Installation instruction



C i40



Declaration of performance according to Regulation (EU) 305/2011 No. ci40-CPR-130912-SE-2

Contura

PRODUCT Product type Type designation Manufacturing number Intended area of use Fuel	Insert lit with solid biofuels Contura i40 See rating plate on the insert Heating of rooms in residential buildings Wood	
MANUFACTURER		
Name	NIBE AB / Contura	
Address	Box 134, Skulptörvägen 10	
	SE-285 23 Markaryd, Sweden	
CHECKS		
According to AVCP	System 3	
European standard	lard EN 13229:2001/AC:2006, EN-13229:2001/A2:2004/AC:2007	
Test institute	nstitute Rein-Ruhr Feuerstätten Prüfstelle, NB 1625,	

DECLARED PERFORMANCE

Essential characteristics	Performance	Harmonised technical specification
Reaction to fire	A1 WT	
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/m³ OGC 59 mg/m³ PM 17 mg/m³	EN 13229:2001/AC:2006, EN-13229:2001/A2:2004/AC:2007
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	

has checked declared performance and issued test report no. RRF-29 13 3402

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

Teller unu

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

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

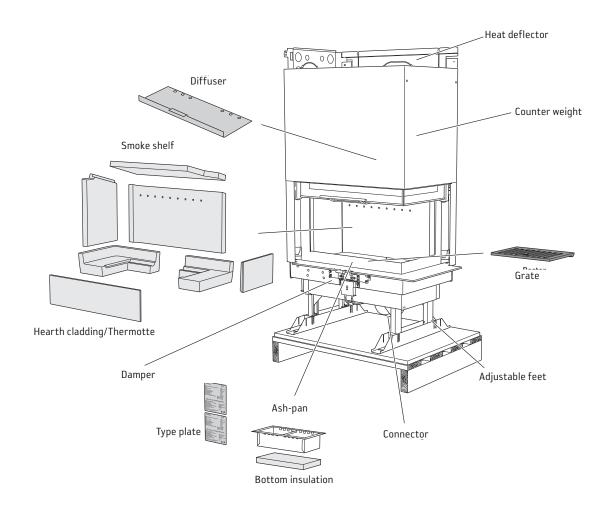
Check that floor joists have the sufficient load capacity for the insert, chimney and construction parts that are used when recessing.

Floor plate

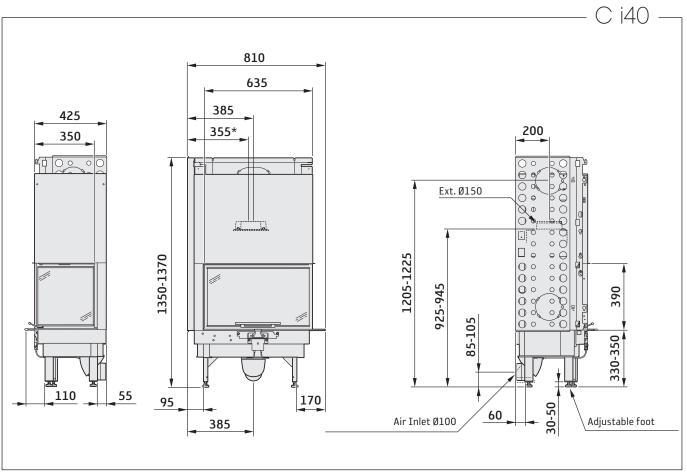
If the floor under the stove is flammable, it must be protected by a non-flammable material e.g. natural stone, concrete or 0.7 mm thick metal. The floor in front of the hearth opening must be protected against any falling embers using non-flammable material that covers an area at least 300 mm in front 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.



