

Installation instruction



C i40

Contura

DECLARATION OF PERFORMANCE

No. Ci40-CPR-130912-SE-2

Contura

PRODUCT

Product type Insert lit with solid biofuels
 Type designation Contura i40
 Manufacturing number See rating plate on the insert
 Intended area of use Heating of rooms in residential buildings
 Fuel Wood

MANUFACTURER

Name NIBE AB / Contura
 Address Box 134, Skulptörvägen 10
 SE-285 23 Markaryd, Sweden

CHECKS

According to AVCP System 3
 European standard EN 13229:2001/AC:2006, EN-13229:2001/A2:2004/AC:2007
 Test institute Rein-Ruhr Feuerstätten Prüfstelle, NB 1625,
 has checked declared performance and issued test report no. RRF-29 13 3402

DECLARED PERFORMANCE

Essential characteristics	Performance	Harmonised technical specification
Reaction to fire	A1 WT	EN 13229:2001/AC:2006, EN-13229:2001/A2:2004/AC:2007
Minimum distance to combustible material	Rear: 150 mm Side: 150 mm Follow the given conditions in the installation instructions.	
Risk of falling embers	Pass	
Emissions from combustion	CO 0,07% NOx 91 mg/m ³ OGC 59 mg/m ³ PM 17 mg/m ³	
Surface temperatures	Pass	
Cleaning options	Pass	
Mechanical durability	Pass	
Emissions of hazardous substances	Pass	
Nominal output	7,0 kW	
Efficiency	81%	
Flue gas temperature in connector at nominal output	328°C	

The undersigned is responsible for the manufacture and conformity with the declared performance.



Niklas Gunnarsson, Business area manager NIBE STOVES
 Markaryd, September 12, 2013



A warm welcome to Contura.

A warm welcome to the Contura family. We hope you will get a great deal of pleasure from your new insert. As a new owner of a Contura insert, you have secured a product with timeless design and long service life. Contura also has a combustion process that is both environmentally friendly and efficient, for the best heat production.

Read through these installation instructions carefully before installation. Read how to best light your stove in the lighting instructions.

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NOTE:

Report the installation of a fireplace to your local authority.

The owner of the house is personally responsible for ensuring compliance with the mandatory safety requirements and must have the installation approved by a qualified inspector. Your local chimney sweep must also be informed about the installation as this will affect the routines for regular chimney-sweeping services.

WARNING!

The insert becomes very hot. During operation, certain surfaces of the insert become very hot and can cause burn injuries if touched. Also, take heed of the strong heat radiated through the door glass. Placing flammable material closer than the safe distance indicated may cause a fire. Smoulder combustion can cause quick gas ignition with the risk of damage to property and personal injury.

Technical specifications

Model	i40
Output	5-10 kW
Nominal output	7 kW
Efficiency	81%
Weight (kg)	145 (with Thermotte) 115 (without Thermotte)
Width (mm)	773
Depth (mm)	424
Height (mm)	1260

Connector diameter Ø150 mm ext.

Type approved in accordance with:

European standard EN-13229

DIN plus

Bauart 1

Part 15a B-VG

Test report no: RRF-29 13 3402

SINTEF: 110-0408

Approved for installation in Smoke Control Area

by DEFRA

General

This manual contains instructions about how Contura i40 must be assembled and installed. To ensure the function and safety of the insert, we recommend that installation is carried out by an authorised technician. Our Contura dealers can recommend suitable technicians, information about our dealers can be found at www.contura.eu

Instructions for lighting are also supplied with the insert. Read them carefully and keep them safe for future use.

Structural support

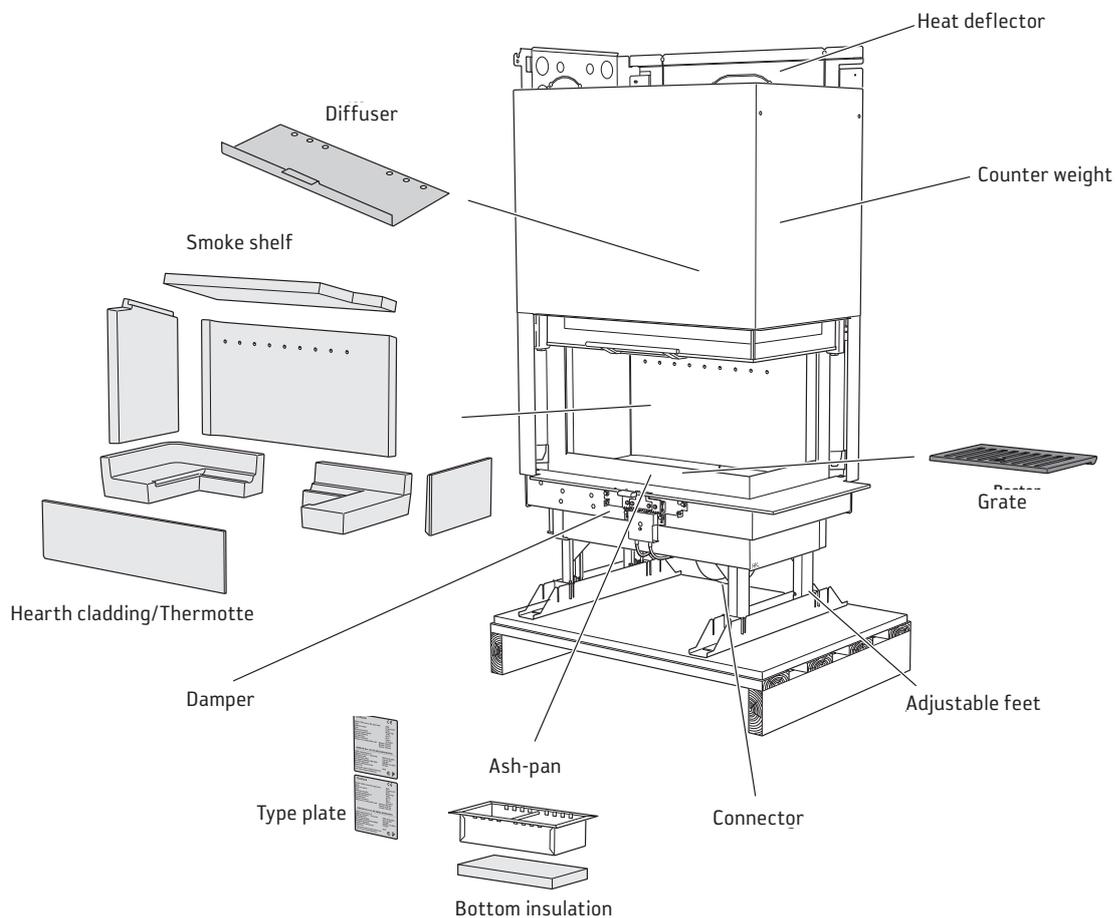
Check that floor joists have the sufficient load capacity for the insert, chimney and construction parts that are used when recessing.

Floor plate

If the floor under the stove is flammable, it must be protected by a non-flammable material e.g. natural stone, concrete or 0.7 mm thick metal. The floor in front of the hearth opening must be protected against any falling embers using non-flammable material that covers an area at least 300 mm in front and 100 mm along each side of the hatch opening. A toughened glass hearth plate is available as an accessory.

