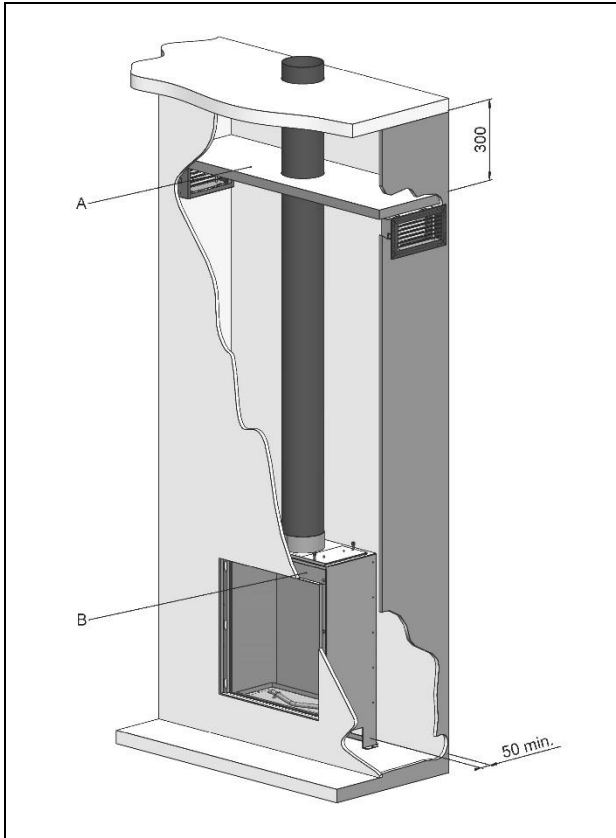


# Fyn 450

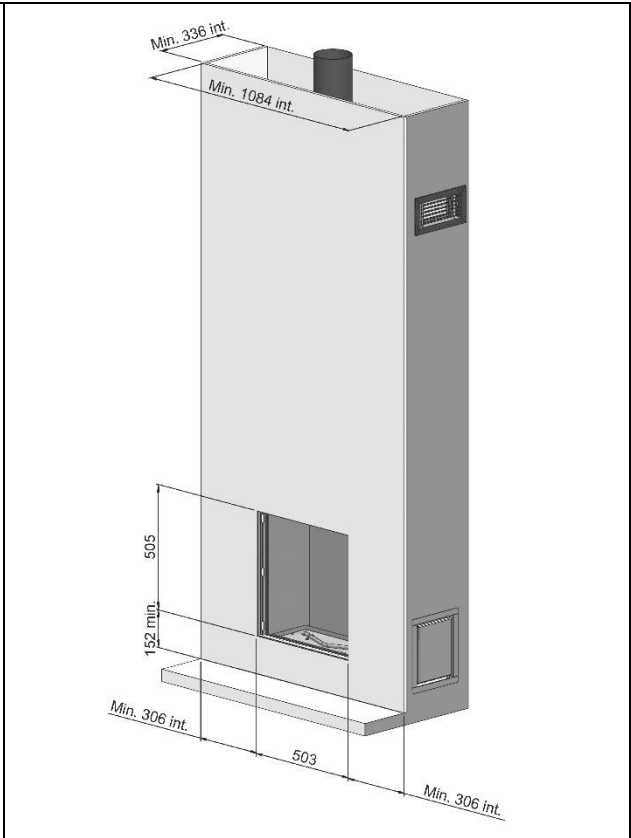


40010929-1840 Fyn 450 ENG

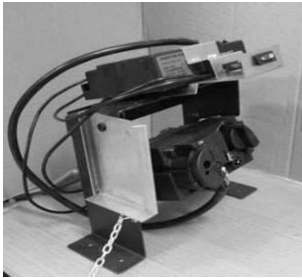
 **faber**



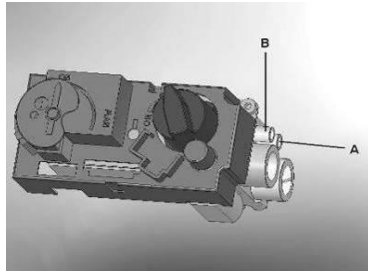
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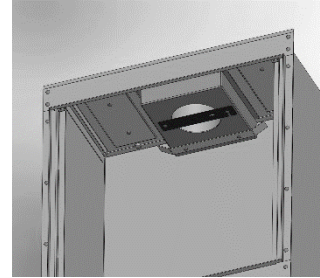
1.2



1.3



1.4



1.5



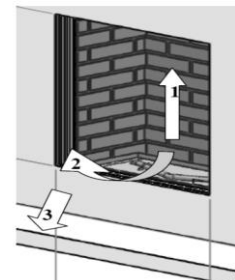
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2.1



2.2



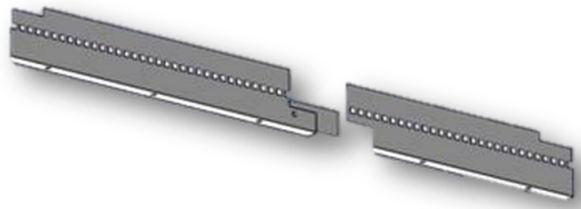
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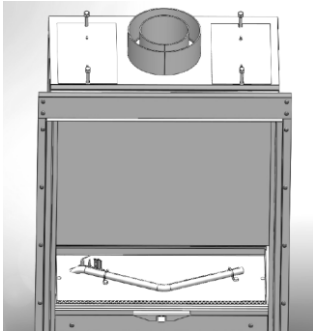
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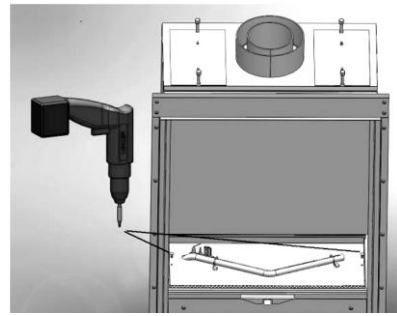
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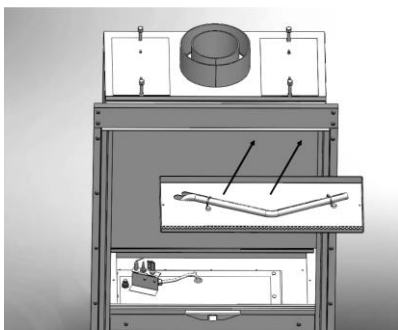
4.0



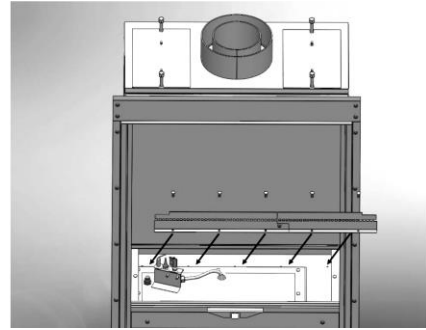
4.1



4.2



4.3



4.4



---

## 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 Gas Appliance Regulation (EU) 2016/426.

Harmonized standards applied EN 613 2000/A1 2003.