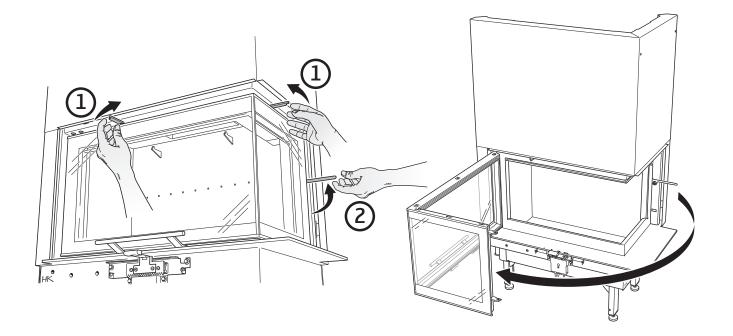
Important dimensions

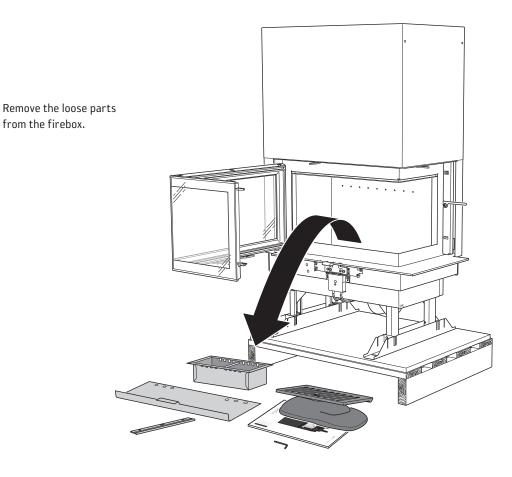


* Factory setting, prepared for Contura surround

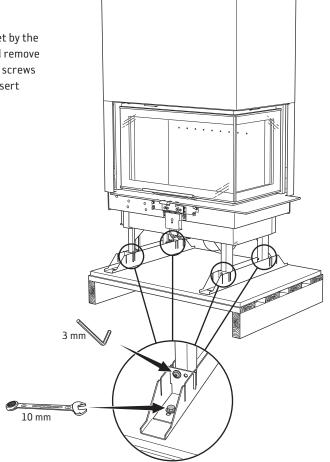
Prior to installation

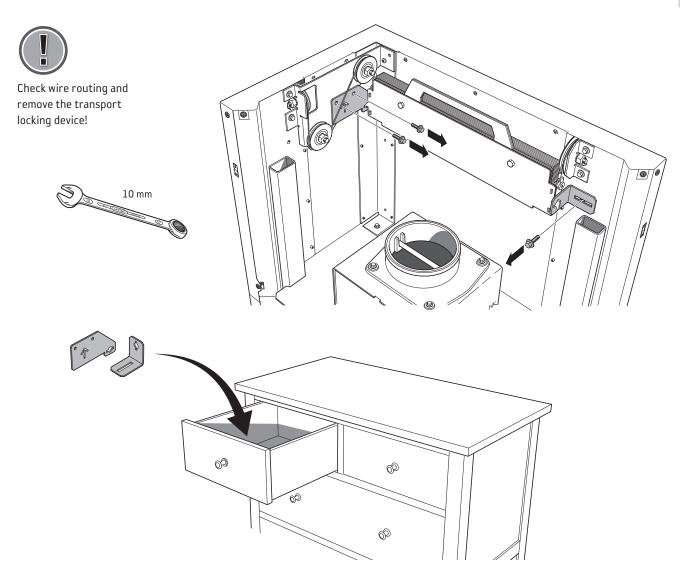
Opening the door





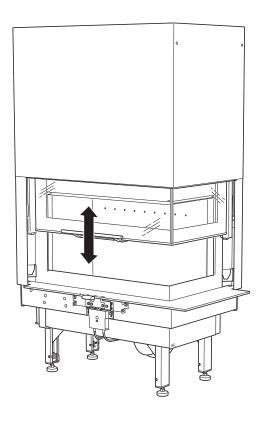
The insert is secured to the pallet by the two rails, remove the screws and remove the angle brackets. Reinstall the screws on the legs before moving the insert from the pallet.

