

**TONWERK** 

 **SPEICHERÖFEN**  
MADE IN SWITZERLAND

## Installation Instruction Tonwerk storage stove

**T-SKY** **eco.2<sup>®</sup>**

**T-SKY** **eco.2<sup>®</sup>** DUO



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Version 20170202

SWISS MADE – Wolfram Design

## 1. Before installing

### Note



Read through these Installation Instructions before starting to work with the storage heating stove!  
They contain important information for your personal safety.

#### 1.1. Load-bearing capacity of the floor:

Prior to installation, ensure that the load-bearing capacity of the sub-structure is high enough to support the weight of the stove. Strong vibrations in elastic sub-structures (wooden floors) can cause defects to the stove and make installation of rotary stoves impossible.

#### 1.2. Fire prevention:

### CAUTION



#### CAUTION

Protect combustible components, furniture, fabrics, wallpaper, wooden panelling, etc. from exposure to heat.

**Observe country-specific and local fire prevention guidelines and regulations.**

## 1.3. Safety clearances:

### CAUTION



#### CAUTION

Fire prevention regulations stipulate minimum or safety clearances when combustible materials (wooden panelling, fabrics, etc.) are present. These are listed in the following table:

#### Safety clearance A

Sides and rear walls require a minimum clearance of 10 cm from combustible materials

#### Safety clearance B

Observe country-specific guidelines.

#### Safety clearances C+D

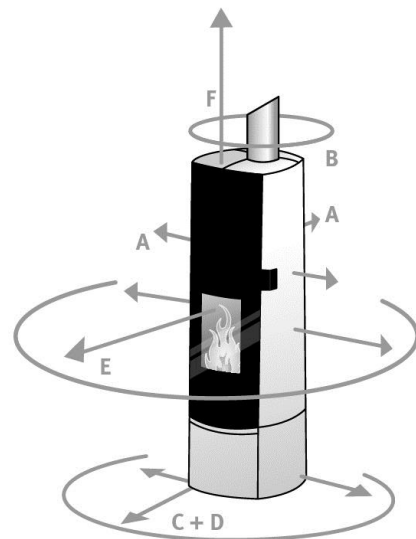
The entire range of rotation requires a minimum clearance of 50 cm

#### Safety clearance E

The entire range of rotation requires a minimum clearance of 80cm

#### Safety clearance F

The minimum safety clearance from the ceiling is 25 cm




## 1.4. Spark protection plate:

If combustible floor coverings are present, a non-combustible covering must be provided in front of the stove as protection. Suitable coverings include plates made from stone, ceramic, metal or security glass. Combustible flooring materials (carpets, parquet, synthetic flooring) must be covered in front of the stove. Building regulations, national building regulations and fire authority regulations vary from one another in different countries. Request approval from the responsible authority prior to installation.

## 1.5. Approvals and rating plate:

The rating plate provides information on the various approvals issued for the T-SKY. The nameplate is attached inside the stove housing at the lower left.

If you have technical questions about the stove or about the warranty, always provide the stove number on the rating plate in order to identify the stove.

|                                                                               |                                                                 |                                                                                         |                  |
|-------------------------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------|------------------|
|                                                                               |                                                                 |  -13 |                  |
| Typ<br><b>T-SKY eco2</b>                                                      |                                                                 | Prod. Nr. <b>T6 - □□□□□ -17</b>                                                         |                  |
| <b>Leistungserklärung Nr. 006-13139</b>                                       |                                                                 |                                                                                         |                  |
| Gesamtwärmeabgabe:<br><b>22.5 kWh</b>                                         | Mittlere Raumwärmeleistung:<br><b>2.6 KW (7.3h Entladezeit)</b> | Abgas-/Verbrennungsluftführung<br><b>FC41x, FC61x, FC81x</b>                            |                  |
| Abgastemperatur:<br><b>222 °C</b>                                             | Brenndauer:<br><b>2.2 h (8.8h)</b>                              | Norm:<br><b>DIN EN 15250-2007-06 / Art. 15a B-VG</b>                                    |                  |
| Feinstaub/poussiere/particules:<br><b>29 mg/Nm3</b>                           | CO bei 13% O2:<br><b>0.10%</b>                                  |                                                                                         |                  |
| Energieeffizienz/rendement/efficiency: <b>84%</b>                             | Mehrfachbelegung: <b>Ja</b>                                     | Brandsicherheit                                                                         | erfüllt          |
| Oberflächentemperaturdifferenz:<br><b>Zeit 100%/50%/25% = 2.1h/6.1h/8.8 h</b> | Brennstoff: <b>Scheitholz</b>                                   | Brandverhalten                                                                          | A1 WT            |
| Hersteller: <b>Tiba AG, Hauptstrasse 147, CH-4416 Bubendorf</b>               |                                                                 | Oberflächentemperatur                                                                   | erfüllt          |
| <b>Bedienungsanleitung beachten/lire le manuel/read instruction manual!</b>   |                                                                 | Elektrische Sicherheit                                                                  | nicht zutreffend |
|                                                                               |                                                                 | Maximaler Betriebsdruck                                                                 | NPD              |
|                                                                               |                                                                 | Mechanische Festigkeit                                                                  | NPD              |
|                                                                               |                                                                 | Freisetzung Gefährlicher Stoffe                                                         | NPD              |
|                                                                               |                                                                 | NPD = no performance determined / keine Leistungsbestimmung                             |                  |

