## Solution

40011444-1327
(Sfaher


1-1

1-3
$-3$



1-2

1.4


$3 \lll<$
(S)faher


4-1


4-2



| Dimensions | Terminal position <br> (For good working of the appliance) | Distance <br> $\mathbf{m m}$ |
| :---: | :---: | :---: |
| D | Below a gutter soil pipes or drain pipes | 500 |
| E | Below eaves | 500 |
| F | Below carport, roof or balcony | 500 |
| G | From a vertical soil pipes or drain pipes | 300 |
| J | Inside and outside of a corner | 500 |
| K | From a surface to a terminal | 1000 |
| L | From a terminal facing a terminal | 1000 |
| M | From the centre of two roof terminals | 450 |
| N | Two Wall terminals above to each other | 1000 |

## 5.1

## 1 Introduction

The appliance can only be installed by a competent person in accordance with the Gas Safety. We urgently advise you to read this installation manual properly.
This appliance complies with the guidelines
for European gas appliances (Gas Appliances
Directive) and bears the CE mark.

Check the appliance for transport damage and report any damage immediately to your dealer

## 2 Safety instructions.

- The appliance should be placed, connected and annually checked in accordance with these installation instructions and valid national and local Gas Safety (Installation and Use) Regulations .
- Check whether the data on the registration plate are in agreement with the local type of domestic gas and pressure.
- The fitter is not permitted to change these adjustments or the construction of the appliance!
- Do not place any additional imitation logs or glowing coals on the burner or in the combustion chamber.
- The appliance has been designed for ambience and heating purposes. This means that all surfaces of the appliance, including the glass, can become very hot (hotter than 100 ${ }^{\circ} \mathrm{C}$ ). An exception to this are the bottom of the appliance and the controls.
- Do not place any inflammable materials within a of 0.5 m . of the radiation of the appliance and ventilation grills.
- Due to natural air circulation of the appliance, moisture and volatile components from paint, building materials, floor coverings etc. that haven't yet set, can be drawn through the convection system and can be deposited on cold surfaces as soot. That is why you should not use the appliance shortly after a renovation.
- The first time the appliance is switched on, Let the fire run on maximum setting for several hours so that the lacquer coating will have an opportunity to set and possible
vapours released can be safely removed by ventilation. We advise you to be outside the room as much as possible during this process!
- Please note that:
- all transport packaging should be removed.
- children or pets should not be present in the room.


## 3 Installation requirements

### 3.1 The fire

- The appliance must be built into an existing or a newly to be constructed false chimney breast.
- In appliances with flexible gas pipes, the gas control valve is mounted to the right side of the fire with a cover over the valve for safe transport Unscrew it and mount it at a distance of max. 30 cm behind the access door.
- the transport cover can now be removed(see fig. 1.3)


### 3.2 False Chimney breast

- The false chimney breast must be constructed of an non-combustible material.
- Always ventilate the space above the appliance by means of the grills or a comparable alternative with a minimum air supply of $200 \mathrm{~cm}^{2}$.
- For the finish, use special stucco (min. $100^{\circ} \mathrm{C}$ resistant) or glass fibre wallpaper to prevent discoloration or cracks etc. Recommended drying time: for plaster is a minimum of 24 hours per mm of coat applied.
- The false chimney breast and its construction may not rest on the appliance


### 3.3 Requirements flue system and outlets

- You should always make use of the materials prescribed by Faber. Only by using these materials can Faber guarantee a proper functioning.
- The outside of the concentric flue material can reach a temperature of Approx $150^{\circ} \mathrm{C}$. Make sure of proper isulation and protection in case of transit through combustible wall or ceiling constructions. And observe sufficient distance.
- Make sure that the concentric flue materials are bracketed every 2 metres when they have an extended length, so that the weight of the flue material is not resting on the appliance itself.
- You may never start with a cut-down concentric pipe directly on to the appliance.


## 3.4 terminals

The flue outlet can end on an external wall or a roof. Check whether the outlet desired by you complies with local requirements concerning good function and ventilation systems
For a proper functioning the terminal should be at least 0.5 m . away from: (See fig 5.1 )

- Corners of the building.
- Roof overhangs and balconies.
- Eaves (with the exception of the roof ridge)


### 3.5 Existing chimney

You can also connect the appliance to an existing chimney. The existing chimney will function as an air supply and a flexible stainless steel pipe drawn up through the chimney will remove the combustion gas. The flexible stainless steel pipe of $\varnothing 100 \mathrm{~mm}$ should have a CE mark for temperatures up to $600^{\circ}$ Celsius.

