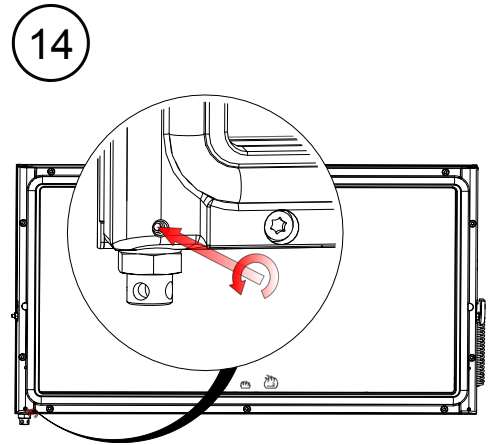
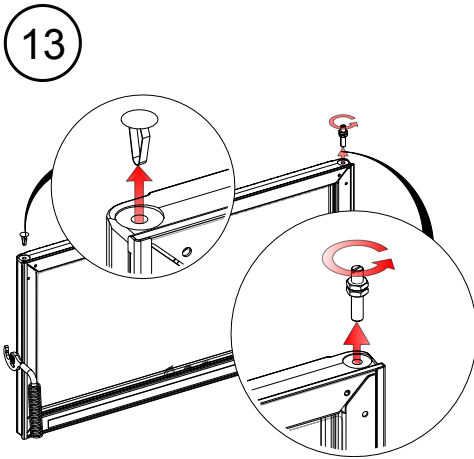
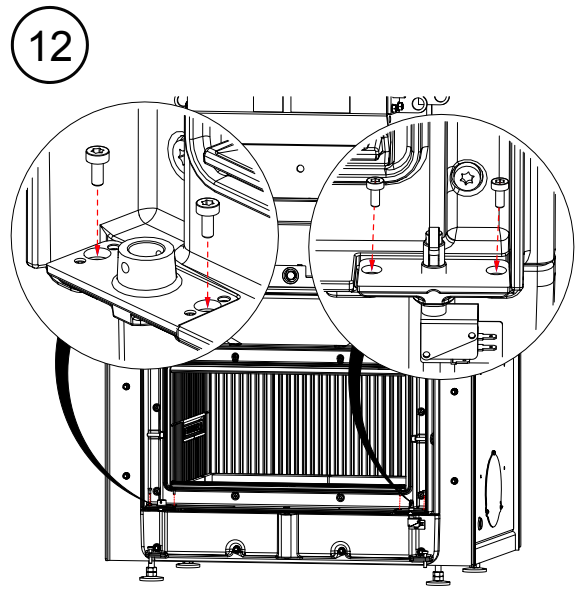
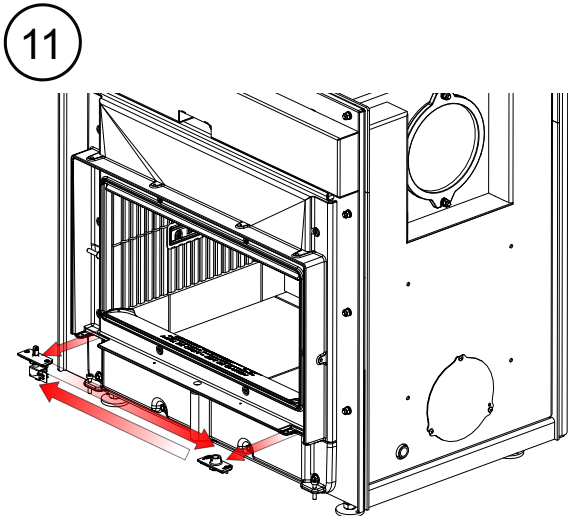


