Jøtul I 520

Jøtul I 520
EN 16510
Manual Version P00

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Jøtul I 520 F

Jøtul I 520 FL

Jøtul I 520 FR

Jøtul I 520 FRL

JØTUL

Les manuels fournis avec le produit doivent être conservés pendant toute la durée de vie du produit. Los manuales suministrados con este producto deben guardarse durante todo el ciclo de vida del producto. I manuali inclusi con il prodotto vanno conservati per l'intera durata di vita del prodotto.

EU no. 2015/1186 - 24/04/2015

Datasheet / Fiche Technique / Ficha técnica / Scheda dati / Datasheet / Datenblatt

Requirements / Exigences / Requisitos / Requisiti / Vereisten / Forderungen	
Supplier / Fabricante / Fornitore / Vereisten / Lieferant:	Jøtul AS
Product models Produits concernés Modelos Modelli Product modellen Varianten der Feuerstelle	JØTUL I 520 F, JØTUL I 520 FL, JØTUL I 520 FR, JØTUL I 520 FRL
Energy efficiency class / Classe énergétique / Clase de eficiencia energética / Classe energetica / Energie efficiëncy klasse / Energieeffizienz-Klasse	A
Direct heat output / Puissance réelle de sortie / Potencia calorifica emitida / Emissione di calore diretta / Directe warmte afgifte / Nennwärmeleistung	7,5 kW
Energy efficiency index / Index de rendement énérgétique/ Índice de eficiencia energetica / Indice di efficienza energetica / Energie efficiëncy index / Energieeffizienz-Index	102
Efficiency at nominal heat output / Rendement à puissance nominale / Eficiencia al rendimiento nominal / Efficienza alla potenza nominale / Efficiency bij nominale warmte afgifte / Wirkungsgrad bei Nennheizleistung	77%
Any specific precautions that shall be taken when the local space heater is assembled installed or maintained. Toutes les précautions spécifiques doivent être prises lors de l'assemblage, l'installation ou l'entretien de l'appareil. Cualquier precaución específica que deba tenerse en cuenta durante el montaje, instalación o mantenimiento del equipo de calefacción Precauzioni specifiche da prendere quando il riscaldatore viene assemblato, installato o mantenuto in uno spazio. Eventuele specifieke voorzorgsmaatregelen die worden genomen wanneer de plaatselijke ruimteverwarming wordt gemonteerd, geïnstalleerd of onderhouden. Besondere Maßnahmen bei Montierung, Installation und Wartung.	Fire safety precautions such as safety distances when installing, national standards, local codes and regulations. See the Instructions manual. Les précautions d'incendie telles que les distances de sécurité lors de l'installation, le suivi des normes, les codes locaux et les règlementations nationales. Veuille lire le manuel d'installation. Precauciones códigos locales y reglamentos. instalación. di sicurezza durante l'installazione, le normat e locali. Leggere il manual. codes en voorschriften. Für brenntechnische Verhältnisse, wie z.B. Aufstellbedingungen und nationale Forderungen.

UK - Installation and operating instructions

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2.0 Technical Data

Installation

- All local regulations, including those referring to national and European Standards as well as the information provided in this assembly and instruction manual need to be complied with when installing the appliance.
- When you install any kind of fireplace or stove, you must inform the local building and housing authorities. In addition you are obliged to have the installation inspected and approved by a local chimney sweep prior to the commissioning
- To ensure best possible functionality and safety for your installation, we advise you to call a professional fitter. Your Jøtul Dealer will be able to recommend a qualified fitter in your area. For information on Jøtul Dealers, please go to www.jotul.com

Safety

Any changed made to the product by the dealer, fitter or user could result in the product and safety functions not functioning as intended. The same applies to the fitting of accessories or extra equipment not supplied by Jøtul AS. This could also be the case if parts that are neccessary for the operation and safety of the stove are dismantled or removed.

This stove is produced in accordance with type approval for the product, which also covers the product's Assembly and Instruction Manual. Read and follow the user operating instructions carefully.

The Declaration of Performance (DoP) is available on www.jotul.com

Technical data

Test in compliance with EN16510			
	Classification of appliance	Type BE	
P_{nom}	Nominal heat output	7,5	kW
η_{nom}	Energy efficiency at nominal heat output	77	%
η_s	Seasonal space heating energy efficiency at nominal heat output	67	%
EEI	Energy efficiency index	102	
	Energy efficiency class	A	
	Fuel	Wood logs *	
	Fuel length, maximum	500	mm
	Fuel consumption	2,3	kg/h
	Amount of fuel	1,7	kg
	Amount of fuel, maximum	2,5	kg
CO_{nom}	CO emission at 13% O_2 at nominal heat output	0,079	%
		988	mg/Nm^3
NO_{xnom}	NO_x emission at 13% O_2 at nominal heat output	49	mg/Nm^3
OGC_{nom}	OGC emission at 13% O_2 at nominal heat output	72	mg/Nm^3
PM_{nom}	Dust emission at 13% O_2 at nominal heat output	13	mg/Nm^3
p_{nom}	Flue draught at nominal heat output	13	Pa
	Recommended sub-pressure in the connecting piece	18-20	Pa
	Required combustion air supply	21,6	m^3/h
T_{snom}	Flue gas outlet temperature at nominal heat output	370	°C
T class	Chimney designation	T400 G	
$Ø_{f.g\ nom}$	Flue gas mass flow at nominal heat output	7,3	g/sec
V_h	Standing air loss	NPD	m^3/h
	Leakage before testing at gauge pressure of 5 Pa (1013 mbar, 27 °C)		Nm³/h
	Leakage before testing at gauge pressure of 10 Pa (1013 mbar, 27 °C)		Nm³/h
	Leakage before testing at gauge pressure of 15 Pa (1013 mbar, 27 °C)		Nm³/h
CON/INT	Continuous operation (CON)/Intermittend operation (INT)	INT**	
	Reaction to fire classification	A1	
E, f	Power supply voltage, frequency	-	V

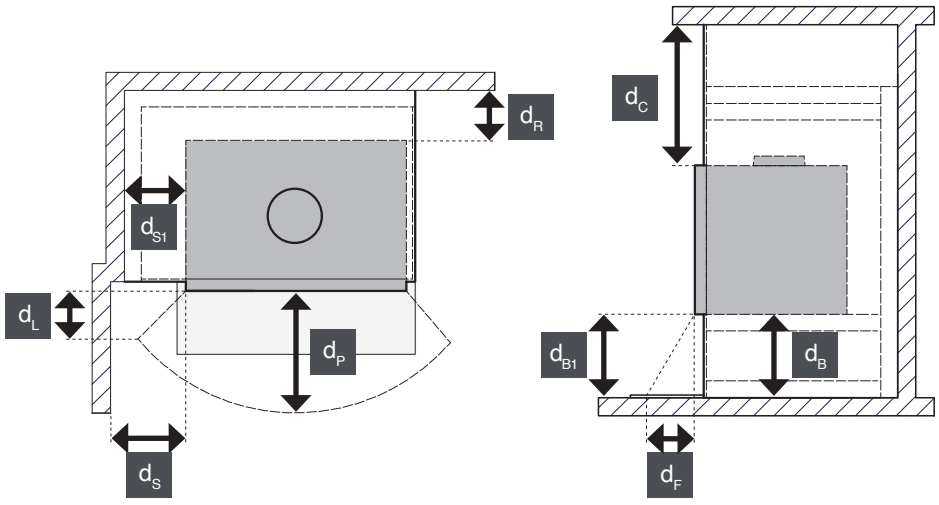
* Use only recommended fuels - designation I.

** Intermittent operation in this context means normal use of a wood-burning stove. In other words, you should let the fire die down until only the embers are left before refueling.

Technical Data

Basictechnical data			
	Materials	Stainless steel Castiron Ceramicstone/vermiculite Glass	
	Surfacetreatment	Senotherm	
	Smokeoutlet	Top/Back	
d_{out}	Diameter of the flue gasoutlet	150	mm
	Freshair connection piece external diameter	80/100	mm
L	Overall dimensions (length)	431	mm
H	Overall dimensions (height)	499	mm
W	Overall dimensions (width)	594	mm
m	Mass (weight)	ca 141	kg
m_{chim}	Maximum load of a chimney the stove may carry	120	kg

Minimum distancesto combustible materials			
d_R	Rear	for installation – seemanual/installation drawings	mm
d_S	Sides	for installation – seemanual/installation drawings	mm
d_C	Ceiling	for installation – seemanual/installation drawings	mm
d_P	Front	1000	mm
d_F	Front to the bottom front radiation area	for installation – seemanual/installation drawings	mm
d_L	Front to the side front radiation area	for installation – seemanual/installation drawings	mm
$d_{B'}$	Distancefrom the loading door to the floor	for installation – seemanual/installation drawings	mm
d_{non}	Minimum distancesto non-combustible walls.	-	mm
	Corner	for installation – seemanual/installation drawings	mm
	The code for insulated flue pipe	T400-N1-D-Vm-L50050-G100	
	Convection air inlet	min 500	cm²
	Convection air outlet	min 750	cm²

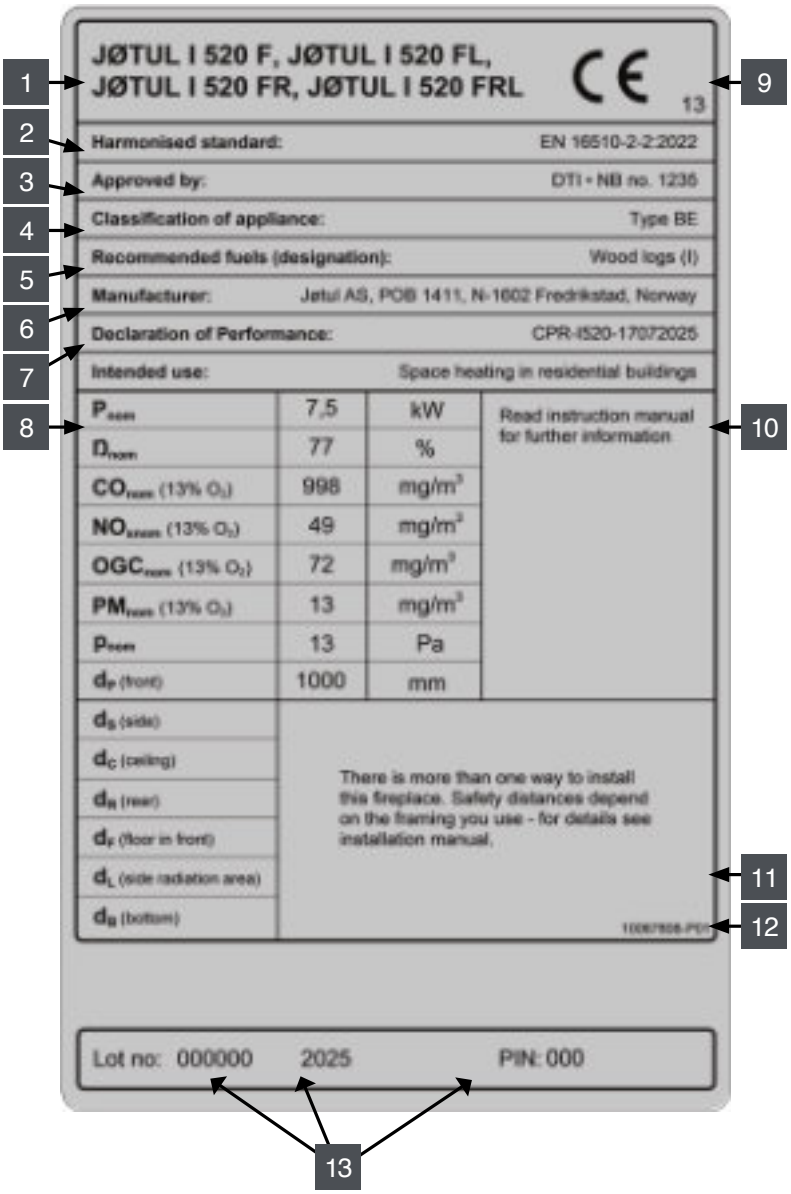


Approval Label

All Jøtul wood-burning stoves are fitted with an approval label that specifies the approval standards and the distance to combustible materials.

The approval label is located at the rear of the stove.
The approval label provides a pin and lot number. These numbers should be quoted when contacting your dealer or Jøtul AS and is required in the event of a complaint.

Approval Label



TYPE PLATE EXPLANATION

1. Type and/or the model number or designation to enable the appliance to be identified
2. Applicable standards
3. Name of test centre/certification number
4. Classification of appliance
5. Recommended fuels
6. Manufacturer's name and address
7. DOP document number
8. Table of values:

   P_{nom} - nominal heat output

   N_{nom} - energy efficiency at nominal heat output

   CO_{nom} - CO emission at 13% O_2 at nominal heat output

   NO_{xnom} - NO_x emission at 13 % O_2 at nominal heat output

   OGC_{nom} - OGC emission at 13 % O_2 at nominal heat output

   PM_{nom} - dust emission at 13 % O_2 at nominal heat output

   p_{nom} - flue draught at nominal heat output

   Minimum distances to combustible materials:

   d_R - back

   d_S - sides

   d_C - ceiling

   d_P - front

   d_F - front to the bottom front radiation area

   d_L - front to the side front radiation area

   d_B - below the bottom (not regarding feet)
9. CE mark of conformity - The digits indicate the year of issue of the certificate
10. Product specifications and instructions
11. Waste electrical and electronic equipment
12. Type plate number
13. Product registration number

3.0 Safety

NB! To guarantee optimal performance and safety, Jøtul stoves must be fitted by a qualified installer.

Any modifications to the product by the distributor, installer or consumer may result in the product and safety features not functioning as intended. The same applies to the installation of accessories or optional extras not supplied by Jøtul. This may also be the case if parts that are essential to the functioning and safety of the fireplace have been disassembled or removed.

In all these cases, the manufacturer is not responsible or liable for the product and the right to make a complaint becomes null and void.

The Clean Air Act

"The Clean Air Act 1993 and Smoke Control Areas"

Under the Clean Air Act local authorities may declare the whole or part of the district of the authority to be a smoke control area. It is an offence to emit smoke from a chimney of a building, from a furnace or from any fixed boiler if located in a designated smoke control area. It is also an offence to acquire an "unauthorised fuel" for use within a smoke control area unless it is used in an "exempt" appliance ("exempted" from the controls which generally apply in the smoke control area).

In England appliances are exempted by publication on a list by the Secretary of State in accordance with changes made to sections 20 and 21 of the Clean Air Act 1993 by section 15 of the Deregulation Act 2015. Similarly in Scotland appliances are exempted by publication on a list by Scottish Ministers under section 50 of the Regulatory Reform (Scotland) Act 2014.

In Northern Ireland appliances are exempted by publication on a list by the Department of Agriculture, Environment and Rural Affairs under Section 16 of the Environmental Better regulation Act (Northern Ireland) 2016.

In Wales appliances are exempted by regulations made by Welsh Ministers.

Further information on the requirements of the Clean Air Act can be found here: https://www.gov.uk/smoke-control-area-rules

Your local authority is responsible for implementing the Clean Air Act 1993 including designation and supervision of smoke control areas and you can contact them for details of Clean Air Act requirements.

The Jøtul I 520 F, Jøtul I 520 FR, Jøtul I 520 FL and Jøtul I 520 FRL have been recommended as suitable for use in smoke control areas when burning wood logs.

3.1 Fire Prevention Measures

There is a certain element of danger every time you use your fireplace. The following instructions must therefore be followed:

- The minimum safety distances when installing and using the fireplace are given in **fig. 1a** and **fig. 1b**.
- Ensure that furniture and other flammable materials are not too close to the fireplace. Flammable materials should not be placed within 1 metre of the fireplace.
- Allow the fire to burn out. Never extinguish the flames with water.
- The fireplace becomes hot when lit and may cause burns if touched.
- Only remove ash when the fireplace is cold. Ash can contain hot embers and should therefore be placed in a non-flammable container.
- Ash should be placed outdoors or be emptied in a place where it will not present a potential fire hazard.

In case of chimney fire:

- Close all hatches and vents.
- Keep the firebox door closed.
- Check the loft and cellar for smoke.
- Call the fire service.
- Before use after a fire an expert must check the fireplace and the chimney in order to ensure that it is fully functional.

3.2 Glove

Use the protective glove when handling the product when it is hot.

4.0 Installation

The Jøtul I 520 can be installed in a prefabricated surround, brick surround and pre-existing open fireplace (hearth).

If installing in a prefabricated surround, follow the instruction manual for the surround. **NB! The product cannot be placed directly in a corner if the convection air outlet is towards the ceiling (see fig. 1f).**

If building a brick surround, the leg rack (optional, item no. 51044759) must be used. See **Fig. 1 e and f**.

If placing inside a pre-existing, code-compliant masonry fireplace, it must also satisfy the requirements for the insert surround, regarding installation against combustible materials and air vents. See **Fig. 1 c, d, e, and f.**

- The stove must be installed in rooms with a good ventilation. A good ventilation is vital for the efficient operation of your stove.
- The appliance shall not be installed with ventilating systems which have pressure below -15 Pa.
- Extractor fans, when operating in the same room or space as the appliance, could cause problems.
- We recommend installing smoke detectors in the home.
- The distances specified in the manual only apply if you comply with the maximum amount of firewood. They only guarantee fire safety.
- There is no guarantee that the present building materials can withstand the temperature in relation to visual changes.
- Check that Building Regulations and any local by laws are followed during installation.

4.1 Floor

Foundations

Ensure that the floor is strong enough for the fireplace. See **«2.0 Technical data»** for weights.

Combustible floor protection

If the fireplace is to be mounted on a combustible floor, cover the floor under and in front of the fireplace with a plate of metal or other non- combustible material. The recommended minimum thickness is 0,9 mm. The minimum distance between the floor and the frame can not be less than 428mm (see Fig. 1f).

It is recommended that flooring which is not fastened to the foundations – so-called floating flooring – is removed during installation.

Jøtul recommends that any flooring made of combustible material, such as linoleum, carpets, etc. should be removed from under the floor plate.

The plate must be in accordance with national laws and regulations.

Contact your local building authority regarding restrictions and installation requirements.

Requirements for protection of inflammable floors in front of the fireplace

The floor in front of the fireplace must be protected by a sheet of metal or other non-inflammable material. The recommended minimum thickness is 0.9 mm. The floor plate must comply with national laws and regulations. Distance between floor and frame must be a minimum of 428mm **(see Fig. 1f)**

Contact your local building authorities regarding restrictions and installation requirements.

4.2 Wall

Distance to combustible wall protected by insulation (fig. 1)

The Jøtul I 520 can be installed inside an open structure/ surround, provided that the distance from the wall (both combustible and non-combustible) is at least 700 mm on the sides with glass, and at least 362 mm on the sides without glass. These distances must be observed because of the heat that is transferred onto the ceiling and adjacent walls **(Fig. 1 e and f)**. With this type of installation, the convection holes in the front and sides of the surround can be omitted since there are convection slots in the top.

Note: Do not place a solid plate on the top of the stove. There must be at least 750 cm^2 of free air space at the top and at least 500 cm^2 of free opening at the base.

Insulation requirements

When installing the insert in a home-built surround with combustible walls protected by insulating material, the following types and thicknesses of insulation can be used:

- 50 mm Jøtul JGFW-5 fireproof board (specific thermal conductivity = λ value = 0.06 W/mK)
- 50 mm Rockwool Fire Protective Bats (λ value = 0.046 W/mK)
- 150 mm Siporex (λ value = 0.144 W/mK).

Other materials may be used. The insulation properties must then always be equal to or exceed the thermal resistance* (R) requirements for the 50 mm Jøtul JGFW-5.

* *Thermal resistance (R) is an indication of how well a material insulates with respect to its thickness. Thermal resistance (R) is calculated as the thickness (d) of the material divided by the thermal conductivity of the material. R = d/λ value.*

*The thermal resistance (R) for the Jøtul JGFW-5 is 0.83 m2*K/W.*

Distance to combustible wall protected by firewall (Fig. 1)

Requirements for regulation firewalls

The firewall must be at least 100 mm thick and made of brick, concrete or lightweight concrete. Other materials and structures with satisfactory documentation may also be used.