## 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 is designed for atmospheric and heating purposes. This means that all visible surfaces, including the glass, can become hotter than 100°C. It is advisable to always install a screen for the fireplace if children, elderly or disabled people are present in the same room as the fireplace. If vulnerable persons can be present in the room without supervision, sufficient protection must always be placed around the fireplace.
- Do not use the remote control and / or app outside the room where the fireplace is located. So you are always aware of possible attendees and the situation around the fireplace when it is ignited.
- Do not place any inflammable materials within a of 0,5m. 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 and pets should not be present in the room.

## 3 Installation requirements

### 3.1 The fire

- Keep a free distance of min. 50mm on the back site of the fire (See fig. 1.1)
- The appliance must be built into an existing or a newly to be constructed false chimney breast.

### 3.2 False chimney breast

- The false chimney breast must be constructed of a 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 cm<sup>2</sup>.
- For the finish, use special stucco (min. 100°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.

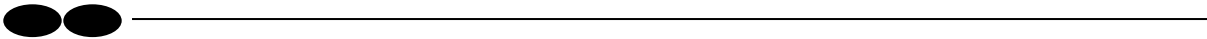
### 3.3 Requirements flue system and outlets

- You should always make use of the materials prescribed by Faber International Ltd. Only by using these materials can Faber International Ltd. guarantee a proper functioning.
- The outside of the concentric flue material can reach a temperature of Approx 150°C. Make sure of proper insulation 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 2m. 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 0,5m. away from:

- 
- Corners of the building.
  - Roof overhangs and balconies.
  - Eaves, with the exception of the roof ridge (See Capital 15).

### 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 Ø100mm should have a CE mark for temperatures up to 600° Celsius.

The chimney should comply with the following requirements:

- The diameter of the flue system must be at least 150x150mm.
- 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 isolator 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 230VAC - 50Hz must be mounted in the vicinity 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 chapter 3).

- Place the appliance into the proper position and if necessary,
- There is no possibility to adjust the height of the fire.

#### 4.5 Mounting the smoke emission outlet materials

- In case of a wall or roof terminal, the hole must be at least 5mm 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 an adjustable pipe.
- For fitting the system a ½ metre cut-down pipe should be used. Make sure the inner pipe is always 2cm 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 build-in flue material (approx. 100cm<sup>2</sup>).

#### 4.6 Building a false chimney breast

Before constructing the chimney breast we advise you to perform a function test with the appliance as described in chapter 7 “checking the installation”.

- Construct the false chimney breast from non-combustible material in combination with metal profiles or of brickwork / aerated concrete bricks.
- Take the grills into account. (See fig. 1.1 and 1.2). Place a protective shield made of non-inflammable material above the grills (see fig. 1.1 A).
- 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. 1.1 B). Keep a minimum margin of 3mm between chimney breast and the appliance in connection with the expansion of the appliance.
- The depth of the recess into the chimney breast has no influence on the removal of the glass.



## 5 Removing the glass

- Remove the cover strips on the left and right hand side (see fig. 2.1).
- Remove the glass clips, by using a screwdriver (see fig. 2.2).
- Place the suction discs onto the glass (see fig. 1.6).
- Slide the glass upwards so that the bottom edge is released. Now gradually move the bottom edge of the glass forwards and lower the glass (see fig. 2.3).

To replace the glass repeat the process in reverse order.

Remove all fingerprints from the glass, these will be burned into it once the appliance 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 free from decorative material!

Do not toss all the decorative material onto the burner all at once, as the very fine dust may block the holes in the burner.

### 6.1 Imitation logs

- Spread the vermiculate preferably by hand over the tube burners. The surface of the pebbles may be very slightly elevated from the burner plate but it should be level throughout the entire length.
- Place the imitation logs according to instructions. (see fig. 3.1 or the instruction card).
- It is optional whether you apply chips to the combustion chamber or not. Prevent chips from covering the burner, this has a negative effect on the fire image.
- Start the pilot en main burner, according to the instructions in the user's manual. Assess whether the flame distribution is correct.
- Place the glass and check the flame picture into the appliance.

### 6.2 Pebbles

- Place the pebbles over the burner and the bottom. Spread the pebbles evenly to a double layer. The surface of the pebbles may be very slightly higher than the burner tube (see fig. 3.2 or the instruction card).
- Place the glass and check the flame picture into the appliance.





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## 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 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.

#### Measuring the inlet pressure:

- Turn off the gas control tap.
- Open the pressure gauge nipple (see figure 1.4 B) 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.

#### Measuring the burner pressure:

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

- Open the pressure gauge nipple (see fig. 1.4 A) 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.**

## 7.4 Checking the flame picture

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

- Distribution of the flames.
- Color 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.

## 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 manual
  - Logset instruction card
  - Suction lifters



## 9 Annual maintenance

### 9.1 Service and cleaning:

- Check and clean if necessary after checking:
  - The pilot light
  - The burner
  - The combustion chamber
  - The glass
  - The logs for possible fractures
  - The outlet

### 9.2 Replace:

- If necessary the chips/embers.

### 9.3 Cleaning the glass

Most of the deposits can be removed with a dry cloth. Clean the glass with Faber glass polish.

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

A simple way to calculate whether the exhaust configuration is possible in combination with your fire, use the free “Faber Flue App” and download it from:

INTERNET:

BlackBerry, Android, PC (Windows Store)

APP store:

iPhone, iPad and Mac.

Google Play:

Android smartphones and Android tablets.

Alternatively use the exhaust calculation table (see chapter 13).

The alternatives of outlet lengths and any restrictors are set out in the restrictor table. In the table we work with start length (STL), total vertical height (TVH) and total horizontal length (THL).

- **Start length (STL):**  
This is the first part that is placed on the fire and represents a certain value (fig. 12.1, 12.2 and 12.3 A, N and F). This value is in the top row of the table (see restrictor table 11.1 and 11.2).
- **Total vertical height (TVH):**  
TVH is the difference in height measured from the top of the unit to the outlet; it can be measured or determined from the building plan. For clarification see the TVH indication in the drawings (fig. 12.1, 12.2 and 12.3).
- **Total horizontal length (THL):**  
THL is the total horizontal length and consists of elbows and pipes which are entirely in the horizontal plane. Elbows I, K and Q and the elements H, J, L, M, P and R (fig. 12.1 and 12.2).
- **Length horizontal plane:**  
The horizontal length consists of the elements H, J, L, M, P and R (fig. 12.1 and 12.2).