9

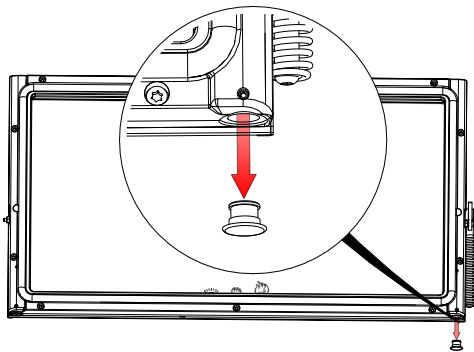


10

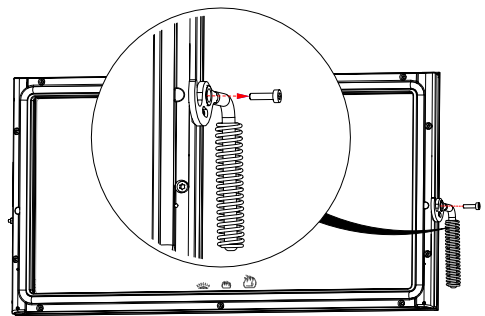




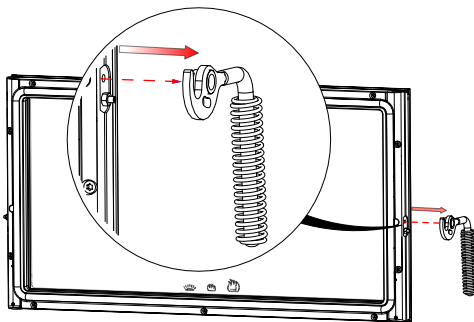
17



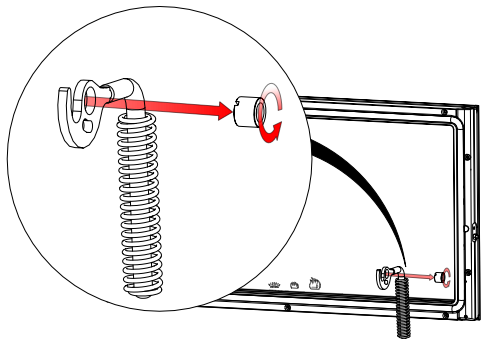
18



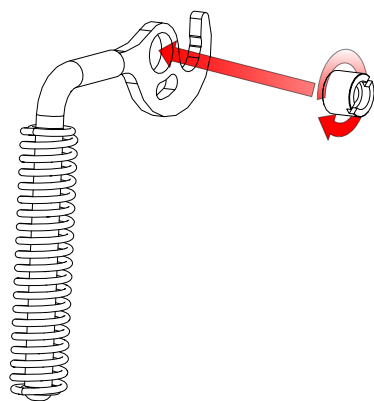
19



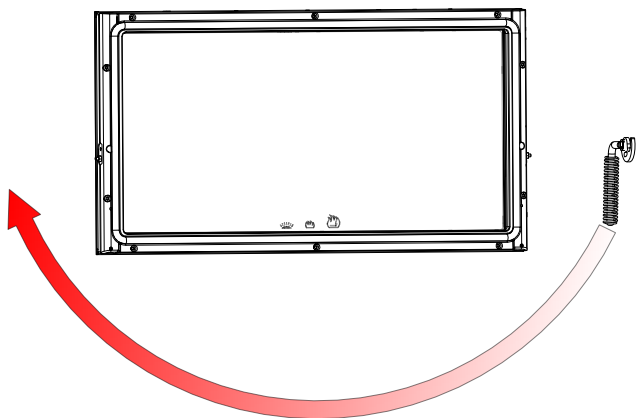
20



21

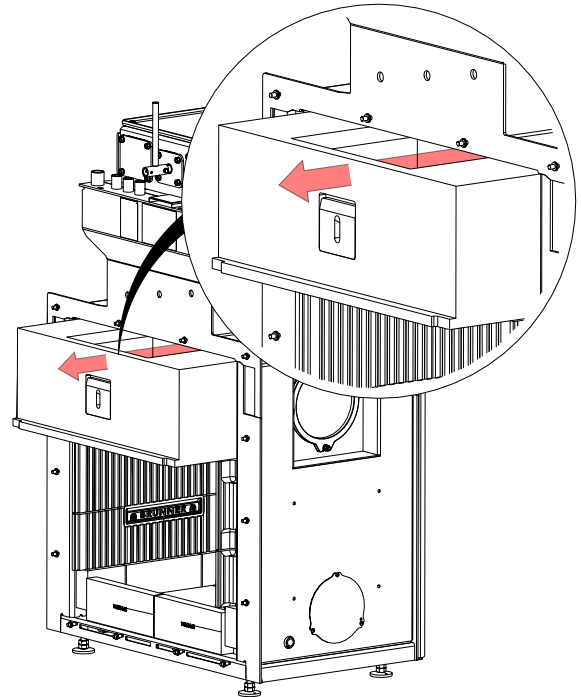
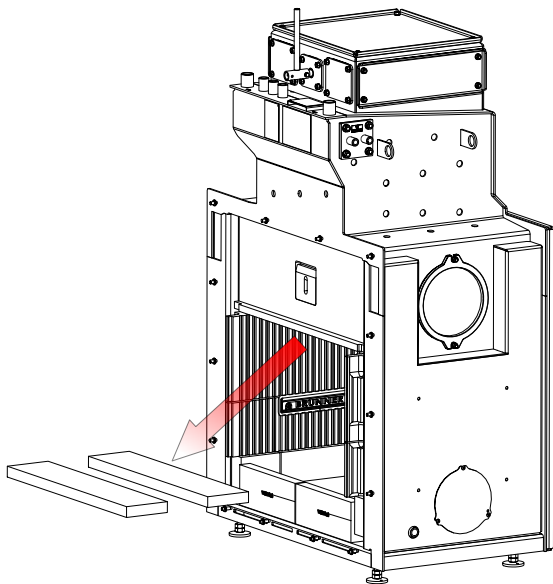
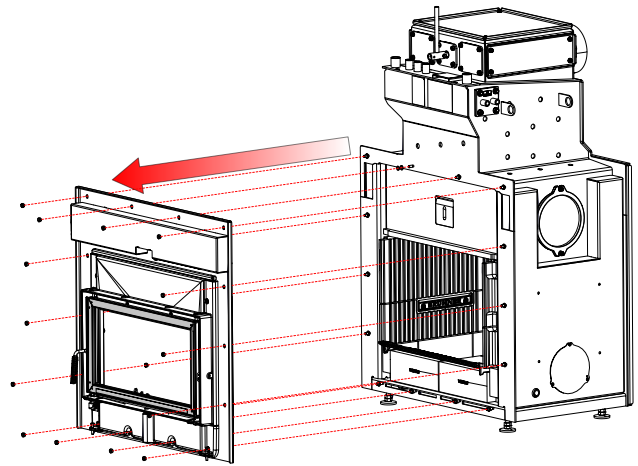
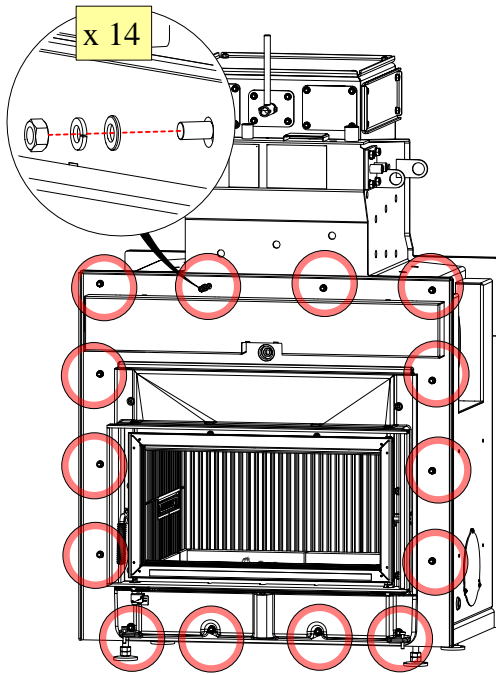