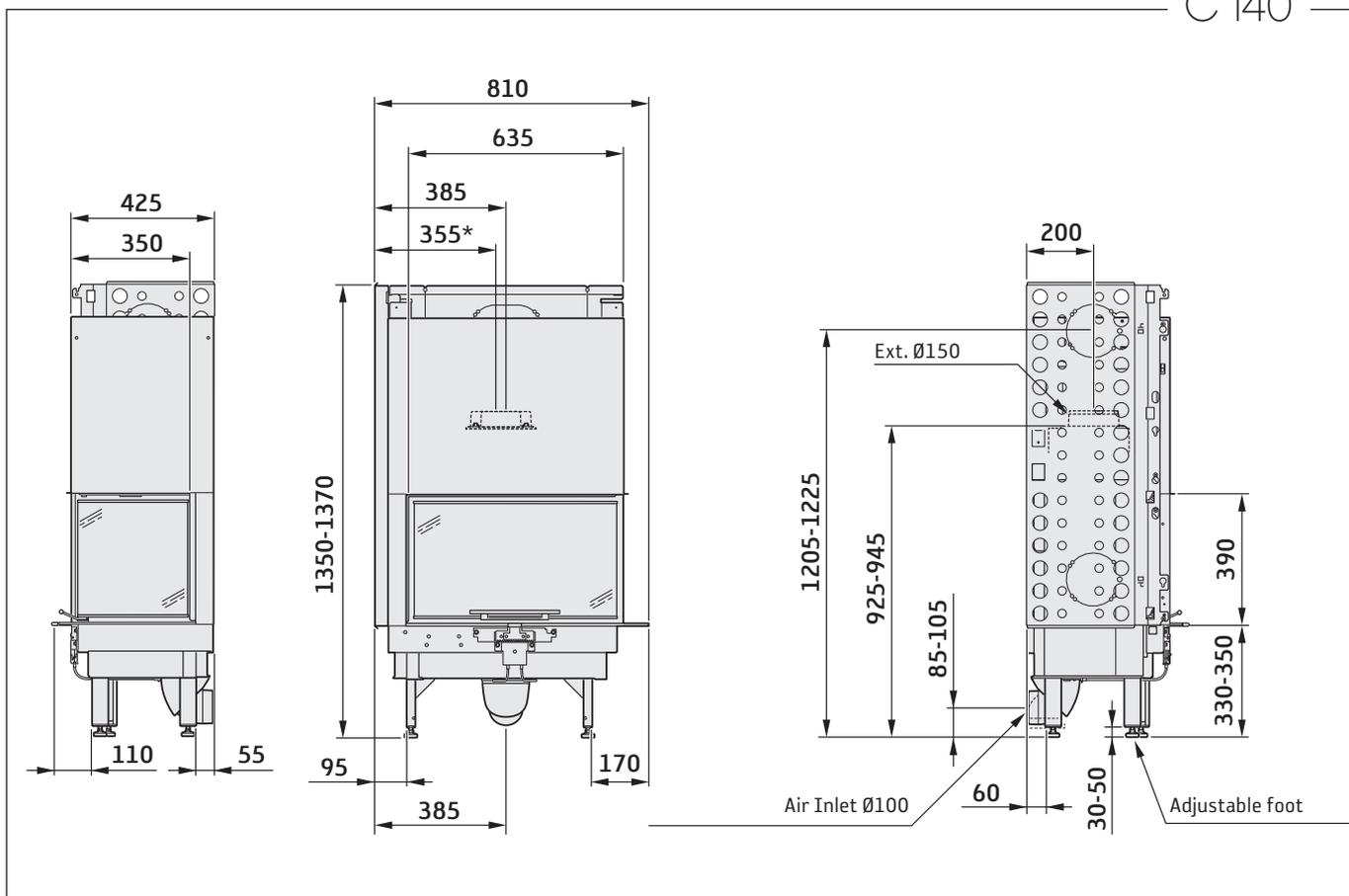
Application to local authority

Before installing a stove or erecting a chimney, it is necessary for you to make an application for permission to your local authority. Ask your local authority for advice regarding regulations and the application.



Important dimensions

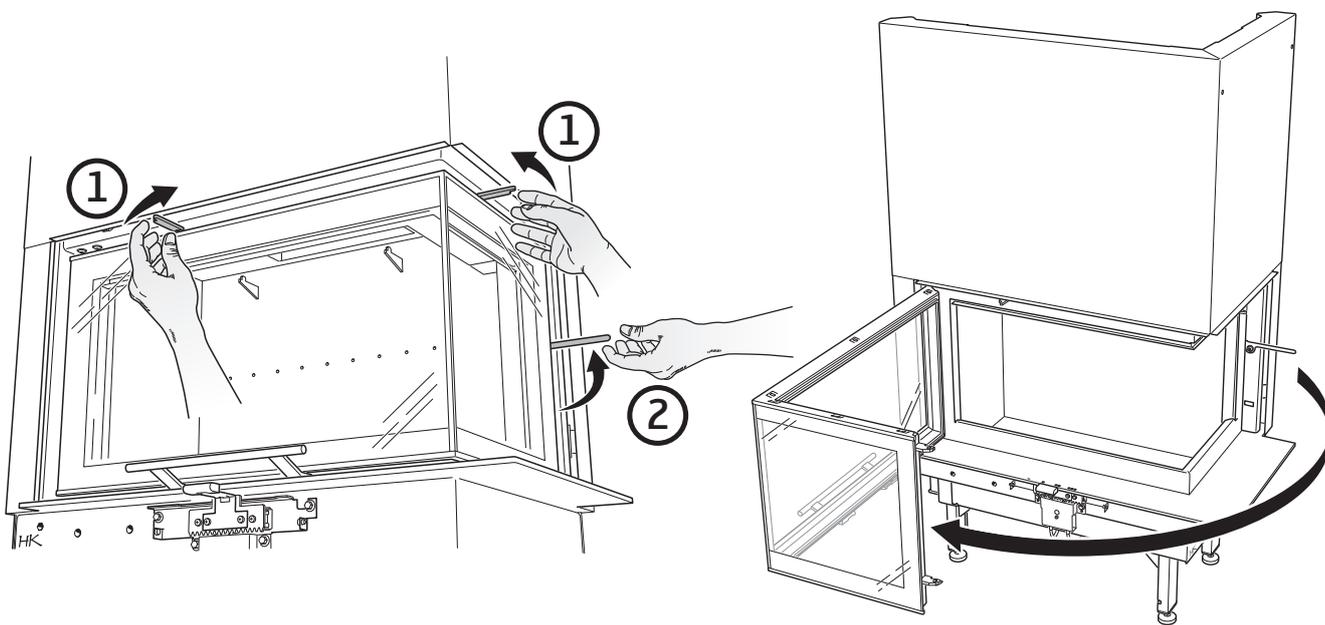
C i40



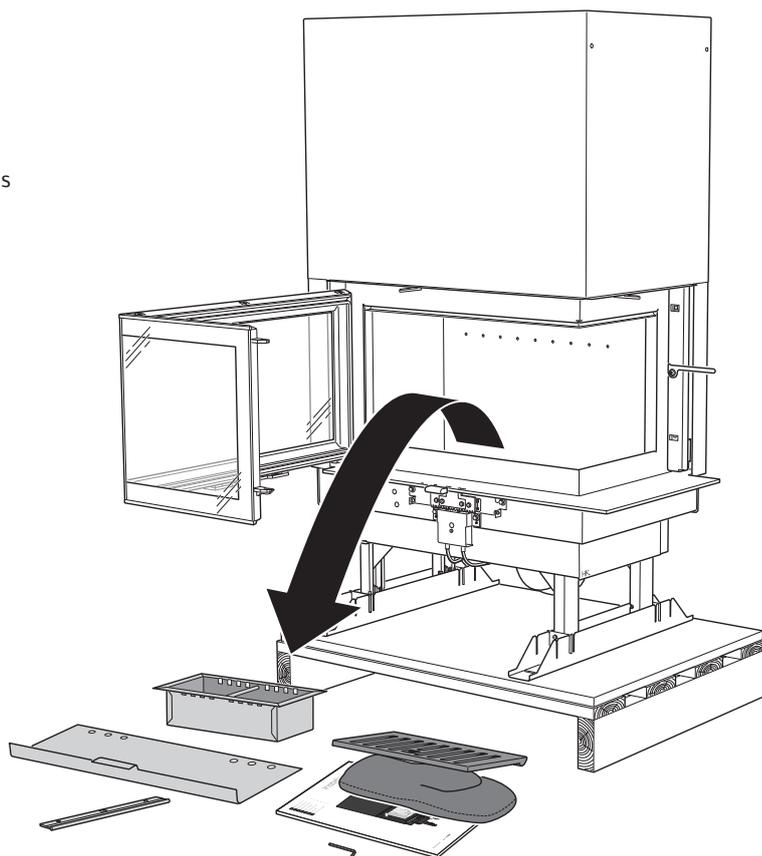
* Factory setting, prepared for Contura surround

Prior to installation

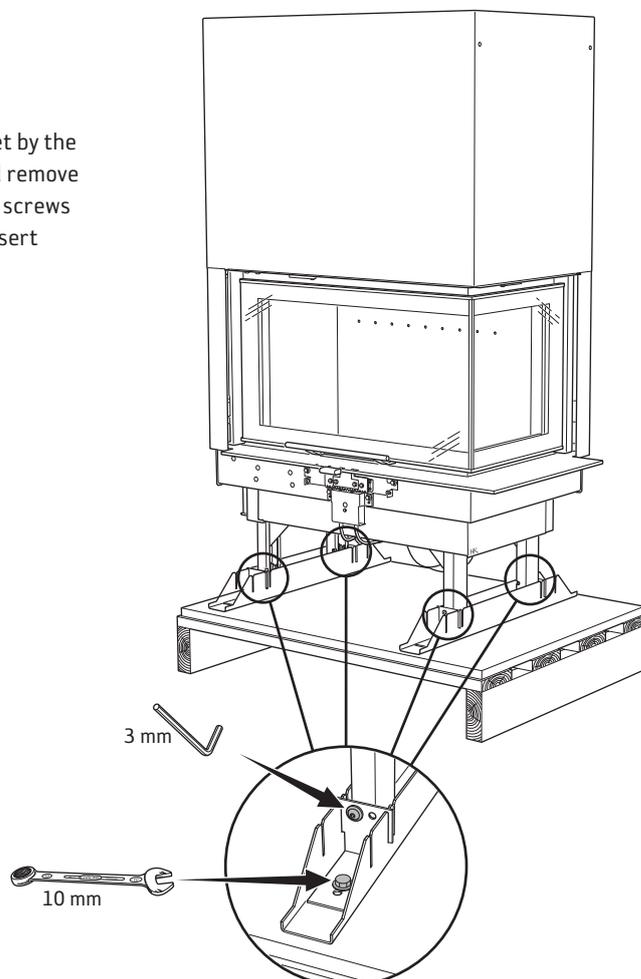
Opening the door



Remove the loose parts
from the firebox.

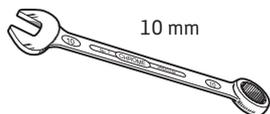


The insert is secured to the pallet by the two rails, remove the screws and remove the angle brackets. Reinstall the screws on the legs before moving the insert from the pallet.