### Triple-point values according to DIN EN 13384:

|                                |     | T-SKY eco2 |
|--------------------------------|-----|------------|
| Flue gas mass flow             | g/s | 8.45       |
| Flue gas temperature           | °C  | 266        |
| Required pressure differential | Pa  | 12         |
| CO <sub>2</sub> content        | %   | 9.9        |

## 1.6. Fitting the flue gas connection and combustion air supply for ambient air independent operation

The flue gas connection and combustion air supply must be fitted in compliance with the classification FC41x, FC61x or FC81x for ambient air independent operation and according to **DIN EN 13384-1:2008-08** und **DIN EN 13384-2:2009-07** is a corresponding proof to lead.

Tonwerk Lausen AG recommend the use of the **Lindab** (system partner & components for heating/ventilation) push-together ductwork system for the combustion-air supply and offers it. The required elements should be stated on the order.

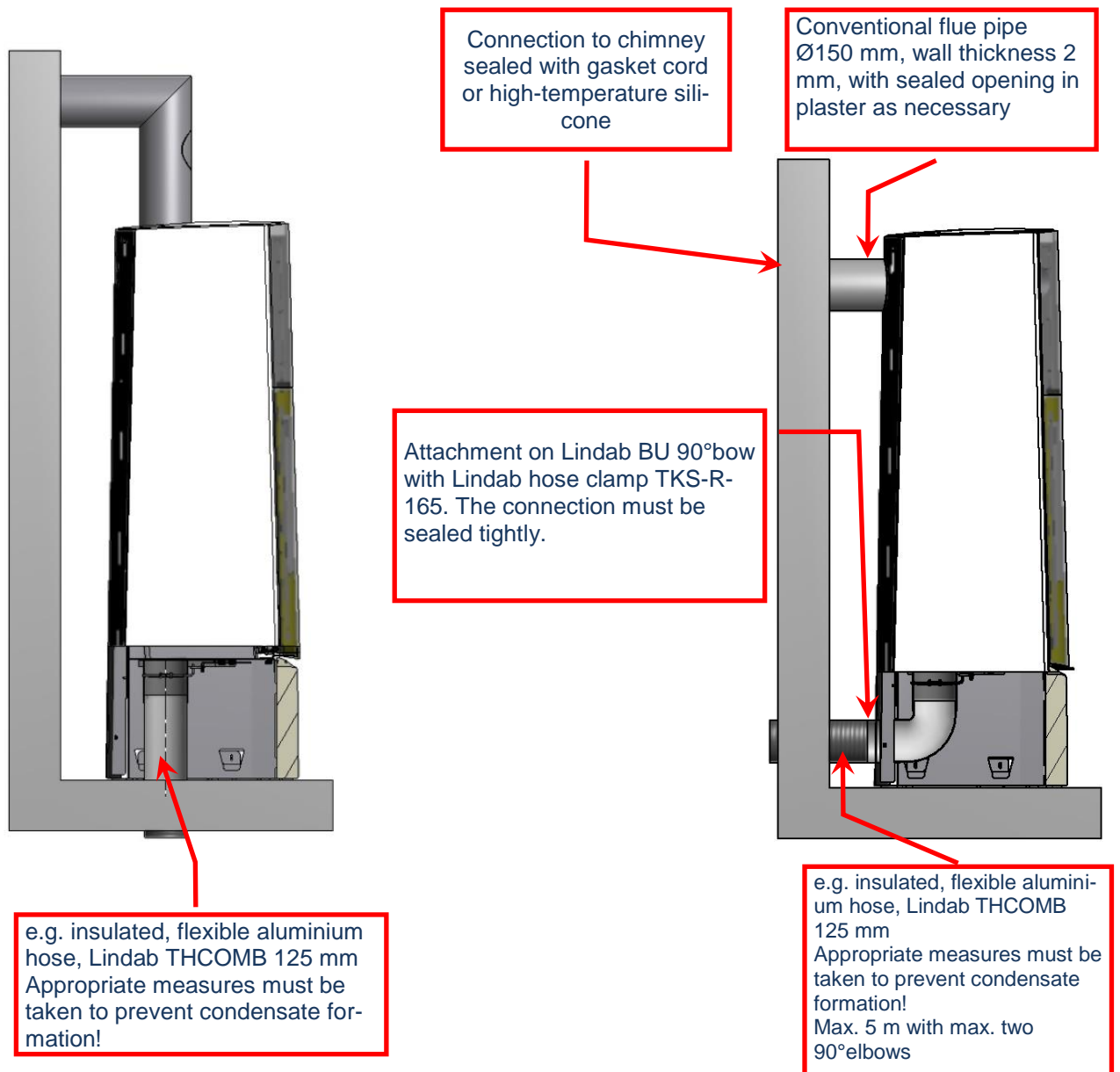
Joints between individual plug-in elements of the combustion air supply must be sealed tightly.