22



22 → 21 → 20 → 19 → 18 → ..... → 1

## 7 HOW TO REPLACE THE ISO HOOD



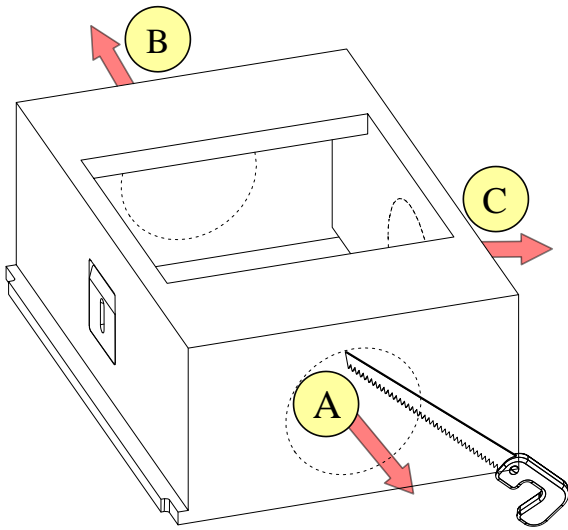


Illustration 7: HKD 7 SK / HKD 7 SK Tunnel

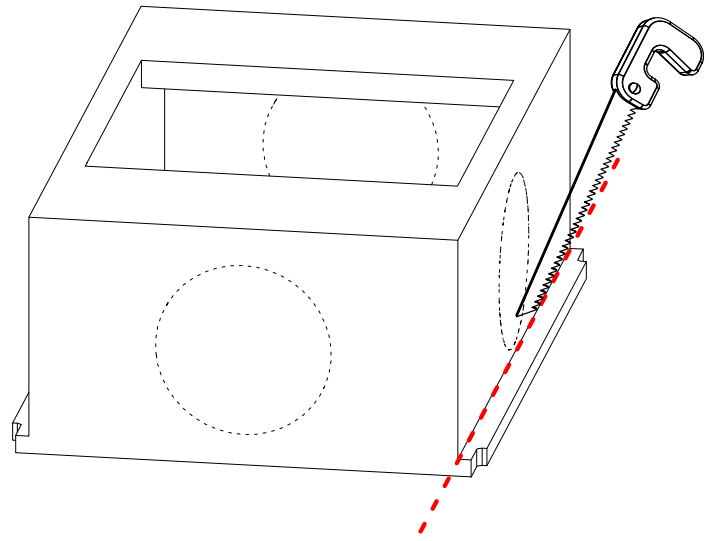


Illustration 8: HKD 7 SK

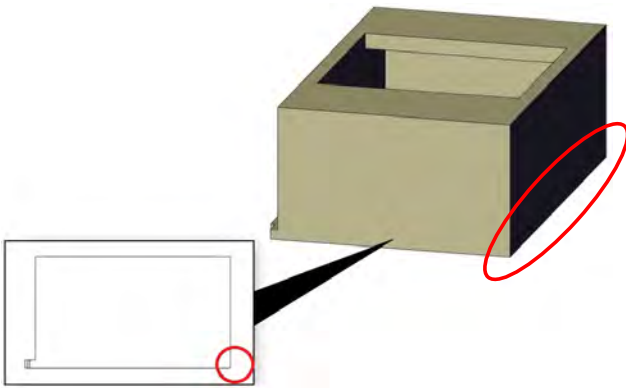


Illustration 9: HKD 7 SK

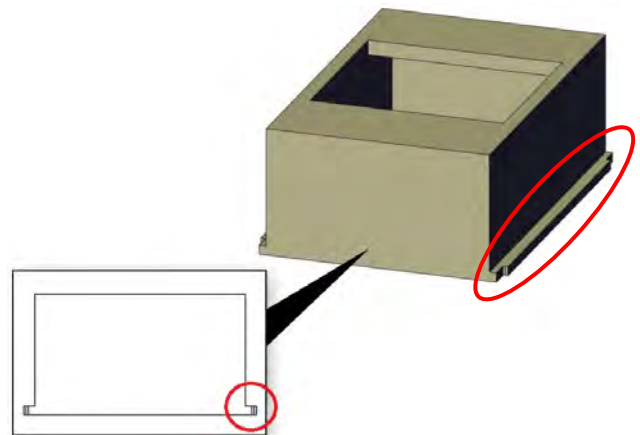
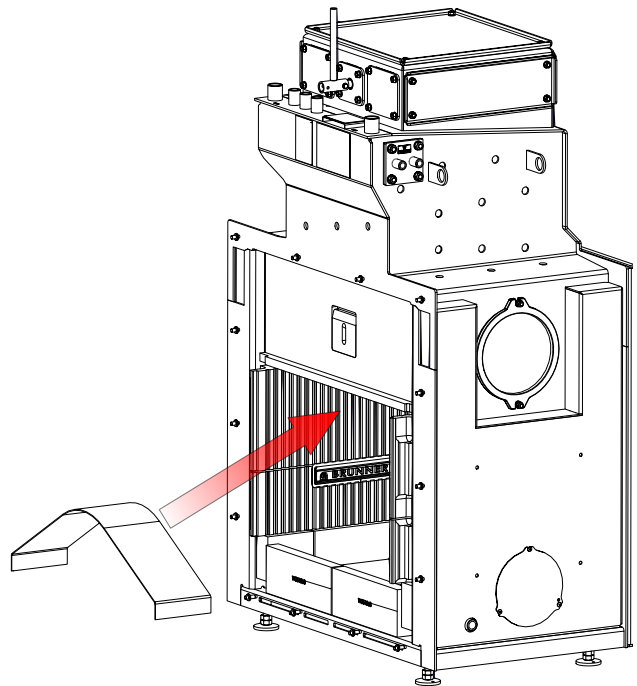
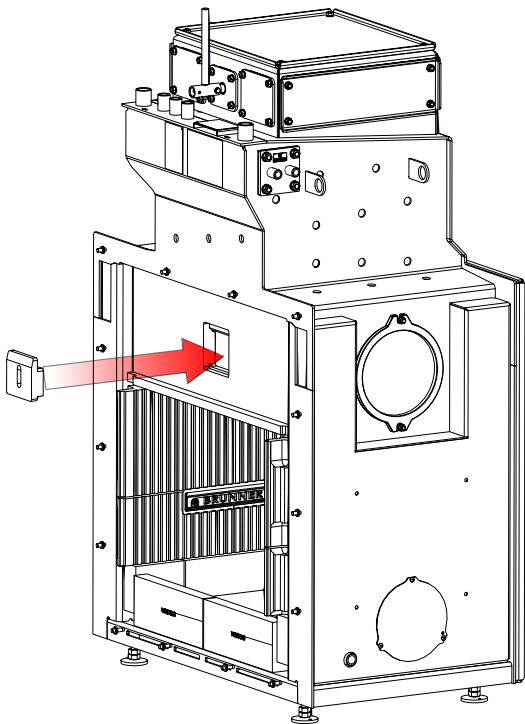
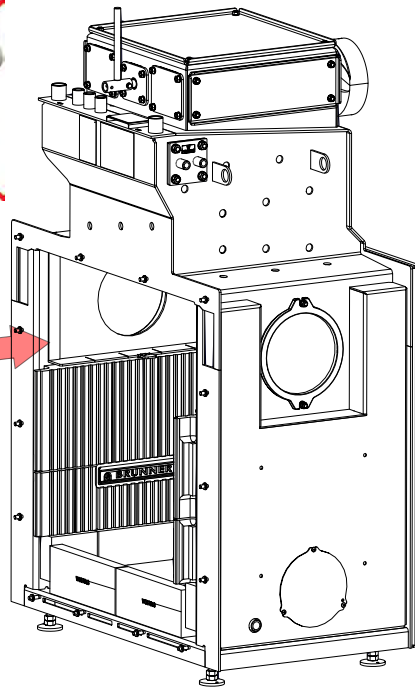
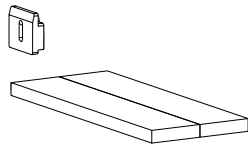
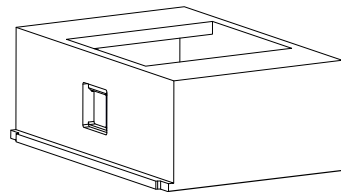
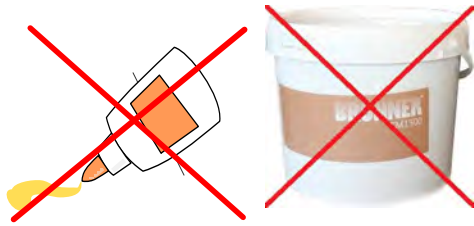
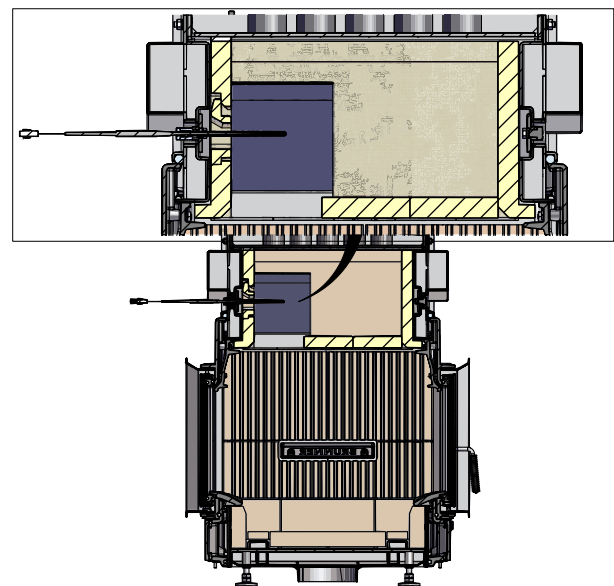
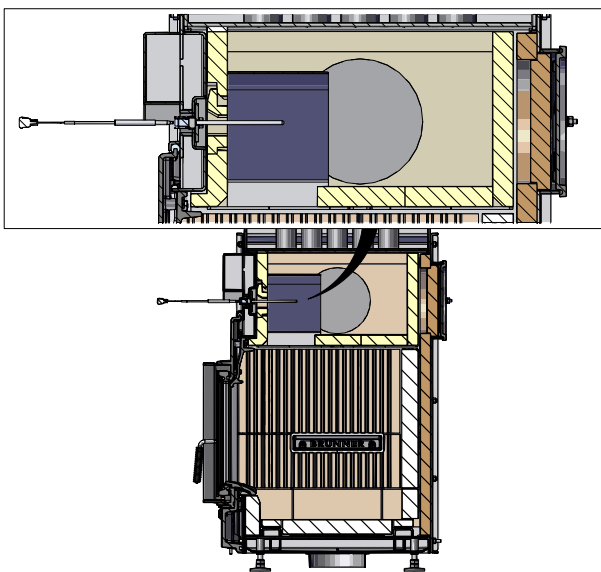
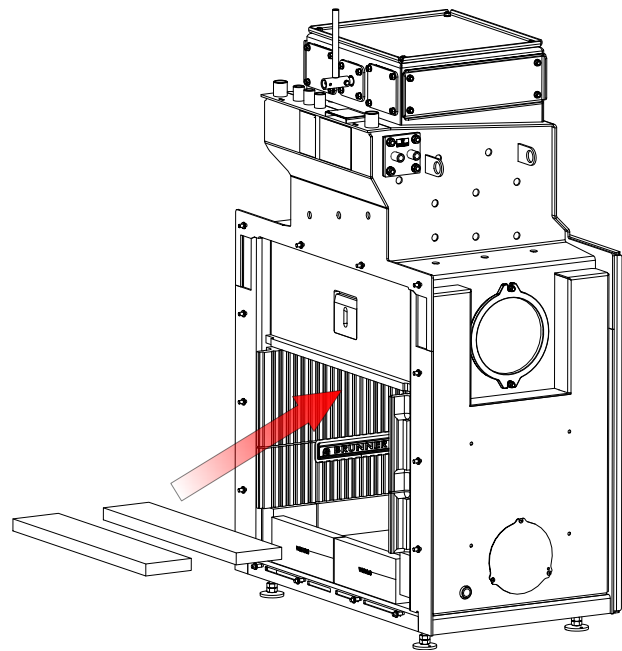
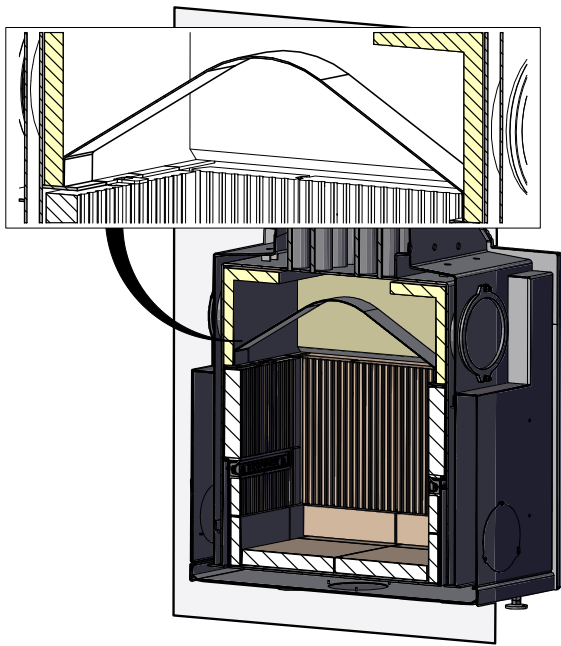