Contact your local building authorities regarding restrictions and installation requirements.

Distance to non-inflammable wall

"Non-inflammable wall" here means a non-bearing wall of continuous brickwork/concrete.

Requirements for fireplace surround

Fireplace surrounds must be made of a non-inflammable material

Note that the entire back wall and, if any, side walls within the surround must be covered with insulation/firewalls.

If the cowl is built up to the ceiling and the ceiling is of inflammable material, extra panelling must be installed above the top of the heating chamber and above the cowl's vents in order to prevent the ceiling becoming hot. Use for example: Rock wool, **100 mm** thick, on a steel plate **(min. 0.9 mm)**. See **Fig. 1 e and f**. Ensure there is adequate ventilation in the top of the cowl – e.g. a gap under the ceiling.

NB: Remember that it must be possible to sweep and inspect the installation.

4.3 Air supply

Air must flow between the insert and the brickwork, and it is extremely important that there is an unimpeded air supply to the air inlets.

The air inlet dimensions specified in the text are minimum requirements.

Required air vent sizes (for air circulation):

Base: Minimum of 500 cm^2 free opening.
Top: Minimum of 750 cm^2 free opening.
Note: See fig. 1 e and f

4.4 Ceiling

The fireplace can be fitted with the top edge of the hot air opening of the surround **at least 400 mm** below a ceiling of inflammable material. See **Fig. 1 e and f**. Ensure there is adequate ventilation in the top of the cowl – e.g. a gap under the ceiling.

4.5 Chimney

The chimney is the engine that drives the fireplace and it's essential to have a good chimney in order for the fireplace to function properly.

The draught in the chimney creates a vacuum in the stove.

This vacuum draws the smoke out of the stove and takes in air through the combustion air baffle to fuel the burning process. The combustion air is also used for the airwash system that keeps the window clear of soot.

The draught in the chimney is caused by the difference in temperatures inside and outside the chimney. The greater the temperature difference, the better the draught in the chimney. It is therefore important to allow the chimney to reach operating temperature before adjusting the air vents to restrict combustion in the stove (a brickwork chimney takes longer to reach operating temperature than a steel chimney).

It is particularly important to reach operating temperature as quickly as possible on days on which the draught in the chimney is poor due to unfavourable wind and weather conditions. Make sure the fuel ignites as quickly as possible. Practical tip: Chop the wood into much smaller pieces and use an extra firelighter.

NB: If the stove has not been used for some considerable time, it is important to check the chimney pipe for blockage.

4.6 Chimney and flue pipe

- The fireplace can be connected to a chimney and flue pipe approved for solid fuel fireplaces with flue gas temperatures as specified in **"2.0 Technical Data"**.
- The cross-section of the chimney must be at least that of the flue pipe. Use **"2.0 Technical Data"** to calculate the correct chimney cross-section.
- Before a hole is made in the chimney, the fireplace should be test-mounted in order to correctly mark the position of the fireplace and the hole in the chimney. See Fig. 1 for minimum dimensions. **NB: This does not apply if the stove is installed inside a hearth.**
- **NB: A sweeping hatch is not required if the angle of the flue pipe bend is 45° or less. If the angle is greater than 45°, a flue pipe bend with a hatch must be installed to allow sweeping.**
- When using a semi-insulated flue pipe (starter section), the part must at a minimum comply with class T 400-N1-D-Vm-L50050-G100. For installation requirements, see drawing.
- The function of the chimney and the flue pipe in terms of safety distances must be met. The chimney shall be proven according to EN 13384-2:2015+A1:2019 depending on the individual situation on site.
- Several solid fuel stoves can be connected to the same chimney system if the chimney cross section is adequate and the door is self-closing. See 7.3. **NB: Look into the applicable rules and regulations to find out what is permitted.** Even a good chimney can function poorly if it is used incorrectly.

Please note that it is extremely important for connections to have a degree of flexibility. This is to prevent any movement in the installation leading to the formation of cracks.

NB: A correct and airtight connection is extremely important for the function of the product.

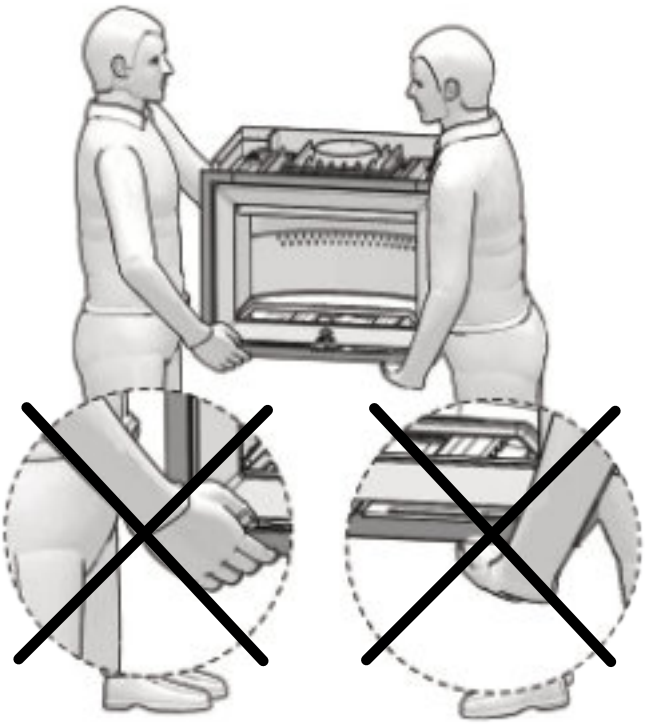
Weight must not be transferred from the fireplace structure to the chimney. The fireplace structure must not hinder the chimney's ability to move, and must not be anchored to the chimney.

For recommended chimney draught, see "2.0 Technical Data". If the draught is too strong, a flue pipe damper can be installed and used to reduce the draught.

4.7 Preparation/installation

The product comes in one package. All the packaging can be recycled. **NB: Before installing the fireplace, check it carefully for any signs of damage.**
The product is heavy! Ensure you have help when positioning and installing it.

Fig. 2



Important! Do not lift the product with the frames on.

1

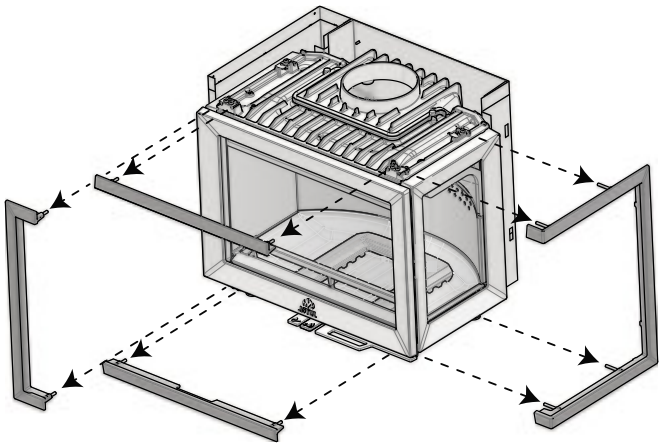
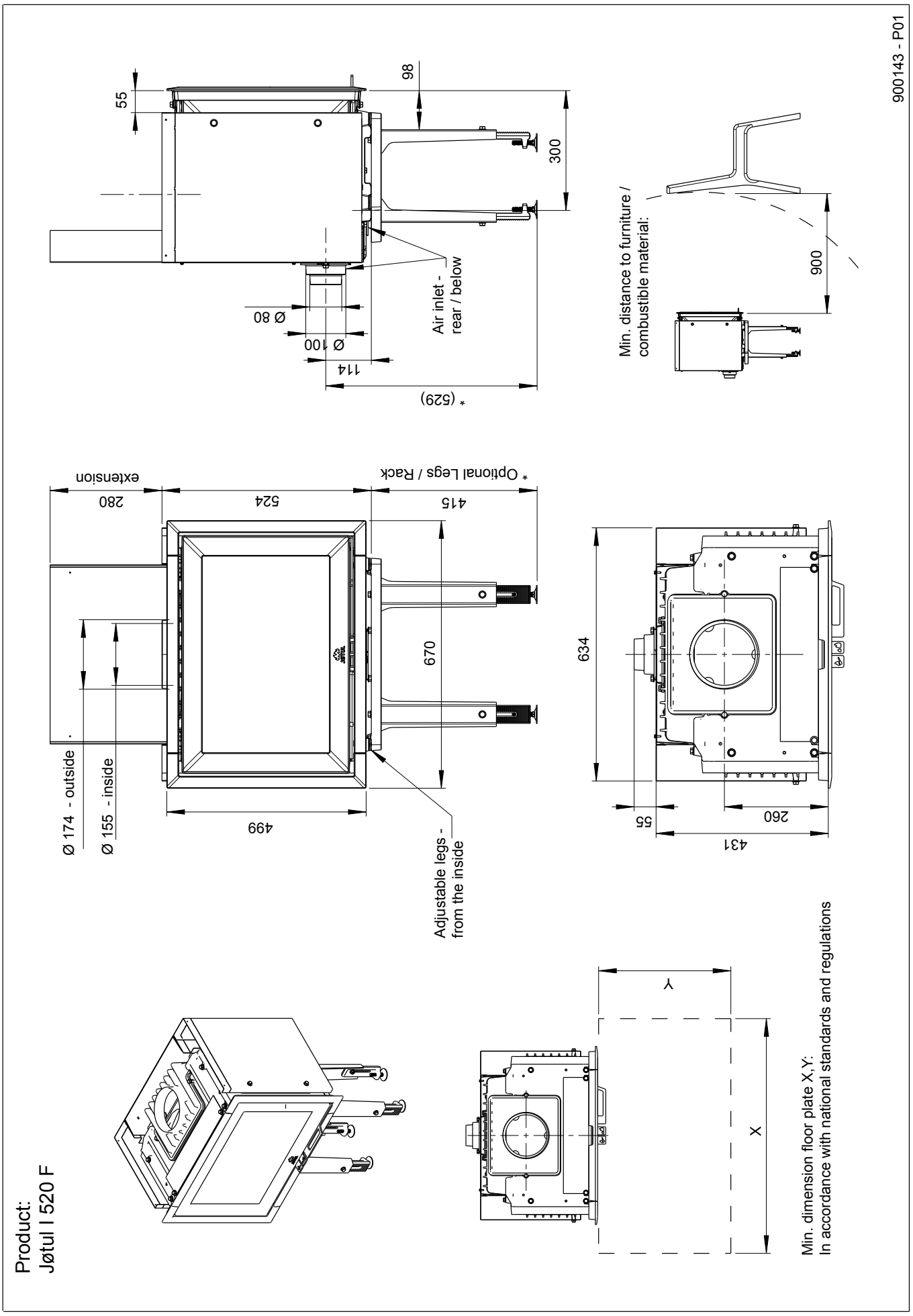


Fig. 1 a


Product:
Jøtul I 520 F
900143 - P01
55
98
300
Air inlet -
rear / below
Ø 80
Ø 100
114
* (529)
Min. distance to furniture /
combustible material:
900
* Optional Legs / Rack
extension
280
524
415
670
499
Ø 174 - outside
Ø 155 - inside
Adjustable legs -
from the inside
634
55
260
431
Y
X
Min. dimension floor plate X,Y:
In accordance with national standards and regulations

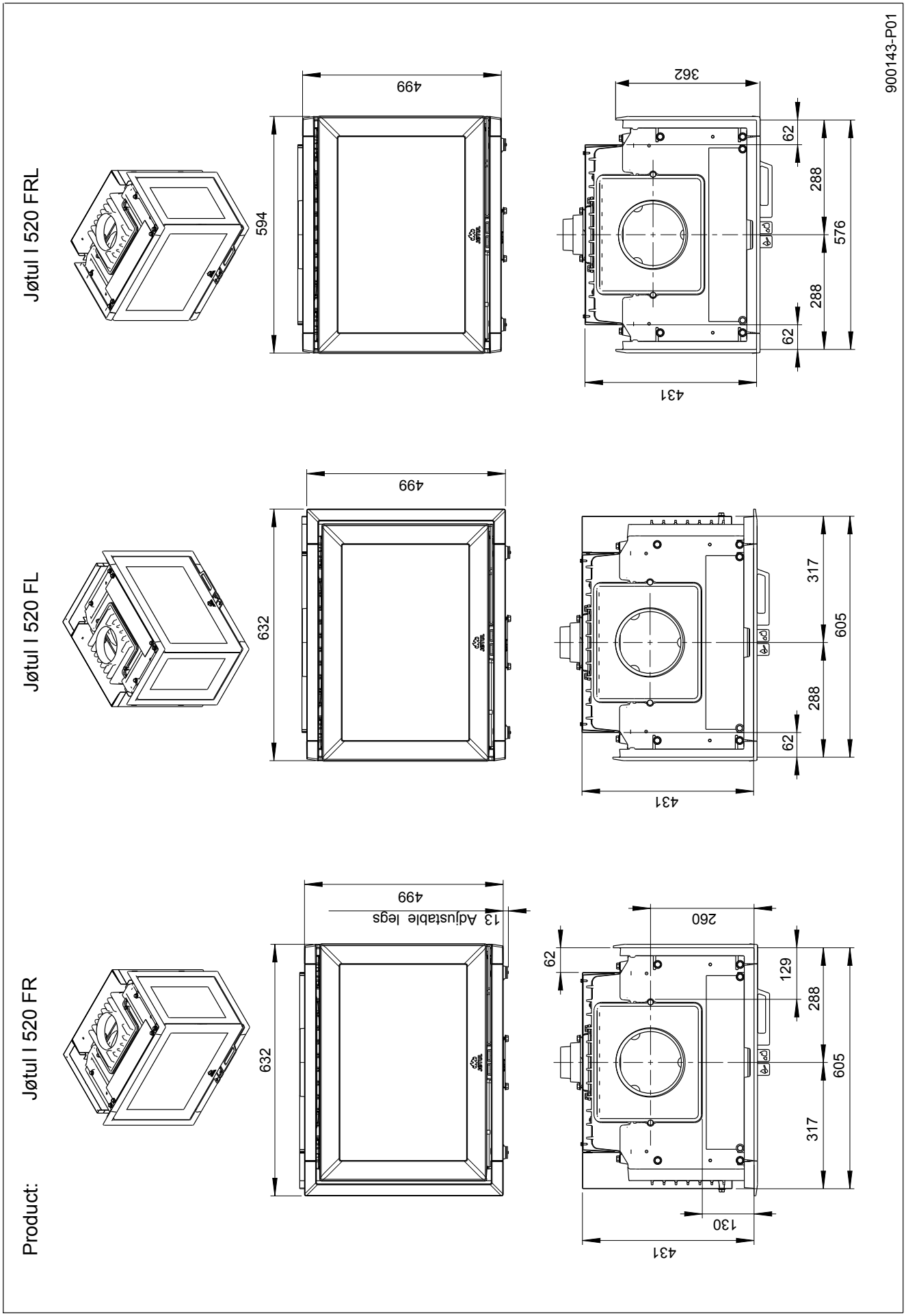

Product:
Jøtul I 520 FR
Jøtul I 520 FL
Jøtul I 520 FRL
900143-P01
499
13 Adjustable legs
632
260
62
129
288
605
317
130
431
362
594
576

Fig. 1 b

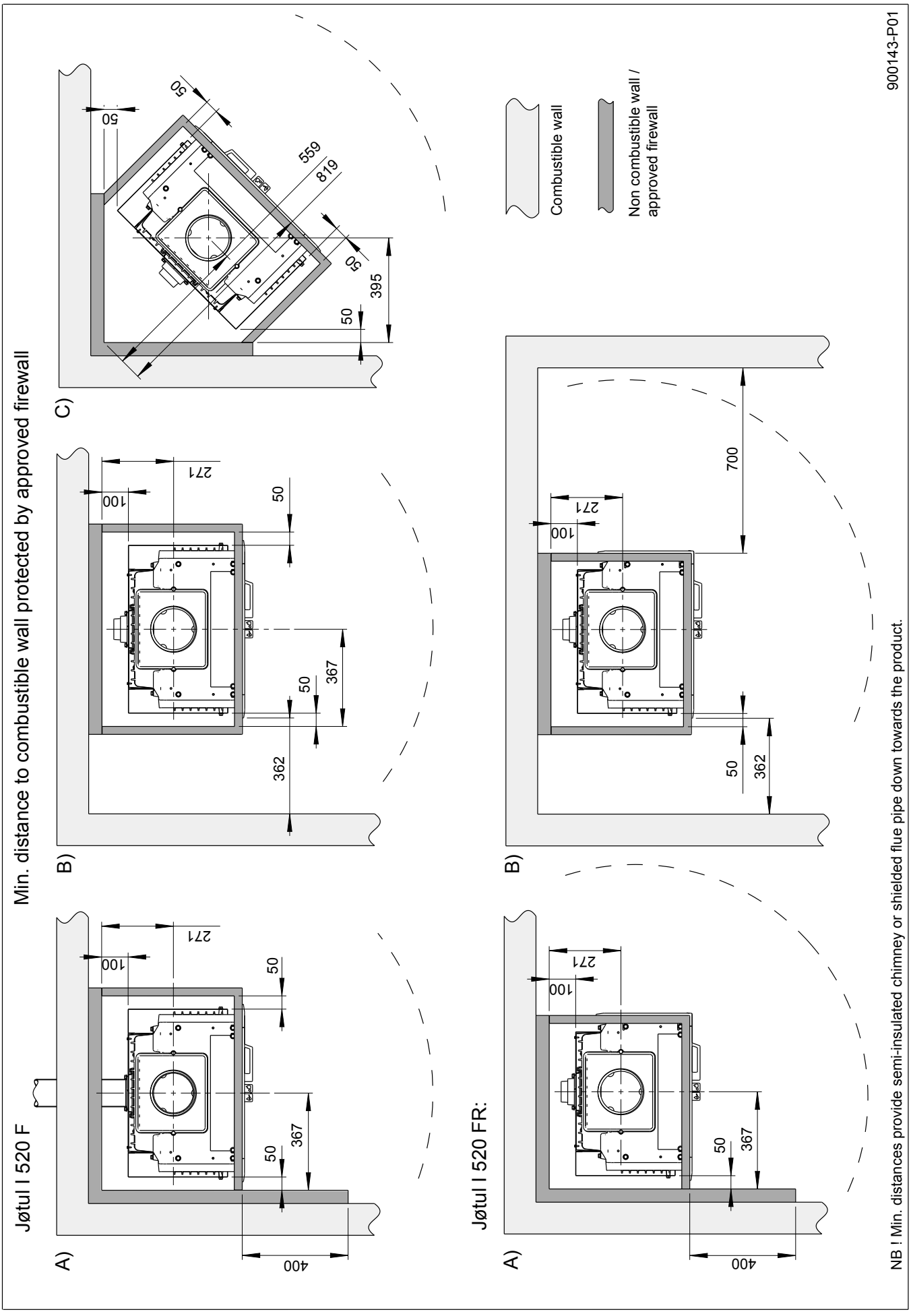

Jøtul I 520 F
Min. distance to combustible wall protected by approved firewall
A)
B)
C)
100
271
50
367
362
400
559
819
395
Jøtul I 520 FR:
700
Combustible wall
Non combustible wall / approved firewall
900143-P01
NB ! Min. distances provide semi-insulated chimney or shielded flue pipe down towards the product.