The chimney should comply with the following requirements:

- The diameter of the flue system must be at least $150 \times 150 \mathrm{~mm}$.
- There should be no more than 1 appliance connected to a flue pipe.
- The chimney must be in good condition
- No leakage and
- It should be properly swept.

For more information about connections to existing flue systems, see the manual "connections".

## 4 Preparation and Installation instructions

### 4.1 Gas connection

The gas connection must comply with locally valid standards.

We advise Pipe work from the meter to the appliance must be of adequate size., with near the appliance a gas isolater tap that should always be accessible. Place the gas connection in such a way that this is easily accessible, and that before service, the burner unit can be disconnected at all times.

### 4.2 Electric connection

If an adapter is used for the power supply, then a wall socket $230 \mathrm{VAC}-50 \mathrm{~Hz}$ must be mounted in the close neighbourhood of the hearth.

### 4.3 Preparation of the appliance

- Remove the packaging of the appliance. Make sure the gas pipes underneath the appliance are not damaged.
- Clear a safe space to store the frame and the glass.
- Remove the frame , (if necessary) and the glass and take the separately wrapped parts out of the appliance
- Prepare the gas connection to the gas control valve.


### 4.4 Placing the appliance

Take the installation requirements into account (see chapter3)

Place the appliance into the proper position and if necessary, adjust the height with the adjustable legs.
Adjusting the height and leveling the hearth with a spirit level.(fig. 2.3)

- Rough height adjustment:
- with the extending legs, or the long additional legs.
- Accurate:
- with the rotating adjustable legs.


### 4.5 Mounting the smoke emission outlet materials

- In case of a wall or roof terminal, the hole must be at least 5 mm bigger than the diameter of the flue material.
- Horizontal parts must be installed at a (3 degree) slope up away the appliance.
- Build up the system from the appliance. If this is not possible, you should make use of a adjustable pipe.
- For fitting the system a $1 / 2$ metre cut-down pipe should be used. Make sure the inner pipe is always 2 cm longer than the outer pipe. Wall and
roof terminal are also shortened. These parts must be secured with a self tapping screw.
- Do not insulate but ventilate bild-in flue material (approx.100cm2)


### 4.6 Building a false chimney breast.

Before constructing the false chimney breast we advise you to perform a function test with the gas hearth as described in chapter 7 "checking the installation"

### 4.7 Chimney breast

- Construct the false chimney breast from non- combustible sheet metal in combination with metal profiles or of brickwork / aerated concrete bricks.
- Take the grates and the service panel (see fig. 1.1 and1.2 )into account. Place a protective shield made of non- combustible material above the grates (see fig.1.1A).
- Always use a lintel if the chimney breast is constructed of brickwork. These should not be placed directly onto the appliance.
- Construct the chimney breast against the build-in frame (see fig. 1.1B). Keep a minimum margin of 3 mm between chimney breast and the appliance in connection with the expansion of the appliance.
- The depth of the recess has no influence on the removal of the glass.


## 5 Removing the glass

- Remove the cover strips on the side. (see fig. 3.1
- Remove cover strip on the bottom. (see fig. 3.2 )
- Place the suction discs onto the glass.
- Remove the sealing cord from the groove (see fig. 3.3)
- Remove the groove strips on the sides. (see fig. 3.4)
- Slide the glass upwards so that it is released from the groove. Now gradually move the glass outwards and downwards. (see fig. 3.5 and 3.6)

To replace the glass repeat the process in reverse order.
Remove all Fingerprints from the glass, these will be burned into it once the hearth is used.

## 6 Placing the decorative material

It is not allowed to add different or more materials to the combustion chamber. Always keep the pilot burner and the second thermocouple free from decorative material! (See fig. 4.1 A up to 4.3 A)
Do not toss all the decorative material onto the burner all at once, it can be obstructed by dust particles.

### 6.1 Imitation logs

- Place a number of the chips onto the burner and on the cover plate
- Place the imitation logs according to instructions. (see fig. 4.1or imitation logs instruction card supplied)
- Divide the remainder of the chips over the burner and the cover plate . Avoid a thick layer onto the burner, this has a negative effect on the fire image.
- Ignite the pilot and main burner according to the instructions in the user's manual. Assess whether the flame division is correct. If necessary, move the chips until there is a proper division of flames.
- Place the glass and check the fire image.


### 6.2 Pebbles/ Greystone

- Place the pebbles on the burner and the cover plate (see fig. 4.2/4.3 or imitation logs instruction card supplied). Avoid a double layer; this has a negative effect on the fire image.
- Place the glass and check the fire image.