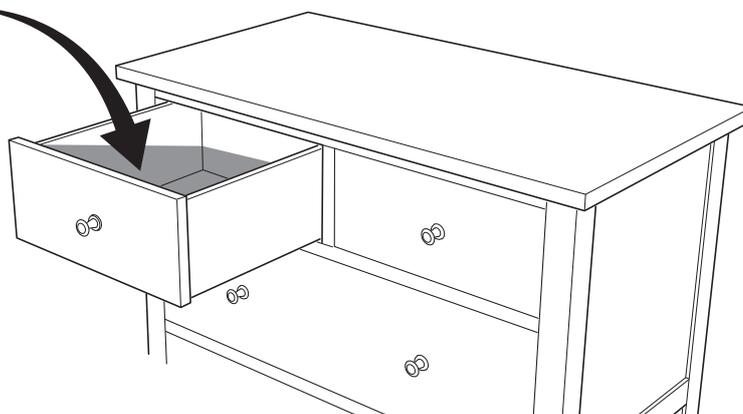
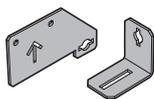
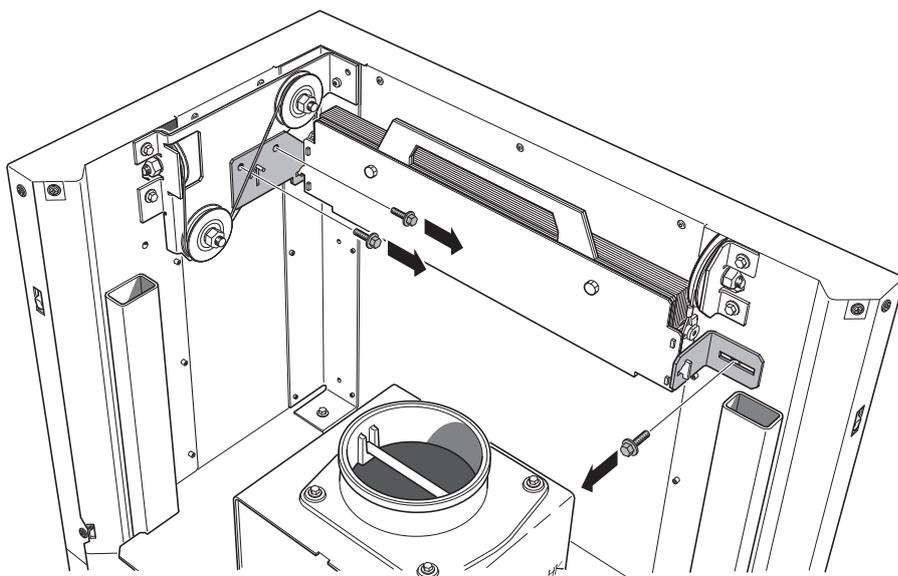




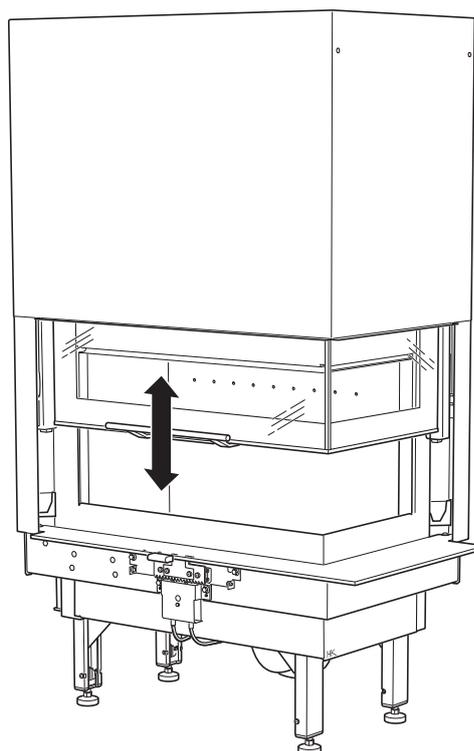
Check wire routing and remove the transport locking device!



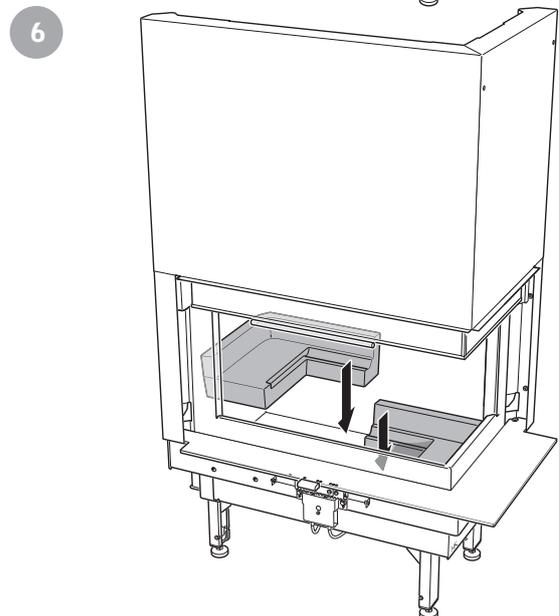
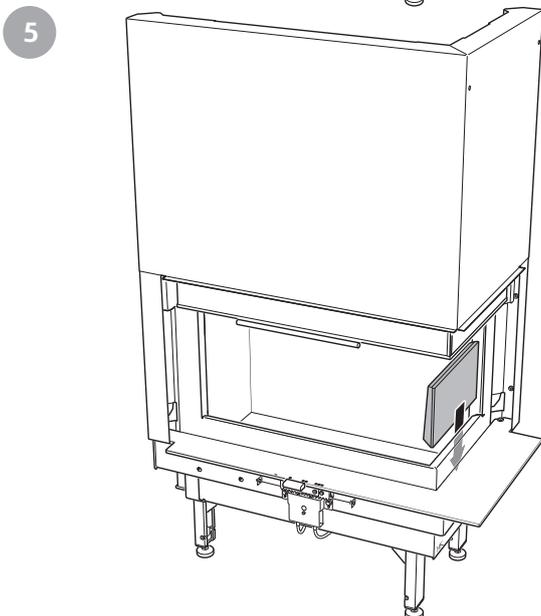
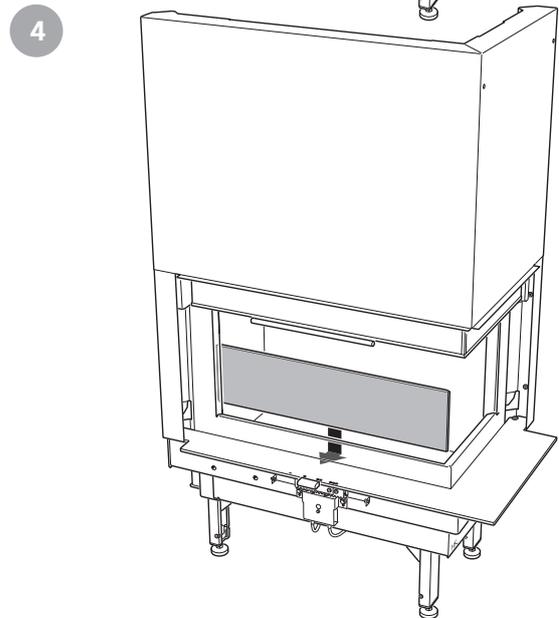
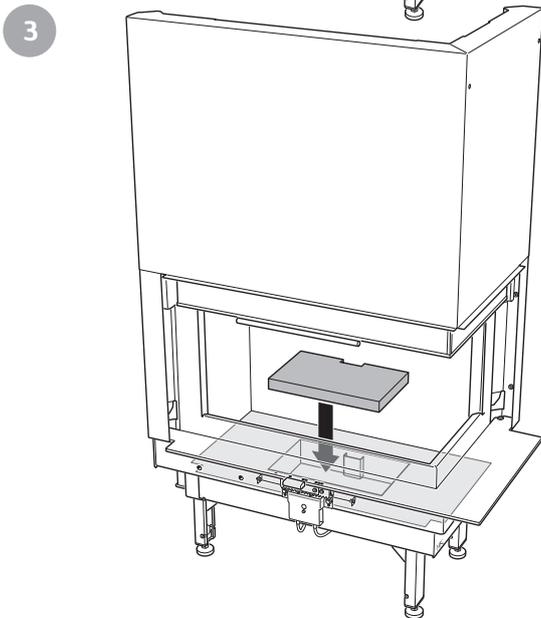
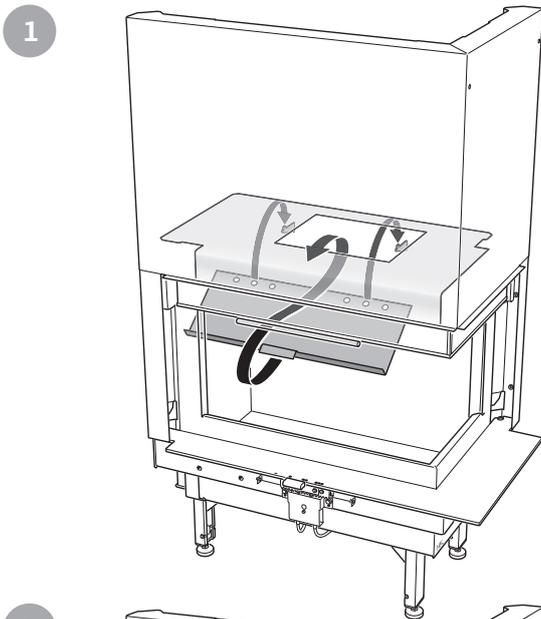
10 mm



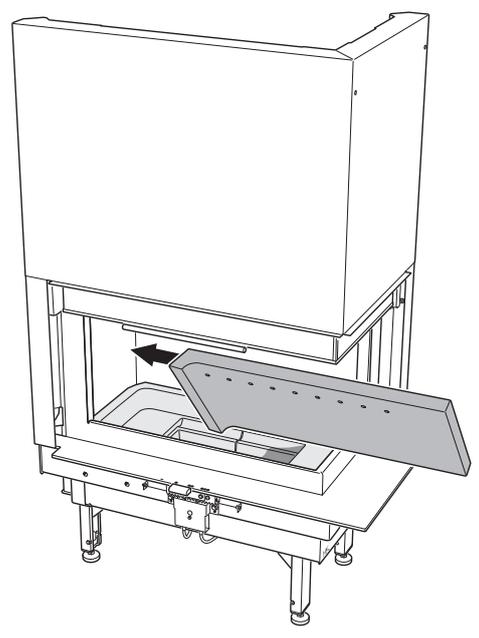
The hatch runners are lubricated at the factory, with special grease that can withstand high temperatures. This type of grease is usually difficult to find on the market and we recommend contacting a Contura dealer to order this special grease when lubricating the runners.



