Installation instructions

www.stuv.com



For professional use





Authorization Number CRC 201302

February 2020 93109157 We recommend that you read the instructions before proceeding with the installation. With certain configurations, the sequence of operations to be performed may slightly vary.

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Standards, certification and technical characteristics

IMPORTANT:

The Stûv 30-Compact ONE (NZ) is designed to function as a closed door wood fire, suitable for installing on properties of less than 2 hectares, LEB areas in New Zealand (Low Emission Burner).

THIS APPLIANCE MUST BE OPERATED IN GLASS DOOR/ CLOSED DOOR MODE - EXC

Data provided in this notice are supplied by a certified laboratory.

This appliance has been tested and certified by Spectrum Laboratory Ltd based on the following standards:

AS/NZS 4012:2014 AS/NZS 4013:2014 AS/NZS 2918:2001

Weight and dimensions

WARNING:

The appliance and flue-system must be installed in accordance with **AS/NZS 2918:2001** and the relevant building code or codes.

Any modification of the appliance that has not been approved in writing by the testing authority will be in breach of the approval granted for compliance with **AS/NZS 4013**.

Once the flue has been installed and approved by a professional installer, the flue must not be modified in any way.

The appliance must be bolted through the base to comply with the seismic restraint provisions of **AS/NZS 2918:2001**.



Stûv 30-compact one is covered by the patent nr 1130323.

System mass	114 kg 150 to ceiling/200/250mm W465 x H1040 x D447mm	
Flue kit		
Firebox dimensions		
Dertermined under test conditions		
Nominal thermal output	8 kW	
Efficiency	65%	
Emissions	0,32 g/kg	
Fuel type		
SOFTWOOD ONLY		
Maximum length of logs in vertical position	40 cm	
Maximum length of logs in horizontal position	25 cm	
Range of wood consumption per hour recommended (at 12% humidity)	0.8–2.5 kg	
Maximum limit for consumption of wood per hour (to avoid overheating the system)	3.3 kg/h	

Recommendations

This appliance should be installed and checked by a qualified professional. Ensure you have read the operation guidelines thoroughly prior to first use.

For any questions or concerns please contact **The Fireplace Ltd** on **09 6236990**.

The installation process is outlined below:

• Determine position of firebox and flue carefully observing the clearances described within this section

• Install the external flue

• Install the internal flue and engage the firebox

• Ensure the floor has adequate protection

NOTE:

We strongly recommend that our products be installed and serviced by professionals certified by the NZHHA.

CAUTION:

Using components or parts other than those provided by the manufacturer or modifying the specification of components may result in inferior or unsafe operation. If such action is necessary, consult the manufacturer in the first instance.

Dimensions



PREPARATION OF THE AREA

Safety and clearance distances

1

120

2

160mm

≥800*

a

The radiation from the glass door [diagram 1/a] and from the sides of the stove [diagram 1/b] can be considerable.

Whatever the direction of the rotating stove, ensure safe distances from combustible materials are maintained.



Clearance from non-combustible surfaces (eg. masonry)

100mm minimum clearance is required from fully non-combustible surfaces. [diagram 2]

Clearance from combustible surfaces (eg. timber, joist & concrete) in corner

configuration. [Diagram 3]

with the application of heat shielding to walls in accordance of

is required from normal non-

combustible glass.[Diagram 4] IMPORTANT: Frames must also be

considered. Timber window frames must be treated as combustible

surfaces. Aluminum frames can be treated as non-combustible surfaces. Clearance from combustible surfaces (eg. timber, joist & concrete) in parallel configuration. [Diagram 5]

AS/NZS 2918:2001. Clearance from glass. 250mm minimum clearance

Note: clearances may be reduced









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Protecting the floor

Any combustible floor beneath a fireplace must have a floor protector that extends 300mm at the front.

If installed directly on combustible material, the floor protector must be made of a minimum 9mm thick cement sheet or other non combustible finishes including the Stuv Steel Plate.

If the combustible floor is installed on concrete, you can replace the combustible material with noncombustible material laid directly onto the concrete.

Floor Protector laid on Timber Floor.



Floor Protector laid on Joist.



Floor Protector laid on Concrete.



Top View.



The stove requires air for combustion.

The ideal solution

The Stûv 30-compact one is designed to be directly connected to an outside air inlet (independent of the air in the house). We recommend this set-up. The connection can be made below the stove [diagrams 1/a et 2] or at the back [diagram 1/b].

If the stove is not connected directly to an outside air inlet...

A sufficient air inlet (Ø 120 mm) should ideally be created close to the stove [diagram 3].