Fig. 1 c

Fig. 1 d

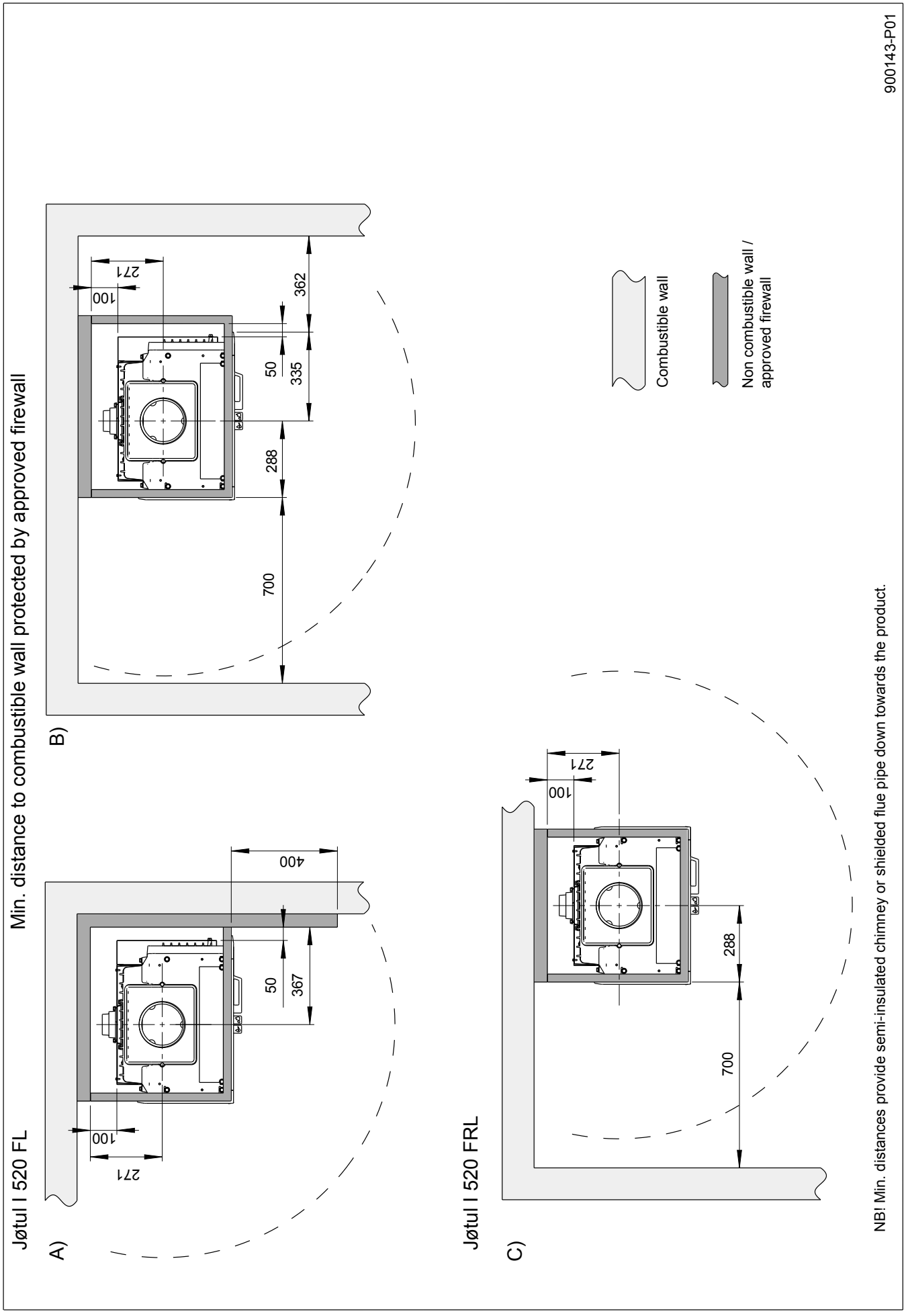

Jøtul I 520 FL
Min. distance to combustible wall protected by approved firewall
A)
400
50
367
100
271
B)
362
50
335
288
700
100
271
Combustible wall
Non combustible wall / approved firewall
Jøtul I 520 FRL
C)
100
271
288
700
NB! Min. distances provide semi-insulated chimney or shielded flue pipe down towards the product.
900143-P01

Fig. 1 e

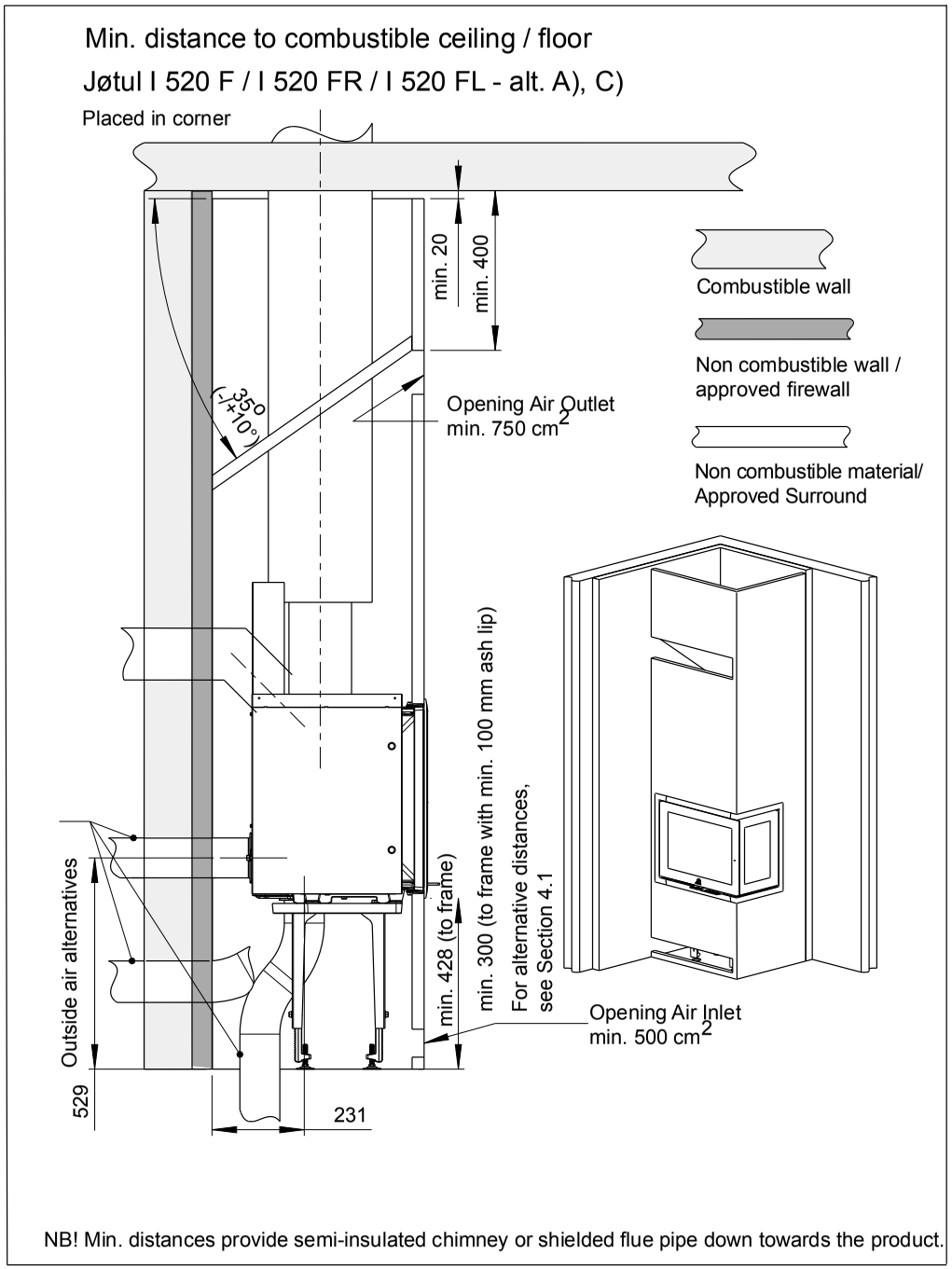
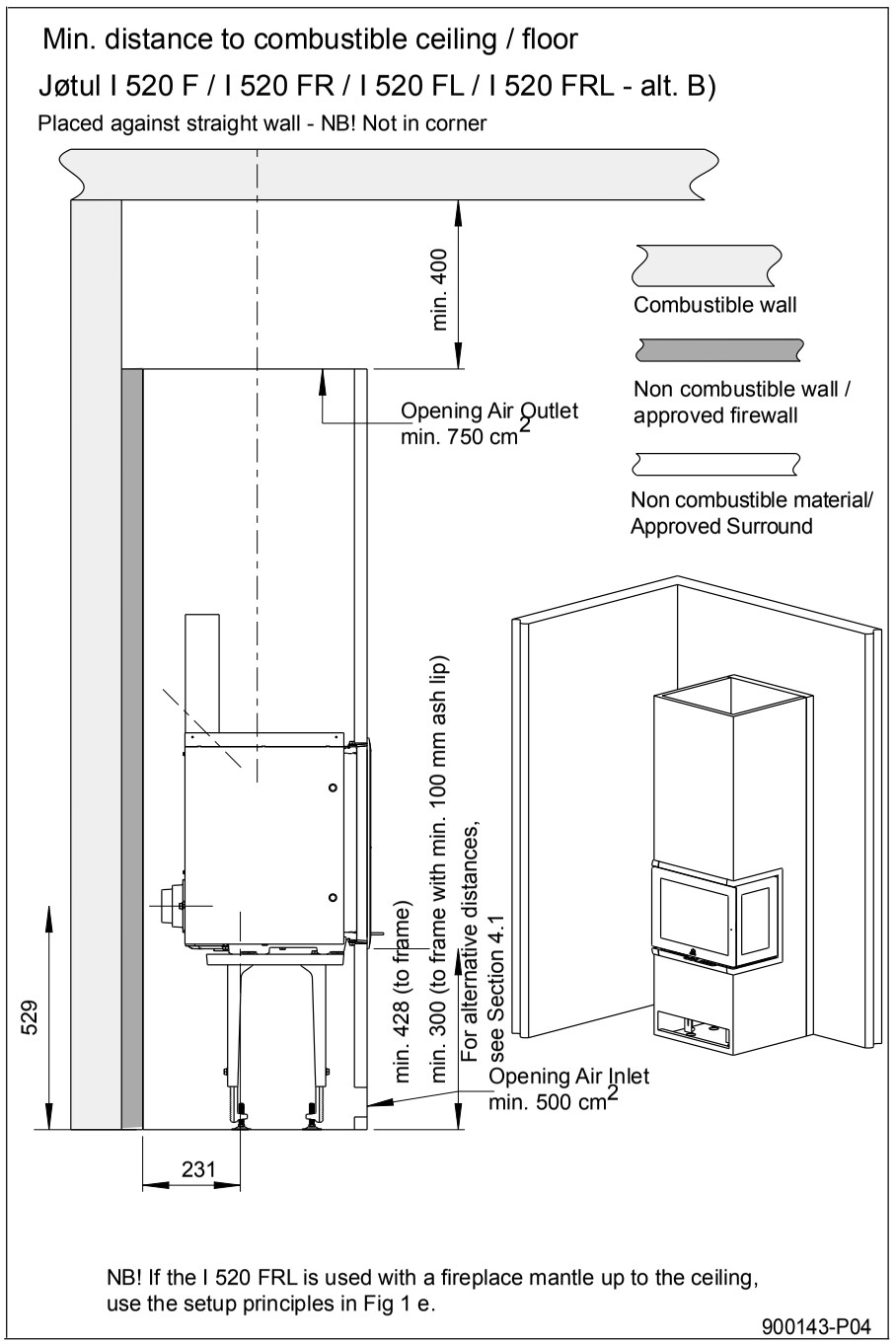
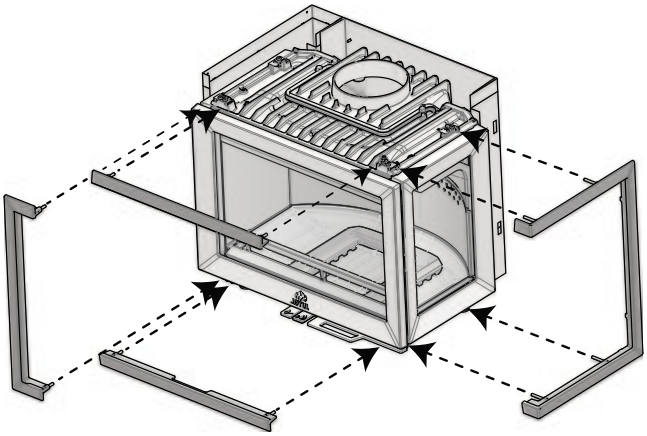

Min. distance to combustible ceiling / floor
Jøtul I 520 F / I 520 FR / I 520 FL - alt. A), C)
Placed in corner
min. 20
min. 400
35°
(-/+10°)
Opening Air Outlet
min. 750 cm2
Combustible wall
Non combustible wall /
approved firewall
Non combustible material/
Approved Surround
Outside air alternatives
529
231
min. 428 (to frame)
min. 300 (to frame with min. 100 mm ash lip)
For alternative distances,
see Section 4.1
Opening Air Inlet
min. 500 cm2
NB! Min. distances provide semi-insulated chimney or shielded flue pipe down towards the product.

Fig. 1 f


Min. distance to combustible ceiling / floor
Jøtul I 520 F / I 520 FR / I 520 FL / I 520 FRL - alt. B)
Placed against straight wall - NB! Not in corner
min. 400
Opening Air Outlet
min. 750 cm2
Combustible wall
Non combustible wall /
approved firewall
Non combustible material/
Approved Surround
529
231
min. 428 (to frame)
min. 300 (to frame with min. 100 mm ash lip)
For alternative distances,
see Section 4.1
Opening Air Inlet
min. 500 cm2
NB! If the I 520 FRL is used with a fireplace mantle up to the ceiling,
use the setup principles in Fig 1 e.
900143-P04

2

3

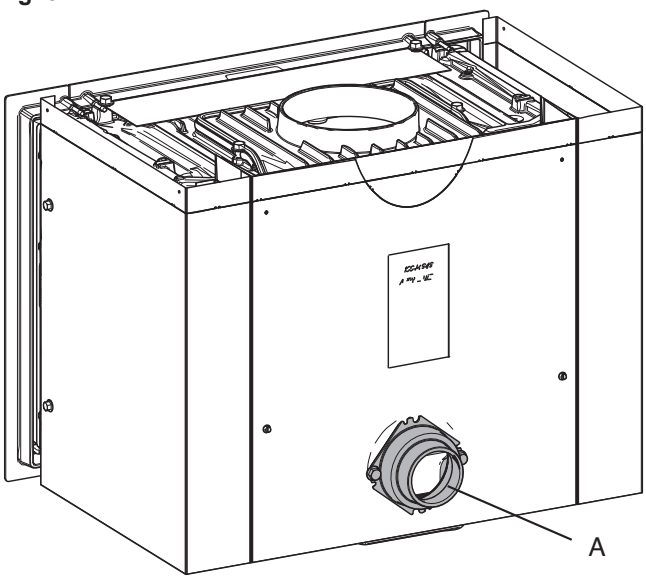


Outside air connection

An optional outside air connection kit is available to order. **(Comes with its own manual - Outside air connection Ø 100, item no. 10026187)**. The duct connector fits Ø100 and Ø 80 fresh air intake tubes.
This is done **before** bricking in or building the surround.
Full compliance with fire codes and regulations is essential if installing in a pre-existing hearth (open fireplace).

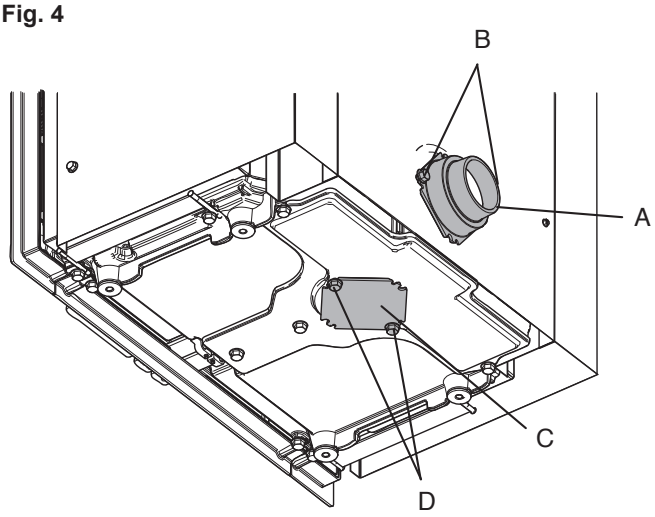
External air supply

Fig. 3



1. The product has an air intake **(A)** at the rear. If necessary, the air intake can be moved to the bottom of the product. See **Fig. 4**

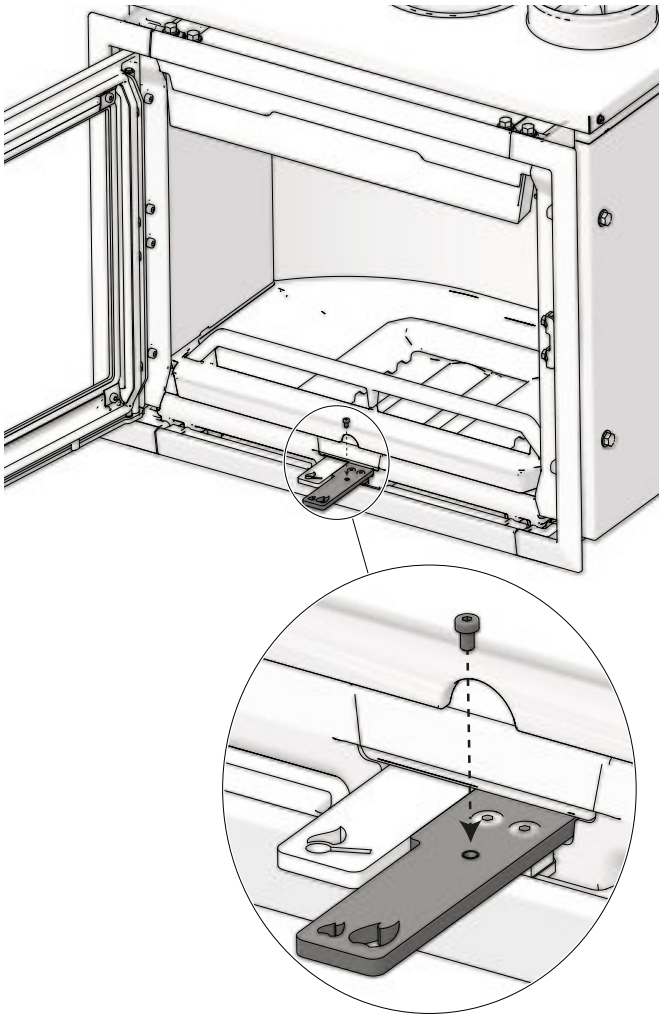
Fig. 4



2. Unscrew the two screws **(B)** and remove the air intake connector **(A)**.
3. Then unscrew the two screws **(D)** beneath the burn chamber and remove the cover **(C)**.
4. Install the connector **(A)** beneath where the cover was placed and secure the connector with screws **(B)**.
5. Then secure the removed cover over the air intake hole at the rear. Secure it in place using the same screws.

Fig. 4-b Requirement for UK - Smoke control areas

The Jøtul I 520 stoves have been recommended as suitable for use in smoke control areas. Make this adjustments to prevent complete primary air control closure.



- Open the door.
- Pull out the primary air valve handle.
- Place the screw (included in the screw bag) in the shown postition **(UK ONLY).**

Installation of leg rack (optional)

If building a brick surround, the leg base (optional, item no. 51044759) must be used. See **Fig. 1 e and f**.

Door hinges

The door is left-hinged as standard but can be changed to right-hinged if required. If so, it should be changed before placing the stove inside the hearth or surround.

An optional kit is required to change the door hinging.

Item no. 50045754. (See the manual, item no. 10045851, which comes with the assembly kit.)

4.8 Connection to chimney

Before installing the product, you need to decide how it is to be connected to the chimney.