## 7 Checking the installation.

### 7.1 Checking the ignition of the pilot burner, main burner.

Start the pilot and main burner according to the instructions in the user's manual.

- Check whether the pilot light is properly positioned above the main burner and is not covered by chips, an imitation log or pebbles.
- Check the ignition of the main burner at full mark or low mark.
(the ignition should take place quickly and easily).


### 7.2 Checking for gas leakage.

Check all connections and joins for possible gas leaks by means of a gas leak detector or spray.

### 7.3 Checking the burner pressure and the pre-pressure

Check whether the burner pressure and the inlet pressure measured agree with the data indicated on the registration plate

### 7.4 Measuring the inlet-pressure:

- Turn off the gas control tap.
- Open the pressure gauge nipple B (see fig. 2.1) a few turns and connect a pressure gauge hose to the gas control valve.
- Carry out this measurement when the appliance is on at full gas mark and when it is on the pilot light.
- If the inlet pressure is too high you are not permitted to connect the appliance.


### 7.5 Measuring the burner pressure:

Only perform this measurement if the inlet-pressure is correct.

- Open the pressure gauge nipple A (see fig.2.1) a few turns and connect a pressure gauge hose to the gas control valve.
- The pressure must agree with the value indicated on the registration plate. In case of deviations, get in touch with the manufacturer.
* Close the pressure gauge nipples and check these for gas leaks.


### 7.6 Checking the flame picture.

Allow the applaince to burn for at least 20 minutes at full and then check the flame picture for:

1. Distribution of the flames
2. Colour of the flames

If either one or both points are unacceptable, then check:

- The positioning of the imitation logs and/or the quantity of pebbles or chips on the burner.
- The connections of the Flue materials for leakage (in case of blue flames)
- Whether the correct flue restrictor has been mounted
- The outlet .
- Wall terminal is installed correctly
- Roof terminal is fitted and sited correctly
- The flue system is correctly calculated

With CO/CO2 measure equipment you have the possibility to measure the quality of the flue gases and fresh air.
There are two measure points between the glass and build-in frame.
One for measuring the air intake and one for the flue gases.(fig.1.8 A and B )
The ratio of CO2 and CO level may not exceed 1:100

## Example:

If CO2 is $4,1 \% \max$ CO 410ppm
If the ratio exceeds $1: 100$ or flue gases are measured in the fresh air you should also check the above points.

## 8 Instructing the client

- Recommend that the appliance be serviced annually by a competent person in order to guarantee a safe use and a long lifespan.
- Advise and instruct the client about maintenance and cleaning of the glass. Emphasize the risk of burning in fingerprints.
- Instruct the client about the operation of the appliance and the remote control unit, including the replacement of the batteries and adjusting the receiver for initial use.
- Hand over to the client:
- Installation manual
- User's manual
- Imitation logs instruction
card
- Suction lifters


## 9 Annual maintenance

### 9.1 Service and cleaning:

- Check and clean if necessary after checking:
- The pilot light
- The burner (in an LPG flat burner replace the burner sheet)
- The combustion chamber
- The glass
- The logs for possible fractures
- The outlet


### 9.2 Replace:

- (for LPG) replace the burner sheet
- If necessary the


## chips/embers.

### 9.3 Cleaning the glass

Most of the deposits can be removed with a dry cloth. You can use ceramic hob cleaner to clean the glass.
Note: prevent fingerprints on the glass. these will be burned into it once the appliance is used and cannot be removed anymore!

Carry-out the check-up according to the instructions in chapter 7 "checking the installation"

## 10 Conversion to a different type of gas (e.g. propane)

This can only be done by installing the proper burner unit. for this purpose get in touch with your supplier.
Always mention the type and serial number of the appliance when ordering.

## 11 Calculation of flue system

Using the flue calculation spread sheet, you can make a flue calculation. (see chapter.14) There is also a App. available, Which can be downloaded with the following code.