This air inlet comes from a ventilated empty space, a ventilated room (cellar) or from outside (mandatory regulation in some countries) [diagram 2].

The flue that brings in outside air... (whether it is connected to the stove or not)

... will be protected on the outside by a grill [diagram 2/a-3/a] the free passage section of which is at least equivalent to the section of the air inlet. Please note that the infiltration of water and the effect of the wind can damage the system.

... will ideally be fitted with a closure valve (for example, the Stûv valve – see below) [photo 4] to prevent the room from becoming cold when the stove is not in use.

... will be as short as possible to prevent pressure loss and to prevent making the house cold.

If you use our standard flexible Ø 63 mm flue, we recommend a maximum length of 2 m and no more than 4 elbows (see table below). If you exceed these guidelines, you must compensate with a greater diameter and/or a smoother duct.

Careful not to crush the flue.

Length of flue	max. permitted number of elbows
1 m	4 elbows
2 m	4 elbows
3 m	2 elbows
4 m	0 elbow

The closure damper

[diagram 2/b and photo 3] prevents the house from becoming cold when the stove is not in use.

This system is optional if you choose a connection directly to the stove [diagram 1]. However, it is still a good idea if the ducts are too long to reach the stove or if it is being installed in an energy-efficient house.

It should ideally be located as close as possible to the outside wall. It can be controlled from inside if it is not too far away from the stove (length of the flexible of the valve control = 1.2 m).

If it is not possible to bring in outside air near the stove (most unfavourable case)...

...ensure there is sufficient replenishment of air in the room when the stove is in use.

CAUTION

Be careful with air extraction systems (kitchen hoods, air conditioning, mechanically-controlled ventilation, other stoves) in operation in the same space or in an adjacent room. They also use lots of air and can cause a depression in the room and prevent the stove from operating correctly (risk of draughtback). They can affect the operation of the stove even if it is connected to an outside air inlet.









1 more than3000mm 3000mm or less Increase from 1000mm min. until clear within 3000mm of top flue 600mm min 3000mm 7 3000mn 3000mn more than 3000mn Increase from 1000mm 600mm min min. until clear within 3000mm 3000mm of top flue Increase as necessary until nothing within 3000mm of top flue Any nearby structure 3 ADD Co Casing Cover Spider Bracket Roof Line Approved Flashing ner Casing 200mr Outer Casing Inner Casing Internal Swage M Timber nogs Ceramic spacers and screws 12.5 Ceiling Plate Freestanding Appliance •

or Protector

The appliance and flue-system shall be installed in accordance with AS/ NZS 2918:2001 and the appropriate requirements of the relevant building code or codes.

Warning: Mixing of appliance or fluesystem components from different sources or modifying the dimensional specification of components may result in hazardous conditions. Where such action is considered, the manufacturer should be consulted in the first instance.

Warning: The flue or chimney system must be in good condition. It must be inspected by a competent person and passed for use with the appliance before installation.

Warning: Products of combustion entering the room can cause serious health risks.

Warning: The following must be adhered to; AS/NZS 2918:2001:4.9.1

Basic information

For good draught, the stove must be suited to the flue (or vice versa).

An oversized flue is as detrimental to the smooth operation of the stove as an undersized flue.

As the Stûv 30-compact one is a highly efficient stove, the smoke flue must be of good quality. The flue must also be as straight and smooth as possible and insulated to encourage drawing and to prevent condensation.

The ideal solution is a flue built inside the building and thermally insulated. An outside flue without any insulation must be avoided.

The stove must never be connected to a smoke flue serving several systems.

Take care to avoid heat loss!

If several flues are available: only use one of them. Block up the unused flues at the top and bottom and, generally speaking, ensure that the top of the recess where the stove is fitted is air-tight.

Standard outlet diameter

The Stuv 30- compact stoves have an internal flue dimension of 150mm.

Some flue configurations may require a different diameter than that provided as standard. Should this be the case, please consult your retailer.

Flue position [diagram 1 & 2]

The flue termination positions are the minimum required as per NZS 2918:2001. It is possible that flue heights may need to be increased as a result of conflicting air pressure envelopes that may develop over some roof-line shapes and surrounding obstructions. Restriction into clear air movement over any roof may also require different cowl designs, particularly for high wind zones or varying local environment conditions. The flue pipe shall extend not less than 4.6m above the top floor protector.

The minimum height of the flue system within 3m distance from the highest point of the roof shall be 600mm above that point.

The minimum height of a flue system further than 3m from the highest point of the roof shall be "a minimum" 1000mm above roof penetration.