Flue pipe connections at the stove and wall must be sealed.

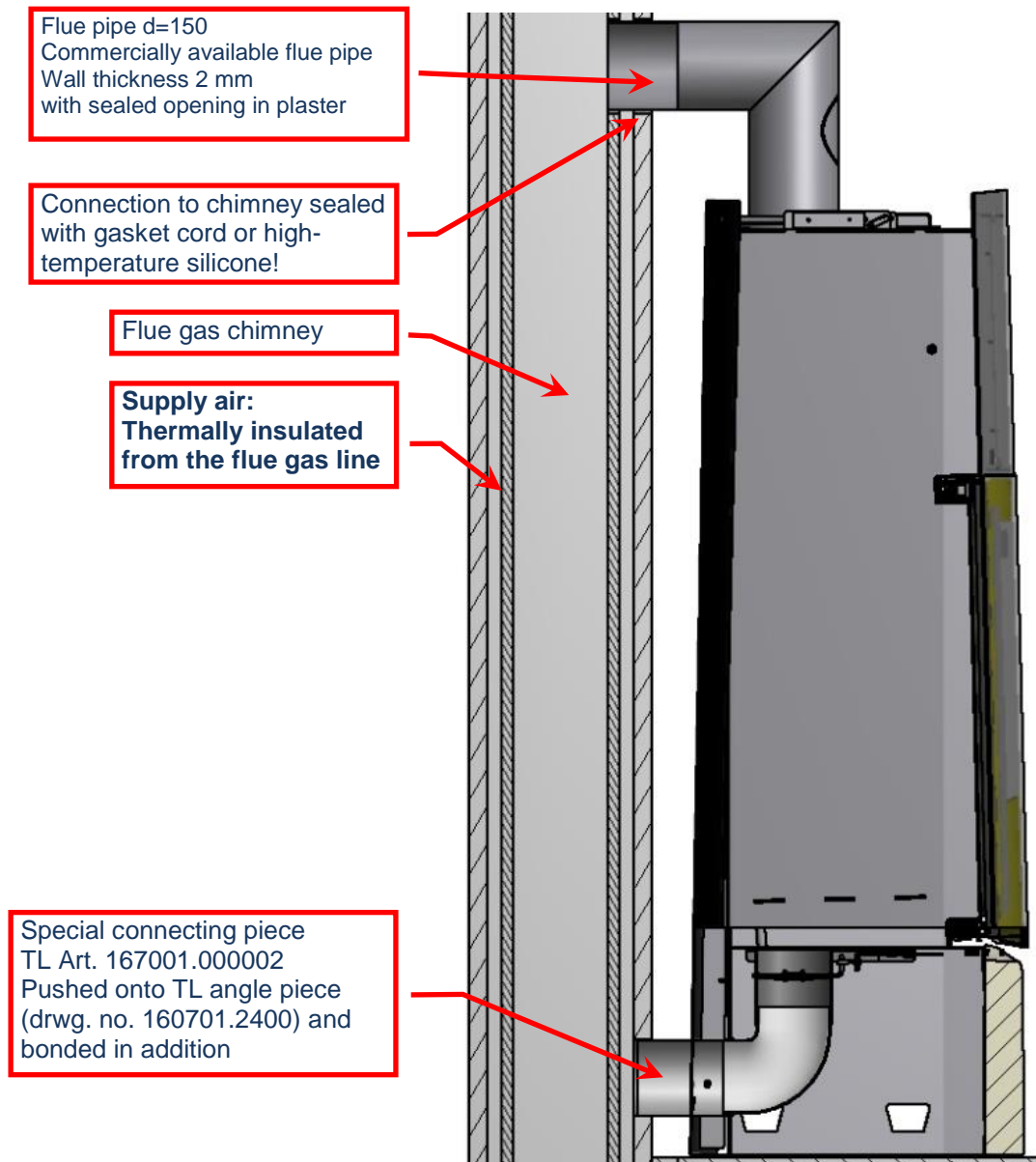
In the case of ambient air-independent operation with automatic ventilation of the living space, multiple connections to the chimney are permitted only within the same residential unit.