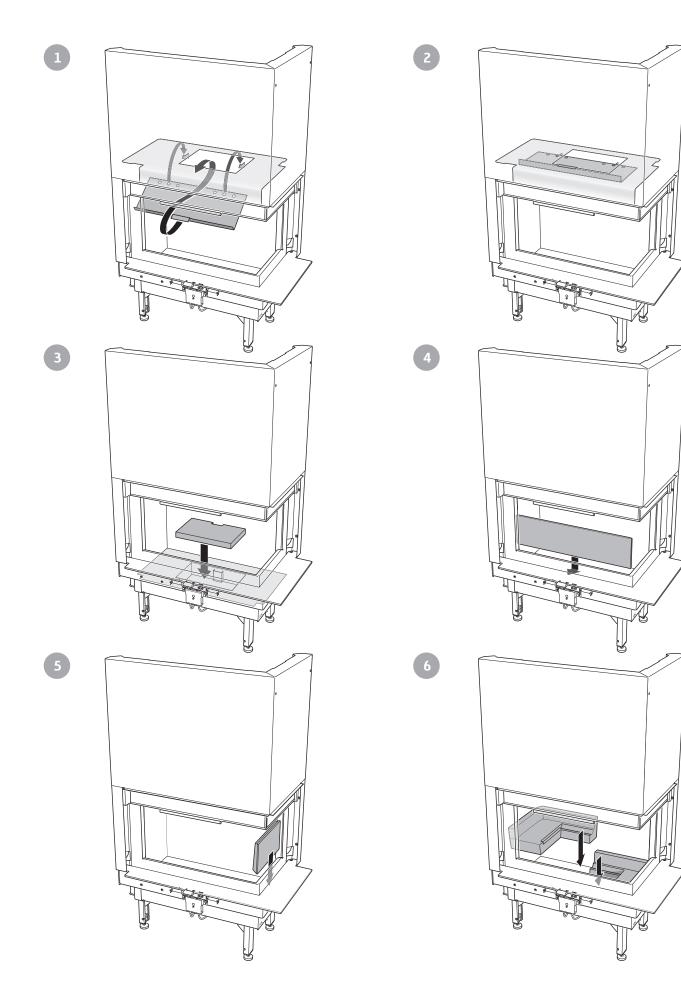




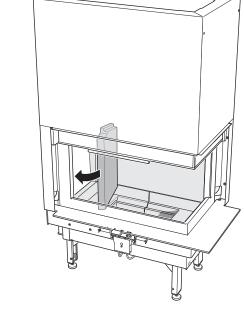


The hatch runners are lubricated at the factory, with special grease that can withstand high temperatures. This type of grease is usually difficult to find on the market and we recommend contacting a Contura dealer to order this special grease when lubricating the runners.





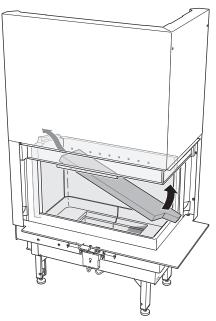


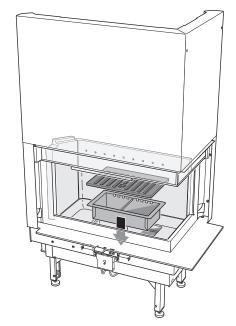


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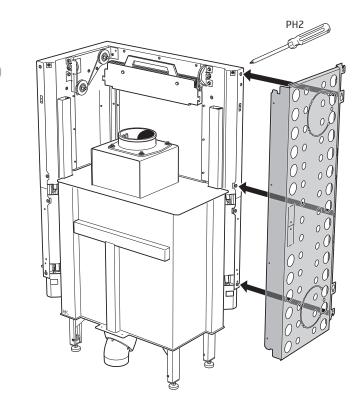


