Installation manual MatriX 800/500 RD H MatriX 800/500 ST H MatriX 1050/500 RD H MatriX 1050/500 ST H ENG



40011991-2201





Commissioning gas fire									
Model:				Date:					
Installa	tion performed by:								
1.	Before starting the	appliance, check:							
1.□	If the front glass is ta	ken out of the appliance and the	e decoration materia	al has no	ot been installed yet.				
2.□	2.□ If the appliance is levelled.								
3.□	If the safety hatches	are cleaned and closed.							
4.□	If there's a flue restri	ctor needed and is installed?							
	□ Yes, m	m							
	□ No, not needed								
5. □	If the position of the	wall- or roof terminal is accordi	ng to the correct ope	eration a	and building				
	regulations.								
6.□	If the ventilation grid	ls are installed and have in total	min. 400cm ² of free	passage	e.				
7.□	If all tie wraps are re	moved from the burner pipes an	d wiring.						
8.□	Whether the ignition	cable hang freely under the app	liance and have no	contact	with any metal part.				
9.□	If the lockable service	e door is installed and gives acce	ss to the control uni	it.					
II.	Installation:								
1.□	Check main gas conn	ection for leakage.							
2.□	Check the standing p	ressure (unloaded) and compare	with the rating plat	te:					
	□ Measured stand	ding pressure unloaded:	_ mbar (min./max. 20	0%, cha	pter 7).				
	□ Deviation with	the rating plate: mbar.							
3.□	Connect your APP to	the I.T.C. and start the fire (at d	ealer level).						
4.□	Run the appliance or	n max. settings and all burners.							
	Check <u>all</u> gas connec								
6.□		ressure (loaded) and compare w		e (unlo	aded):				
		ding pressure loaded:n							
		e APP to the actual measured val	ues and check the d	ata.					
		in the APP (1.5mA is required).							
	□ Value ionization								
		ressure and compare it with the	working pressure sp	ecified	in the "Technical				
		llation manual, Chapter 14).	In and the second	>					
	□ Measured burner pressure: mbar (min./max. 20%, chapter 7).								
0		e given in the manual: r	npar.						
		high and low setting.							
		measuring nipples on leakage.	the decemption wat	arial					
11.□	Switch the appliance	e off and let it cool down. Place	the decoration mate	erial.					

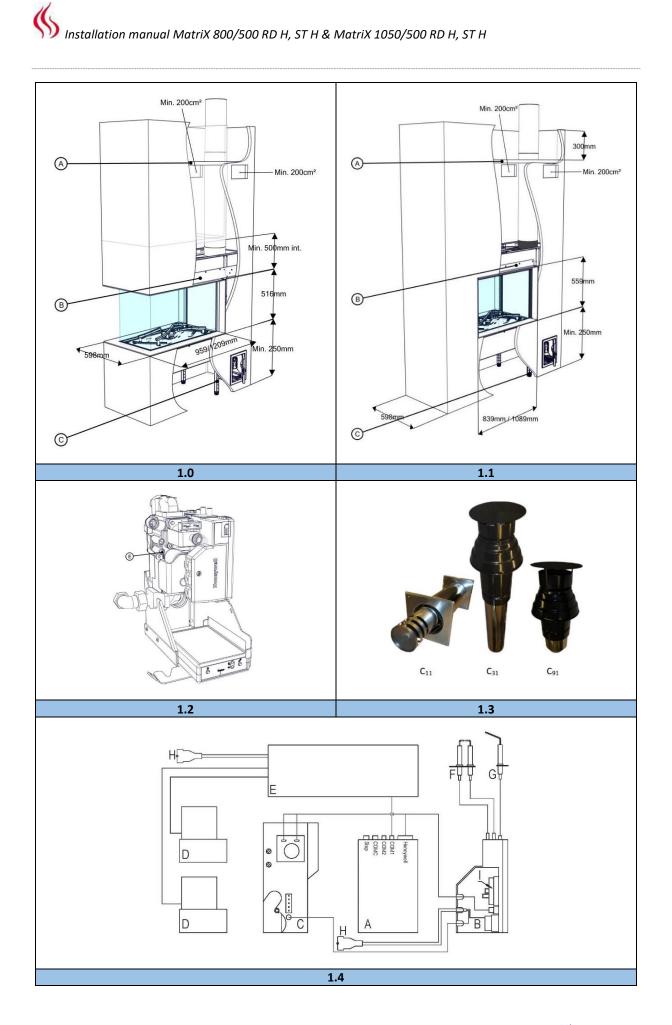




III.	I	Decoration:
	1.0 7	he decoration material is placed according to the instructions (chapter 6 or the decoration
	i	nstruction card).
	2.□ k	Geep the ionization and ignition pin free from the decorative material.
IV.	F	Representation of the flames and flue gas analyses:
	1	The glass is cleaned on both sides (chapter 5, 8 and 9).
	1	Please note! Avoid fingerprints on the glass, these are no longer removable once the fire is used!
	2.□ 1	et the fireplace burn for at least 20 minutes at highest setting and check the flame for (chapter 7.1):
		Flame distribution;
		Colour of the flames.
	3.□ I	Perform a flue gas analysis (see chapter 7.2).
	4	Close and check all the measuring nipples on leakage.
٧.	ı	nformation and material for the customer:
	1.□ I	nform the customer personally about the correct use of:
		the appliance;
		the remote control;
		the APP and it's settings;
		the maintenance process.
	2.□ H	landover to the customer:
		the installation manual;
		the user manual;
		the decoration instruction card;
		the suction cups;
		the Faber glass polish sample.
	D/.	ease note! Before leaving the customer, save your company data in the Faber APP.
VI.		Comments:
VI.		oniments.