## 1.7. Supply-air connection at bottom / back:

T-SKY



## 1.8. Connecting to a combination air / flue gas chimney:



## 1.9. Rotating stoves and ambient air independent operation:

### Note



Rotating connections used for standard rotating installations and flue gas connections are accessories that are **not** suitable for ambient air-independent operation and thus not permitted.

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## 2. Unpacking the T-SKY:

### Note



When unpacking, make sure not to damage the edges of the cover panels. **It is easy to damage a stone edge! Have a softer rubber / foam underlay available.** The glass in the fire door can also be damaged easily. During the factory acceptance, each unit was assembled and checked for completeness and damage. If you nevertheless find a defect attributable to damage during transport, please contact Tonwerk Lausen AG **immediately after delivery.**

### WARNING



#### Heavy components

Components can be very heavy. Improper handling can result in severe injuries!

Use suitable lifting gear and aids!

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## 3. Installation steps

### 3.1. Step 1:

**For versions with a rotating base, see the rotating base option!**

### 3.2. Setting up the stove housing

Level the stove and, using the metal cover at the top, align with and measure the distance to the chimney connection.

#### Note



**Once completely assembled, the stove can no longer be moved.**

The housing must stand on a level floor or a base plate. If the supporting surface is uneven, the housing can be aligned with the aid of the four adjustable, threaded feet.

#### CAUTION



#### CAUTION!

When using glass floor plates: Use the adjustable feet only after placing a large metal pad underneath

### 3.3. Step 2: Connecting the flue gas and supply air

#### 3.3.1. Fitting the combustion air supply connection for ambient air independent operation:

The supply air can be connected vertically from below or horizontally from the back with the aid of commercially available flexible aluminium hose (NW 125 mm) and must be sealed tightly.

**When connecting the supply air from the back, order the appropriate connecting angle piece.**

The T-SKY comes equipped with a commercially available connecting piece with seal lip that prevents the flexible aluminium hose slipping out.

## Note



The open cross-section of 125 mm must not be reduced. When the cross-section of the pipe for the supply-air connection is determined on site, it is necessary to perform a functional calculation for the chimney and verify the results with test fires.

With connections to the outside façade in particular, it is necessary to ensure that the supply-air lines are insulated sufficiently to prevent condensate formation.

## IMPORTANT

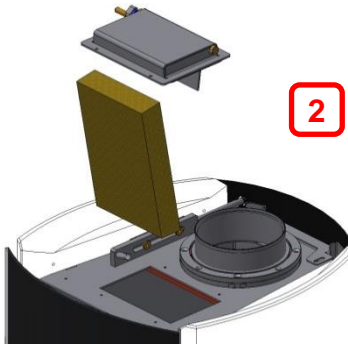


### Important!

In the event of long supply air lines  $> 4$  metres in length or several changes in direction (elbows), the flow resistance must be adjusted by means of suitable dimensioning. It is recommended that the chimney calculation program be used to calculate the dimension of the supply-air line

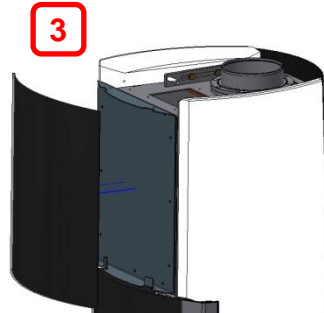
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### 3.4. Step 3: Installing the storage block

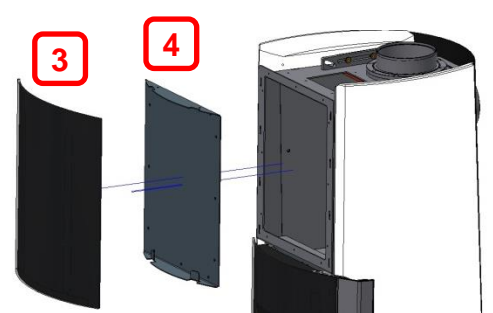


2

1. Remove the cover stones
2. Unscrew the clean-out cover



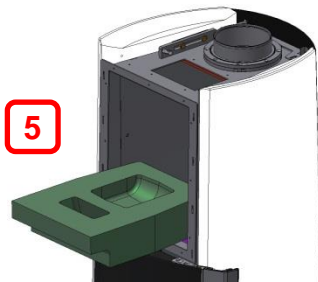
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3