Illustration 10: HKD 7 SK Tunnel

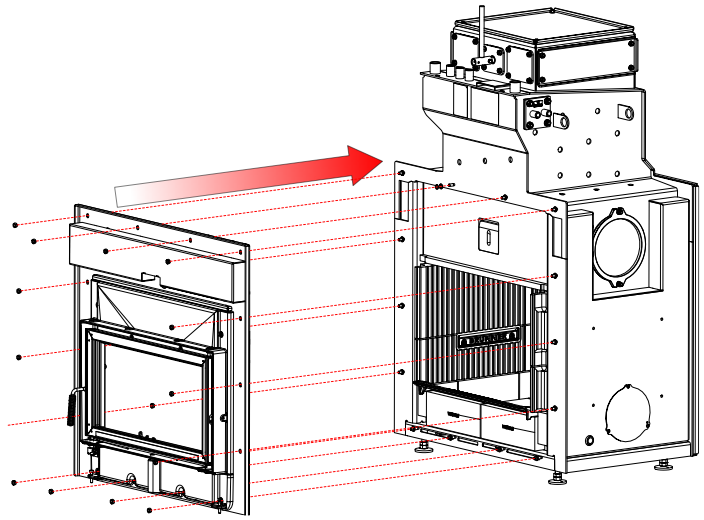
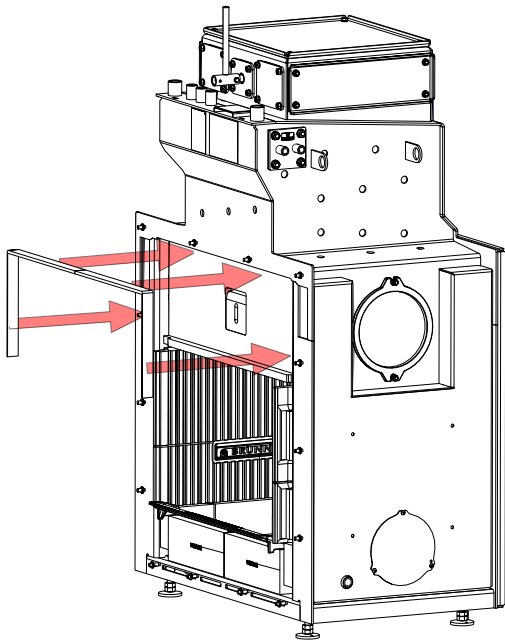