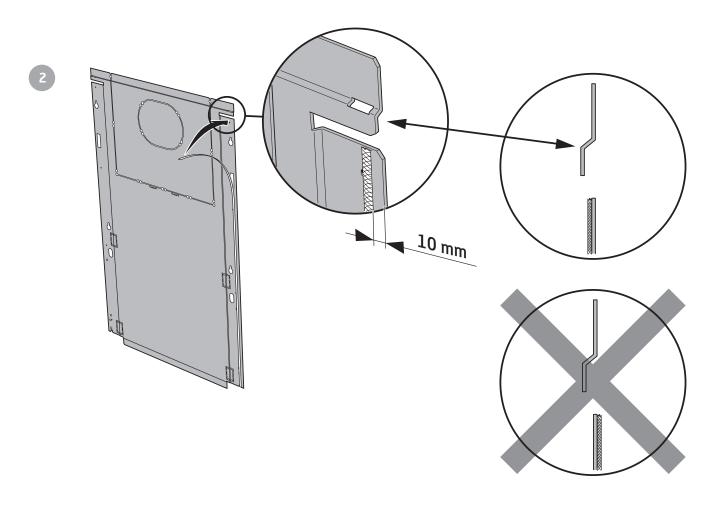


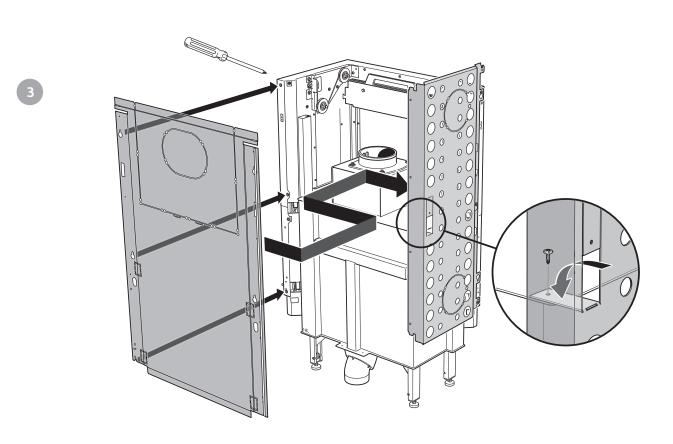


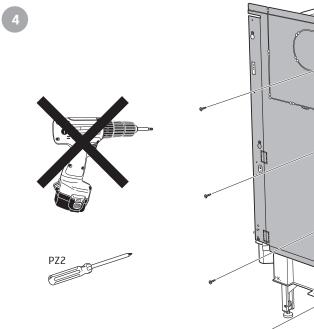
Installing heat deflectors

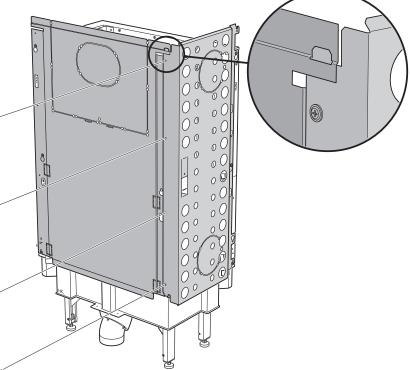
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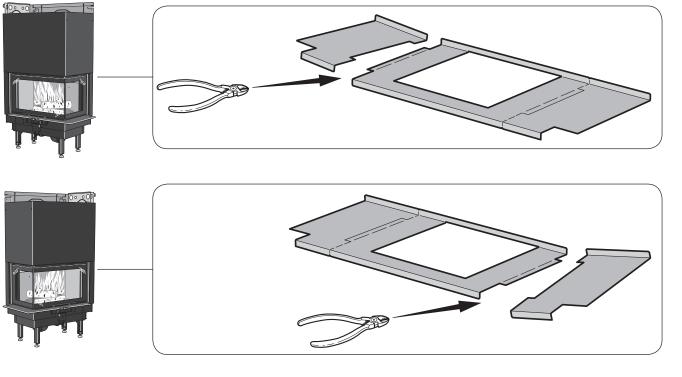