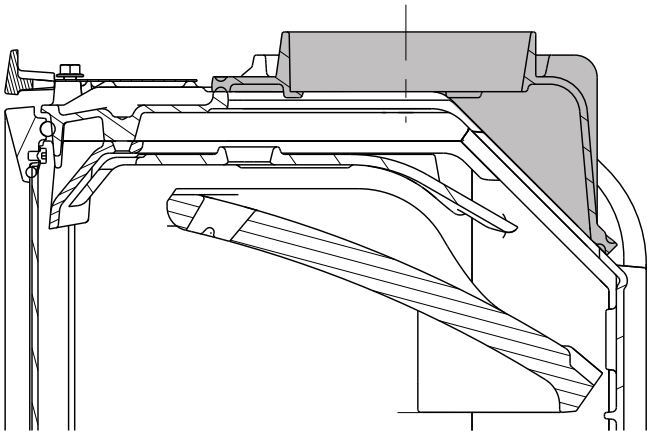
Installation of the smoke bell

The smoke bell can be installed from the outside and the inside. It is factory-fitted on the outside for a top outlet, but can be mounted to a top outlet from the inside. It can also be rotated 45° (rear outlet) for installation from both outside and inside.

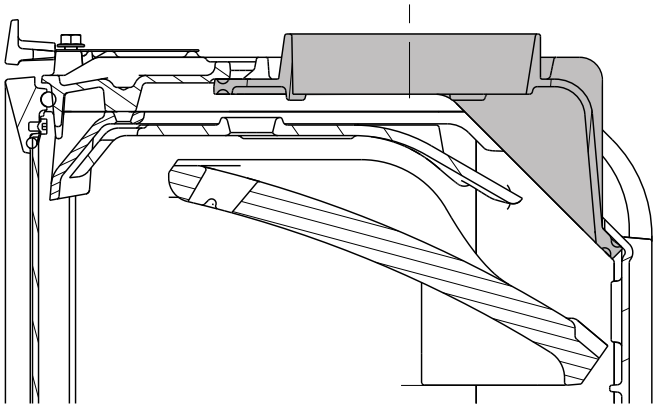
If installing from the inside, the burn plates, baffle and exhaust deflector must be removed.

Fig. 5

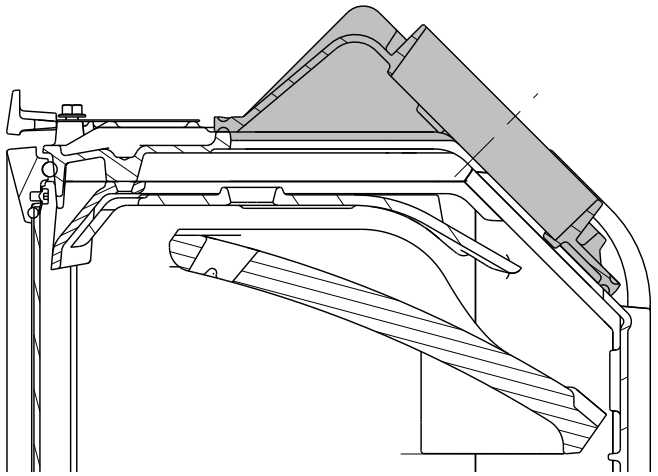
Top outlet installed from the outside (factory-fitted)



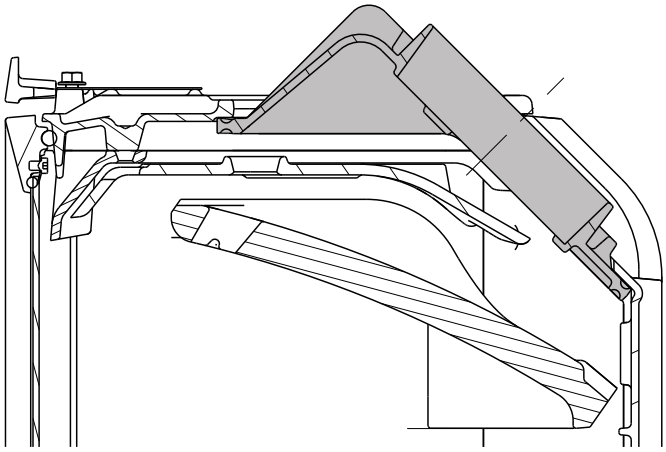
Top outlet installed from the inside



Rear-installed smoke outlet (rotated 45°) from the outside



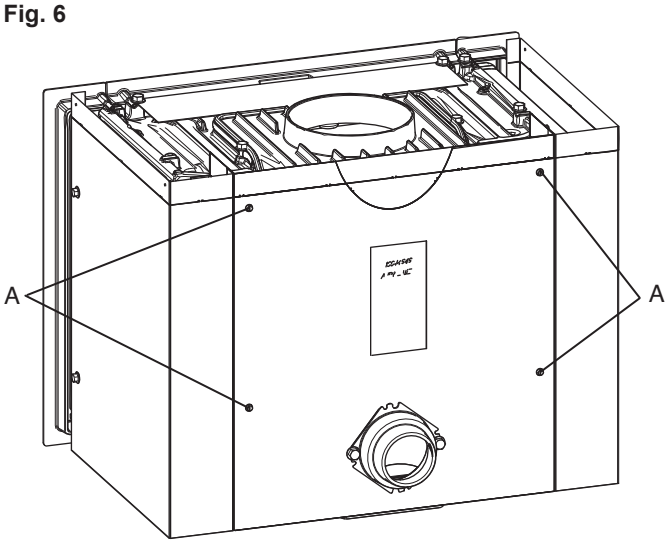
Rear-installed smoke outlet (rotated 45°) from the inside.



Top outlet

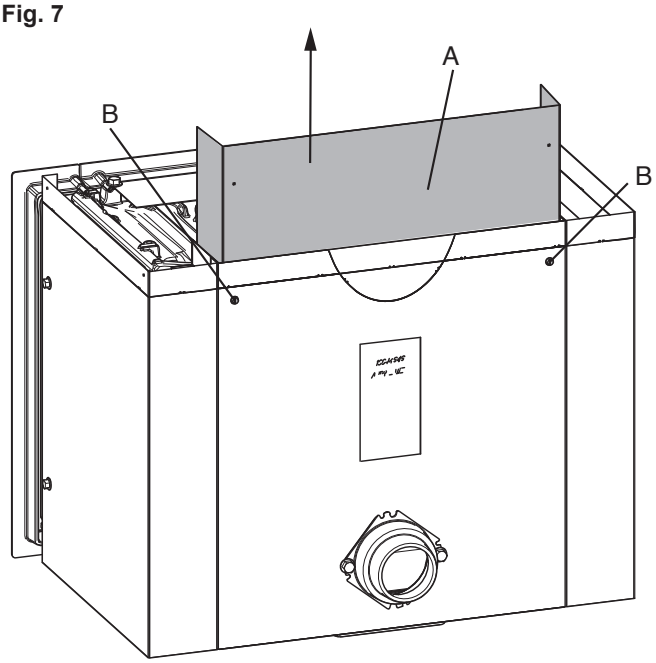
The product is factory-fitted for a top outlet. The inner rear heat shield should be raised to protect the rear wall against heat from the flue pipe.

Fig. 6



1. Loosen the four screws **(A)**.

Fig. 7



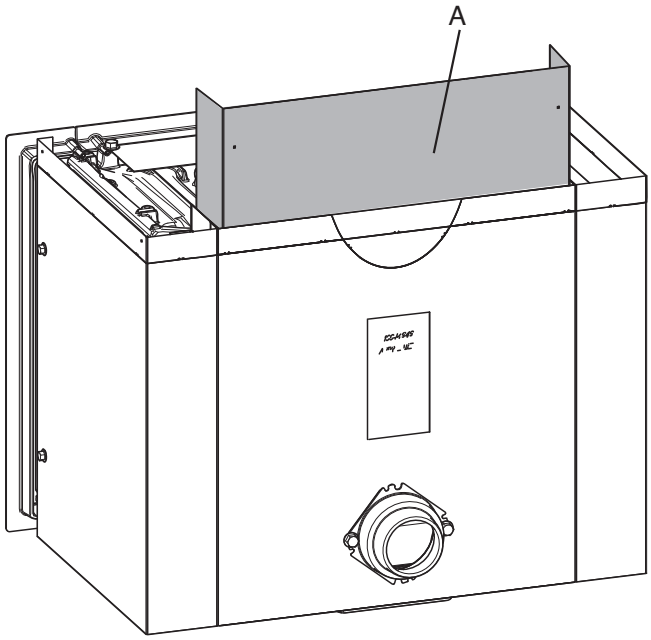
2. Pull the inner heat shield **(A)** up.
3. Secure it in place using the two upper screws **(B)**.

Converting to a rear outlet

The smoke outlet can be converted to a rear outlet if necessary. The smoke bell can also be installed from the inside if the space where the burn chamber is to be installed is confined.

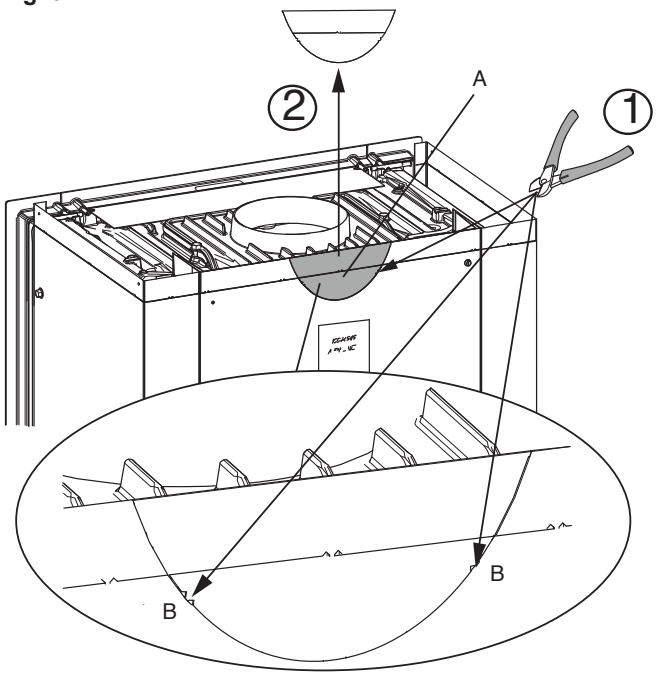
Remove the four screws that were mentioned in Fig. 6.

Fig. 8



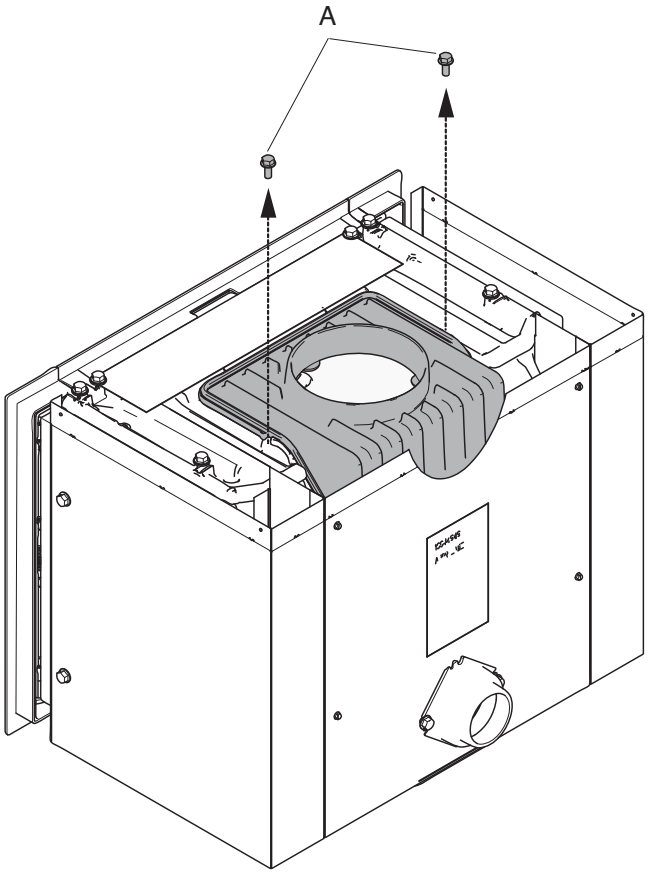
1. Remove the inner heat shield **(A)**.

Fig. 9



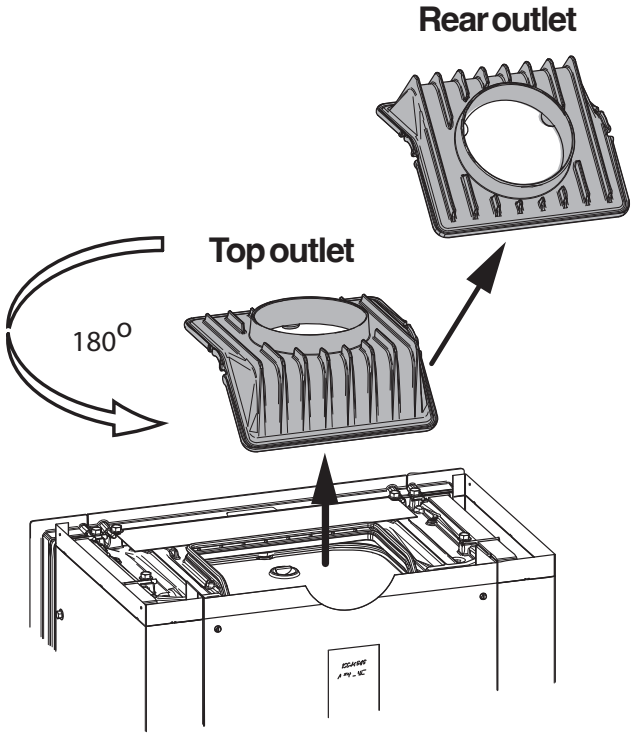
2. If using a rear outlet, the curved section **(A)** must be removed first. Cut along the knock-out holes **(B)**. Then snap off the knock-out section.

Fig. 10



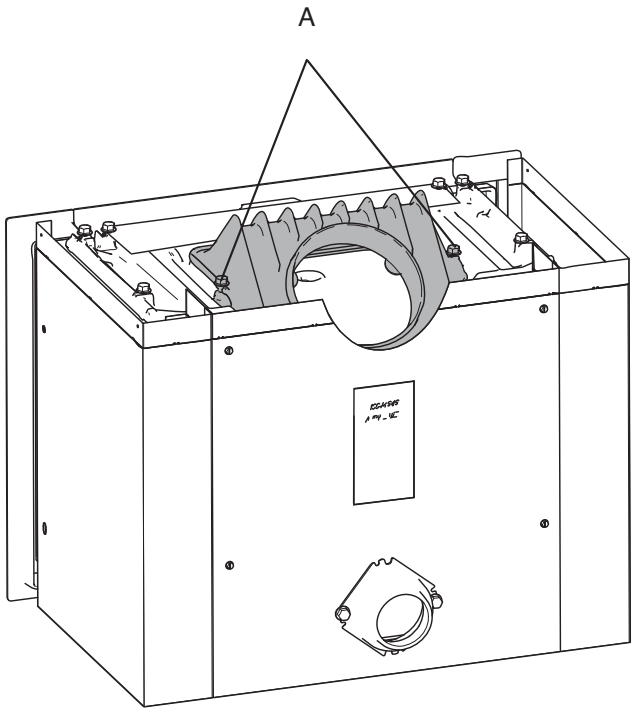
3. Remove the two screws **(A)** that are holding the smoke bell to the burn chamber.

Fig. 11



4. Lift the smoke bell up and rotate it 180°.

Fig. 12



5. Screw the smoke bell onto the burn chamber again using the same two screws **(A)**.

4.9 Installation

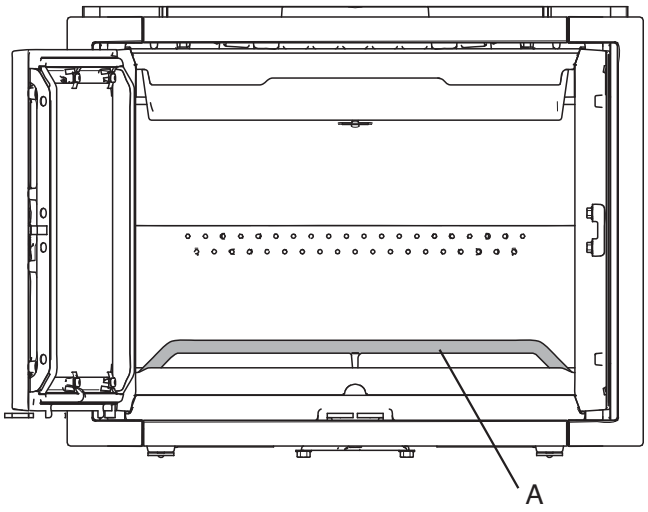
Installation of internal smoke bell

The product comes in four different models. The installation procedure depends on which model is being fitted:
For the following three models, follow **Figures 13 to 20.**

- For the Jøtul I 520 F (glass in the front), Jøtul I 520 FL (glass in the front and left side) and Jøtul I 520 FR (glass in the front and right side).

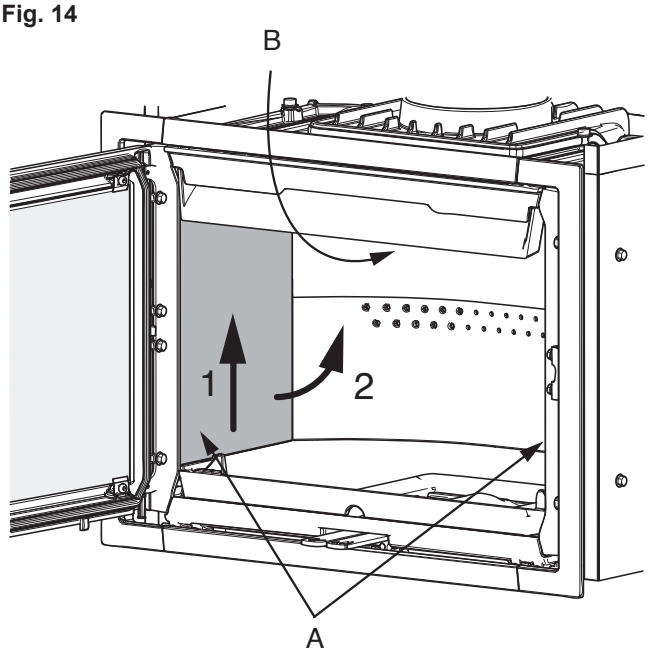
- For the Jøtul I 520 FRL (glass in front and on both sides), follow **Figures 14 to 20**.

Fig. 13



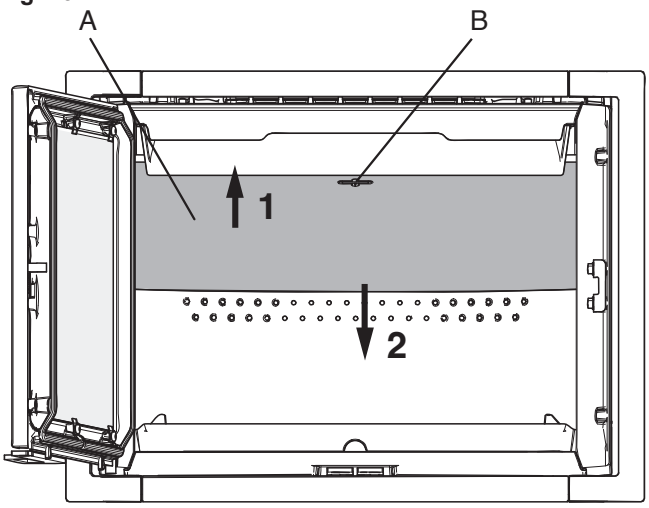
1. Open the door and remove the log retainer (A).