- Elbows 90° in the horizontal plane:  
Horizontal bends are bends which are entirely in the horizontal plane (fig. 12.1, 12.2 and 12.3 I, K and Q).
- Bends 45° or 30° in the horizontal plane:  
Horizontal bends are bends which are entirely in the horizontal plane.
- Elbows 90° vertical to horizontal plane:  
These are 90° elbows, which proceed from horizontal to vertical (fig. 12.2 and 12.3 G, O and S).
- Bends 45° or 30° vertical to horizontal plane:  
These are 30° or 45° bends with a vertical offset of less than 45° (fig. 12.1 B and D).
- Pipes under a tilt angle:  
These are pipes which are vertically ascending at an angle of 30° or 45° (fig. 12.1 C). Fill in only in combination with at least 2x 30 or 45° bends in the vertical part.
- Restrictor table:  
See the restrictor table at the right vertical (TVH) and horizontal length (THL). For “x” and if the values are outside the table, then the combination is not allowed. Only then adjust the TVH or THL.

If a value is indicated, check that the calculated STL value is not lower than indicated in the table. In this case STL must be adjusted.

The found value indicates the width of the restrictor (“0” means no restrictor). Standard is a restrictor of 30mm installed (see fig. 1.5).

When only a vertical flue length is used, then you must install the additional air restrictor under in the appliance (see fig. 4.1 up to 4.4). The air restrictor comes standard with the appliance (see fig. 4.0).

## 11.1 Table and air-restrictor plate

Starting length (STL), Vertical (TVH) and Horizontal (THL)

STL	0,1	0,1	0,2	0,5	1	1	1					
TVH	0	1	2	3	4	5	6	7	8	9	10	THL
0	x	x	x	x	x	x	x	x	x	x	x	
0,5	30	30	x	x	x	x	x	x	x	x	x	
1	30,1	30	30	0	0	0	0	x	x	x	x	
1,5	30,1	30	30	30	0	0	0	x	x	x	x	
2	30,1	40	30	30	30	0	0	x	x	x	x	
3	40,1	50	40	30	30	30	0	x	x	x	x	
4	50,1	50	50	40	30	30	30	x	x	x	x	
5	50,1	60	50	50	40	30	30	x	x	x	x	
6	60,1	60	60	50	50	40	30	x	x	x	x	
7	60,1	60	60	60	50	50	30	x	x	x	x	
8	60,1	65	60	60	60	50	40	x	x	x	x	
9	65,1	65	65	60	60	50	40	x	x	x	x	
10	65,1	65	65	60	60	50	40	x	x	x	x	
11	65,1	65	65	60	60	50	40	x	x	x	x	
12	65,1	65	65	60	60	50	40	x	x	x	x	
13	65,1	65	65	60	60	50	40	x	x	x	x	
14	65,1	65	65	60	60	50	40	x	x	x	x	
15	65,1	65	65	60	60	50	40	x	x	x	x	
16	65,1	65	65	60	60	50	40	x	x	x	x	
17	65,1	65	65	60	60	50	40	x	x	x	x	
18	65,1	65	65	60	60	50	40	x	x	x	x	
19	65,1	65	65	60	60	50	40	x	x	x	x	
20	65,1	65	65	60	60	50	40	x	x	x	x	
21	65,1	65	65	60	60	50	40	x	x	x	x	
22	65,1	65	65	60	60	50	40	x	x	x	x	
23	65,1	65	65	60	60	50	40	x	x	x	x	
24	65,1	65	65	60	60	50	40	x	x	x	x	
25	65,1	65	65	60	60	50	x	x	x	x	x	
26	65,1	65	65	60	60	x	x	x	x	x	x	
27	65,1	65	65	60	x	x	x	x	x	x	x	
28	65,1	65	65	x	x	x	x	x	x	x	x	
29	65,1	65	x	x	x	x	x	x	x	x	x	
30	65,1	x	x	x	x	x	x	x	x	x	x	

## 12 Examples flue materials

Fig. 12.1

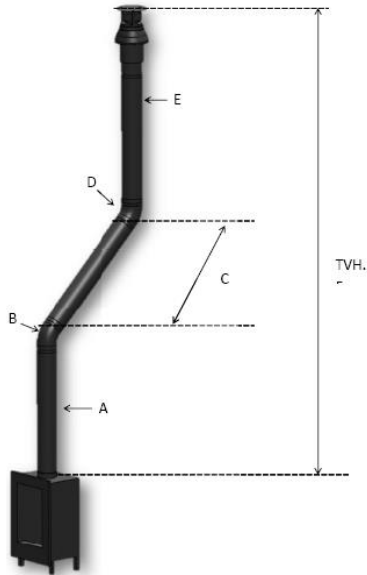


Fig. 12.2

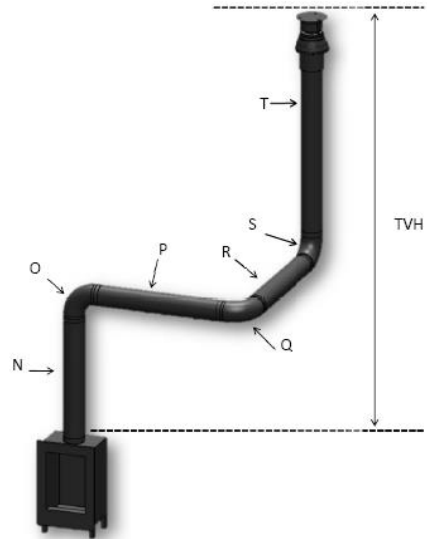
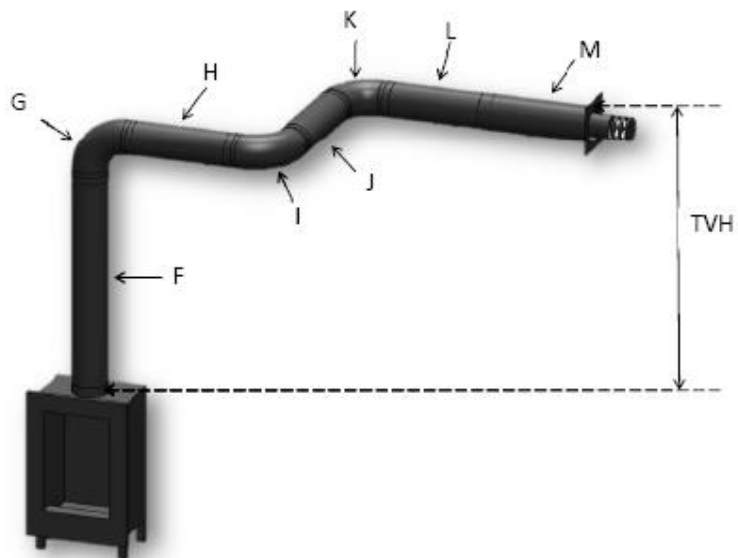