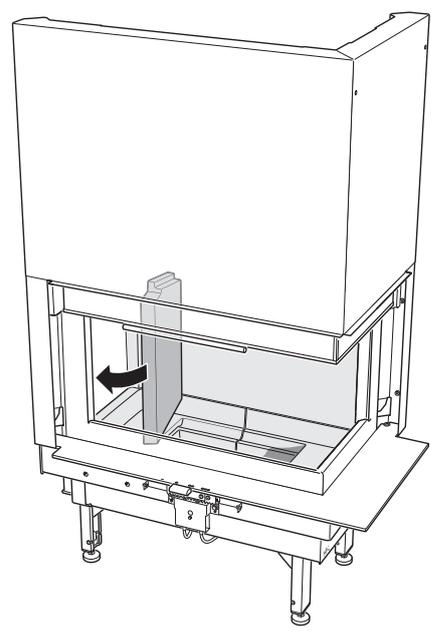
Installing the hearth cladding



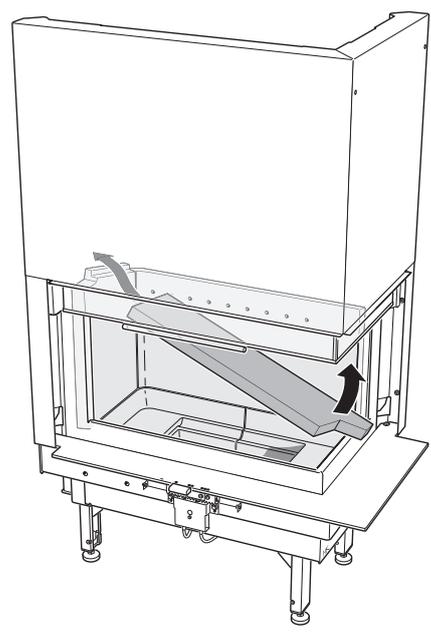
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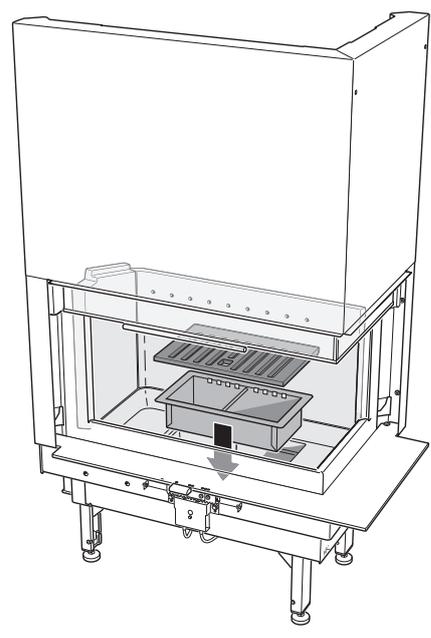
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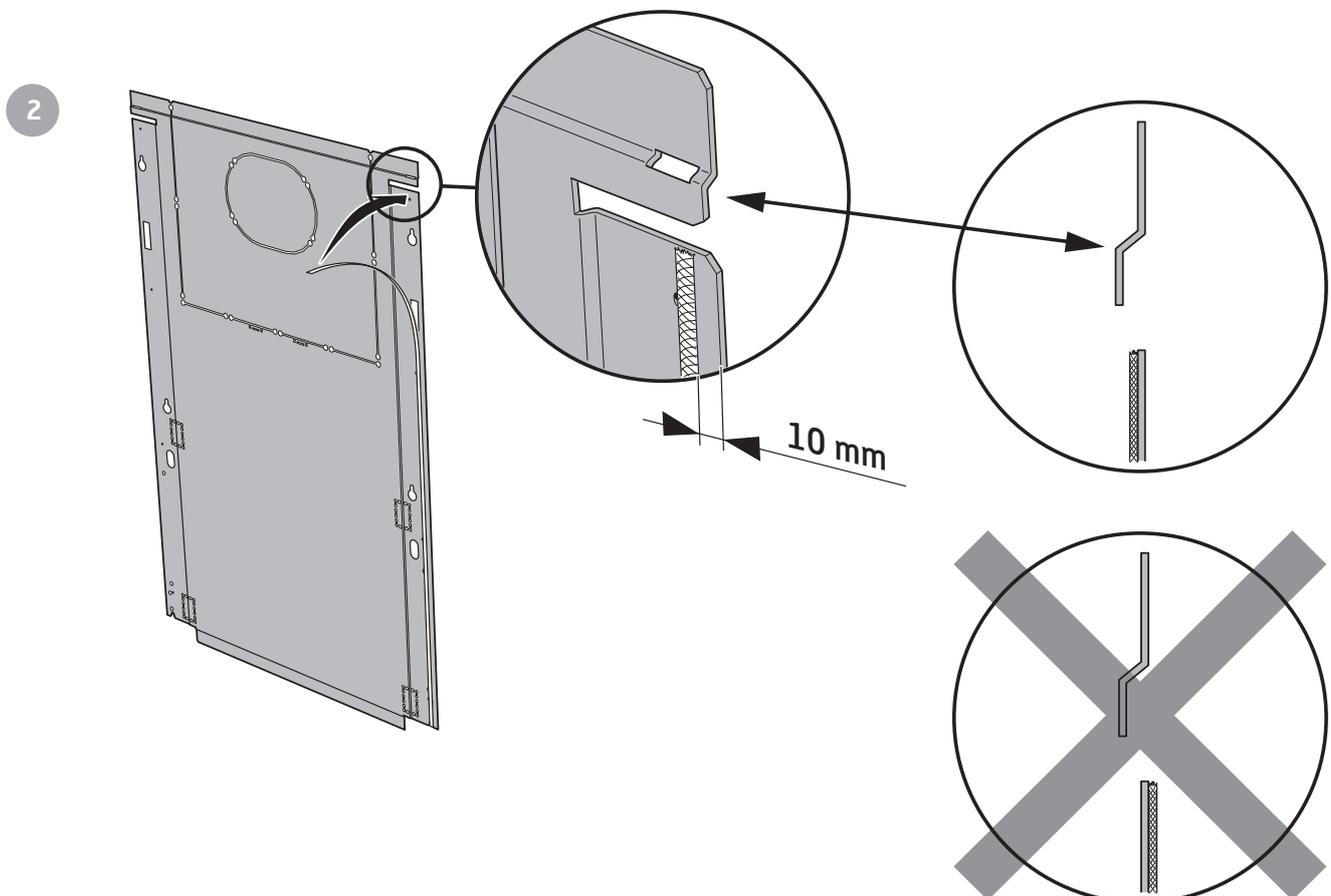
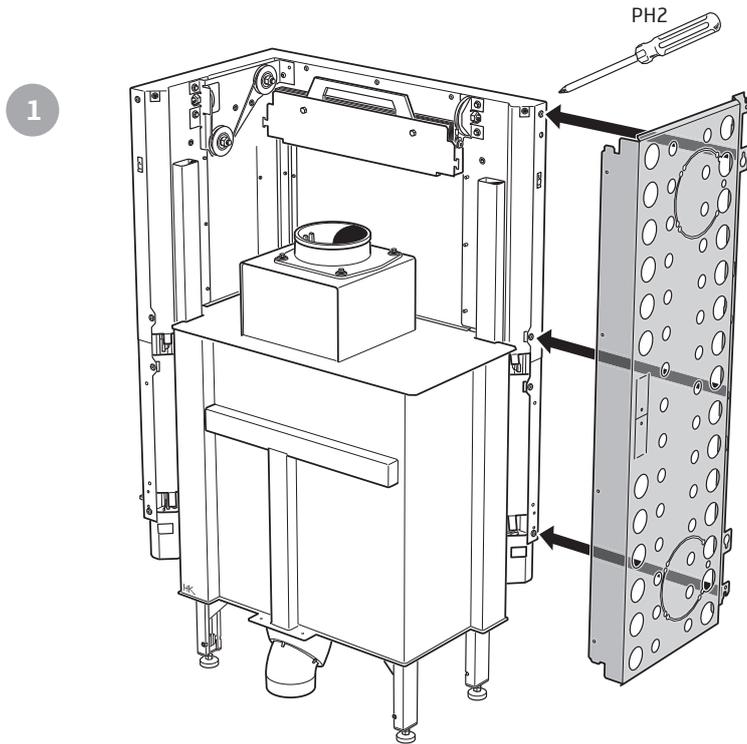
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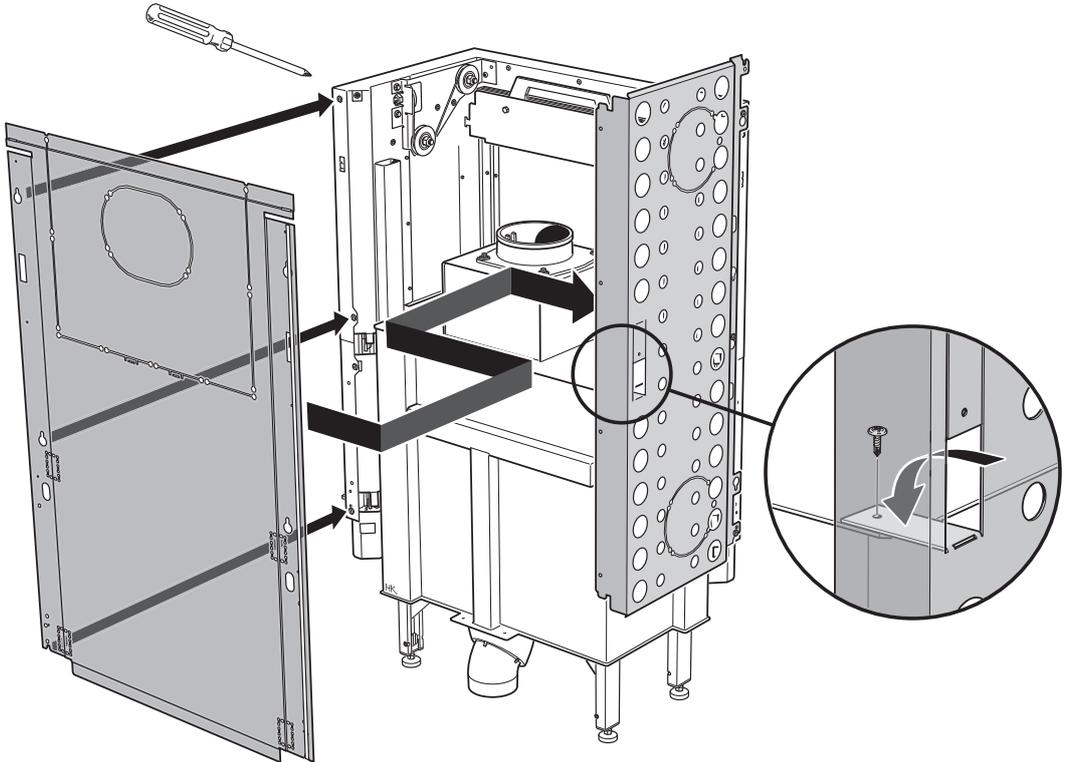
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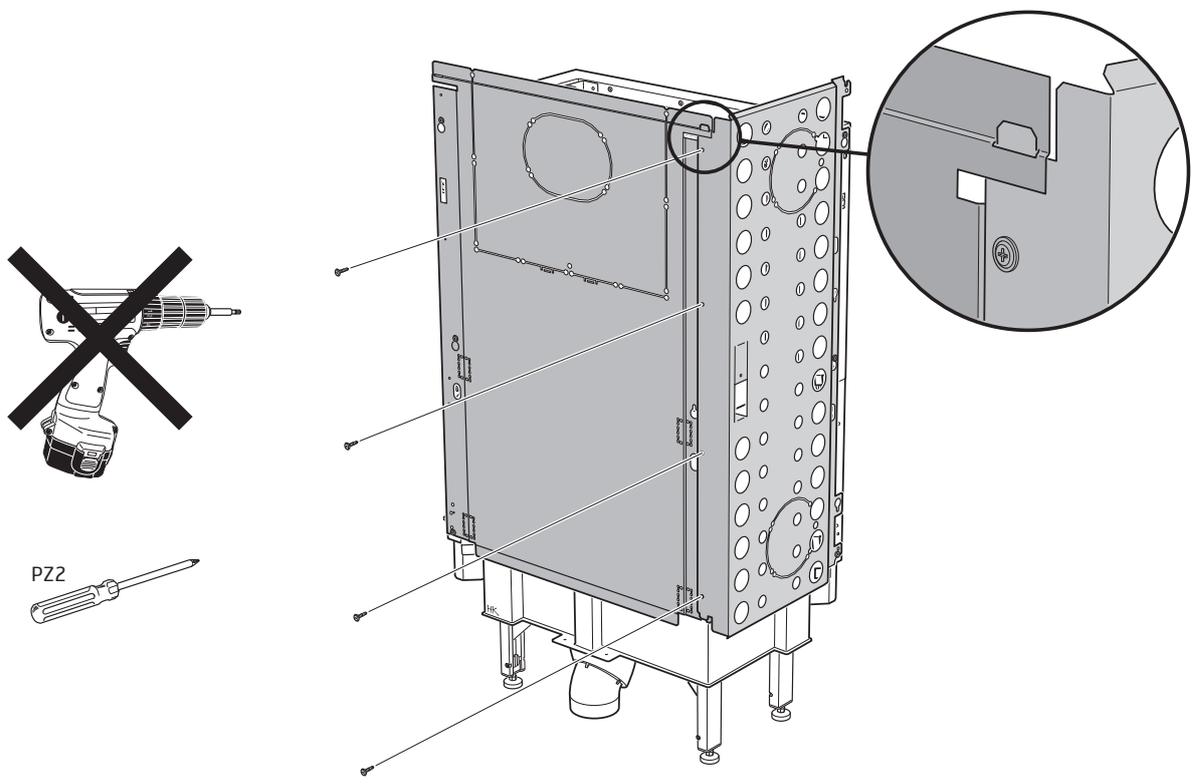
Installing heat deflectors