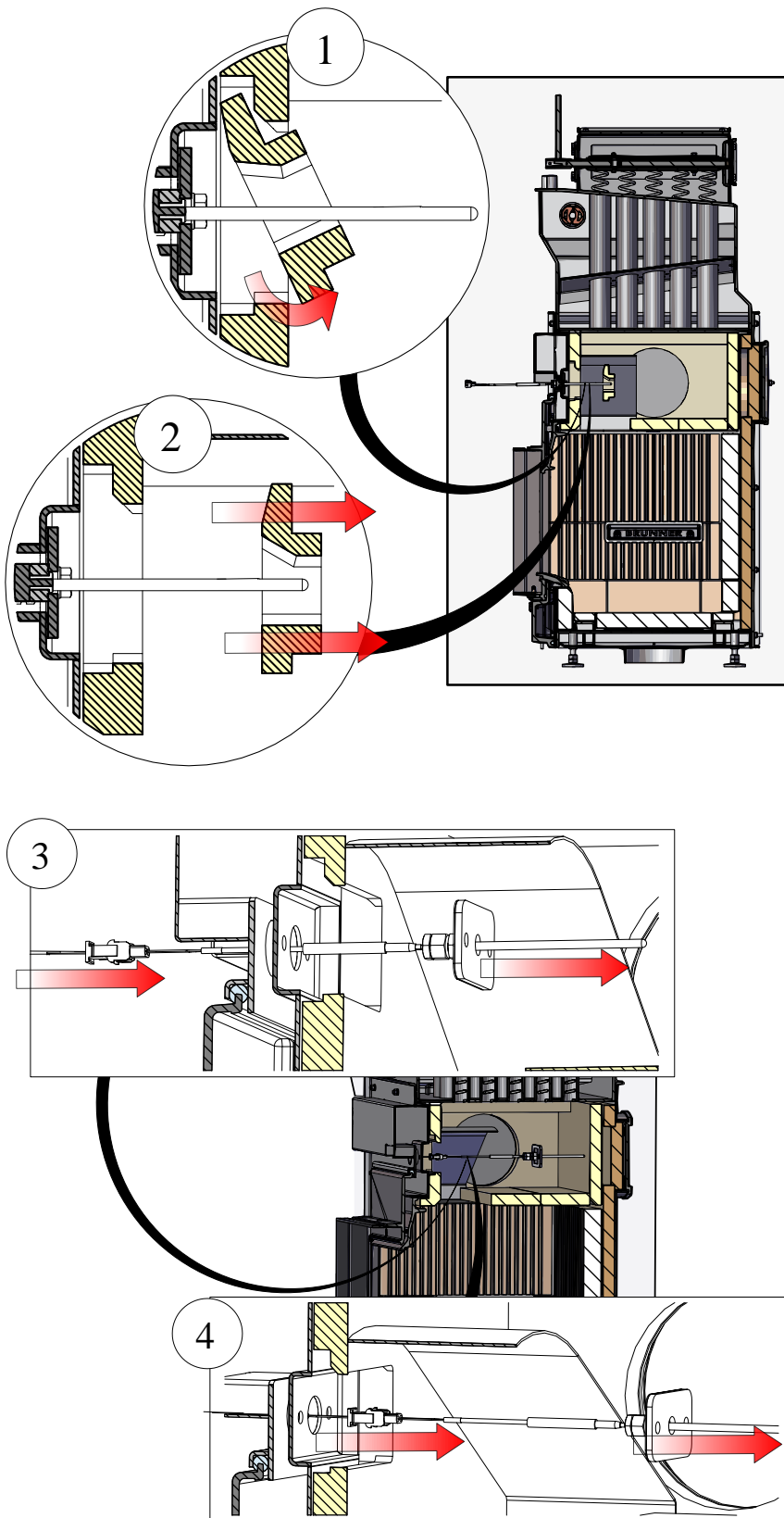


*Illustration 11: HKD 7 SK*

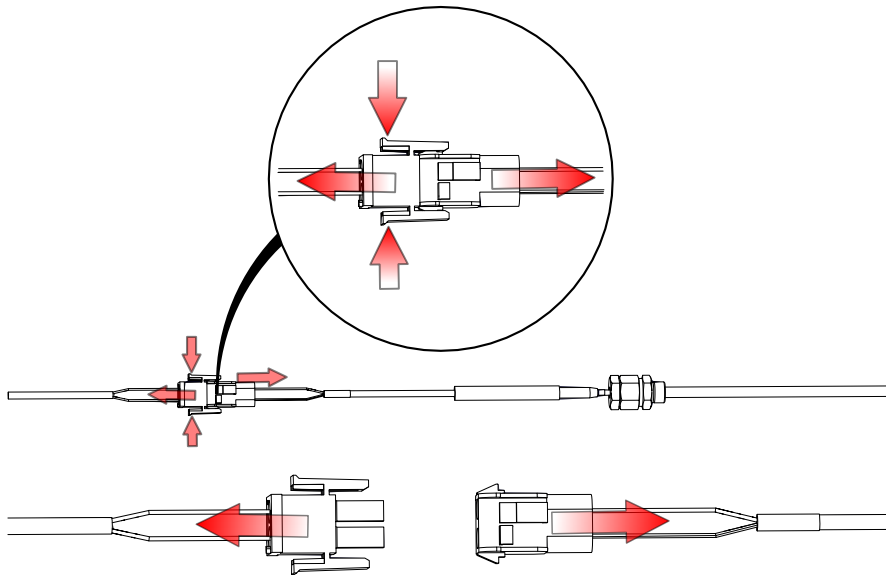
*Illustration 12: HKD 7 SK Tunnel*



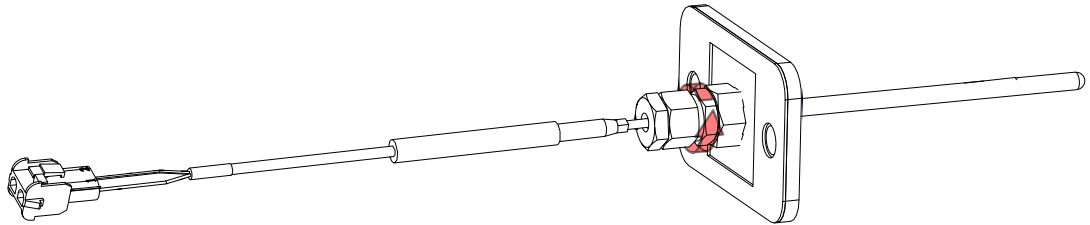
## 8 HOW TO REPLACE THE THERMOCOUPLE



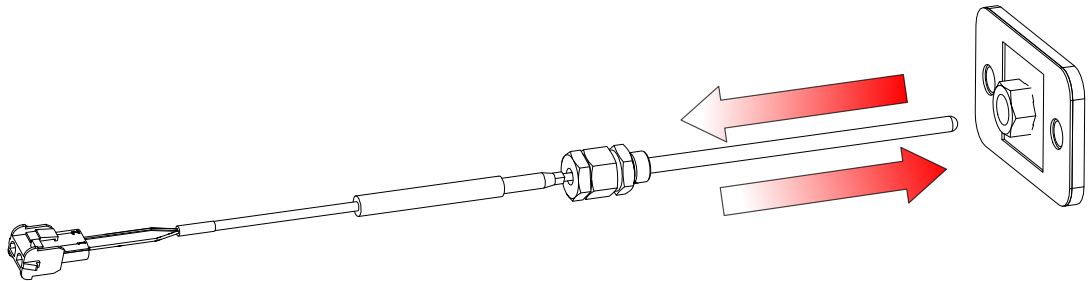
5



6



7



**7 → 6 → 5 → 4 → 3 → 2 → 1**

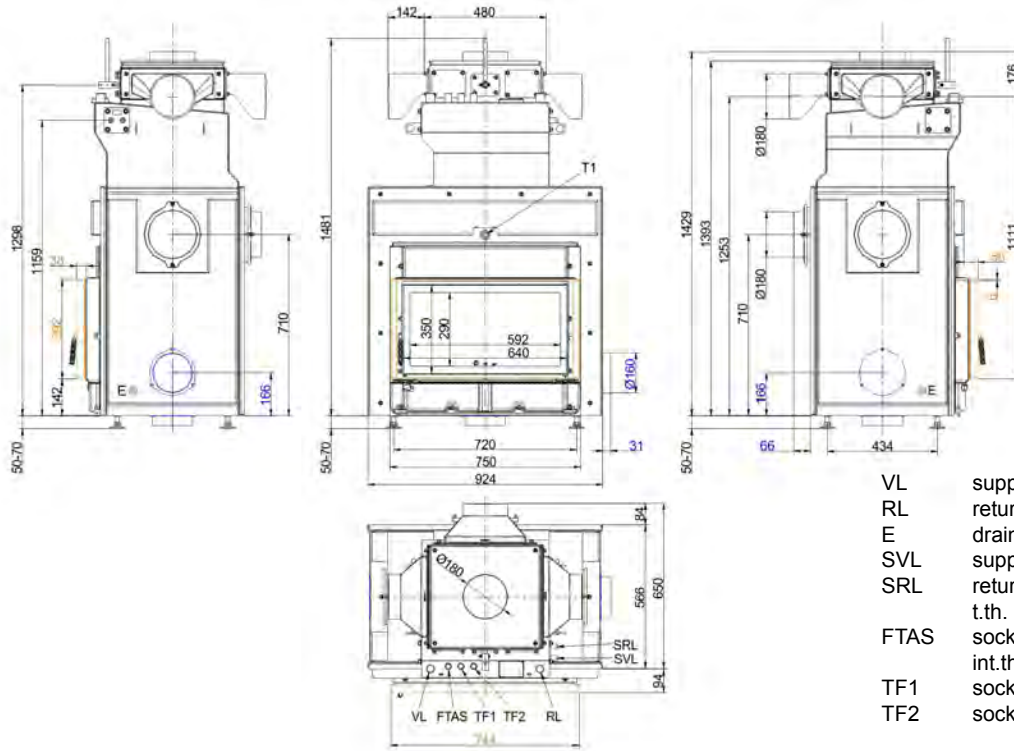
## 9 DIRECTIVES

The following standards and directives must be respected when setting up or using a heating system:

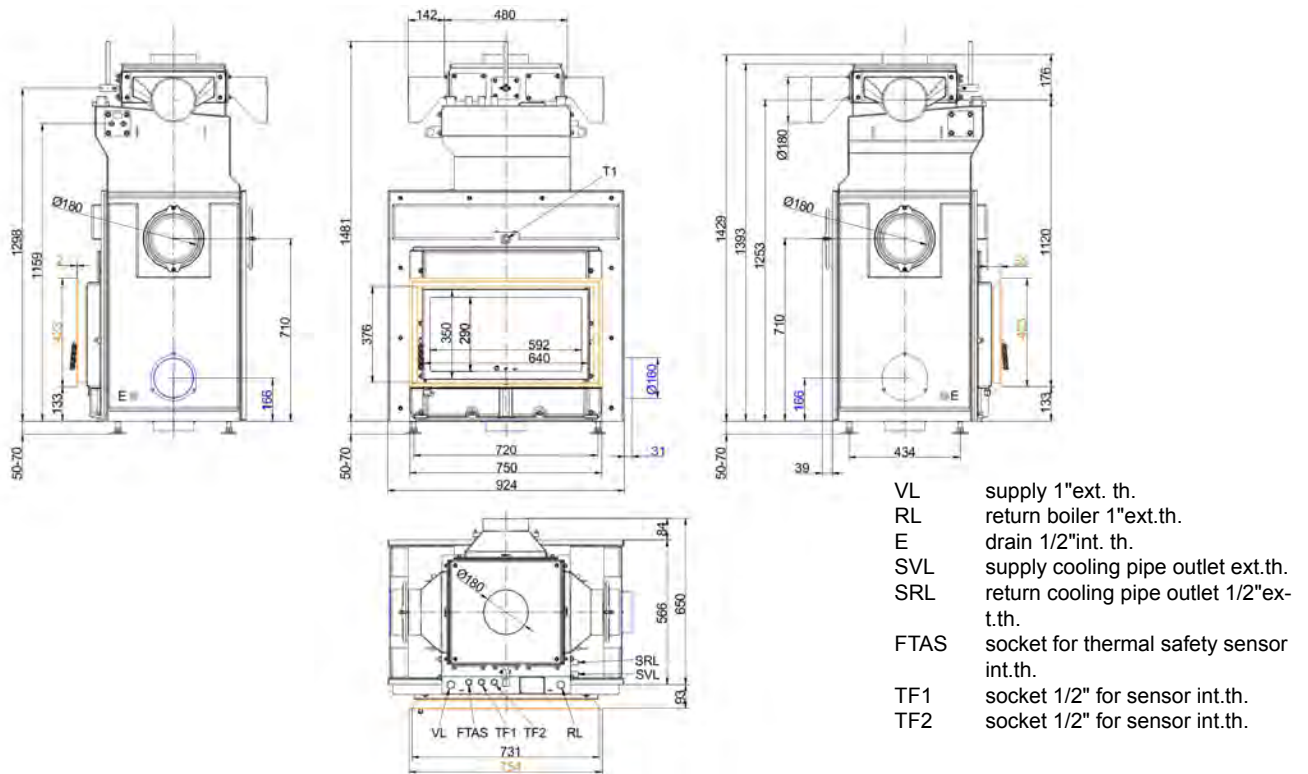
|   |   |
|---|---|
| TROL  | Stove fitting rules and regulations for warm air heating systems  |
| FeuVo   | "Feuerungsverordnung" (Fireplace Act; relevant for German Federal Lands)  |
| EnEV  | Energy Saving Regulation  |
| LBO   | Regional building codes   |
| VDE   | electronic installation instructions  |
|   | List of technical building regulations  |
| DIN EN 12831  | Calculation of the standard heating load  |
| DIN EN 12828  | Heating systems in buildings  |
| DIN EN 14597  | Temperature control devices and limiters for heat generating systems  |
| TRD 721 oder<br>DIN EN ISO 4126   | Safety devices against excessive pressure - safety valves<br>Safety devices against impermissible overpressure - safety valves                              |
| DIN V 18160-1   | Exhaust systems   |
| DIN EN13384   | Exhaust systems: Thermal and fluidic calculation methods<br>- Part 1: exhaust systems with a fireplace<br>- Part 2: exhaust systems with several fireplaces |
| DVGW-Worksheet W551   | Technical rules for drinking water installations  |
| In addition, it is necessary to observe the local building law and regulations for heating systems valid in your country. |   |

The listing does not claim to be complete!