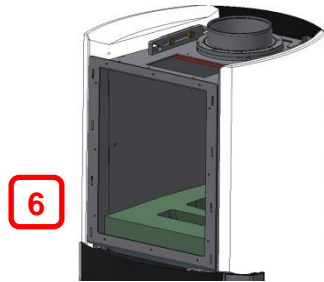
4

3. Remove the glass cover
4. Unscrew the storage compartment cover



5

5. Insert the lower storage stone



6

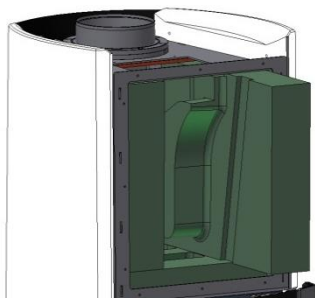
6. Place the lower storage stone in position
7. Insert the upper side storage stone straight

7

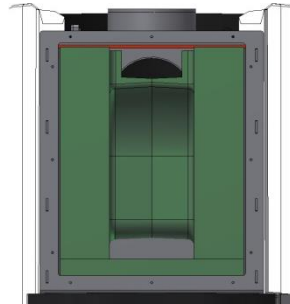


8

8. Push the storage stone completely to the back until the top is aligned with the edge of the housing (red)

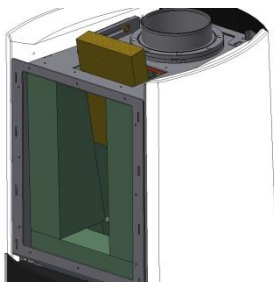


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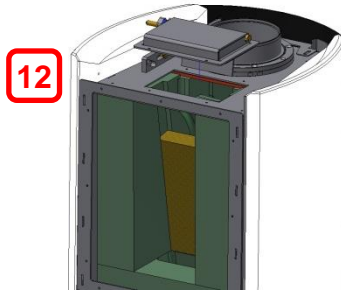


10

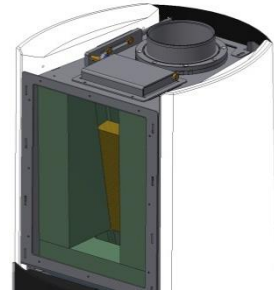
9. Insert the second storage stone in the same way until it contacts the top of the housing  
10. Use the screws provided to secure the two side stones to the side of the housing



11



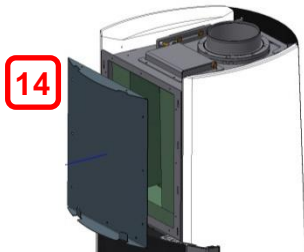
12



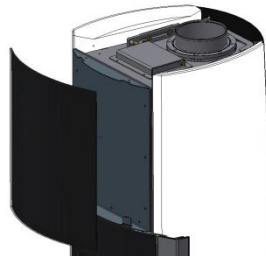
13

12. Reattach the clean-out cover  
13. Test operation of the heating flap

11. Insert the flue gas baffle plate



14



14. Reinstall the storage compartment cover and check that the gasket fits tightly

## Note



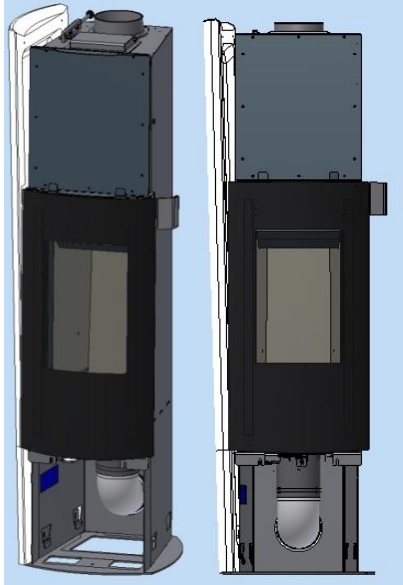
Ensure that the storage blocks are pushed to the sides and back as far as possible and that there is no large gap between the side storage stones.

## Note

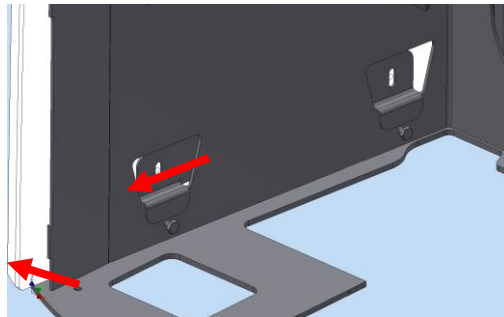


It is **important** that the flue gas connections and openings in the plaster are sealed tightly. The same applies for the transitions: connecting piece to chimney and flue gas pipe to ceiling or wall connection.