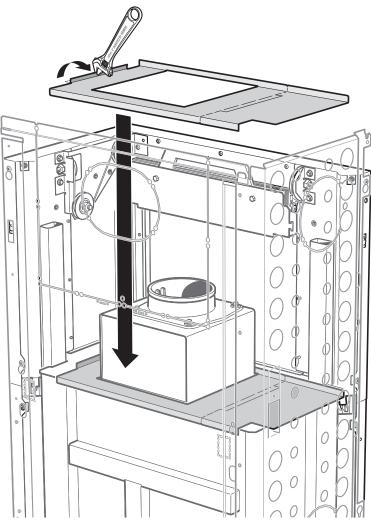


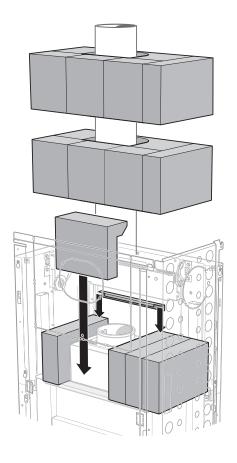


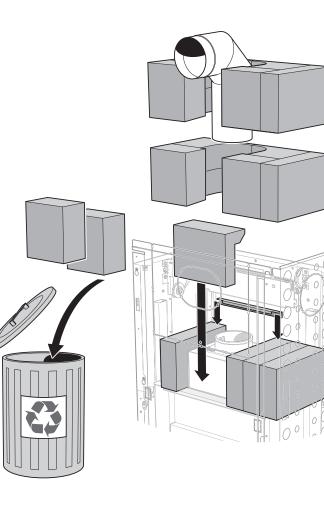
at.

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

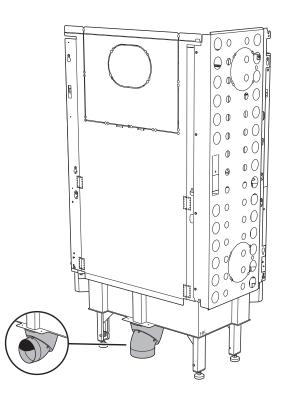
Ensure that the installation meets national and regional regulations. The installation must be approved by an authorized inspection body.

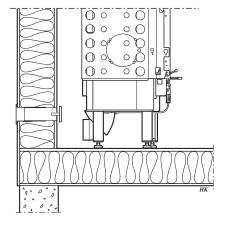
Supply of combustion air

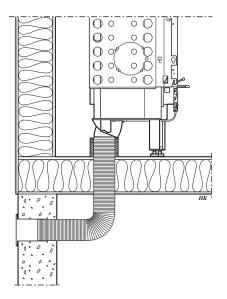
Supply air from open air must be provided. Combustion air can be provided directly via a duct from outside, or indirectly via a vent in the outer wall of the room where the insert is placed. The amount of combustion air that is used for combustion is approx. 30 m3/h. Some installation alternatives are shown below. The air duct connection on the insert has an external diameter of Ø100 mm.

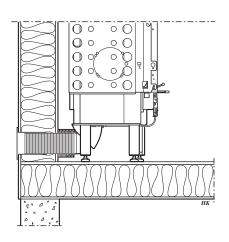
In hot areas, the duct should be insulated with 30 mm mineral wool covered with a moisture inhibitor for example, aluminium tape. It is important that the lead-in, between the pipe and the wall (or floor), is sealed using jointing compound.

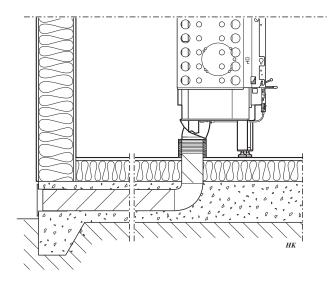
A 1 m length of condensation-insulated ducting for combustion air is available as an accessory.











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.

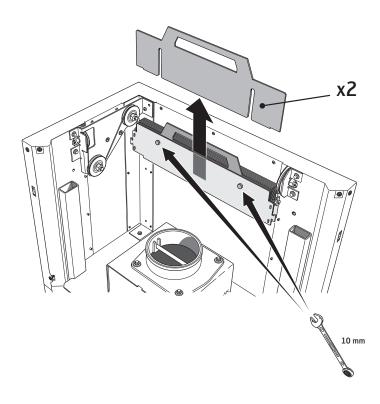
Rearward connection

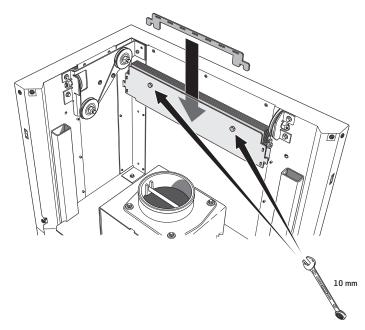
For the rearward connection it is recommended to use a 45 $^\circ$ +45 $^\circ$ angle with soot hatch and with the centre at least 285 mm above the connector.