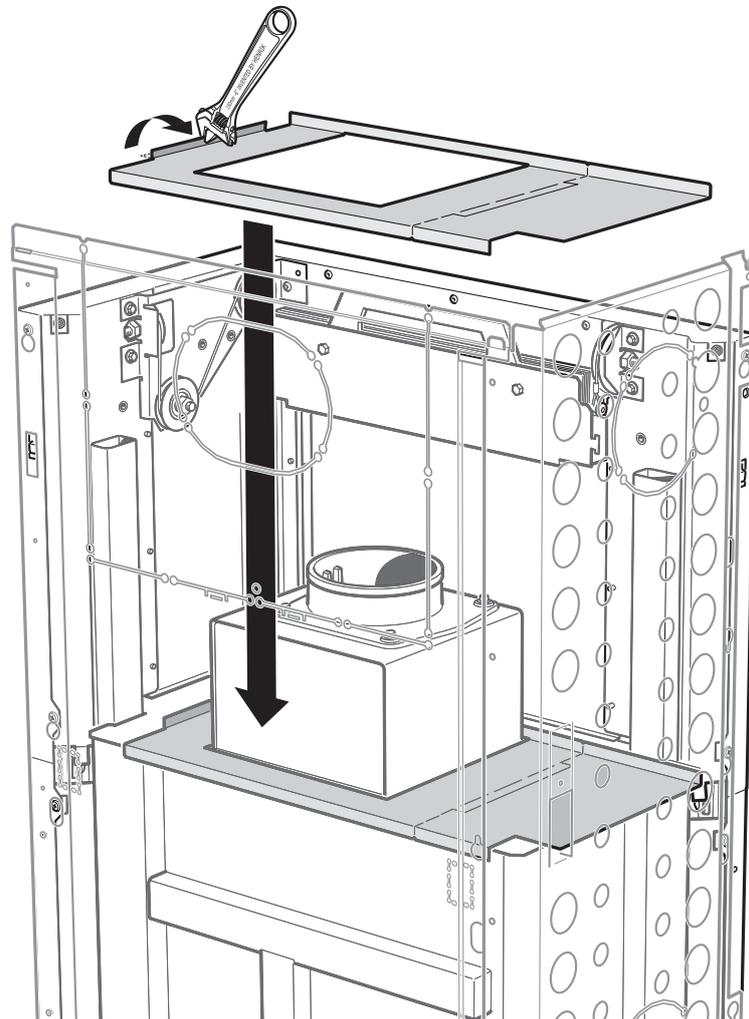
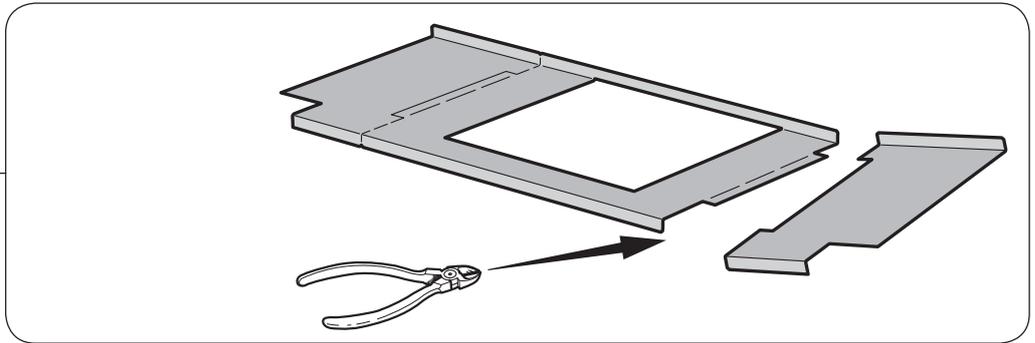
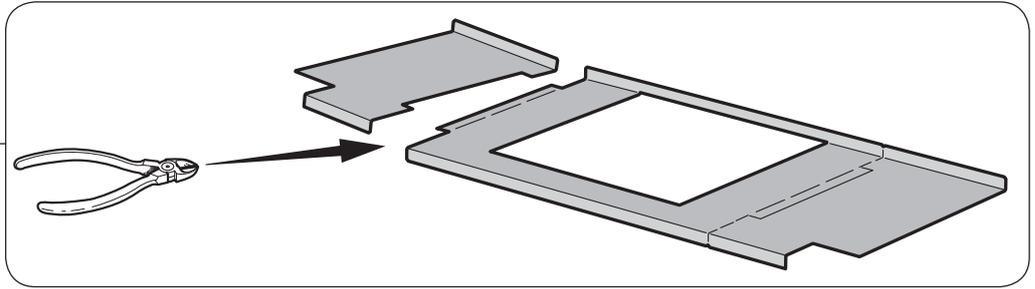
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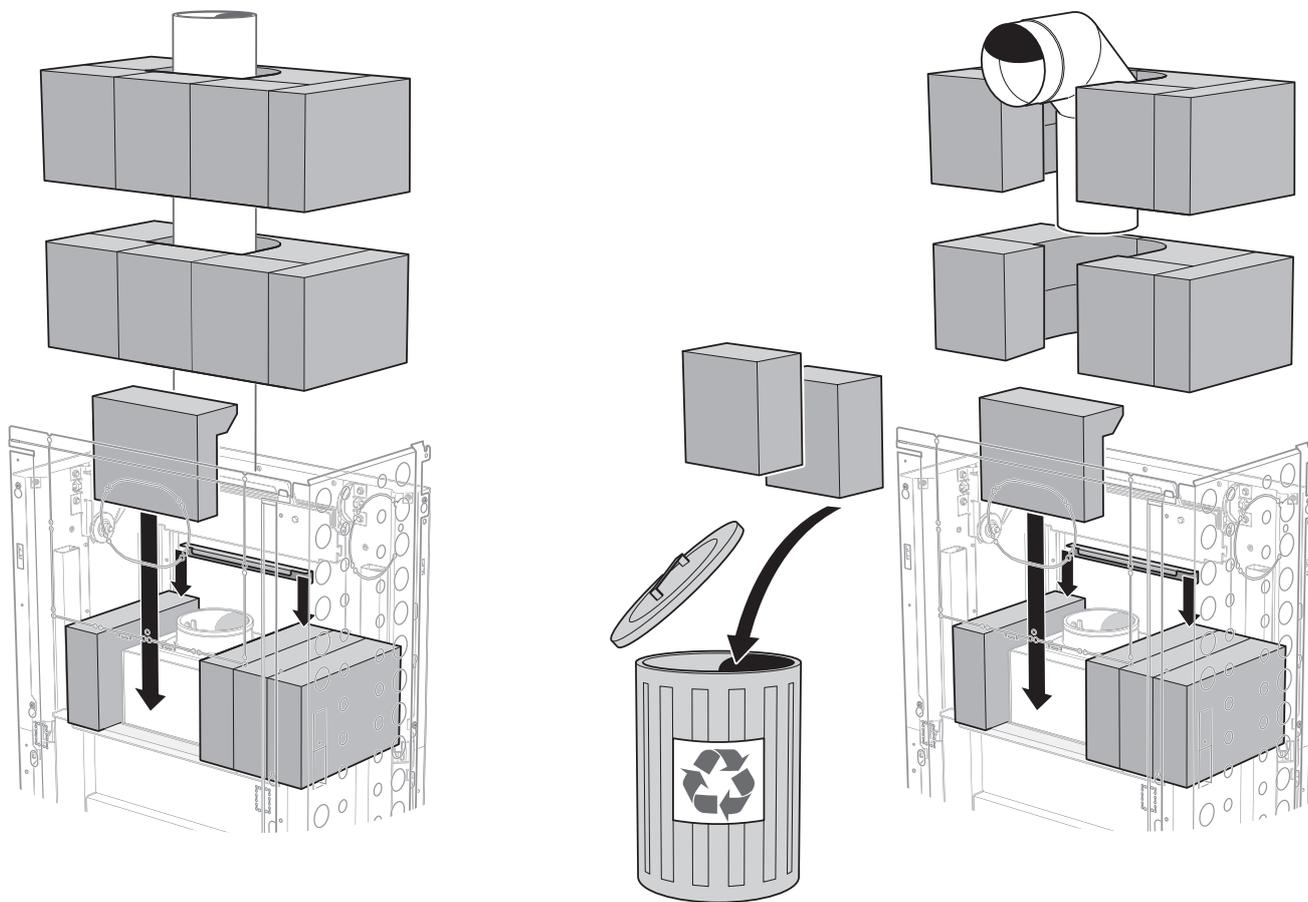