# Dimension sheets - HKD 7 SK

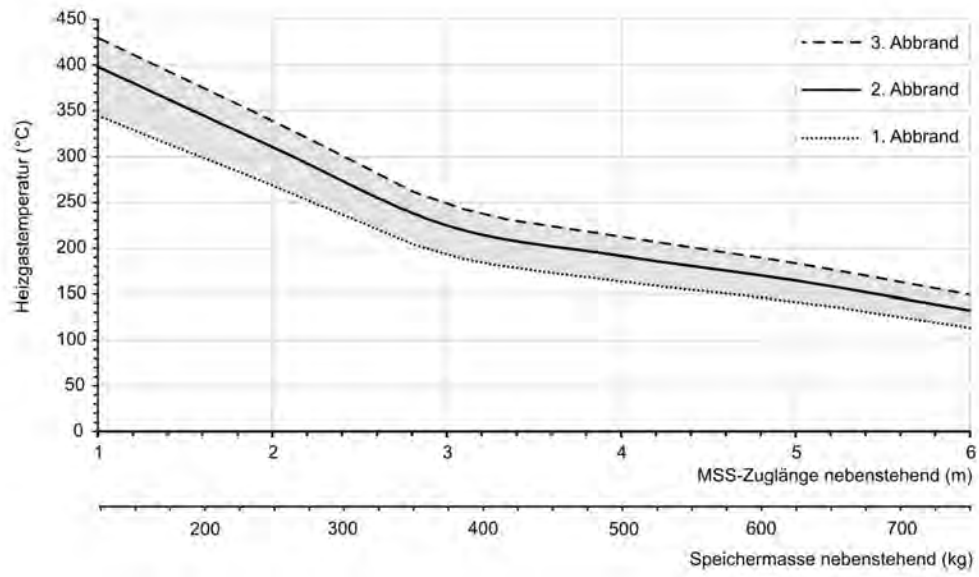


... with mounting frame



... with door frame

## Dimension sheets - HKD 7 SK



### Design characteristics for adjacent storage mass

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



## Planning and installation - HKD 7 SK

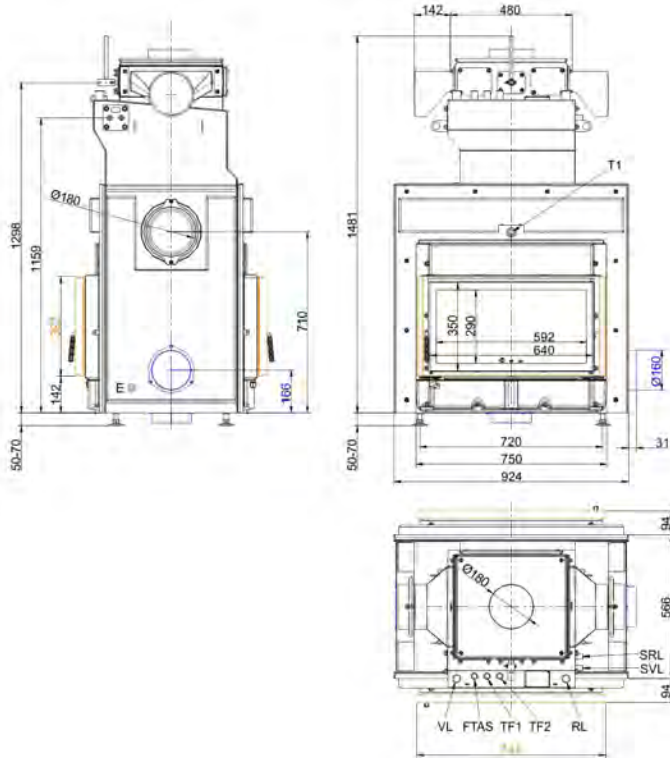
|   |  |                |                |
|---|--|----------------|----------------|
| Tested according to   |  | EN 13229 W     | EN 13229 W     |
| Values measured at  |  | Rated capacity | Practical avg. |
| Suitable for all construction types according to rules              |  | OK             | -              |
| EEL   |  | 114.4          | 114.4          |
| <b>Data for functional demonstration</b>                            |  |                |                |
| Rated heat power  | kW   | 12             | -              |
| Room heating power  | kW   | 4.5            | -              |
| Water heating power   | kW   | 7.5            | -              |
| Fire wood volume  | kg/h   | 3.6            | 7              |
| Combustion performance  | kW   | 14             | 28             |
| Flue gas mass flow  | g/s  | 11             | 23             |
| Outlet temperature (before reheating surface)                       | °C   | 370            | 630            |
| Flue gas temperature after:   |  |                |                |
| 1 x adjoining cast iron radiator (GNF 8/10)                         | °C   | 180            | 220            |
| 4,9 m ceramic accumulator <sup>1)</sup>                             | °C   | -              | 180            |
| 3,4 m accumulation stones (MSS) <sup>1)</sup>                       | °C   | -              | 210            |
| boiler  | °C   | 175            | 220            |
| Necessary supply pressure   | Pa   | 12             | 15             |
| Combustion air consumption  | m <sup>3</sup> /h                              | 35             | 60             |
| Combustion air connection Ø   | mm   | 160            | 160            |
| <b>Heat distribution</b>  |  |                |                |
| Insert / reheating surface  | %  | 10 / 10 - 30   | 10 / 10 - 30   |
| Glass pane (single / double)  | %  | 25 / 20        | 25 / 20        |
| Boiler  | %  | 40 - 60        | 40 - 60        |
| <b>Cross-section of gratings <sup>2)</sup></b>                      |  |                |                |
| Convection air  | cm <sup>2</sup>                                | 500 / - / 500  | 500 / - / 500  |
| Supply air  | cm <sup>2</sup>                                | 500 / - / 500  | 500 / - / 500  |
| <b>Minimal distances of the fireplace</b>                           |  |                |                |
| to insulation layer   | cm   | 6              | 6              |
| to mounting floor   | cm   | 4              | 4              |
| <b>Thermal insulation without / with air gratings <sup>3)</sup></b> |  |                |                |
| Mounting wall   | cm   | 10 / 8         | 10 / 8         |
| Floor   | cm   | 0 / 0          | 0 / 0          |
| Ceiling   | cm   | 13 / 10        | 13 / 10        |
| Brick lining for combustible wall                                   | cm   | 10             | 10             |
| <b>Water boiler data</b>  |  |                |                |
| Max. operating pressure   | bar  | 3              | 3              |
| Max. flow temperature   | °C   | 100            | 100            |
| Water volume  | liter  | 80             | 80             |
| Connections flow / return   | inches   | 1              | 1              |
| <b>Weight</b>   |  |                |                |
| Fireplace / combustion chamber                                      | kg   | 382 / 85       |                |
| <b>Meets requirement/limit values for:</b>                          |  |                |                |
| Germany/ Austria / Switzerland / Norway                             | 1.BImSchV (Stufe 2) / 15a BVG (2015) / LRV / - |                |                |

1) Approximate value. Determination according to design characteristics for adjacent storage mass or proof of function provided by calculation

2) for fireplace inserts / flue gas pipe / metallic reheating surface

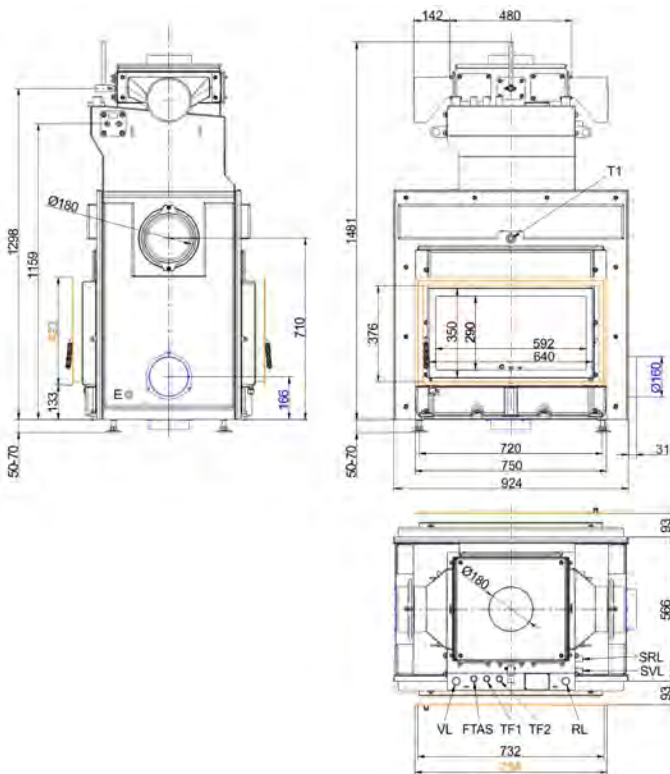
3) Values determined with upper air sections; stove cladding is heat emitting