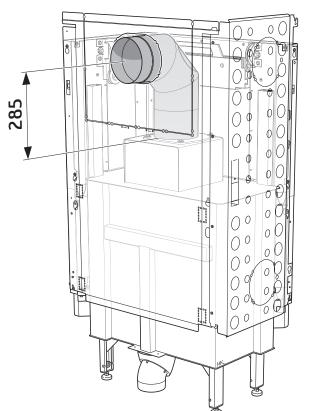
It is important that sweeping can be carried out through convection grates or a hatch in the surround.



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 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".

Material requirements

The building material must not be combustible.

The thermal conductivity coefficient $\lambda may \mbox{ be a maximum of } 0.14$ 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

The recess must not go all the way up to the ceiling, leave an air gap of at least 20 mm closest to the ceiling. The recess must be sealed off above the convection exhaust. The seal must be 100 mm above the convection exhaust's upper edge and must be made

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.

List of suitable materials:

Aerated concrete	$\lambda = 0,12-0,14$
Vermiculite	λ = 0,12-0,14
Calcium silicate	λ = 0.09

of 100 mm non-flammable material according to the material requirements above. Use heat-resistant silicone, for example, between the seal and chimney.

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



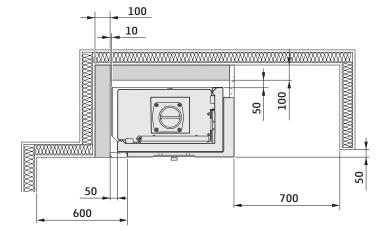
The dimensions are the minimum dimensions, unless otherwise stated.

Wall of combustible material

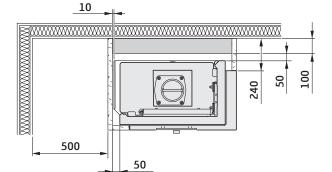


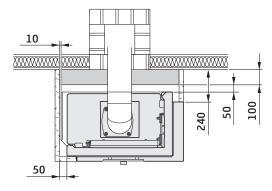
Wall of non-combustible material that is not in contact with combustible material and therefore has no minimum thickness requirement.

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



recess example.

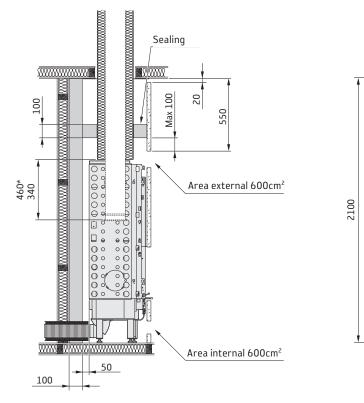


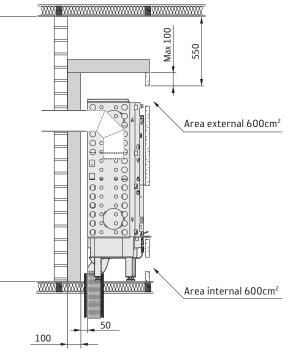


Final inspection of the installation

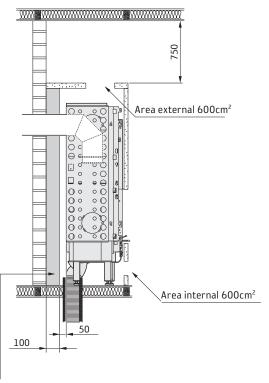


It is extremely important that the installation is inspected by an authorised inspection body before the stove is used. Also read the "Lighting instructions" before lighting for the first time.

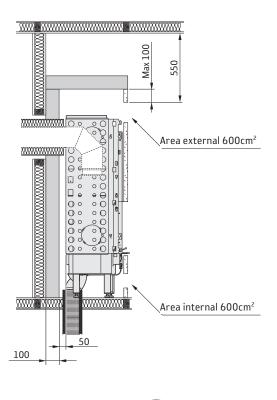




* With Powerstone



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 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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