4



Installing Powerstone





Install the Powerstone blocks as illustrated. Ensure there is sufficient space for so that the counterweight can move freely. Test by opening/closing the door.

Installation

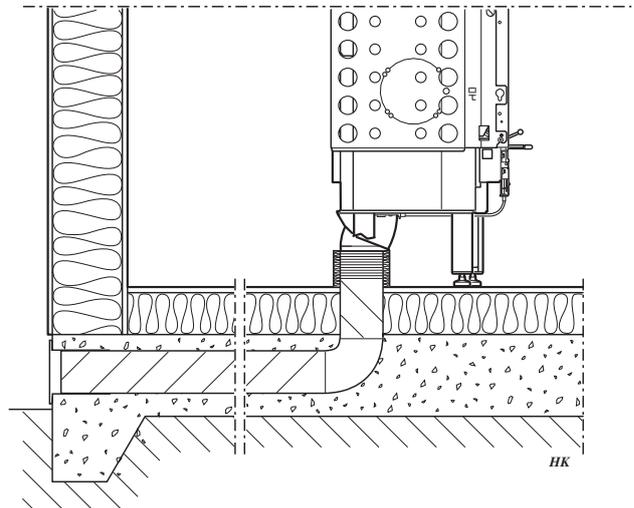
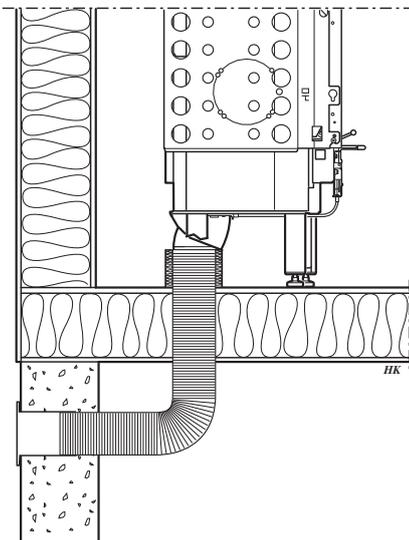
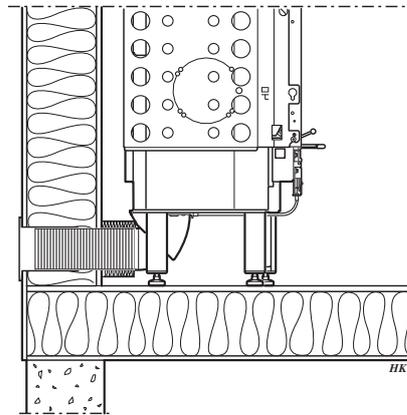
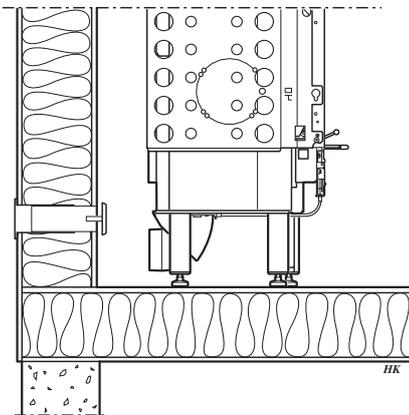
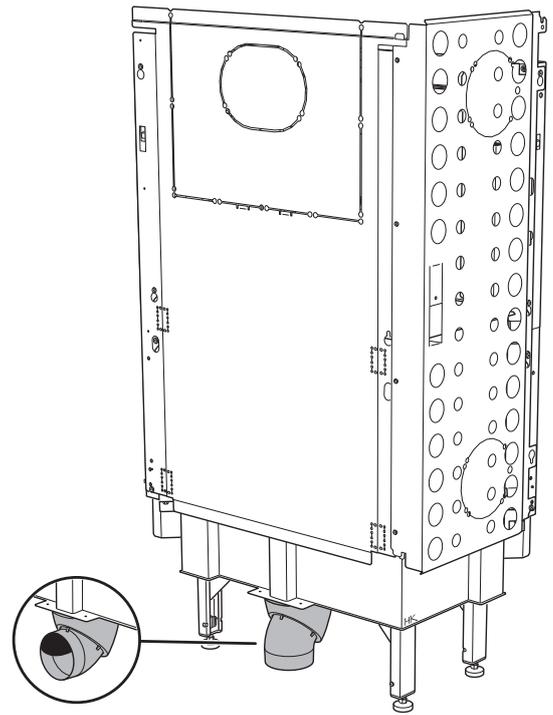
Ensure that the installation meets national and regional regulations. The installation must be approved by an authorized inspection body.