No part of any building lies in or above a circular area described by a horizontal radius of 3m about the flue system exit.

Terminate all flues a minimum of 600mm above the highest ridge-line of the donor building.

In extreme wind areas it may be necessary to consult your local agent for further technical assistance.

Flue penetration and terminations

[Diagram 4 & 5]

The flue system's penetration and termination must comply with AS/NZS2918:2001

Chimney casing must be ventilated as per diagram 5.

Note: All external air vents & ceiling penetrations must be bird & rodent proofed with permanently fixed screens







Allow play of 2 mm/m for expansion of the flue and to ensure smooth rotation of the stove.

Connection above [diagrams 1/a and 2/a]

If the flue is straight, it is simply placed on the stove; the flue turns with the stove.

If the flue has an elbow or is deflected, it is fixed at wall or ceiling level (rotation of stove only).

Calculation of the height of the duct

For the sinking of the duct at stove level, add 25 mm for a duct 2 mm in thickness and 35 mm for a 0.4 mm duct.





Air-tightness

The various components which make up the connection between the stove and the smoke flue and those which make up the flue itself have to be fitted so that they are airtight for the condensation [diagram 2/a] rather than the smoke [diagram 2/b].

Holding capacity of the structure

Ensure the floor is resistant enough to support the stove; consult a specialist if in doubt.

The stove must be bolted through the base and to the floor to comply with the seismic restraint provisions of AS/NZS 2918:2001.

The stove's surroundings

The heat radiated from the glass door and the walls may be significant.

Whichever direction the stove is facing, please adhere to the safety distances from combustible materials [diagram 1] or ensure that the materials exposed to radiated heat are resistant to high temperatures.

Prevent "heat traps" in the cladding, recess and hood

If the stove is situated in a bell-shaped area (ex: a former hearth), this space must be ventilated to prevent "heat traps".



Tools



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On taking delivery of the equipment

Please note!

Check that the stove has not suffered any damage during delivery. The guarantee only covers damage due to transportation if it is indicated on the delivery slip.

Complaints

If you wish to make a complaint, always quote the serial number visible on the stove in the lower door. [diagram 1]

Accessories

- flue and upper connection
- ground plate
- kit for rear outside air intake

If any of these accessories have been ordered, they will be found around the stove or its packaging. Check that you have received them.



Please note!

The paint is not oven baked and is therefore relatively fragile but will harden after being heated a few times. Handle the system with care when installing.

Moving

While the stove is still packaged, you can use a pallet loader or a hand-lift truck [photo 1]. Move it close to its final position.

If you are unable to transport the stove on its pallet to its final position, please observe the following unpacking instructions.



Unpacking

> Remove the wooden structure using

a claw hammer [photo 1].



> Remove the plastic packaging [photo 2] and the plastic films at the top and bottom of the stove which hold the mobile parts in place during transport.



Note! The hand-lift truck protection [photo 3] supports the stove during handling to avoid putting pressure on the doors or the drum. It is later removed when the stove is moved into its final position.

Please note ! Never undo the two screws holding the support panel in place : it is factory adjusted and fixed [photo 4].







To make the stove lighter, easier to handle and to avoid damaging the mobile parts, we strongly recommend that you unpack the Stûv 30-compact one and remove the contents from the combustion chamber before starting the actual installation.

> Remove the 2 plates on the top of the stove:

on the Stûv 30-compact one simply remove the one at the back and then the one at the front [photo 1].

> Remove the side panels using a size 10 socket wrench [photos 2 and 3].





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> Carefully cut the plastic film holding the doors. Do not tear this film off! One of the ends of this film is stuck between the solid door and the body of the stove. Unlock and open the door using the cold grip to release it [photo 4].

> Remove the hand-lift truck protection:

- open the door and undo the two nuts and bolts (M6x12 hexagonal heads) holding the hand-lift truck protection in place [photo 5 and 6].
- pick up the 2 nuts and close the door.



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> Remove the ash pan:

open the ash pan door [photo 7] and take it out by lifting it off its hinges [photo 8].

> Remove the doors:

half open them gently [photo 9], lift them off their hinges and slide them to the left [photo 10].





Checking the contents of the combustion chamber [photo 1]

You will find:

- spray paint for touching up [photo 1/a]
- cold grip to handle the door and the valve [photo 1/b]
- 2 rotation stops and 2 M5x6 screws [photo 1/c]
- a sealing plate and 2 M5x8 screws
 [photo 1/d]
- installation instructions
- instructions for use

Note!

When you handle symmetrical parts while dismantling, remember to take note of which are the left parts and which are the right ones! It will make re-assembly easier.