Fig. 12.3




## 13 Examples flue materials

Starter length (STL)				
<b>First part on top of the appliance</b>		<b>Value</b>		<b>Value</b>
Flue length from 0,1m till 0,45m		0,2		
Flue length from 0,5m till 0,90m		0,5		
Flue length from 1m till 1,4m		1		
Flue length from 1,5m till 2m		1,5		
Flue length 2m or more		2		
Bend 90°		0,1		
Bend 45°, 30° or 15°		0,2		
Roof terminal		1		
Wall terminal		0		
Total Vertical Height (TVH)				
measured height			rounded value	
..... meter			..... meter	
Total Horizontal Length (THL)				
Calculation				
Part	number	x	value	result
Total Length in meters	.....	x	1	.....
90° Bend, vertical to horizontal	.....	x	0,4	.....
45° Bend, vertical to horizontal	.....	x	0,2	.....
90° Bend in horizontal direction	.....	x	1,5	.....
45° Bend in horizontal direction	.....	x	1	.....
flue pipes at an angle in meters	.....	x	0,7	.....
<b>Total</b>				.....+
				..... meter



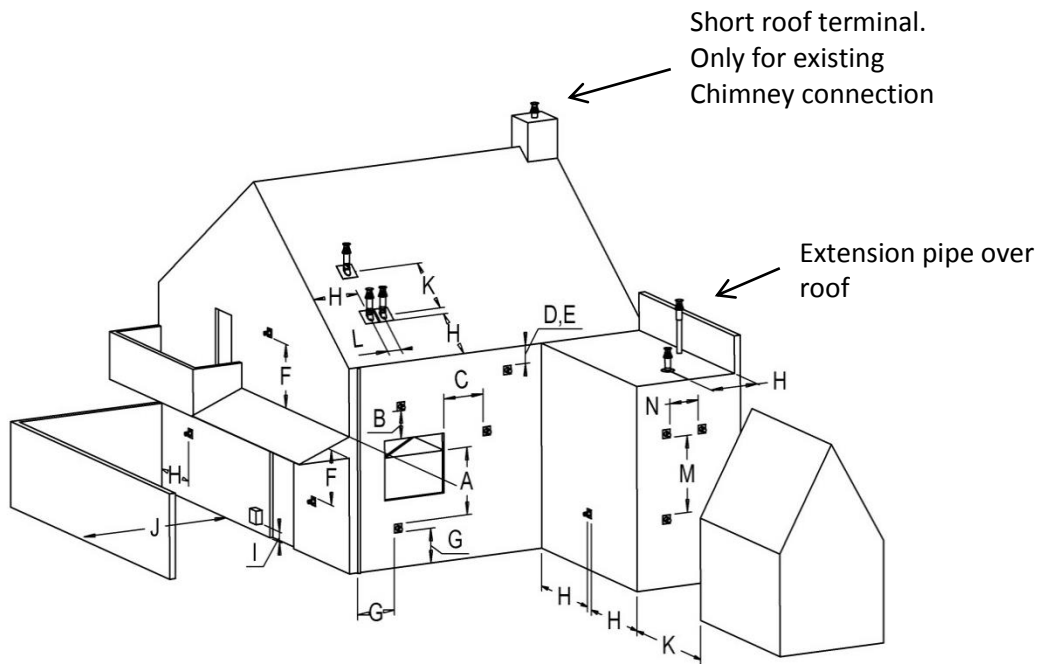


Search in the table at TVH and THL and enter the value that is found.		<b>found value</b>
		.....
If the detected value is a number, check whether the completed STL is higher or equal to the value in the table.		
Is the STL value lower as specified in the table then the installation is not possible. Solution: Start length to low, see for the minimum length in the top row of the table.		
Is the found value X, then the installation is not possible. Solution: Change the TVH or THL.		
<b>Results</b>		
Restrictor size = Value for the comma		..... mm
Extra information = Value behind the comma		<b>mark</b>
Install the air restrictor plate, see installation manual	0,1	
Install adapter 100/150 direct on top of the fire	0,2	→
In case of wall terminal, install adapter 100/150 before the last bend, incase of roof terminal just before the terminal.	0,3	→
In case of roof terminal (always size 100/150) install the 100/150 adapter just before the terminal. Wall terminal 130/200	0,4	→
From the fire first an adjuster to 130/200 and 1 meter 130/200, after that reduce to 100/150 and everything 100/150.	0,5	→

## 14 Technical data

Technical data						
Type indication(s)	Farum, Fyn, Fyn 450, Concept I-450					
Type appliance	C11/C31/C91					
Diameter outlet/inlet	100/150					
Gas connection	3/8"					
Indirect heating functionality	no					
Category	II2H3+					
	Symbol					Unit
Reference gas/inlet pressure		G20-20	G30-30	G31-37		mbar
Emissions in space heating	NOx	78	88	85		mg/kWh <sub>input</sub> (GVC)
Direct heating output						
Nominal heat output	P <sub>nom</sub>	4,2	3,9	3,9		kW
Minimum heat output (indicative)	P <sub>min</sub>	1,5	1,4	1,4		kW
Useful efficiency (NCV)						
At nominal heat output	η <sub>th,nom</sub>	93,7	93,7	93,7		%
At minimum heat output (indicative)	η <sub>th,min</sub>	89,7	89,7	89,7		%
Appliance input data						
Input	Hi	4,5	4,2	4,2		kW
Gas rate at full mark		0,482	0,127	0,164		m <sup>3</sup> /h
			320	310		kg/h
Burner pressure at full mark		10	24,8	31,6		mbar
Power requirement for permanent pilot light						
Power requirement for permanent pilot light (if applicable)	P <sub>pilot</sub>	0,11	0,11	0,11		kW
Additional electricity consumption						
At nominal heat output	e <sub>l,max</sub>	0	0	0		kW
At minimum heat output	e <sub>l,min</sub>	0	0	0		kW
In standby mode	e <sub>l,sb</sub>	0	0	0		kW
Energy-efficiency						
Energy-efficiency class		A	A	A		
Energy-efficiency index	EEl	88	88	88		
Type heating output/control room temperature			Other control options			
One step heat output, no control of room temperature	no	Control of room temperature, with presence detection			no	
Two or more manually adjustable stages, no control of room temperature	no					
With mechanical control of the room temperature by thermostat	no	Control of room temperature, with open window detection			no	
With electronic control of the room temperature	no					
With electronic control of the room temperature plus day-time switch	yes	With optional remote control			yes	
With electronic control of the room temperature plus week-time switch	no					
<b>Glen Dimplex Benelux Saturnus 8 Heerenveen The Netherlands</b>						

# 15 Terminal position



Location	Position outlet	Distance mm
D	Under a gutter	500
E	Under a roof edge	500
F	Under a carport or balcony	500
G	Vertical downpipe	300
H	Inside and outside corners	500
J	From wall surface to a wall outlet	1000
K	Two gable outlets against over each other	1000
L	Distance between two roof outlets	450
M	Two roof outlets above each other on a pitched roof	1000
N	Two gable outlets next to each other	1000

- Learn a new code for remote.
- Battery remote.
- Battery receiver.