Fig. 14



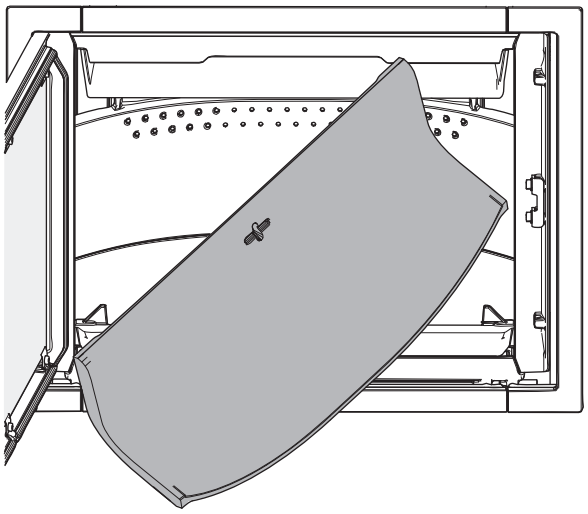
2. Remove the side burn plate **(A)** by lifting it up slightly while holding the baffle **(B)** up. Pull the side burn plate out at the bottom and pull it out. Then remove the other side burn plate in the same way.

Fig. 15



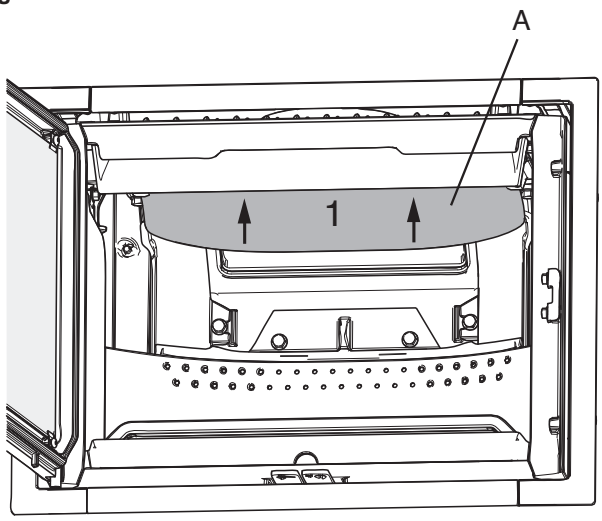
3. First lift the baffle **(A)** up. Turn the key **(B)** 90° and then remove the key. Pull the back edge of the baffle down.

Fig. 16



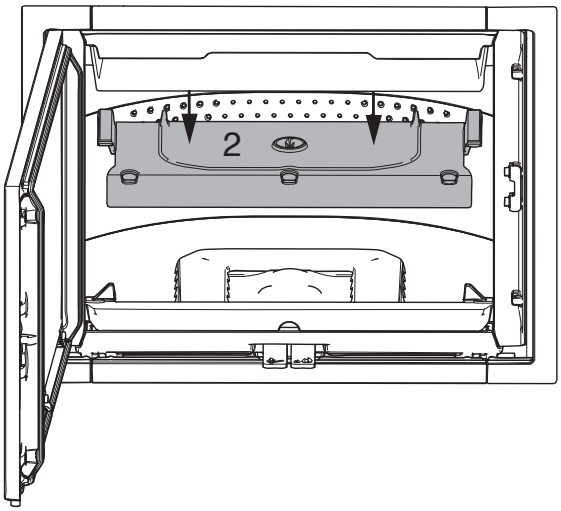
4. Turn one corner towards you and pull it out sideways.

Fig. 17



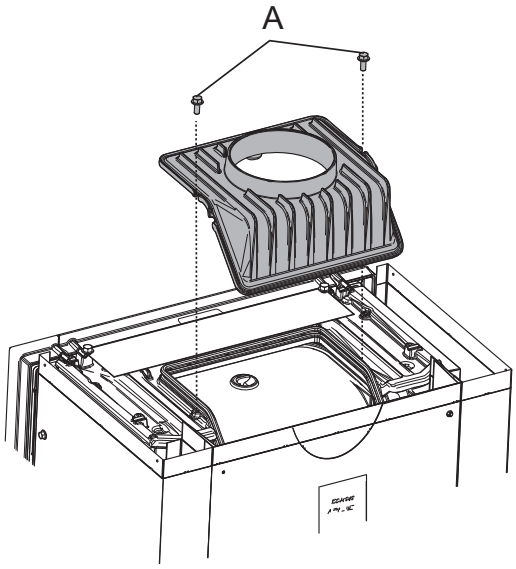
5. Then remove the exhaust deflector **(A)** by raising it slightly to begin with. Then push the exhaust deflector backwards.

Fig. 18



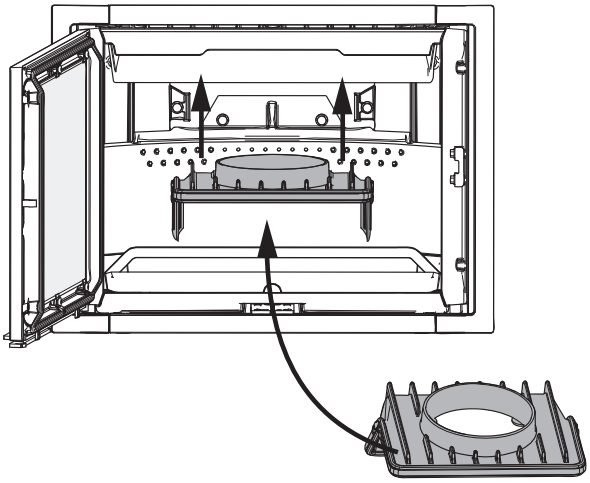
6. Lower the exhaust deflector and lift it out.

Fig. 19



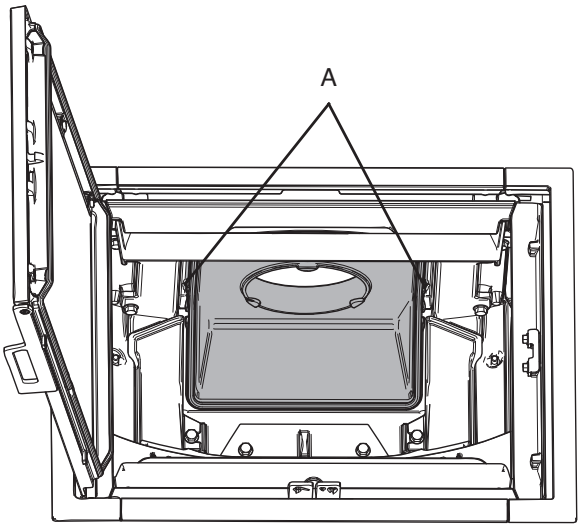
7. Remove the two screws **(A)** on either side of the smoke bell and lift it off.

Fig. 20



8. Secure the smoke bell from the inside.

Fig. 21

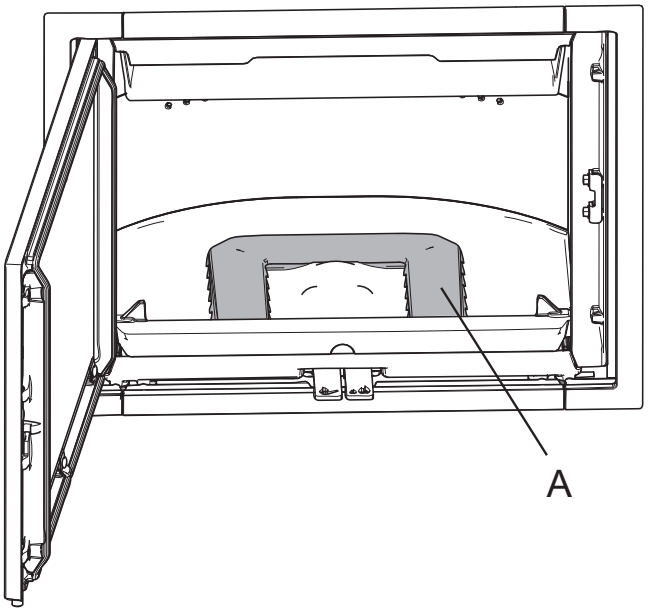


9. Screw the same screws **(A)** in from the inside.

Levelling the insert

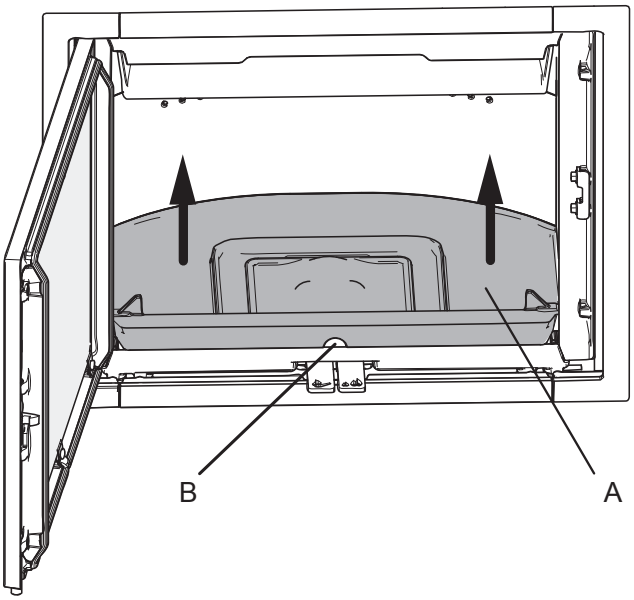
It is important that the insert is level when installing it inside a brick or prefabricated surround and hearth/open fireplace.

Fig. 22



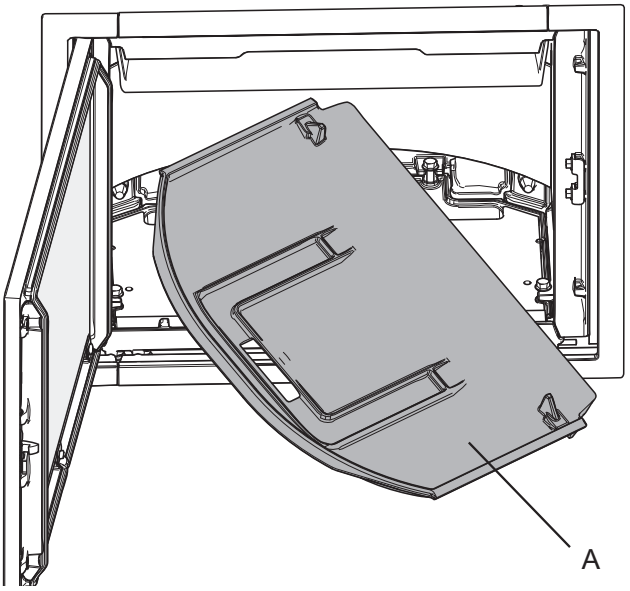
1. Lift the air duct **(A)** up and remove it.

Fig. 23



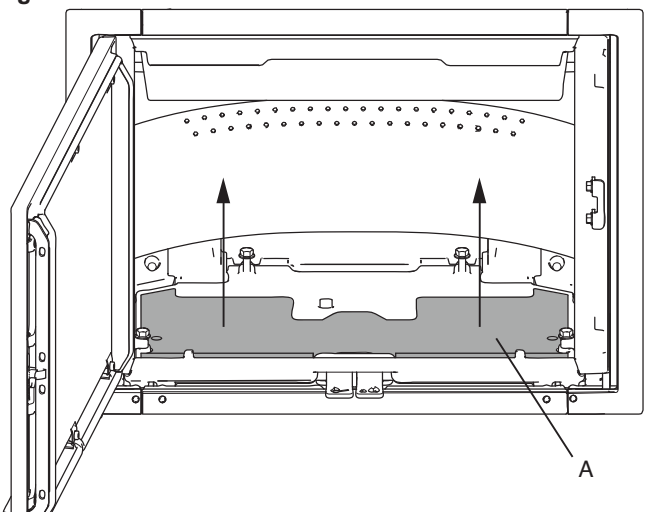
2. Take hold of the hole **(B)** at the front edge of the inner bottom **(A)** and lift it up.

Fig. 24



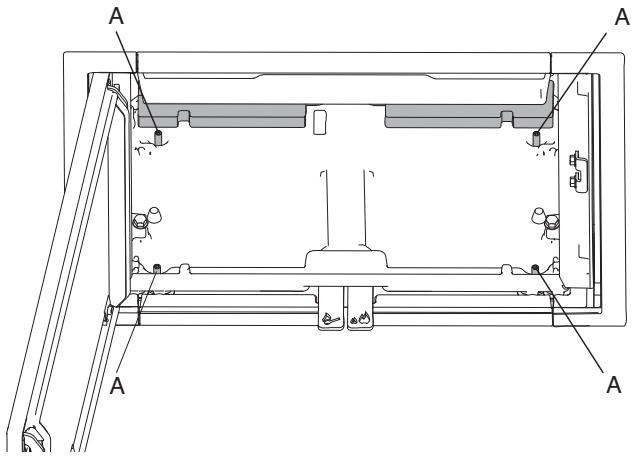
3. Turn one corner towards you and pull the inner bottom out.

Fig. 25



4. Lift the insulation sheet **(A)** up.

Fig. 26



5. Use the Allen key supplied to adjust the levelling screws **(A)** until the burn chamber is level and at the correct height.
6. Refit the exhaust deflector, the baffle and the side panels.

4.10 Installing inside an open fireplace

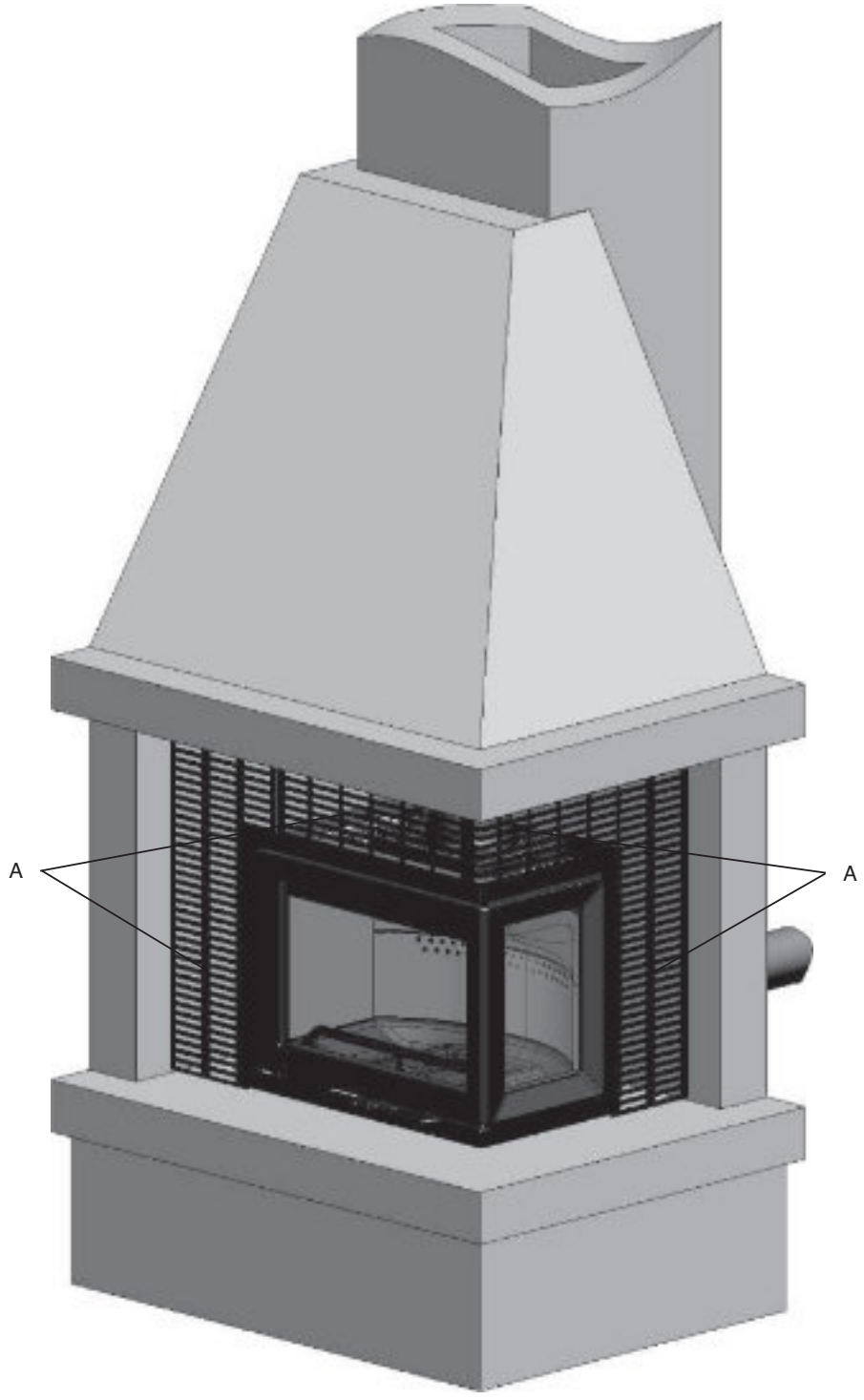
The Jøtul I 520 is designed to be placed inside a pre-existing, code-compliant masonry fireplace. The fireplace must satisfy the requirements regarding installation against combustible materials. It is important that the convection air openings are sufficiently large (500 / 750 cm^2) to utilize the heat emission from the product.

There are several options for installation in hearths/open fireplaces. Here are three options:

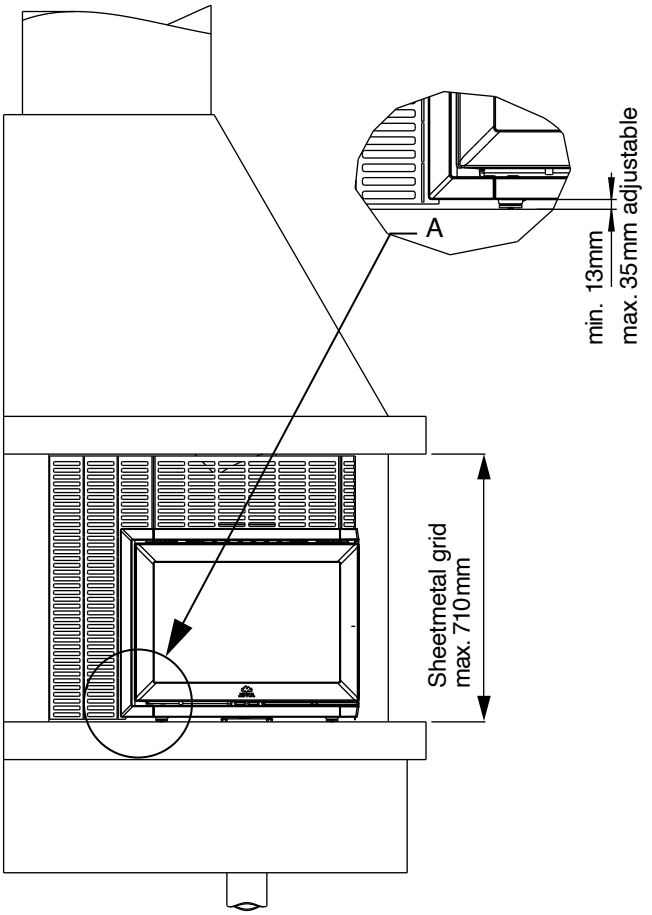
1) Placed in a corner with plenty of space

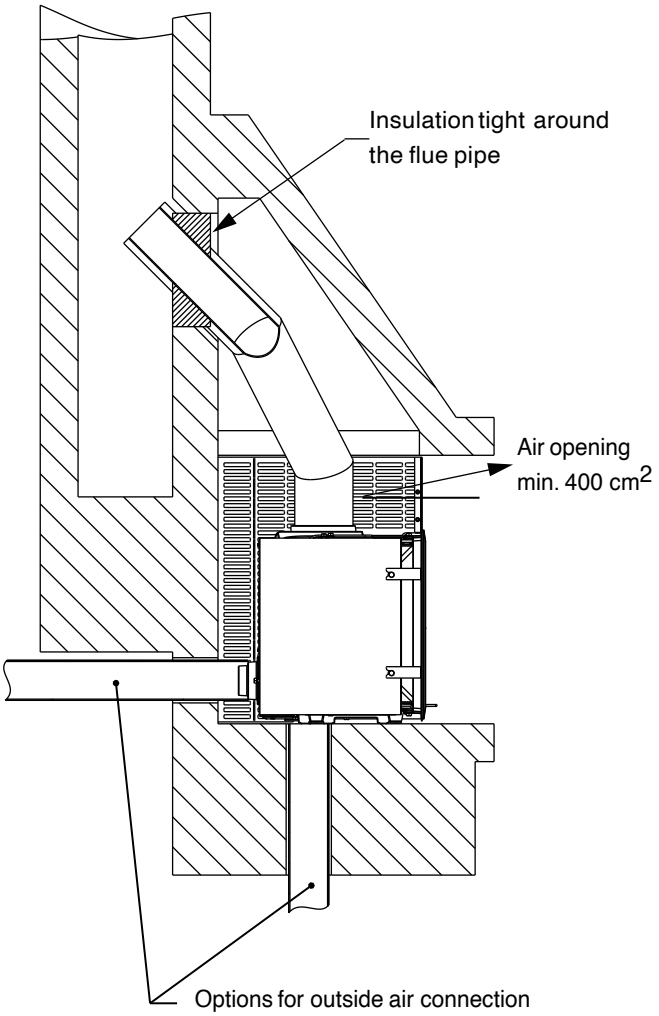
The illustration shows the Jøtul I 520 FR (glass in the door and on the right-hand side). In this example, a sheet metal grid is used (optional - item no. 50045748) to fill the space between the insert and the fireplace.