Removal of the following parts

> the smoke deflector:

the smoke deflector has been locked down to prevent damage during transport. Remove the two blocking screws from the inside [photo 2].

Tilt and gently slide the smoke deflector towards the back [photos 3 and 4]. Turn it clockwise to release the deflector and its control [photo 5]. Let the deflector drop down [photo 6].













Unpacking the interior parts of the stove (continued)

> the 2 vermiculite deflectors: lift up
the stainless steel support [photo 7]
and slide it forwards [photo 8] then let
the part drop to remove it [photo 9].





> the lateral holders: before removing the lateral holders, first remove the lateral keys: lift them up and bring the bottom of the parts forward [photo 10].

To remove the lateral holders; slide them to the back, [photo 11], tilt them and take them out [photo 12].









> the back holder: remove the pressure screw keeping the deflector cradle in place [photo 13] and pull the back holder forwards [photo 14]. Tilt it towards the stove opening.



Unpacking the interior parts of the stove (continued)

> the ash grille [photo 15].

> the lower protection strut
[photo 16].





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> the smoke deflector cradle [photos 19 to 21].











Final positioning of the stove

Please note! Do not forget to put the hand-lift truck protection back on before moving the stove!

The stove can now be moved to its final position: tilt the stove onto its front.

Note: remember to put a soft protective cloth between the drum ring and the hand-lift truck.



Connection with outside air

If you are not connecting your stove to the outside air, go to the next section.

If the air connection comes from the ground:

> Fix the filling plate (with an 8 mm flat spanner and 2 M5x8 hexagonal head screws) [photos 1 to 4]:

> **Position the stove** over the outside air inlet.

> Check that the joint is fully airtight in relation to the floor.









If the air connection comes from the wall:

> Find the "rear outside air inlet" kit [photo 5].

> Make sure the duct is the desired length bearing in mind the maximum length of the standard Stûv inlet duct is 50 cm. Cut it if necessary.

> Connect the flue to the back of the stove (using 2 M5x6 hexagonal head screws and a size 8 spanner) [photo 6].







> Fix the 2 masking supports

[photo 7a]

- Position the supports so that the additional piece is at the front of the stove [photo 9].
- Fix the 2 supports (using the 4 M5x6 hexagonal head screws and a size 8 spanner) [photo 10].

> Clip on the 2 masking pieces [photo 7b] to their supports and check that they are firmly in place [photos 11 to 12].

> Prepare the 2 panels by removing the lower pre-cut part (using a metal saw) [photo 13]. Smooth the panel edges with a half-moon file.

> Put the stove in position
[photo 14].

















Levelling and fixing the stove

Before you start, make sure that the floor covering is flat and clean. If the floor covering is not level, you will have to take steps to ensure that the lower joint is perfectly airtight.

> Remove the hand-lift truck protection for the final time [photo 1].

> Level the stove: adjust 3 of the 6 feet (1 of each 2) by turning them clockwise (using a size 13 spanner) [photo 2]. Leave the other 3 feet for the moment.

Please note ! Ensure that the joint is properly supported on the ground to ensure air-tightness for outside air intake.

> Adjust the last three feet.

IMPORTANT! The holes in the lower ring are used to bolt the stove to the floor to comply with seismic restraint requirements [photo 3].







Remarks

If you are going to use a connecting flue that is all one piece, allow play of 2 mm/m in length to allow for expansion.

The smoke outlet can accept ducts of 0.4 to 2.0 mm in thickness.

It is preferable to use the screws supplied by Stûv. If not, make sure that you do not use screws that are too long and will block the rotation system.

Connection going upwards

Fit the flue onto the top of the stove and fix it in place using the 3 selftightening screws in the 3 holes provided [photo 1].





Directing the stove

A turning plate means the stove can face in the direction you want the heat to be diffused !

Various possible configurations

You can limit the rotation of the stove to a certain angle using the rotation stops. The choice of rotation angle will depend on your preference, the configuration of the site and the proximity of combustible materials.

The stove's connection (smoke outlet and outside air inlet) will also determine the choice of configuration.

Smoke connection going upwards [diagram 1]

> 360° Rotation: The mechanism allows a complete revolution in both directions [diagram 2].

> 90° Rotation when the stove is placed in a corner [diagram 3].

> 180° Rotation when the stove is placed along a wall [diagram 4].

> 270° Rotation when the stove is placed in front of a corner or a pillar [diagram 5].

Smoke connection going upwards with outside air inlet at the back [diagram 6]

> 90° Rotation: only configuration possible in this case [diagram 7 and photo 8].