- See inst. manual.  
 - 1x 9V Alkaline.  
 - 4x 1.5V AA Alkaline.  
 - Replace 6V adapter.  
 - Replace the receiver.

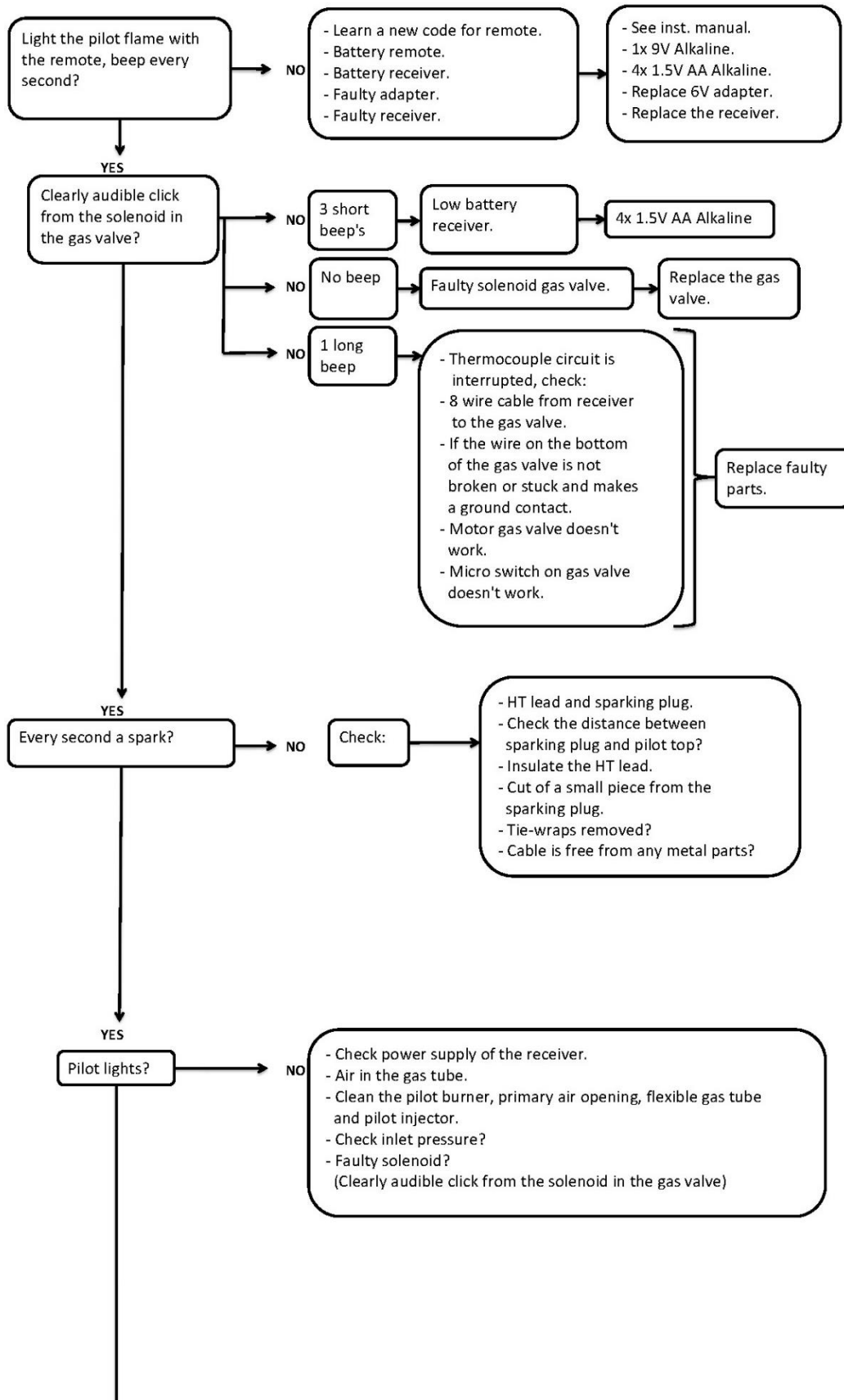
- Learn a new code for remote.  
 - Battery remote.  
 - Battery receiver.  
 - Faulty adapter.  
 - Faulty receiver.

- See inst. manual.  
 - 1x 9V Alkaline.  
 - 4x 1.5V AA Alkaline.  
 - Replace 6V adapter.  
 - Replace the receiver.



Location	Position outlet	Distance mm
D	Under a gutter	500
E	Under a roof edge	500
F	Under a carport or balcony	500
G	Vertical downpipe	300
H	Inside and outside corners	500
J	From wall surface to a wall outlet	1000
K	Two gable outlets against over each other	1000
L	Distance between two roof outlets	450
M	Two roof outlets above each other on a pitched roof	1000
N	Two gable outlets next to each other	1000

# 16 Troubleshooting guide

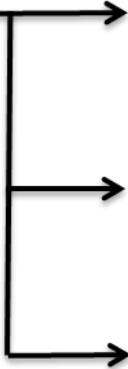




Light the pilot flame with the remote, beep every second?



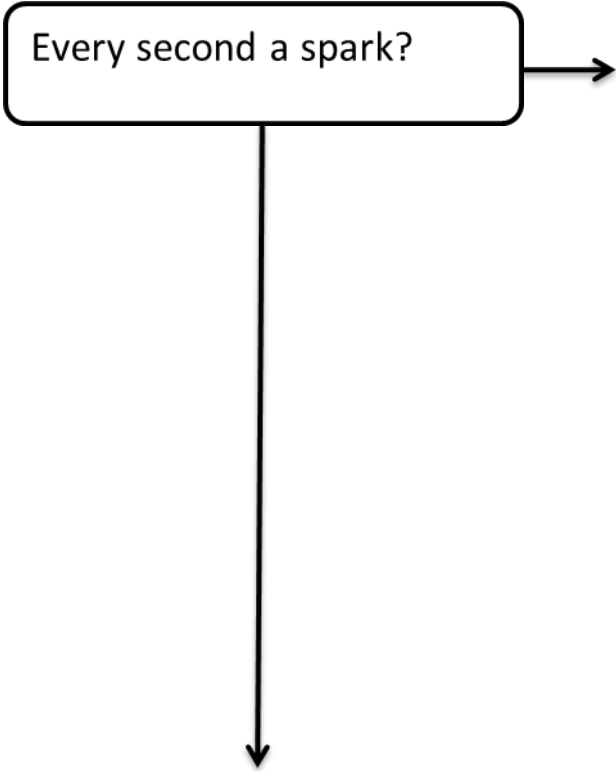
Clearly audible click from the solenoid in the gas valve?