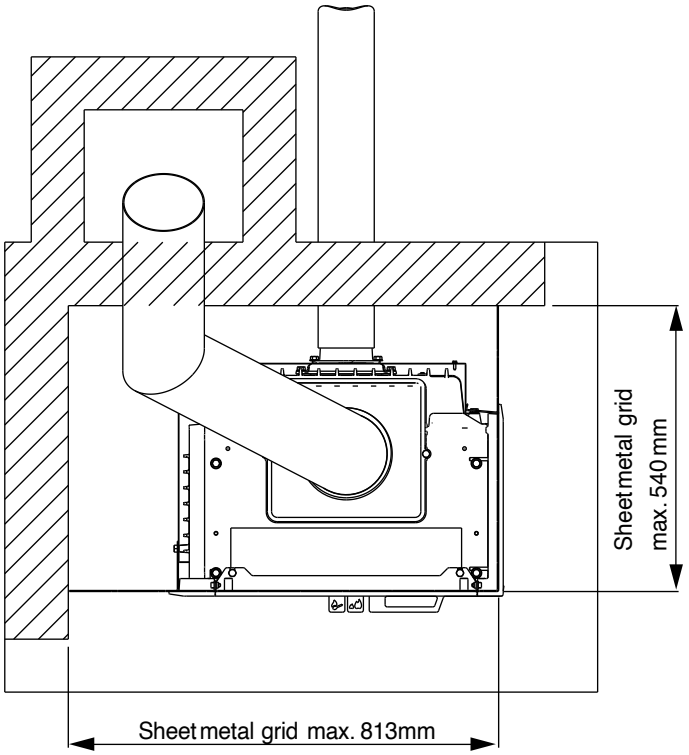
Fig. 27



The sheet metal grid **(A)** must be cut to fit the fireplace. See separate manual for instructions on how to fit the sheet metal grids.


A
min. 13mm
max. 35mm adjustable
Sheetmetal grid
max. 710mm

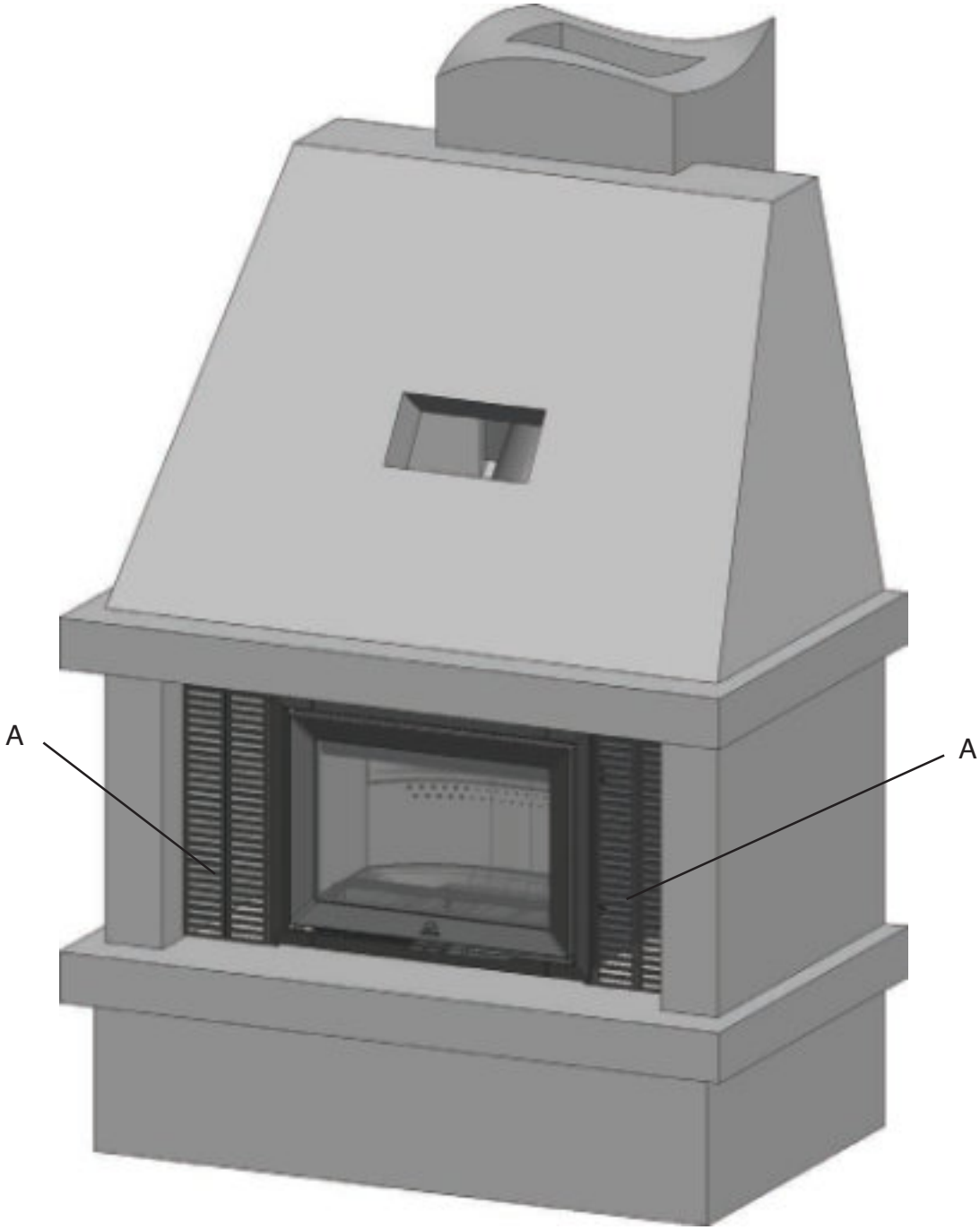

Insulation tight around
the flue pipe
Air opening
min. 400 cm2
Options for outside air connection


Sheet metal grid
max. 540 mm
Sheet metal grid max. 813mm

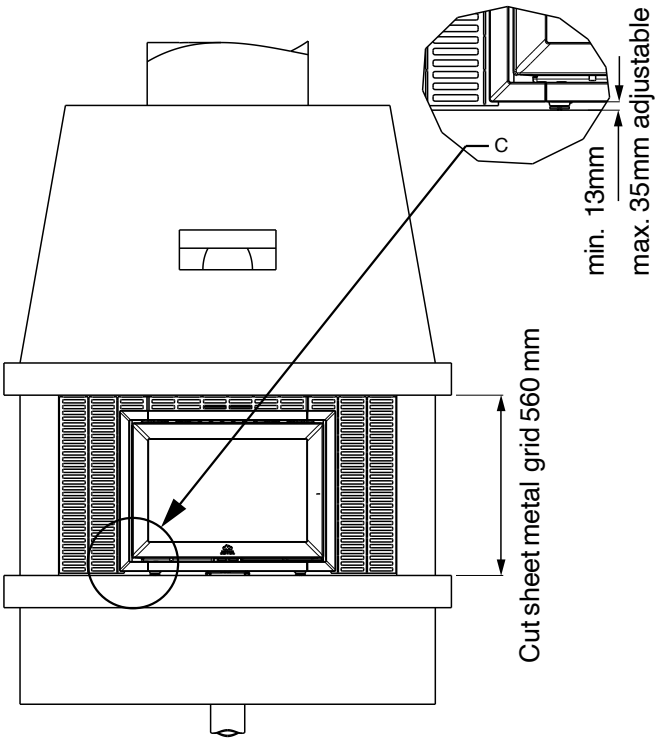
2) Installation in open fireplace

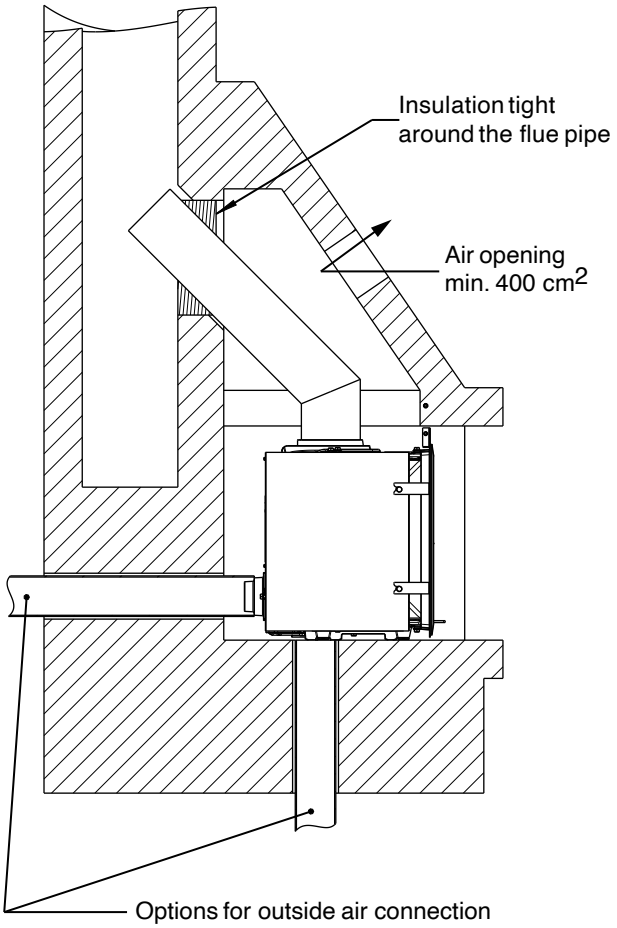
Installation against a straight wall with plenty of space at the sides, low height. The illustration shows the Jøtul I 520 F. In this example, a metal grille is used (optional - item no. 50045747) to fill the space between the insert and the fireplace.

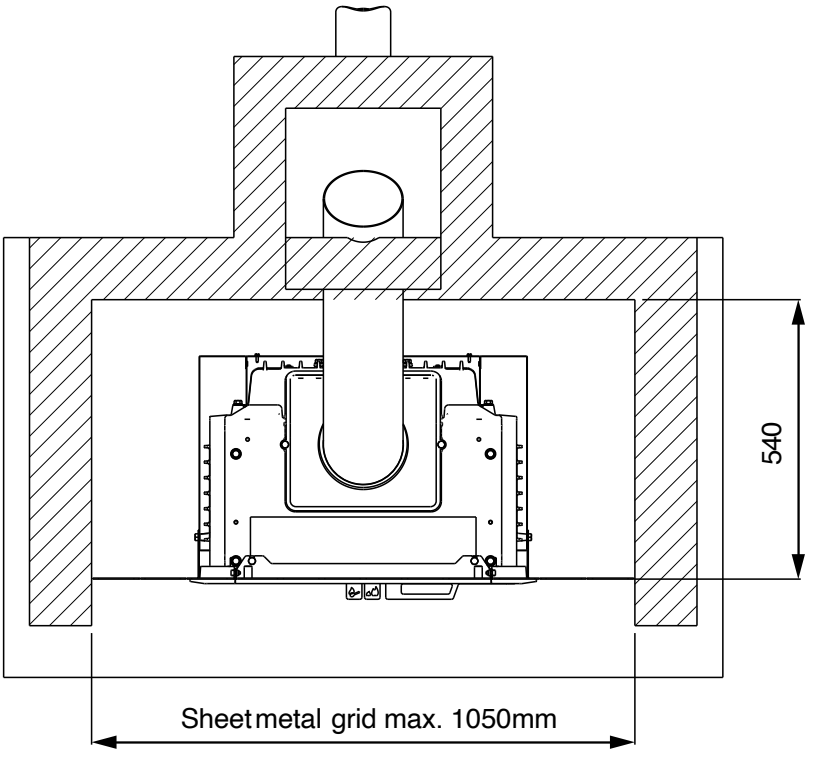
Fig. 28



The sheet metal grid **(A)** must be cut to fit the fireplace. See separate manual for instructions on how to fit sheet metal grids.


C
min. 13mm
max. 35mm adjustable
Cut sheet metal grid 560 mm

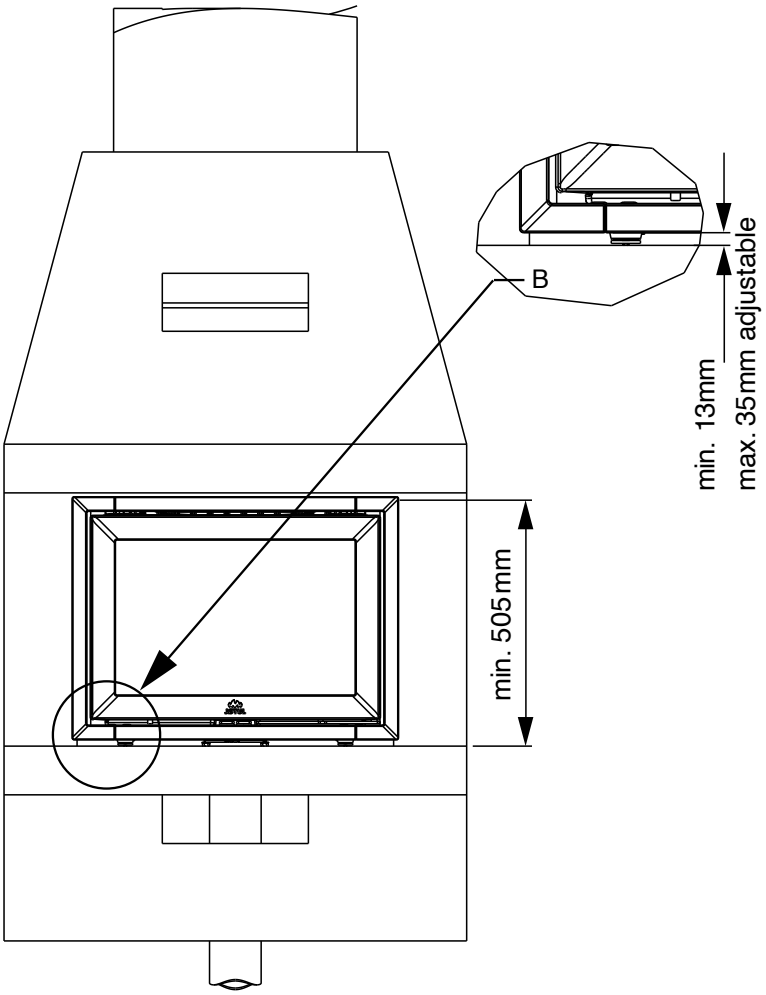

Insulation tight
around the flue pipe
Air opening
min. 400 cm2
Options for outside air connection

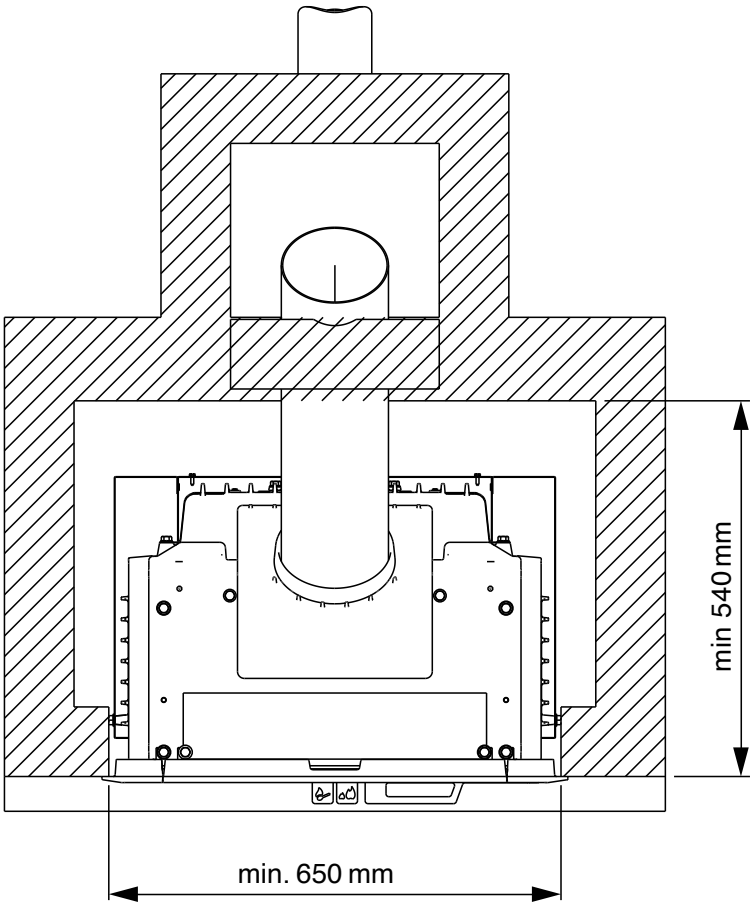

540
Sheet metal grid max. 1050mm

3) Installation in open fireplace

Installation against a straight wall with little space directly in front. The illustration shows the Jøtul I 520 F with a smoke bell rotated 45° from the inside. See Fig. 29 for details.