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Directing the stove (continued)

Rotation stop

The rotation stop enables you to choose a maximum angle of rotation to which the stove can turn.

> First of all, choose your configuration for the stove (see previous pages). This will define your maximum angle of rotation.

> Take out the 3 stepped screws with a flat screwdriver (2 screws at the front, 1 screw at the back) [photos 1 and 2].

Please note ! Once the 3 stepped screws have been removed, do not under any circumstances move or tilt the stove. This risks damaging the rotation axle of the stove.

> Limit the angle of rotation to 90°, 180° or 270° by fixing the stops [photo 3] (with the M5x6 hexagonal screws) in position : > for 90° [photo 4] > for 180° [photo 5] > for 270° [photo 6]

Please note! Ensure that you fix the stop the right way around (look closely at the photos).















If you have dismantled your stove, re-assemble the following parts :

- the smoke deflector cradle
- the stove hearth holder
- the lower protection strut
- the ash grille
- the back holder
- the lateral holders
- the lateral keys
- the 2 vermiculite deflectors
- the smoke deflector

Follow the reverse of the dismantling steps! (see pages 12 to 16)

Please note! Do not mix up the left and right symmetrical parts.

Put the last parts back in place:

> the ash pan support, insert it right to the back of the stove. Press down at the front of the ash pan support so that it slots properly into place [photo 1 and 2].

> the ash pan [photo 3],

> the door

> the panels: position the lower part by placing the holes over the positioning cones [photo 5]. Then fix the upper part of the panels by screwing them into place (using 4 M5x8 hexagonal head screws) [photo 6].













> the 2 upper plates: clip the front part of the plate into place [photo 7]. Then place the rear part of the plate in position [photo 8].

> the ash pan door [photo 9].

Please note! Check that the blocking screws in the combustion chamber for transportation purposes have been removed [photo 10].



When installation of the stove is complete...

... test that the stove is working properly.

Before testing, make sure that no items from the installation have been left in the combustion chamber or the bends and turns (spray paint, tube of grease, tools...)

When the fire is lit for the first time, it may give off some smoke and odours: ventilate the room well.

Consult the instructions for use.

Once the stove is installed, give the instructions for use to the user. Complete the guarantee certificate (at the back of the instructions for use) with him/her and recommend that they send it to the manufacturer or the importer.

CONTACTS

Stûv stoves are designed and manufactured in Belgium by:

Stûv sa rue Jules Borbouse 4 B-5170 Bois-de-Villers (Belgium) info@stuv.com – www.stuv.com

Importer for New Zealand

The Fireplace Ltd

12 Tawari Street Mt Eden, Auckland, New Zealand

www.thefireplace.co.nz

ACCEPTANCE OF WORKS

stûv

PLEASE COMPLETE IN BLOCK CAPITALS.

THE PURCHASER

INSTALLATION ENGINEER

COMPANY

YOUR STÛV STOVE 30-COMPACT ONE

SERIAL N°
DATE OF INSTALLATION

FLUE CHARACTERISTICS

HEIGHT OF FLUE IN M
DIAMETER OF FLUE IN MM
TYPE OF FLUE

CHECK OF SYSTEM'S SETTINGS

CHECK ON THE VACUITY OF THE FLUE VALIDATION OF DRAUGHT VERIFICATION OF AIR INLET SETTING (OPEN/CLOSED)	
CHECK OF THE HUMIDITY OF THE WOODHUMIDITY %	
COMMENTS	

SAFETY GUIDELINES

The use of this system has to comply with the installer's recommendations and the manufacturer's instructions which are set out in the directions for use issued to the customer with the invoice and this confirmation of acceptance.

The efficiency and longevity of the system depend directly on the quality of wood used: it is essential that wood with humidity of less than 18% or reconstituted wood briquettes are used. Green wood with drying-out time of less than 24 months cannot be used (more information in the "fuels" section on pages 8 and 9 of the directions for use).

THE INSTALLATION ENGINEER (name written out in full and signature).....

THE CUSTOMER (name written out in full and signature)

Directions for use of the system issued to customer / D Information sheet on lighting the stove issued to the customer

installation instructions Stûv 30-compact one

02/20 - SN 162181 > ...

Stûv reserves the right to make changes without prior notice. These instructions have been produced with the greatest of care. However, we do not accept responsibility for any errors that may have been made. Editor: Gérard Pitance – rue Jules Borbouse 4 - 5170 Bois-de-Villers – Belgium [nl] [de] [it] [es] [pt] [cz] [en] [fr] >
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