# Dimension sheets - HKD 7 SK Tunnel



- VL supply 1"ext. th.
- RL return boiler 1"ext.th.
- E drain 1/2"int. th.
- SVL supply cooling pipe outlet ext.th.
- SRL return cooling pipe outlet 1/2"ex-t.th.
- FTAS socket for thermal safety sensor int.th.
- TF1 socket 1/2" for sensor int.th.
- TF2 socket 1/2" for sensor int.th.

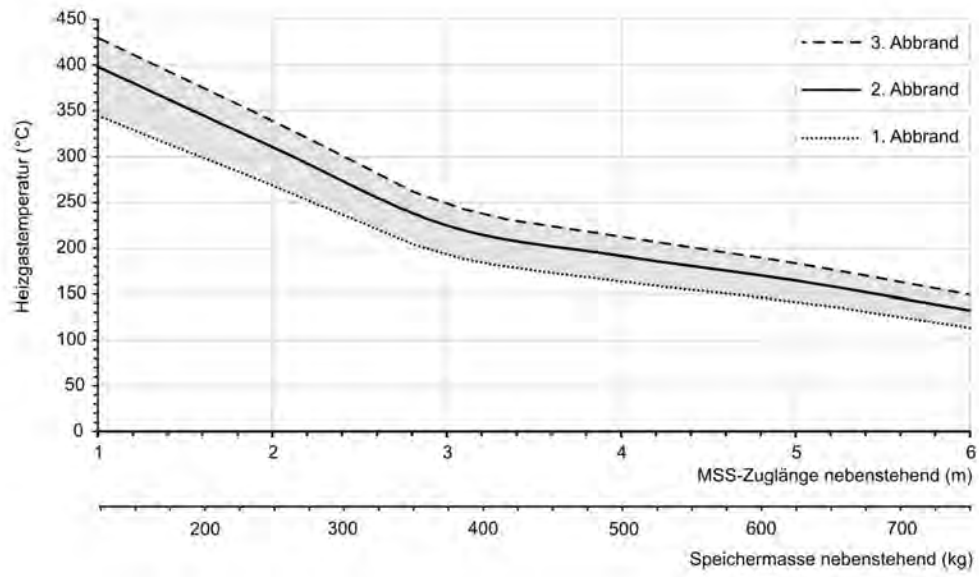
... with mounting frame



- VL supply 1"ext. th.
- RL return boiler 1"ext.th.
- E drain 1/2"int. th.
- SVL supply cooling pipe outlet ext.th.
- SRL return cooling pipe outlet 1/2"ex-t.th.
- FTAS socket for thermal safety sensor int.th.
- TF1 socket 1/2" for sensor int.th.
- TF2 socket 1/2" for sensor int.th.

... with door frame

## Dimension sheets - HKD 7 SK Tunnel



### Design characteristics for adjacent storage mass

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

# Planning and installation - HKD 7 SK Tunnel

|   |  |                |                |
|---|--|----------------|----------------|
| Tested according to   |  | EN 13229 W     | EN 13229 W     |
| Values measured at  |  | Rated capacity | Practical avg. |
| Suitable for all construction types according to rules              |  | OK             | -              |
| EEL   |  | 114.4          | 114.4          |
| <b>Data for functional demonstration</b>                            |  |                |                |
| Rated heat power  | kW   | 12             | -              |
| Room heating power  | kW   | 5              | -              |
| Water heating power   | kW   | 7              | -              |
| Fire wood volume  | kg/h   | 3.6            | 7              |
| Combustion performance  | kW   | 14             | 28             |
| Flue gas mass flow  | g/s  | 11             | 23             |
| Outlet temperature (before reheating surface)                       | °C   | 350            | 630            |
| Flue gas temperature after:   |  |                |                |
| 1 x adjoining cast iron radiator (GNF 8/10)                         | °C   | 180            | 220            |
| 4,9 m ceramic accumulator <sup>1)</sup>                             | °C   | -              | 180            |
| 3,4 m accumulation stones (MSS) <sup>1)</sup>                       | °C   | -              | 210            |
| boiler  | °C   | 165            | 220            |
| Necessary supply pressure   | Pa   | 12             | 15             |
| Combustion air consumption  | m <sup>3</sup> /h                              | 35             | 60             |
| Combustion air connection Ø   | mm   | 160            | 160            |
| <b>Heat distribution</b>  |  |                |                |
| Insert / reheating surface  | %  | 10 / 10 - 30   | 10 / 10 - 30   |
| Glass pane (single / double)  | %  | 25 / 20        | 25 / 20        |
| Boiler  | %  | 40 - 60        | 40 - 60        |
| <b>Cross-section of gratings <sup>2)</sup></b>                      |  |                |                |
| Convection air  | cm <sup>2</sup>                                | 500 / - / 500  | 500 / - / 500  |
| Supply air  | cm <sup>2</sup>                                | 500 / - / 500  | 500 / - / 500  |
| <b>Minimal distances of the fireplace</b>                           |  |                |                |
| to insulation layer   | cm   | 6              | 6              |
| to mounting floor   | cm   | 4              | 4              |
| <b>Thermal insulation without / with air gratings <sup>3)</sup></b> |  |                |                |
| Mounting wall   | cm   | 10 / 8         | 10 / 8         |
| Floor   | cm   | 0 / 0          | 0 / 0          |
| Ceiling   | cm   | 13 / 10        | 13 / 10        |
| Brick lining for combustible wall                                   | cm   | 10             | 10             |
| <b>Water boiler data</b>  |  |                |                |
| Max. operating pressure   | bar  | 3              | 3              |
| Max. flow temperature   | °C   | 100            | 100            |
| Water volume  | liter  | 80             | 80             |
| Connections flow / return   | inches   | 1              | 1              |
| <b>Weight</b>   |  |                |                |
| Fireplace / combustion chamber                                      | kg   | 425 / 72       |                |
| <b>Meets requirement/limit values for:</b>                          |  |                |                |
| Germany/ Austria / Switzerland / Norway                             | 1.BImSchV (Stufe 2) / 15a BVG (2015) / LRV / - |                |                |

1) Approximate value. Determination according to design characteristics for adjacent storage mass or proof of function provided by calculation

2) for fireplace inserts / flue gas pipe / metallic reheating surface

3) Values determined with upper air sections; stove cladding is heat emitting

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](mailto:info@brunner.de)

**Art. No.:**