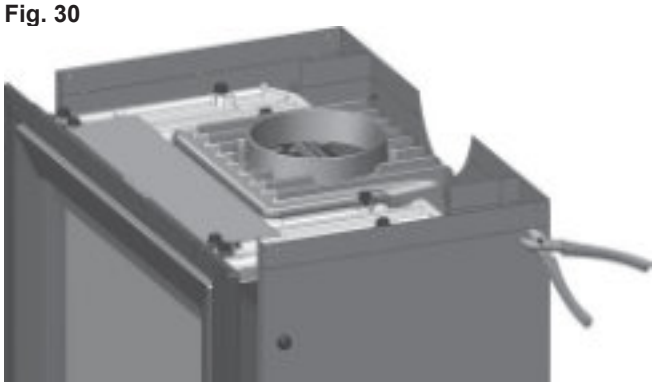
Fig. 29


B
min. 13mm
max. 35mm adjustable
min. 505mm


min 540mm
min. 650 mm

Placing an insert inside an open fireplace

Fig. 30



1. Cut along the knock-out holes at the top of the heat shield and remove that section.

Fig. 31

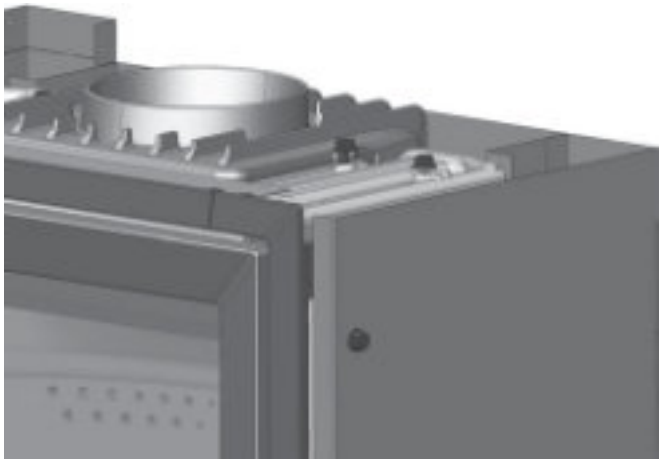
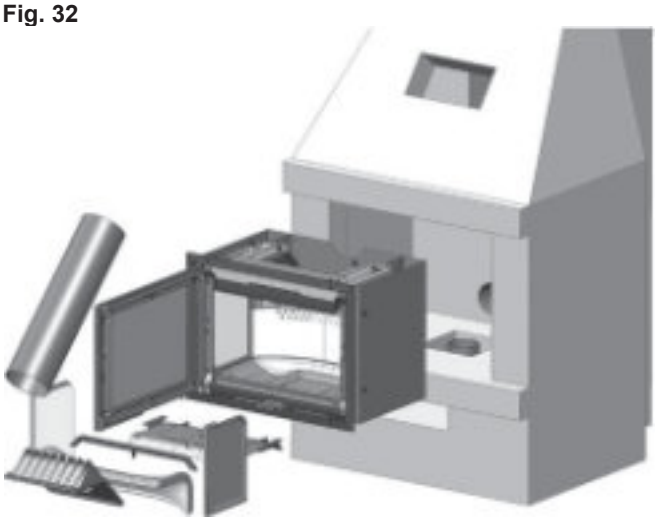
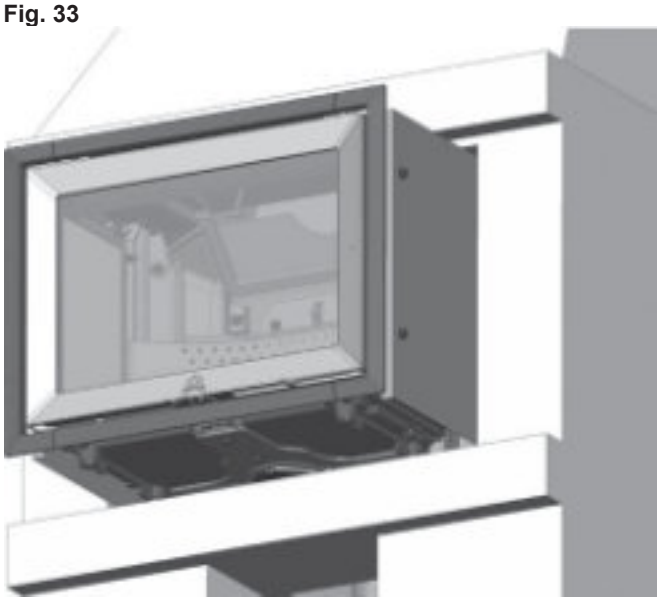


Fig. 32



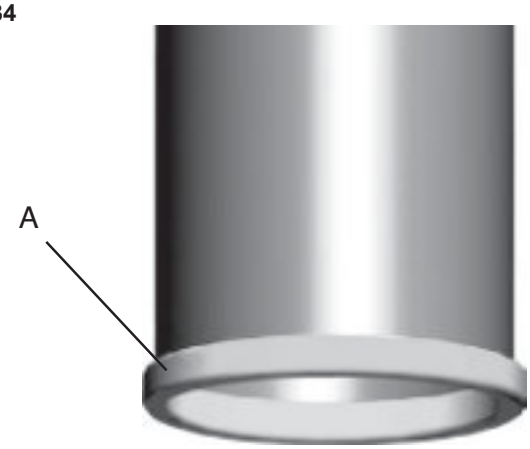
2. Before inserting the burn chamber inside the fireplace, remove the log retainer, side burn plates, back burn plate, baffle and exhaust deflector. These are fitted back into place when the flue pipe and smoke bell have been installed. See the figures below.

Fig. 33



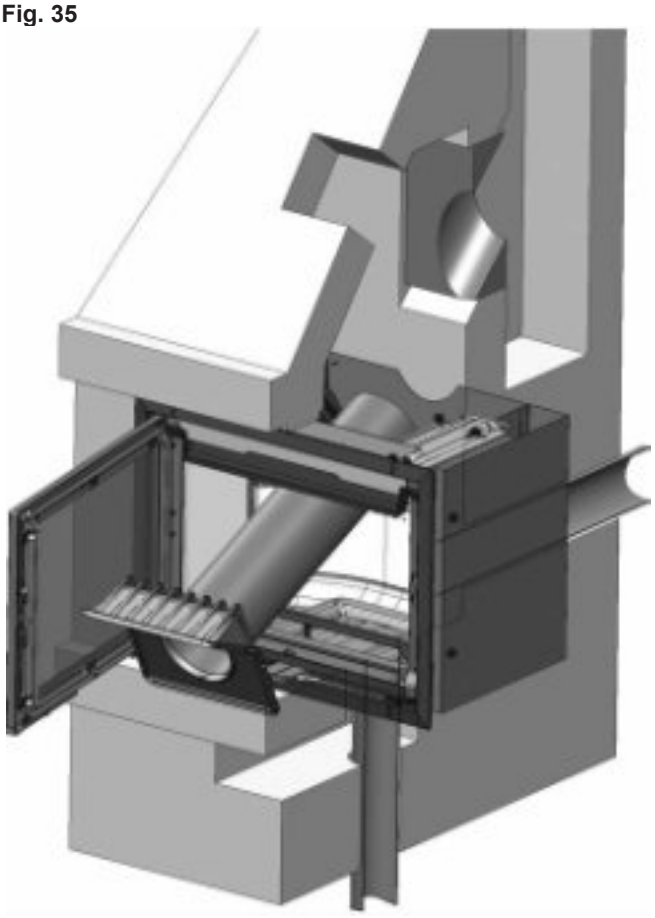
3. Slide the burn chamber in on the moulded runners on the bottom until it is in place. Level the burn chamber as described in “Levelling the insert”.

Fig. 34



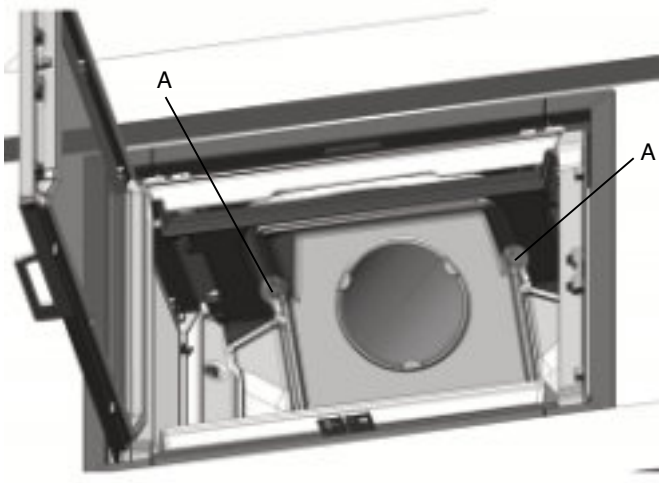
4. Fit the gasket **(A)** onto the edge of the flue pipe.

Fig. 35



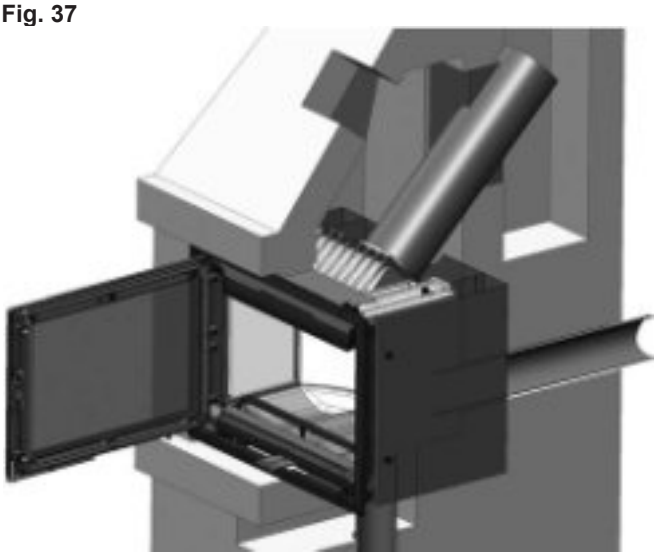
5. Attach the smoke bell **(A)** to the end of the flue pipe where the gasket is fitted.
6. Attach the flue pipe with the smoke bell on from the inside of the burn chamber.

Fig. 36



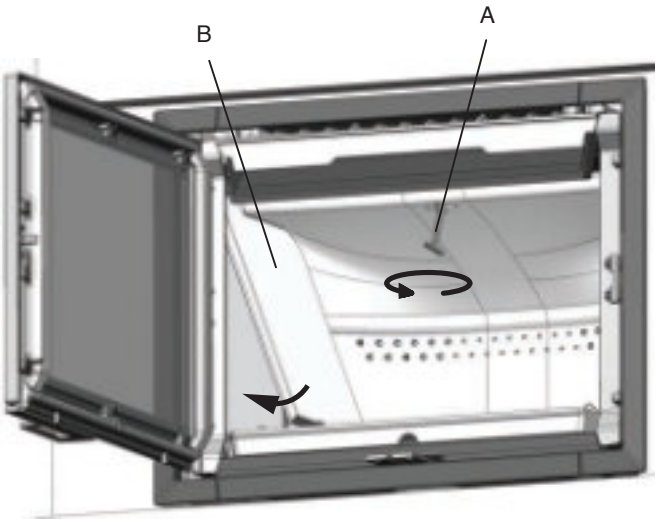
7. Then attach the smoke bell using the screws **(A)** that had previously been removed when it was taken off the top outlet.

Fig. 37



8. If installing as shown in example 3, we recommend threading the flue pipe in through the door opening of the burn chamber. Push the flue pipe with the smoke bell on in through the door opening and the opening for the smoke bell and any insulation material and up inside the chimney.

Fig. 38



9. Push the key **(A)** up through the opening in the baffle, turn it and secure it.
10. Insert the side burn plates (B) into place.

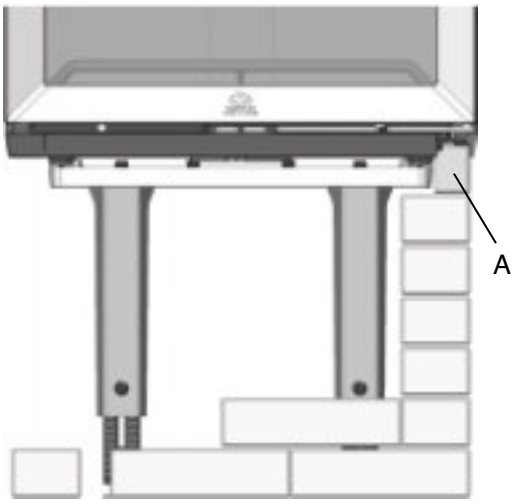
When building a brick surround

If building a brick surround, a leg rack (optional, item no. 51044759) must be used. NB: Maximum leg length must be used! See **Fig. 1 e and 1 f**. The base is designed so that space is left to the bricks on the inside of the frame that is provided.

Fig. 39

1. The bricks are laid so that they fit under the insert frame.

Fig. 40



2. The last bricks **(A)** are cut to fit between the leg base and the frame. **NB: Remember to leave openings in the brickwork for convection air (Fig. 1 e and f).**

5.0 Daily use

5.1 Control handles

Ignition vent (A)

This vent is used when lighting the fire and to get the fire going well when adding more wood. If continuously
using hard wood, such as oak and beech, the ignition vent can be open 0% to 50%. If using soft wood, such as birch and pine, the ignition vent can be closed.
Setting for normal use: 0% to 50%.

Through air or air vent (B)

The through air is preheated and added to the fire indirectly. The through air also flushes the glass to prevent the formation of soot. Soot may form on the glass if the through air control is set too low. The heat output is determined by the through air.
Setting for normal use: 40% to 70%.

Clean Burn Technology

The Jøtul I 520 incorporates clean burn technology. The air passes through a specially-designed duct system. This ensures optimal combustion of the gases that are released during the burning process. The pre-heated air passes into the burn chamber through the small holes in the back burn plate of the chamber. The airflow is determined by the combustion rate and cannot therefore be regulated.

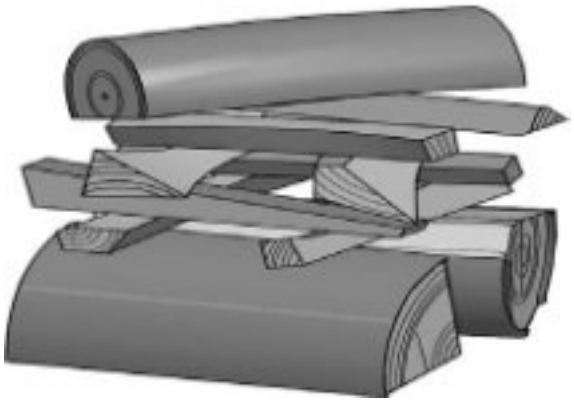
5.2 Lighting the fire

Important!

Please note that if too little wood is used when lighting the fire, or if the pieces of wood are too large, it will not be possible to attain the optimum working temperature in the burn chamber. This can result in poor combustion and may lead to a heavy build-up of soot, or cause the fire to die out when the door is closed.

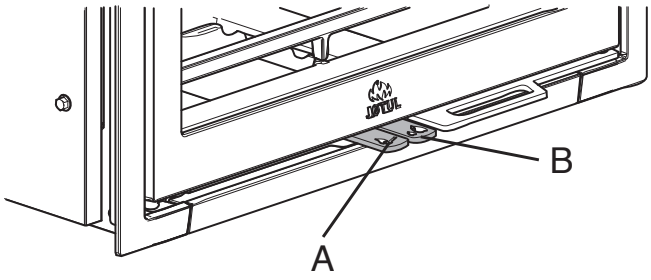
If the house has a mechanical ventilation system, the pressure inside the house is negative and the fireplace does not have an outside air connection, open a window near to the stove before lighting a fire. Let the window remain open for a minute or two until the fire has begun to burn properly.

Fig. 41



- Place two medium-sized logs on each side at the bottom of the burn chamber. NB: In order to avoid a build-up of soot on the glass, it is important not to let the logs touch the glass.
- Place firelighters or bark off the birch wood between the logs. Stack some finely split wood on top in a criss-cross pattern. Light the fire.

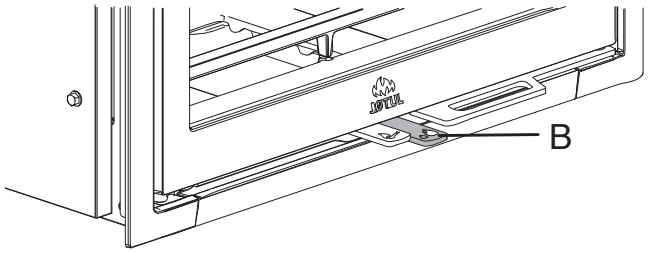
Fig. 42



- Pull out the ignition vent **(A)** (the air vent **(B)** automatically follows.

5.3 Stoking the fire

Fig. 43



- To be able to control the heat output, it is important to have a thick layer of embers and a high temperature in the burn chamber. Stoke the fire with more wood when it has burned down to embers. **NB: Use a glove or something similar to protect your hand in case the handles are hot.**
- Open the door slightly and allow the pressure in the
- burn chamber to even out for a few seconds before opening the door fully. This prevents smoke and ash from spilling out. Never put on more wood while the fire is burning well.
- Stoke with 2 or 3 logs that together weigh about 2 kg. To ensure optimal combustion, logs must NOT be higher than the upper holes in the rear plate.
- Close the door.
- Leave the ignition vent and the air vent open for 2 or 3 minutes until the logs have turned black and are burning well. Then adjust the ignition and air vents to 40% to 70%.
- The conditions for controlling combustion vary depending on the temperature in the burn chamber and the draught in the chimney.

Important! It is important to get the wood burning quickly and we therefore recommend that you open up the air supply. Burning at too low a temperature and with too little air can in some cases cause gas ignition which may damage the stove.

- **Refuelling on to a low fire bed**: If there is insufficent burning material in the firebed to light a new fuel charge, excessive smoke emission can occur. Refilling must be carried out onto a sufficient quantity of glowing embers and ash that new fuel charge will ignite in a reasonable period. If there are too few embers in the fire bed, add suitable kindling to prevent excessive smoke.
- **Fuel overloading**: The maximum amount of fuel specified in this manual should not be exceeded, overloading can cause exess smoke
- **Operating with door left open**: Operation with the door open can cause excess smoke. This appliance must not be operated with the appliance door left open except as directed in the instructions.
- **Dampers left open**: Operation with the air controls or apploance dampers can excess smoke. The appliance must not be operated with air controls, appliance dampers or door left open exept as directed in the instructions.

Warning against overheating

Never overheat the fireplace

The fireplace has been designed and tested for use at a nominal output of 7 kW. This corresponds to a combustion rate of about 2.3 kg of wood per hour.
The maximum amount each time is 3.4 kg per hour (3-4 logs at a time).

Important!

- Never have a fire burning with the ignition vent fully open for any length of time. A sure sign of overheating is when parts of the stove glow red. If this happens, reduce the air vent opening immediately.
- Seek professional advice if you suspect that the chimney is not drawing properly (too much/too little draught).

Odours when using the fireplace for the first time

When the fireplace is used for the first time, it may emit an irritating gas which may smell slightly. This is because the paint on the outside is drying. The gas is not toxic but you should open some windows to ensure the room is thoroughly ventilated. Let the fire burn with a high draught until all traces of the gas have disappeared and no smoke or odours can be detected.

5.4 Fuel requirements

Wood quality

Chopping and storing wood

- You can use any type of wood as firewood. However, harder types such as beech and ash are generally better as they burn more evenly and create less ash. Other wood types, like maple, birch and spruce, also make excellent firewood.
- Firewood is best if you fell the tree and saw and split the wood before May 1st.
- Remember to cut the logs to the size of your stove's combustion chamber. We recommend a diameter of 6 to 10 cm and the length should be about 10 - 20 mm shorter than the combustion chamber, to leave enough space for air to circulate. Logs with a larger diameter than this will need splitting before use. Split wood dries faster.
- Sawn and split logs should be stored in a dry place for 1 to 2 years before they are sufficiently dry to use.
- It's a good idea to bring logs in to stand at room temperature for a few days before using them.

Moisture

To avoid environmental problems and to ensure optimum burning efficiency, the wood must be completely dry before it is used as firewood:

- The moisture content should not be more than 20%.
- A moisture content of between 15% and 18% yields best results. An easy way to check if wood is dry is to knock two logs together. If the wood is damp, the logs will sound dull when knocked together.
- If the wood used is too damp, most of the heat it produces will be used to evaporate the water. The stove does not heat up and does not heat the room. This is not economical. It also causes soot to build up on the glass, in the burn chamber and in the chimney. Burning damp wood also causes pollution.

Be especially careful never to use the following materials as fuel in your fireplace:

- Household rubbish, plastic bags, etc.
- Painted or impregnated timber (which is extremely toxic).
- Laminated wooden planks.
- Driftwood

These may harm the product and are also pollutants.

NB: Never use petrol, paraffin, methylated spirit or similar liquids to light the fire. You may cause serious injury to yourself and damage to the product.

5.5 Wood consumption

Wood consumption, at nominal heat output: Approx. 2.3 kg/h.

The size of the logs should be:

Kindling (finely split wood):

Length: 30 - 50 cm
Diameter: 6 - 10 cm
Quantity for kindling: 3 logs weighing 0.6-0.8 kg each and 10 to 12 sticks weighing about 1 kg in total.

Stoking the fire:

Wood (split wood):
Length: 30 - 50 cm
Quantity required each time: 2 or 3 logs weighing 0.7 kg each, i.e. 1.5-2.0 kg each time.
Stoking frequency: Approx. 50 minutes

Nominal heat output is achieved when the air vent is open approximately 40% to 70% and the ignition vent is open 0% to 50%.

5.6 General notes

PLEASE NOTE! Parts of the wood-burning stove, especially the outer surfaces, become hot during use. Due care should be exercised.