Supply of combustion air

Supply air from open air must be provided. Combustion air can be provided directly via a duct from outside, or indirectly via a vent in the outer wall of the room where the insert is placed. The amount of combustion air that is used for combustion is approx. 30 m³/h. Some installation alternatives are shown below. The air duct connection on the insert has an external diameter of $\varnothing 100$ mm.

In hot areas, the duct should be insulated with 30 mm mineral wool covered with a moisture inhibitor for example, aluminium tape. It is important that the lead-in, between the pipe and the wall (or floor), is sealed using jointing compound.

A 1 m length of condensation-insulated ducting for combustion air is available as an accessory.



Chimney

The insert is type approved for and must be connected to a chimney dimensioned for a flue temperature of 350°C, the external connection diameter is 150 mm.

The insert requires a draft in the chimney of at least -12 Pa. The draft is affected both by the length and area of the chimney, and by how well sealed it is. Carefully check that the chimney is sealed and that there is no leakage around soot hatches and flue connections.

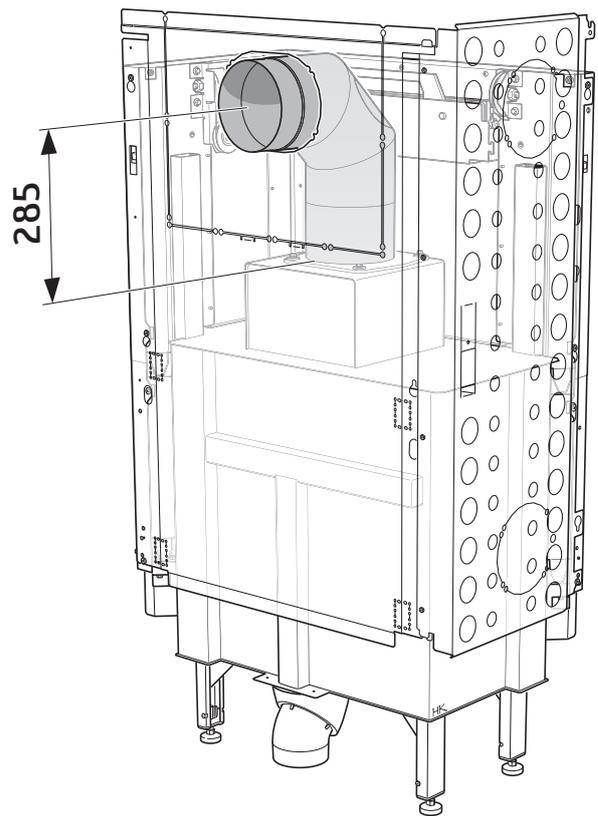
Note that a flue with sharp bends and horizontal routing reduces the draught in the chimney. The maximum horizontal flue is 1 m, on the condition that the vertical flue length is at least 5 m. It must be possible to sweep the full length of the flue and the soot hatches must be easily accessible.

If two fireplaces are connected to the same chimney flue, the stove must be equipped with self-closing door.

Rearward connection

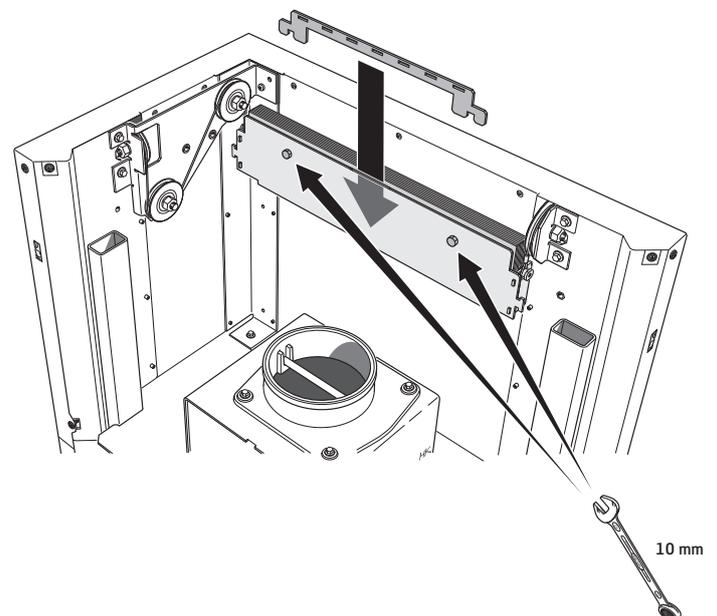
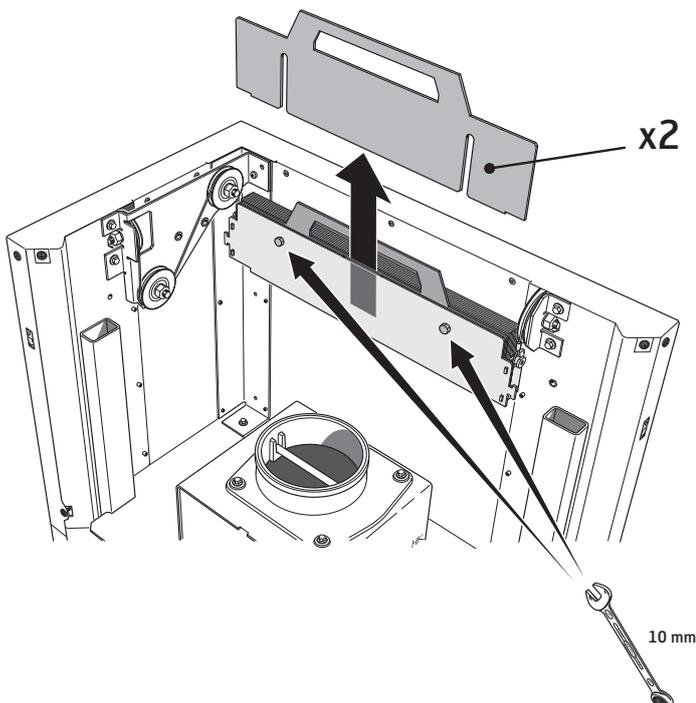
For the rearward connection it is recommended to use a 45° +45° angle with soot hatch and with the centre at least 285 mm above the connector.

It is important that sweeping can be carried out through convection grates or a hatch in the surround.



Self-closing door

The insert can be supplied with a self-closing door. Loosen the screws and remove the two weights with handle. Position the enclosed panel section on the counterweight and tighten the screws. Check the function, note that during lighting the self-closing effect increases.



Recessing the insert

When recessing the insert, adjacent walls that are not classed as fire walls, or are considered unsuitable for heat loads must be protected by non-combustible material according to the specification below.

All joints on the non-combustible material must be sealed using the manufacturer's recommended method. The area between the insert and the recess must be ventilated according to the specification/dimension diagrams on page 98

Material requirements

The building material must not be combustible.

The thermal conductivity coefficient λ may be a maximum of 0.14 W/mK.

The thickness of the building material must always be at least 100 mm.

In cases where the building material's insulation properties are given as a U-Value, this must be a maximum of 1.4 W/ m²K.

Sealing

If the recess is to extend to the ceiling, a seal must be made above the convection exhaust. This is to prevent hot air collecting in the recess closest to the ceiling. The seal must a maximum of 100 mm

Convection air

The convection air ventilates the surround, cools the insert and transports the hot air out into the room. The effective cross section area on the air intake and exhaust must not be less than the stated values. The air intake must be positioned somewhere between the floor and the bottom of the insert, at the front or on the sides of the recess. The vent must be positioned above the insert's highest point at the front or to the sides of the recess. If the air intake respectively the vent is positioned on the sides, the areas for the left respectively right sides must be the same size to ensure the insert is evenly cooled.

Observe the minimum distance up to the ceiling (see diagram on page 98).

Service

Access to the damper and counterweight must be ensured via doors or ventilation grilles in the surround.

Connector

Rotating connector, can be turned 180° to be centred over the insert, see drawing on page 5.

When connecting a steel flue, please refer to the particular manufacturer's installation instructions. Observe the safety distance to combustible material required by the steel flue. Heat radiation from the hatch is strong and is why combustible material must not be placed closer than 1.5 m in front of the hatch. When recessing, building material must not be in direct contact with the insert due to the thermal expansion of the insert.

Note that building regulations apply regarding the area below and in front of the insert, see section "Hearth plate".

List of suitable materials:

Aerated concrete $\lambda = 0,12-0,14$

Vermiculite $\lambda = 0,12-0,14$

Calcium silicate $\lambda = 0.09$

above the convection exhaust's upper edge and must be made up of 20 mm thick building boards made of calcium silicate or a panel with at least a 50 mm thickness of rock wool on top.

Convection air in: 600 cm²

Convection air out: 600 cm²

If the convection outlets are directed upwards the following applies

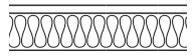
- the recess must be free-standing or placed against a non-combustible wall.
- the distance from the air outlet to combustible roof must be at least 750 mm.

Note that building regulations apply regarding the area below and in front of the insert, see section "Hearth plate".

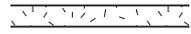
Recess example



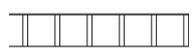
The dimensions are the minimum dimensions, unless otherwise stated.