YES

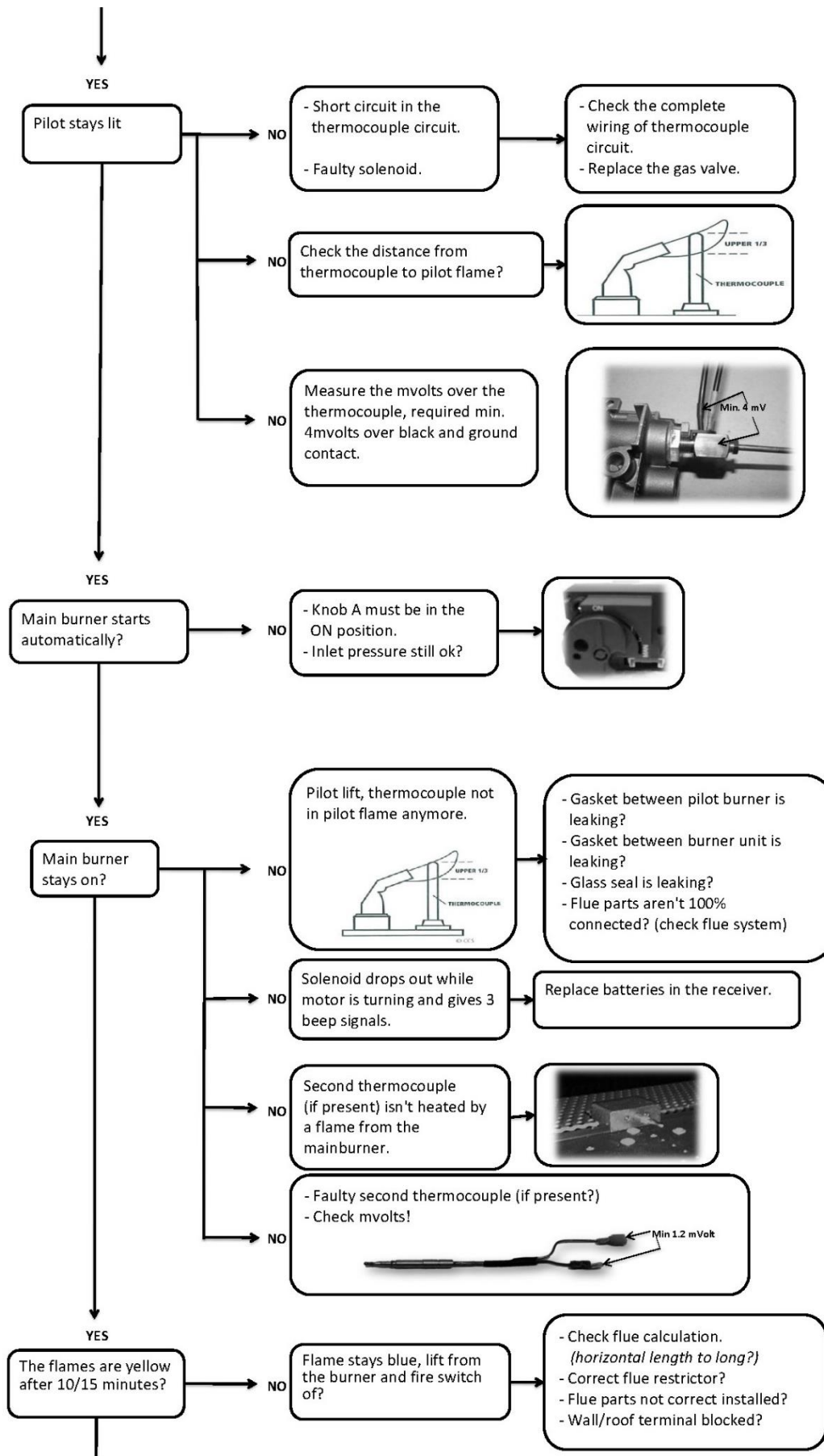


YES

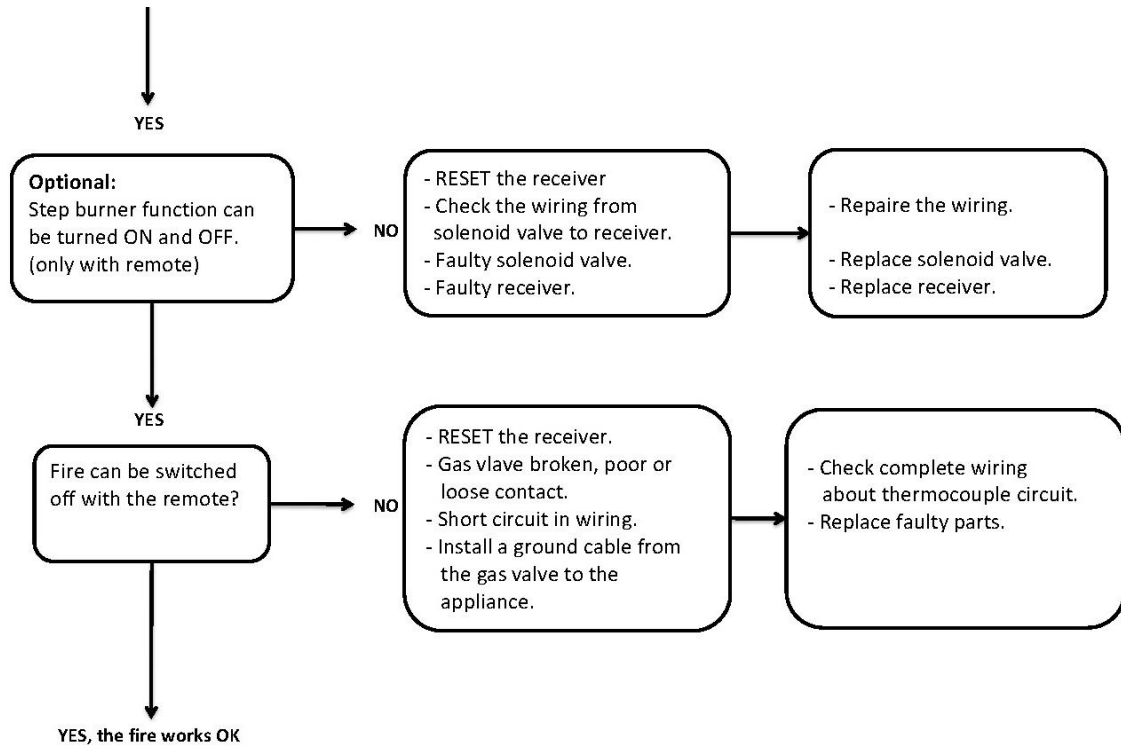
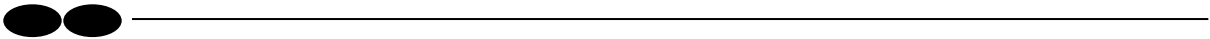