- Wear a glove when handling the stove
- Never empty ashes into a flammable container. Ashes can contain glowing embers long after you finish operating the stove
- Keep the combustion chamber closed except during ignition, refuelling and removal of residue material to prevent fume spillage
- Keep the air intake and output holes free from any accidental blokage while the stove is in use
- When the stove is not in use you can close the dampers to avoid a draught through the stove
- If the stove has not been used for some time, you should check the flue passageways for potential blockages before relighting
- We advise you strongly not to use the stove over night. The stove is not suited for this purpose
- NOTE: Never place flammable material in the radiation zone of the stove!

6.0 Maintenance

6.1 Cleaning the glass

The product is equipped with an air wash for the glass. Air is sucked in through the air vent on the top of the product and down along the inside of the glass.

Good advice! For normal cleaning, moisten a paper towel with warm water and add some ash from the burn chamber. Rub it over the glass and then clean the glass with clean water. Dry well. If it is necessary to clean the glass more thoroughly we recommend using a glass cleaner *(follow the instructions on the bottle).*

6.2 Ash removal

- Only remove ash when the fireplace is cold.

1. Use a scoop or similar to remove the ash through the door.
2. Always leave some ash as a protective layer on the bottom of the fireplace.

6.3 Cleaning and soot removal

Soot deposits may build up on the internal surfaces of the fireplace during use. Soot is a good insulator and will therefore reduce the fireplace's heat output. If soot deposits accumulate when using the product, they can easily be removed by using a soot remover.

An annual internal cleaning is necessary to get the best heating effect from your product. It is a good idea to do this when cleaning the chimney and flue pipes.

6.4 Sweeping flue pipes to the chimney

Flue pipes must be swept through the flue pipe sweeping hatch or through the door opening.

6.5 Inspection of the fireplace

Jøtul recommends that you carefully inspect your fireplace yourself after it has been swept/cleaned. Check all visible surfaces for cracks. Also check that all joints are sealed and that the gaskets are in the correct position. Any gaskets showing signs of wear or deformation must be replaced.

Thoroughly clean the gasket grooves, apply ceramic glue (available from your local Jøtul dealer) and press the gasket well into place. The joint will dry quickly.

6.6 Exterior maintenance

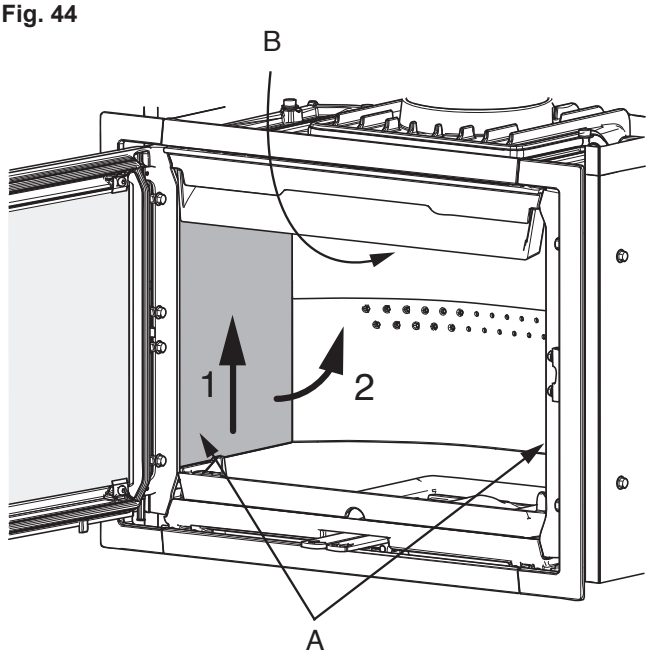
Painted products may change colour after several years' usage. The surface should be cleaned and brushed free of any loose particles before new paint is applied.

7.0 Servicing

Warning! Any unauthorised changes to the product are illegal!
Only original spare parts may be used!

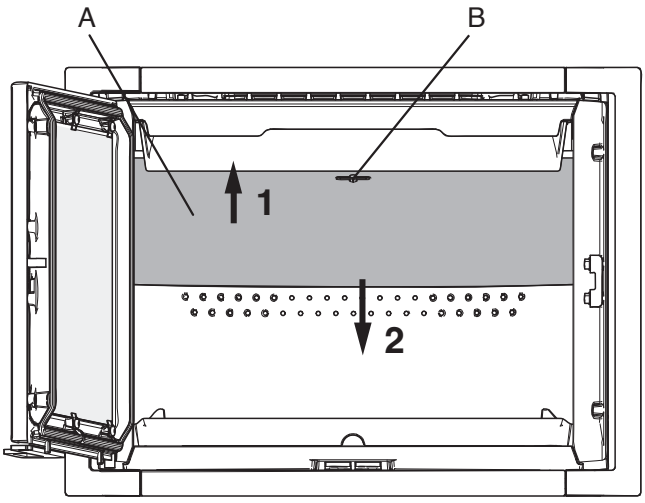
7.1 Replacing the burn plates, baffle and exhaust deflector

Fig. 44



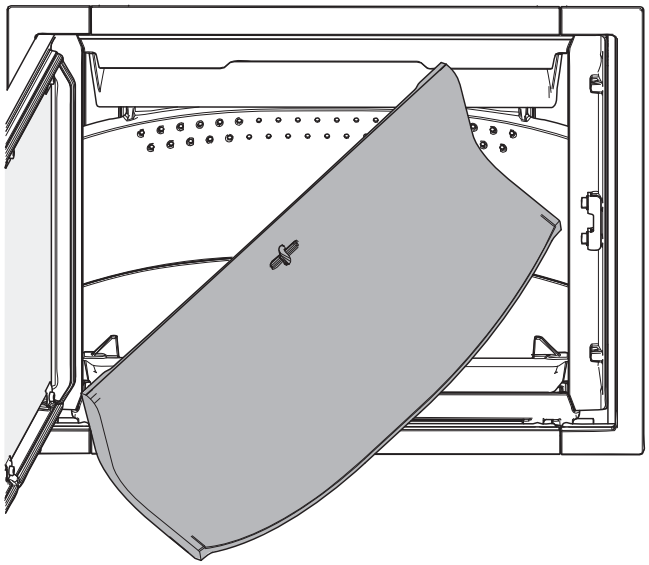
1. First remove the log retainer **(Fig. 13 A)** .
2. Remove the side burn plate **(A)** by lifting it up slightly while holding the baffle **(B)** up. Pull the side burn plate out at the bottom and lift it out.
3. Then lift out the other side burn plate while holding the baffle up in the same way as for the first side burn plate.

Fig. 45



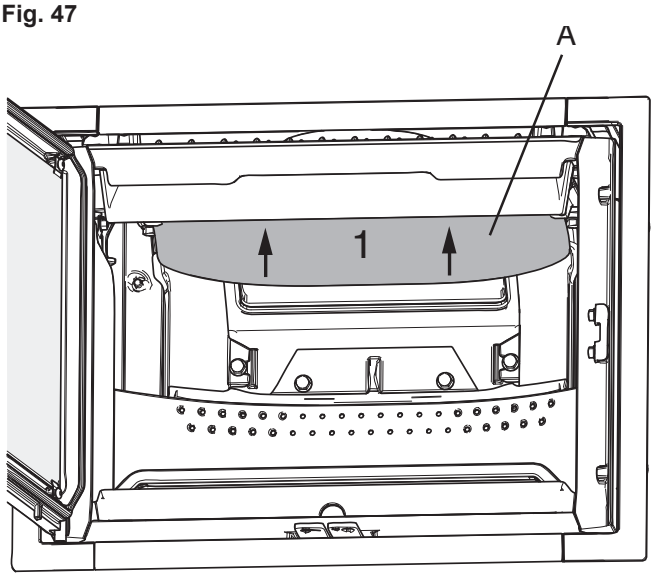
4. First lift the baffle **(A)** up. Turn the key **(B)** 90° and then remove the key. Pull the back edge of the baffle down.

Fig. 46



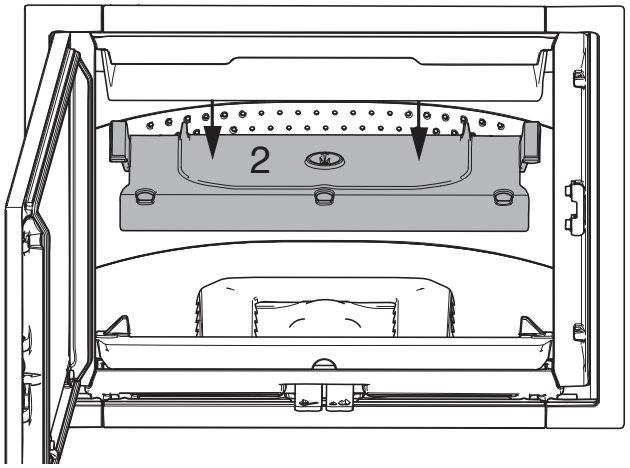
5. Turn one corner towards you and pull it out sideways.

Fig. 47



6. Then remove the exhaust deflector **(A)** by raising it slightly to begin with. Then push the exhaust deflector backwards.

Fig. 48

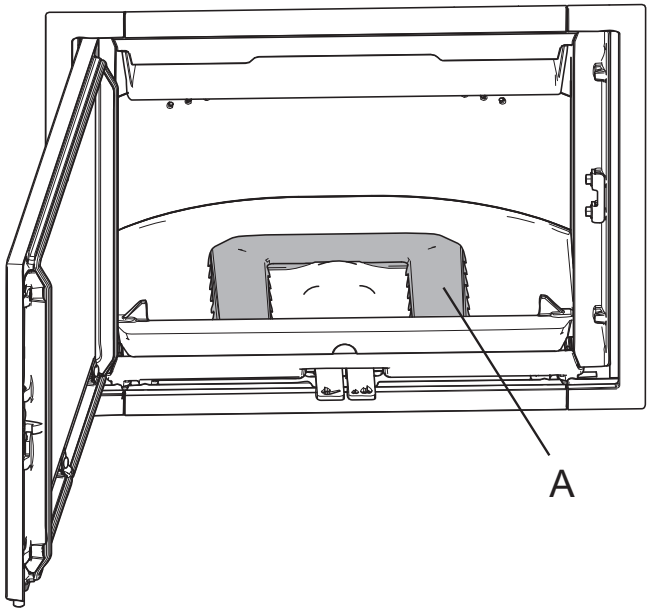


7. Lower the exhaust deflector and lift it out.
8. When refitting, follow the same procedure in reverse order.

7.2 Replacing the air duct and inner bottom

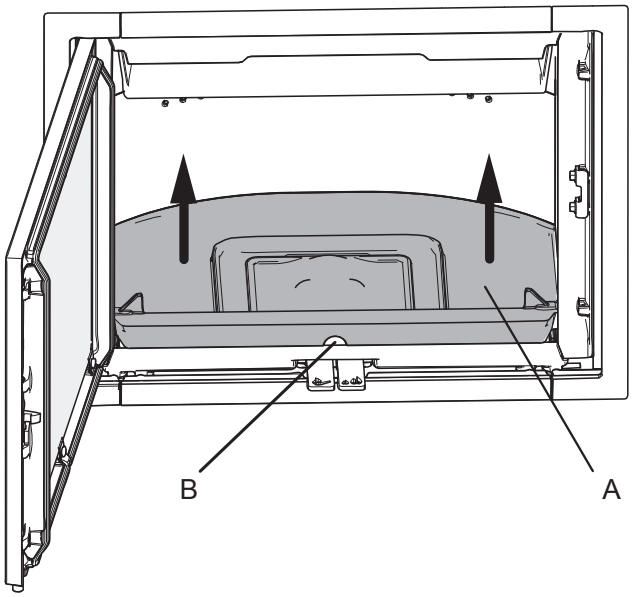
It is important that the insert is level when installing it inside a brick or prefabricated surround and hearth/open fireplace.

Fig. 49



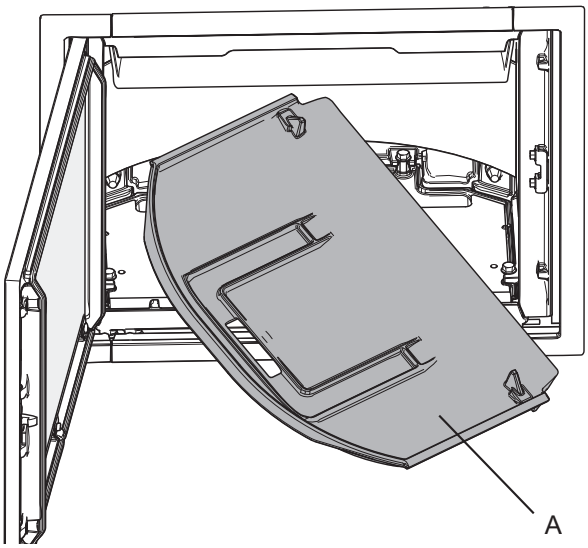
1. Lift the air duct **(A)** up and remove it.

Fig. 50



2. Take hold of the hole **(B)** at the front edge of the inner bottom **(A)** and lift it up.

Fig. 51

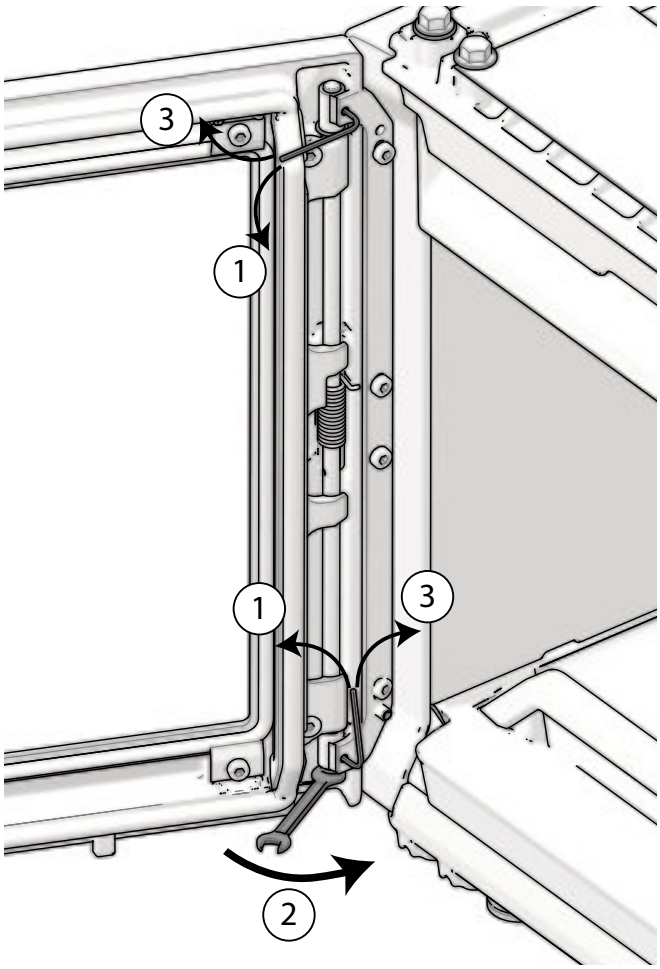


3. Turn one corner towards you and pull the inner bottom out.
4. When refitting, follow the same procedure in reverse order.

7.3 Self-closing door

By making this change, you make the door self-closing.

Fig. 52



1. Loosen the two Allen screws.
2. Tighten the screw on the underside.
3. Tighten the Allen screw again.

NB! This operation must be preformed several times to achieve the desired effect.

8.0 Optional extras

8.1 Leg Rack, complete

Item no. 51044759

8.2. Door lock, complete, left

For right-hinged door
Item no. 50045754

8.3 Frames

Frame for the Jøtul I 520 F
Item no. 50045750

Frame for the Jøtul I 520 FL/FR
Item no. 50045751

Frame for the Jøtul I 520 FRL
Item no. 50045752

8.4 Convection top plate, complete I 520 F

Item no. 50045755

8.5 Sheet metal grid

Sheet metal grid Jøtul I 520 F / FR / FL
Item no. 50051746

9.0 Operational problems - troubleshooting

Poor draught

Check the length of the chimney and that it complies with national laws and regulations. (See also «2.0 Technical data»). Make sure that the minimum cross section on the chimney is according to «2.0 Technical data» in the installation manual. Make sure that there is not anything preventing the smoke gasses from escaping: branches, trees, etc.
Upon suspicion of excessive/poor draught in the chimney, seek professional help for measurement and adjustment.

The fire extinguishes after a while

- Make sure that the firewood is sufficiently dry.
- Find out whether there is negative pressure in the house, close mechanical fans and open a window close to the fireplace.
- Check that the air vent is open.
- Check that the flue outlet is not clogged by soot.

Unusual amount of soot accumulates on the glass

Some soot will always stick to the glass, but the quantity depends on:

- Moisture in the fuel.
- The local draught conditions.
- Air vent opening.

Most of the soot will normally burn off when the air vent is opened all the way and a fire is burning briskly in the fireplace. (See «6.1 Cleaning the glass».)

10.0 Recycling

10.1 Recycling packaging

Your fireplace is delivered with the following packaging:

- A wooden pallet that can be cut up and burned in the fireplace.
- Cardboard packaging that should be taken to a local recycling facility.
- Plastic bags that should be taken to a local recycling facility.

10.2 Recycling the fireplace

The fireplace is made of:

- Metal that should be taken to a local recycling facility.
- Glass that should be disposed of as hazardous waste. The glass in the fireplace must not be placed in a regular source segregation container.
- Vermiculite burn plates that can be disposed of in regular waste containers.

ENGLISH

11.0 Guarantee terms

1. Our guarantee covers:

Jøtul AS guarantees that the external cast-iron parts are free from defects in materials or manufacturing at the time of purchase. You may extend the guarantee on the external cast-iron parts to 25 years from the date of delivery by registering the product on jotul.com, and print out the extended guarantee card within three months of purchase. We recommend that the guarantee card be kept together with the receipt. Jøtul AS also guarantees that steel plate parts are free from defects in materials or manufacturing at the time of purchase for a period of 5 years from the date of delivery.

The guarantee applies on the condition that the stove has been installed by a qualified installer in accordance with applicable laws and regulations and Jøtul's installation and operating instructions. Repaired products and replacement items are guaranteed within the original guarantee period.

2. The guarantee does not cover:

2.1. Damage to consumables such as burn plates, fire grates, flue baffles, gaskets and similar as these deteriorate over time due to normal wear and tear.
2.2. Damage caused as a result of improper maintenance, overheating, use of unsuitable fuel (e.g of unsuitable fuel are, but not limited to driftwood, impregnated wood, plank offcuts, chipboard) or too moist / wet wood.
2.3. Installation of optional extras for the purpose of rectifying local draught conditions, air supply or other circumstances beyond Jøtul's control.
2.4. Cases involving alterations / modifications to the fireplace without Jøtul's consent or the use of non-original parts.
2.5. Damage caused during storage at a distributor, transport from a distributor or during installation.
2.6. Products sold by unauthorized sellers in areas where Jøtul operates a selective distribution system.
2.7. Associated cost (e.g.but not limited to, transport, manpower, travel) or indirect damages.

Pellets stoves, glass, stone, concrete, enamel and paint finish (e.g. but not limited to chipping, cracking, bubbling or discolouration and crazing) are applicable to the national legislation governing the sale of consumer goods. This guarantee is valid for purchases made within the territory of the European Economic Area. All guarantee inquiries must be addressed to your local authorized Jøtul dealer within a reasonable amount of time, which shall not be later than 14 days from the date on which the fault or defect first became apparent. See list of importers and dealers on our web site www.jotul.com.

If Jøtul is unable to meet the obligations outlined in the above guarantee terms, Jøtul will offer a replacement product with a similar heating capacity free of charge.

Jøtul reserve the right to decline of any replacement of parts or service in the event that the guarantee is not registrated online. This guarantee does not affect any rights under applicable national legislation governing the sale of consumer goods. The national complaint right applies from the purchase date and only in exchange for a receipt / serial number.