Wall of combustible material



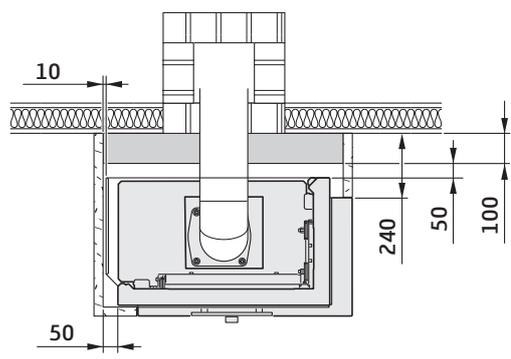
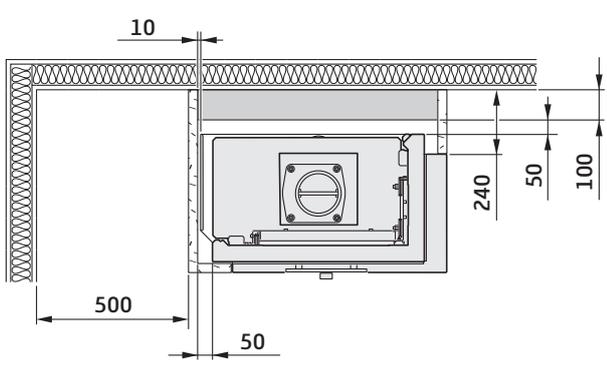
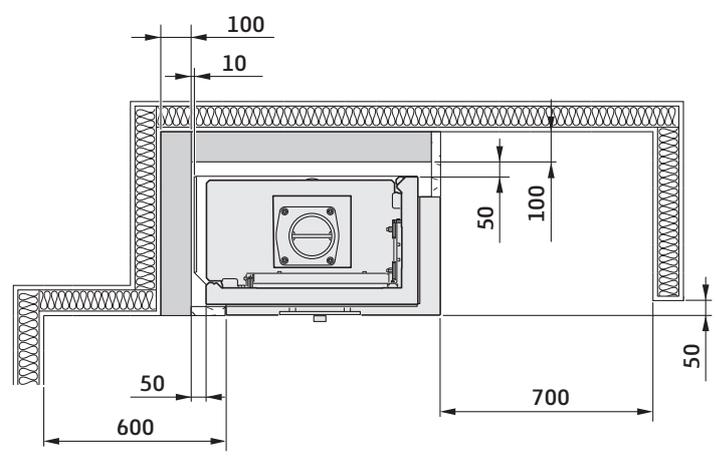
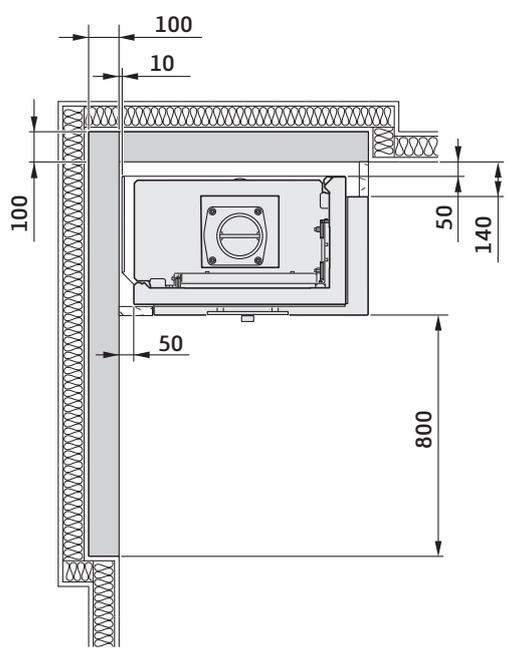
Wall of non-combustible material that is not in contact with combustible material and therefore has no minimum thickness requirement.



Chimney breast



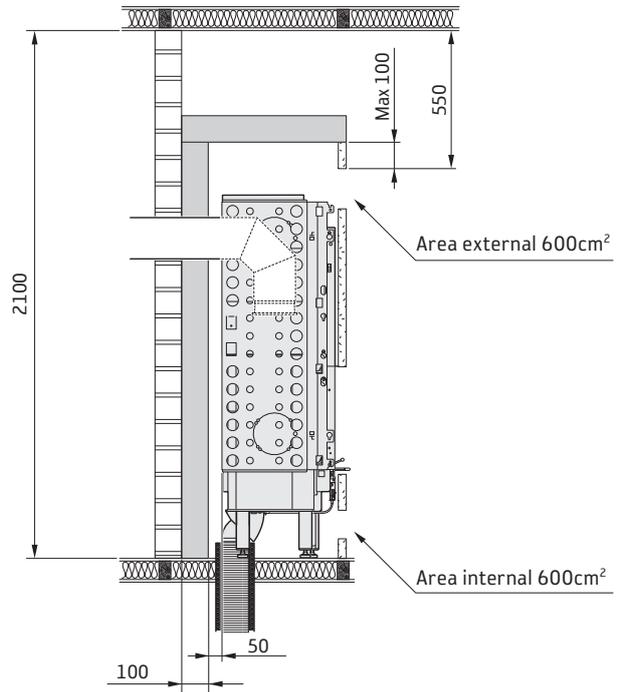
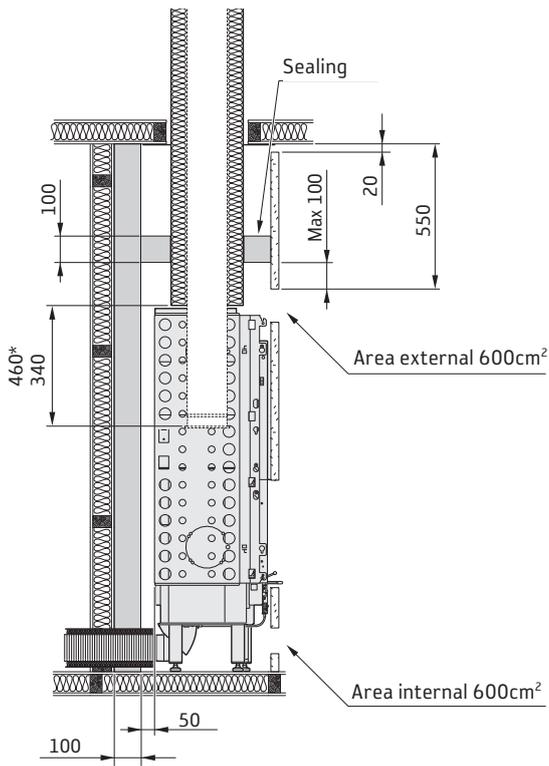
Wall of non-combustible material, made of 100 mm aerated concrete in the recess example.



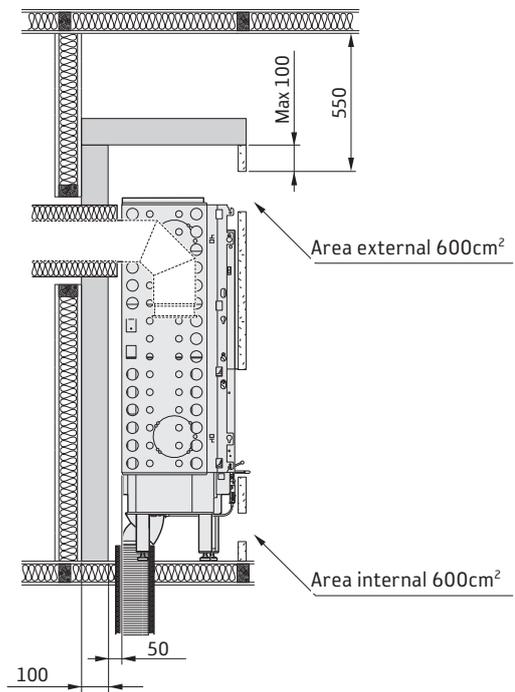
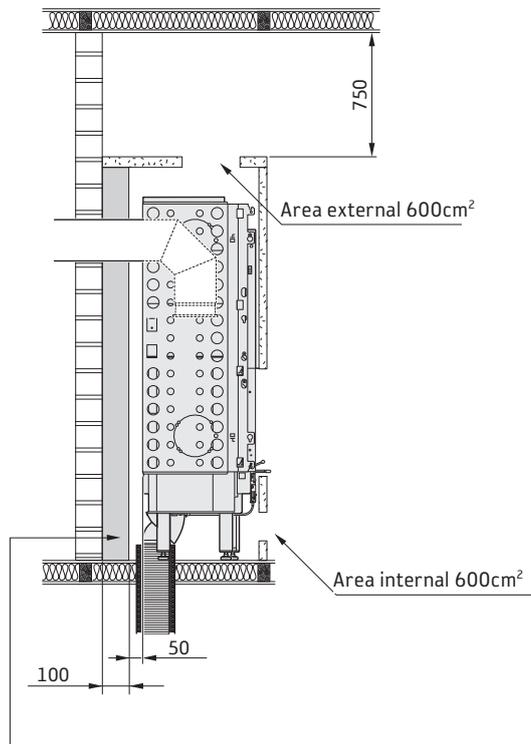
Final inspection of the installation

It is extremely important that the installation is inspected by an authorised inspection body before the stove is used. Also read the "Lighting instructions" before lighting for the first time.





* With Powerstone



Can be excluded if the chimney breast behind is approved and meets full safety requirements according to the authorized inspection body.



Always observe the safety distances to combustible material required by a steel flue.



The dimensions are the minimum dimensions, unless otherwise stated.

Contura

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www.contura.eu

Contura reserves the right to change dimensions and procedures described in these instructions at any time without special notice. The current edition can be downloaded from www.contura.eu

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