The possibilities for the lengths of flue pipes and the possible restrictors have been recorded in a table This table works with a Starter length (STL) Total vertical height (TVH) and Total horizontal length (THL)

### 11.1 Starter length (STL)

Is the first flue part installed on the fireplace and represents a certain value (fig. 12.2 and12 3 A,N, F)
This value is showed in the top row of the table ( see chapter 12 )

### 11.2 Total Vertical Height (TVH)

TVH is the total height, measured from the top of the fireplace to the terminal. Indicated as TVH., This can be measured or determined from the construction drawing.
see also the TVH indication in the drawings. (fig. 12.112 .2 and 12 3: TVH)

### 11.3 Total Horizontal length:(THL)

THL is the calculated Horizontal Length and may consist of bends or pipe lengths in the horizontal direction. Indicated as I, K, and Q for bends and $\mathrm{H}, \mathrm{j}, \mathrm{L}, \mathrm{M}, \mathrm{P}$ and $R$ for pipes. (fig.12.1 and 12.2)

### 11.4 Total length of horizontal flue:

In the drawings the horizontal pipe lengths
consists of the elements $\mathrm{H}, \mathrm{J}, \mathrm{L}$,
$M, P$ and $R$. (fig. 12.1 and 12.2 )

## 11.5 $90^{\circ}$ bends in the horizontal direction

Only bends in the horizontal direction. Indicated as I, K and Q. (fig.12.1,12.2 and 12.3)
$11.645^{\circ}$ of 30 bends in the horizontal direction

Only bends in the horizontal direction.

## $11.790^{\circ}$ bends from vertical to horizontal direction

$90^{\circ}$ bends from vertical to horizontal direction or reversed. Indicated as G, O and S. fig.12.2 and 12.3 )

## $11.845^{\circ}$ of $30^{\circ}$ bends from vertical to horizontal direction

$30^{\circ}$ or $45^{\circ}$ bends in the vertical direction. Indicated as B and D. (fig 12.1 )
11.9 Flue pipes under $45^{\circ}$ or $30^{\circ}$ gradient::

Flue pipes installed with an angle of $30^{\circ}$ or $45^{\circ}$ in the vertical direction. Indicated as C. (fig 12.1 ) Only possible in combination with 2 pieces of $45^{\circ}$ or $30^{\circ}$ bends in the vertical plane
11.10 Table:

Find the correct vertical (TVH) and horizontal (THL).lengths in the table.
In case of an " $x$ ", or if the values are outside the table, the combination is not permitted.in this case, change the length of the TVH or THL. If a value is specified, verify that the
calculated STL value is not lower than indicated in the table. If so than the STL must be changed
The value found indicates the width of the restrictor to be placed ("0" means no restrictor should be placed).
Generally a 30 mm restrictor is pre-installed. (See fig. 2.4 )

12 Table flue pipe diamter100/150mm
Vertical (TVH) and Horizontal(THL)

STL


## Example

fig. 12.1
fig. 12.2

fig. 12.3


13 Flue calculation spread sheet


| Search in the table at TVH and THL and enter the value that is found |
| :--- | :--- | :--- | :--- |
| Is the detected value is a number check whether the completed STL is higher or equal to the |
| value in the table. | found value

## 14 Technical data

| Gas category |  | II 2H3P | II 2H3+ | II 2H3P |
| :---: | :---: | :---: | :---: | :---: |
| Type of appliance |  | C11/ C31 | C11/ C31 | C11/ C31 |
| Reference gas |  | G20 | G30 | G31 |
| Input Nett | kW | 8.7 | 8.7 | 8.7 |
| Efficiency class |  | 2 | 2 | 2 |
| NOx class |  | 4 | 5 | 5 |
| inlet-pressure | mbar | 20 | 30 | 37 |
| Gas rate at $15^{\circ} \mathrm{C}$ and 1013 mbar | $\mathrm{M}^{3} / \mathrm{h}$ | 0,883 | 0,258 | 0,340 |
| Gas rate at $15^{\circ} \mathrm{C}$ and 1013 mbar | gr/h | - | 650 | 640 |
| Burner pressure at full mark | mbar | 11 | 20.5 | 28 |
| Injector main burner | mm | ST. 390 | $\begin{aligned} & \text { ST } 100 \\ & \text { ST. } 120 \end{aligned}$ | $\begin{aligned} & \text { ST. } 100 \\ & \text { ST. } 120 \end{aligned}$ |
| Reduced input restraint | mm | 1.8 | 1.3 | 1.3 |
| Pilot assembly |  | SIT 145 | SIT 145 | SIT 145 |
| Code Injector |  | Nr 36 | Nr 23 | Nr 23 |
| Flue size | mm | 150/100 | 150/100 | 150/100 |
| Gas control valve |  | GV60 | GV60 | GV60 |
| Gas connection |  | 3/8" | 3/8" | 3/8" |
| Electrical connection | V | 220 | 220 | 220 |
| Batteries receiver | V | AA 4x | AA 4x | AA 4x |
| Batteries sender | V | 9 | 9 | 9 |

15 Dimension drawings



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