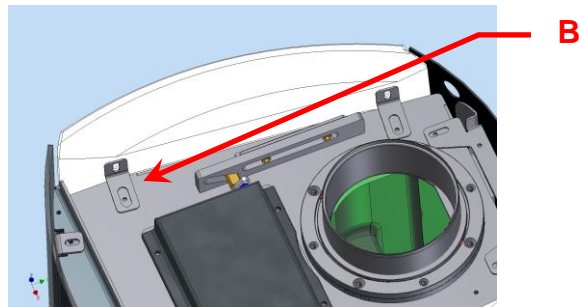
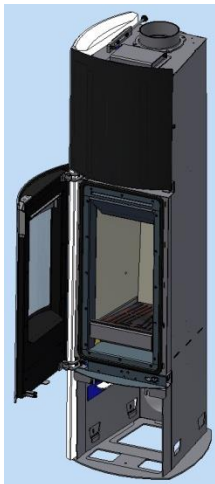
## 3.5. Step 5: Installing the stove cover panels



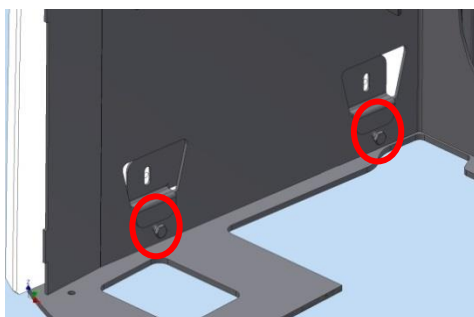
1. Carefully insert and align the left side panel in the brackets at the bottom of the housing (A)



Attach panels at the top (B)

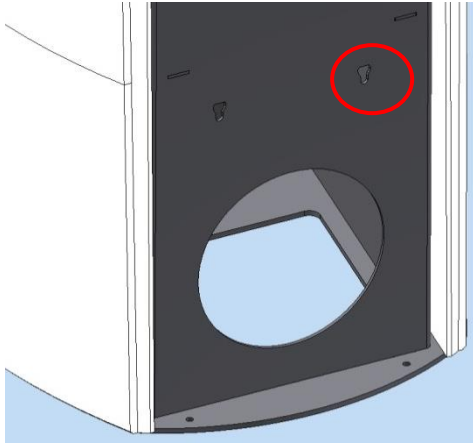




2. Before the right side panel can be inserted, the door must be opened and held in place. Install and align in the same way used for the left panel.

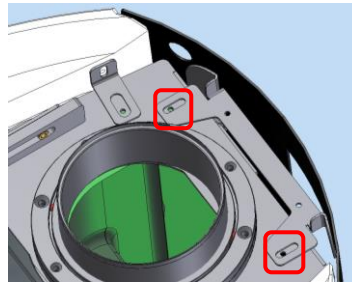


3. After side panels are mounted, Set base stone and adjust gap dimension with side stone. Then remove the base stone back and do the 2 screws on the side stone.

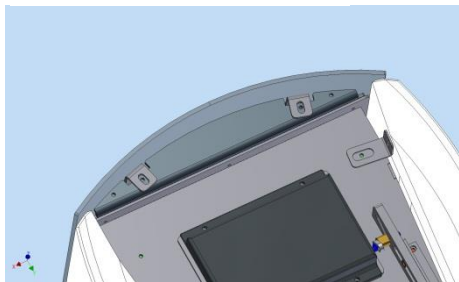
Placing base stone again



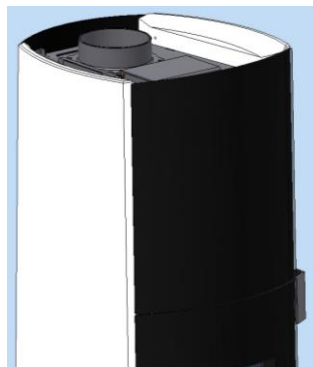
4. Back panel mount below  and screw the top on the mounting 



View from above



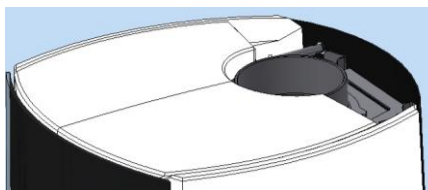
5. Insert the glass front, align and secure with screws up / down



Bottom View



6. Place the cor stones on the top



### 3.6. Step 6: Checking operation of the door-closing function

#### Note



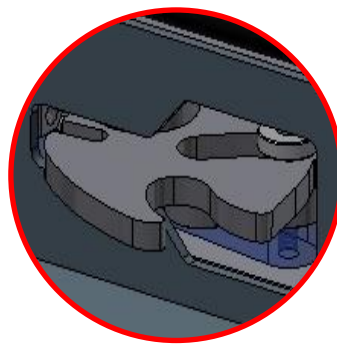
Prior to commissioning, check that the door closes automatically and is pulled tightly against the housing.