YES

Pilot lights?

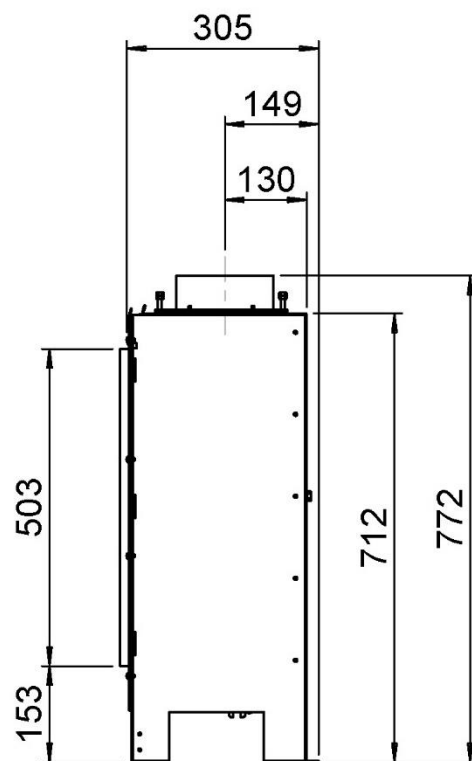
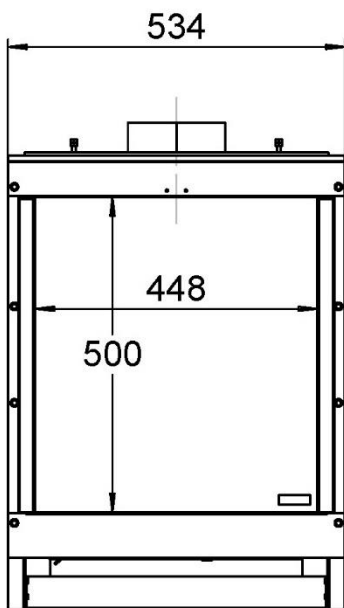
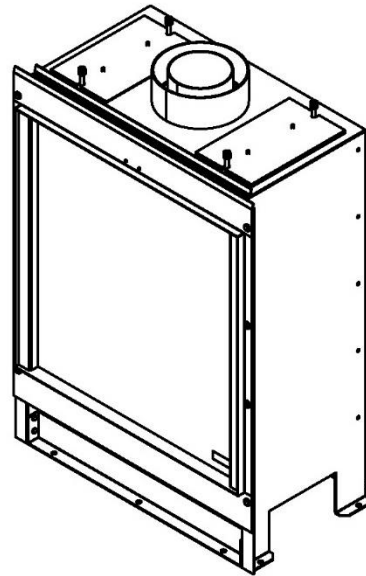
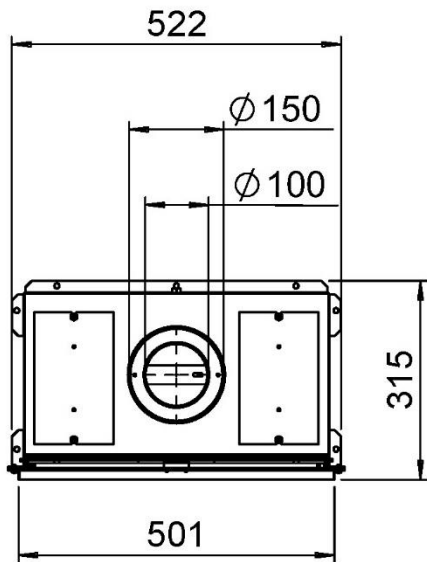




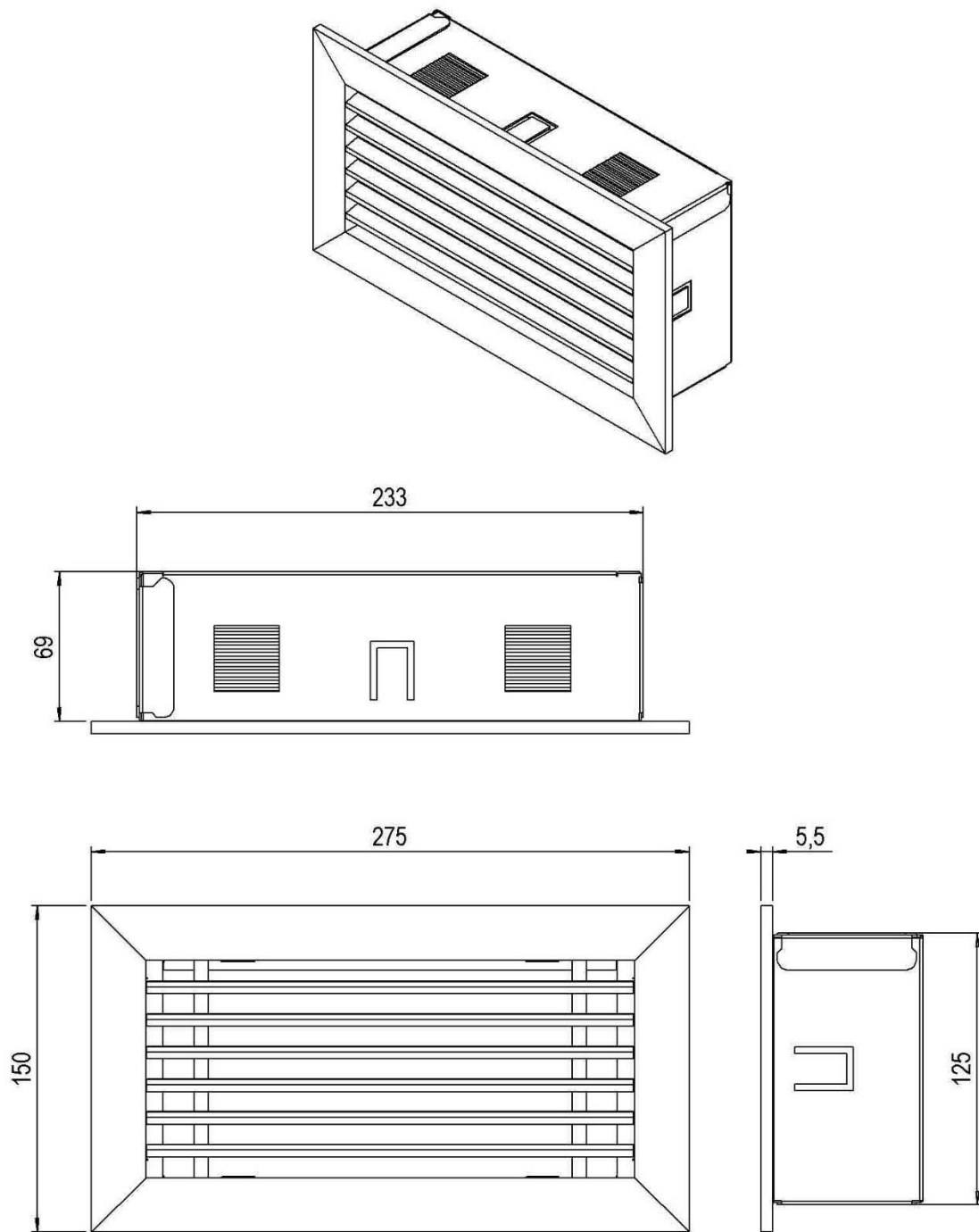


# 17 Dimensional drawings

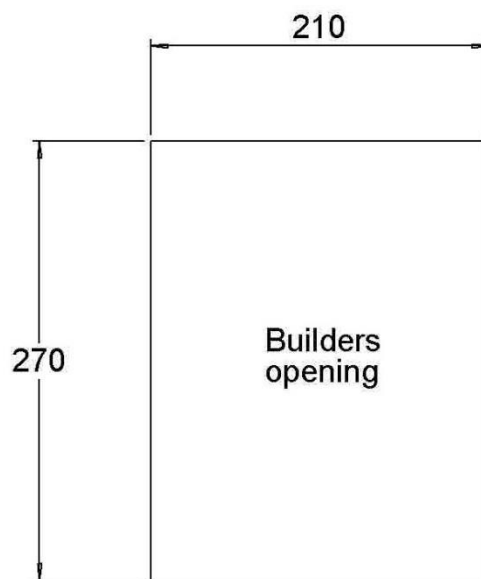
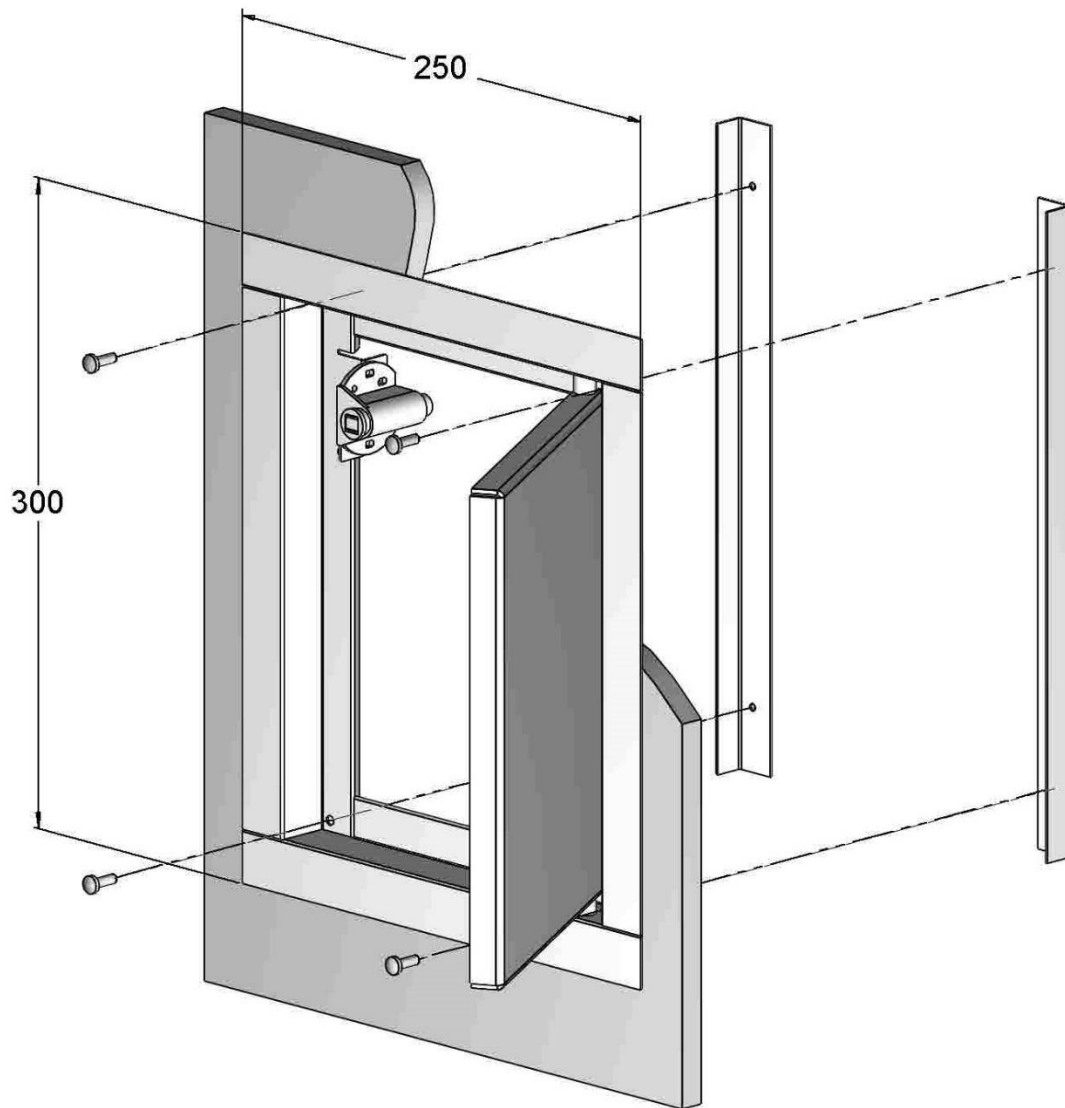
## 17.1 Fyn 450



17.2 Ventilation grid



17.3 Remote access door







**Fyn 450**

 **faber**