#### CAUTION



#### CAUTION!

The locking tongue is under spring tension and must not be pushed in by hand. Operation occurs abruptly and can injure fingers.



### 3.7. Step 7: Checking operation of the optional automatic supply air function

#### Note



- (1) Before connecting the supply air, press the reset plate to check that the air flap closes (audible closing sound).
- (2) Open the door to check whether the supply-air flap opens again (carefully reach in to the supply air connection and feel the front edge of the cover in the pipe)
- (3) With the door closed, use the reset plate to close the supply air flap again.

**Repeat items 1 to 3 several times.**

### 3.8. Step 8: Commissioning, instructing and starting a fire

Start a fire in the stove and instruct the user with the aid of the operating instructions. Make the customer aware of the safety and application instructions.

#### Note



Point out to the customer that a defective gasket must be exchanged immediately for safety reasons.

## 4. Rotating base option:

### 4.1. Installing the rotating base

#### Note



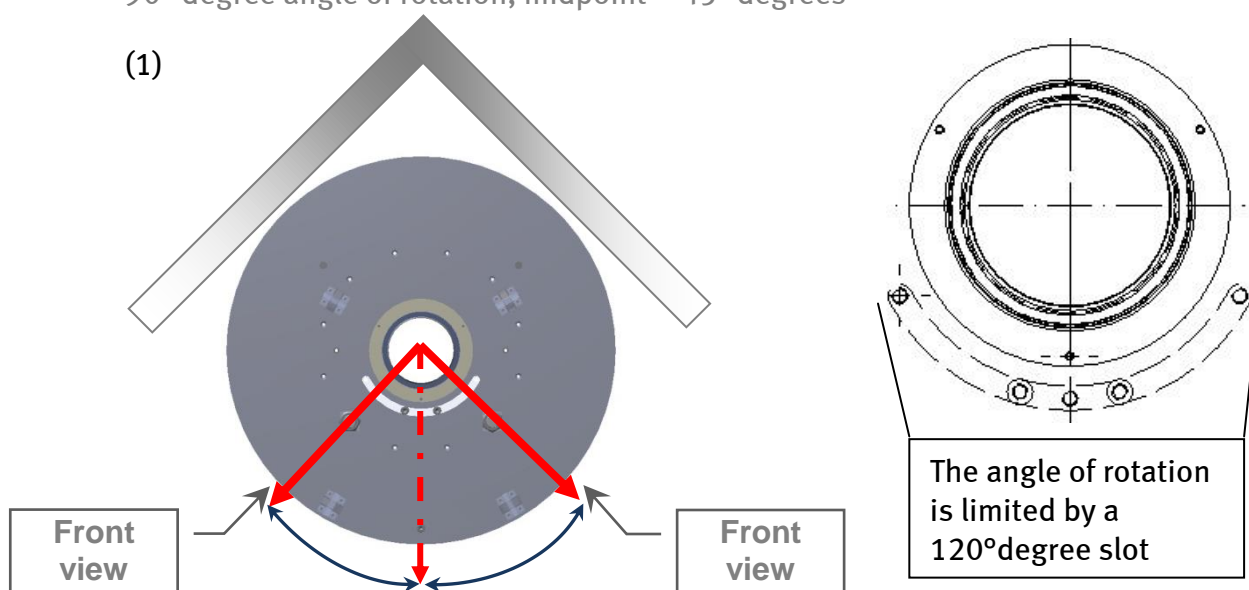
It is **important** that the entire surface of the rotating base rests flat on the floor. The rotating base must be completely level.

When installing a stove with a rotating base, place the base on the floor first. The axis of the rotating base must always be placed at the midpoint of the desired angle of rotation

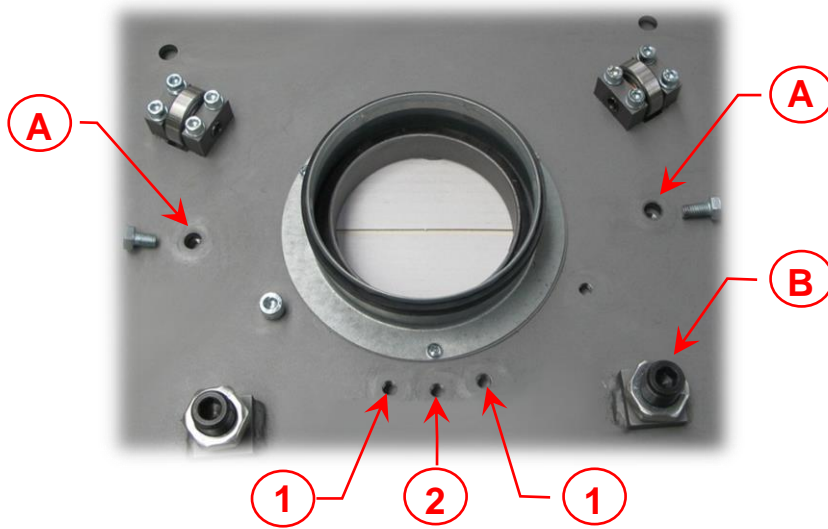
Example.

90° degree angle of rotation, midpoint = 45° degrees

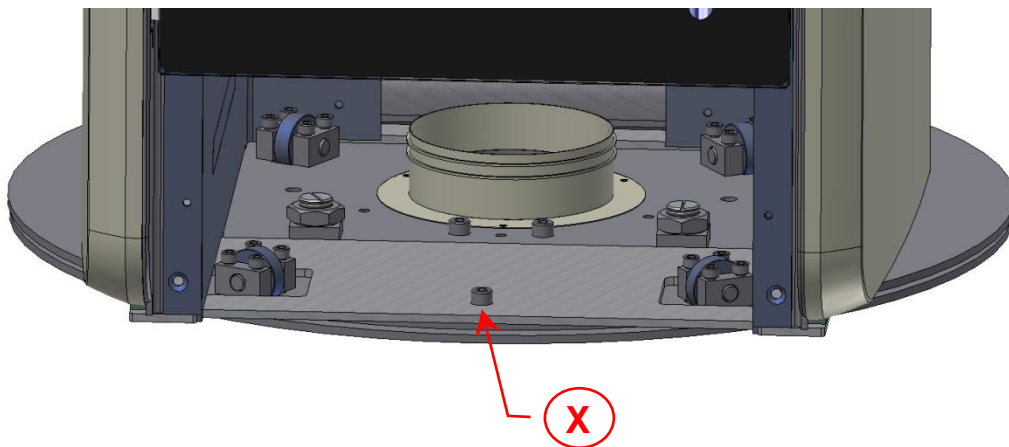
(1)





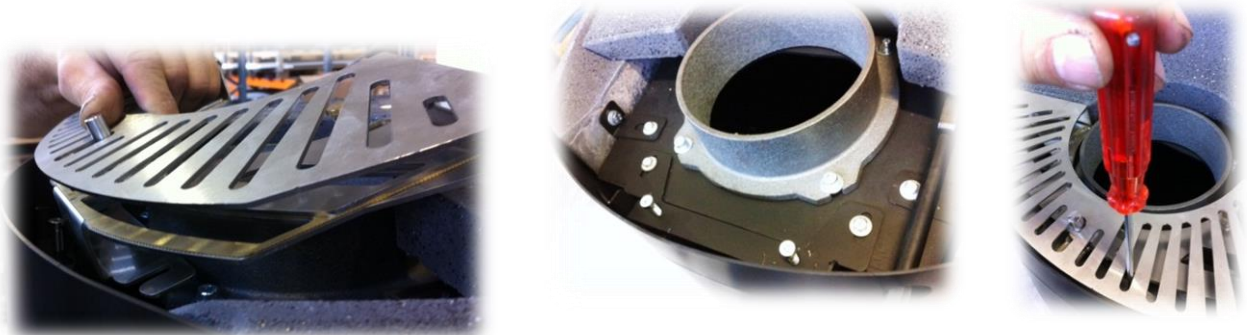


- A These holes are for fixing the rotating base (as-delivered condition)
  - B Detent pins to secure in the desired position  
Installation = Screw in as far as possible, then back out 1/2 turn, Secure with counternut
- 1) Stop for 45° degree angle of rotation per side  
(overall angle of rotation = 90° degrees)
  - 2) Stop for 60° degree angle of rotation per side  
(overall angle of rotation = 120° degrees)



- x) The stove is secured to the rotating base using this screw

## 5. Option DUO module



1. Enter the DUO module at an angle in the 2 screws at the top (A) at the rear carrier
2. Align the DUO module to the back wall and the front cover
3. In the open state (slide forward B) screw the DUO module from above.



## 6. Supplemental information:

When ventilation grates or supply air flaps are used on the outside façade, instruct the customer in their maintenance / cleaning.

Fill out the warranty certificate in the presence of the customer and send back to us.

Please contact our Customer Service Dept. on +41 (0) 61 935 17 10  
if you should have any questions.

Subject to change: Bubendorf, February 2017

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