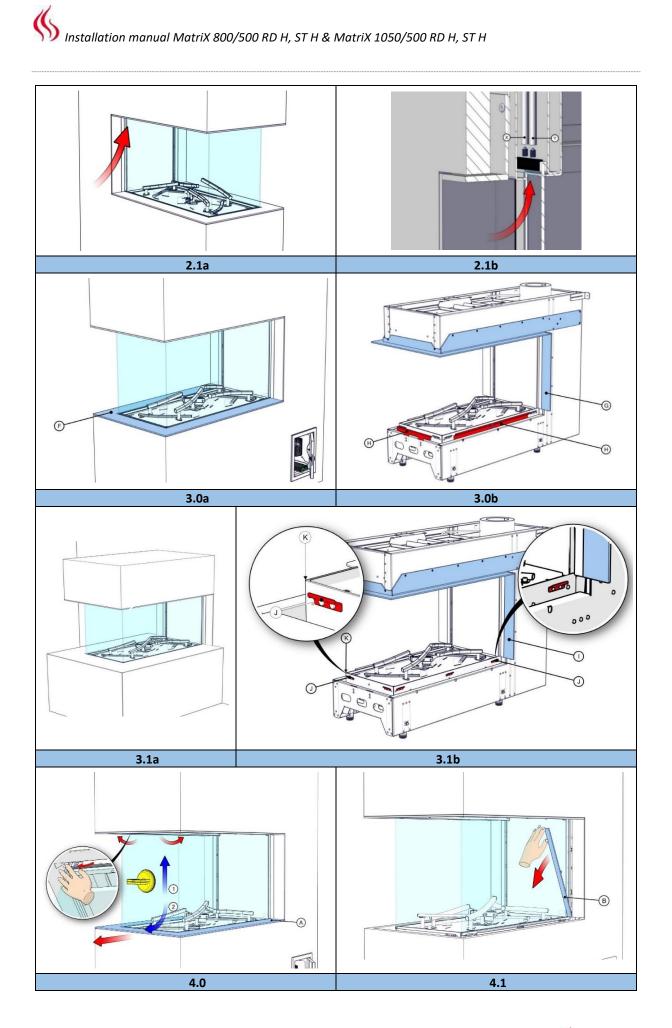






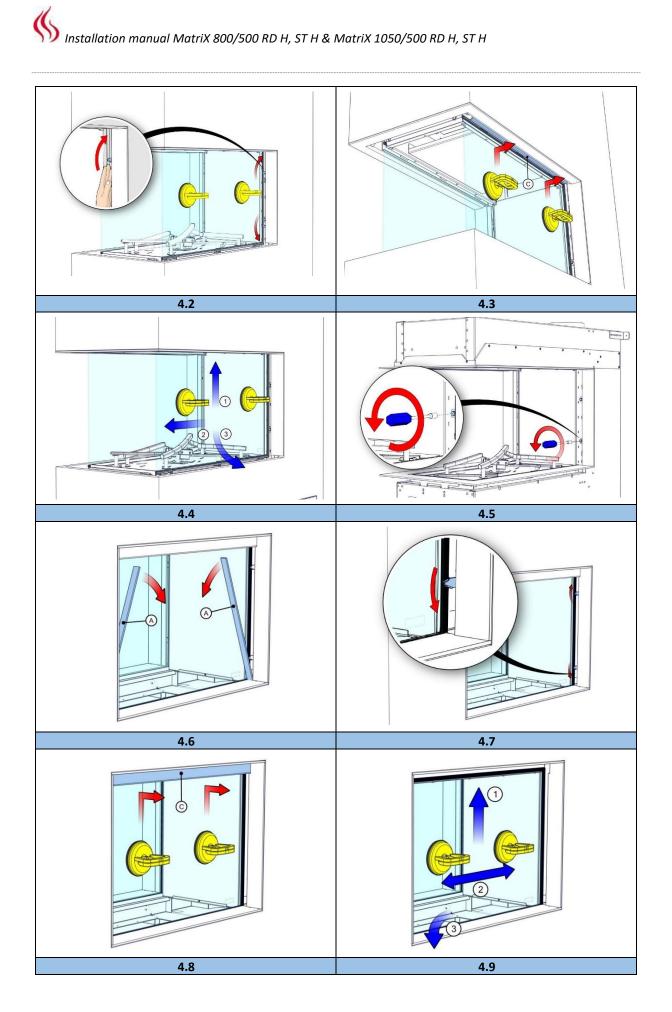






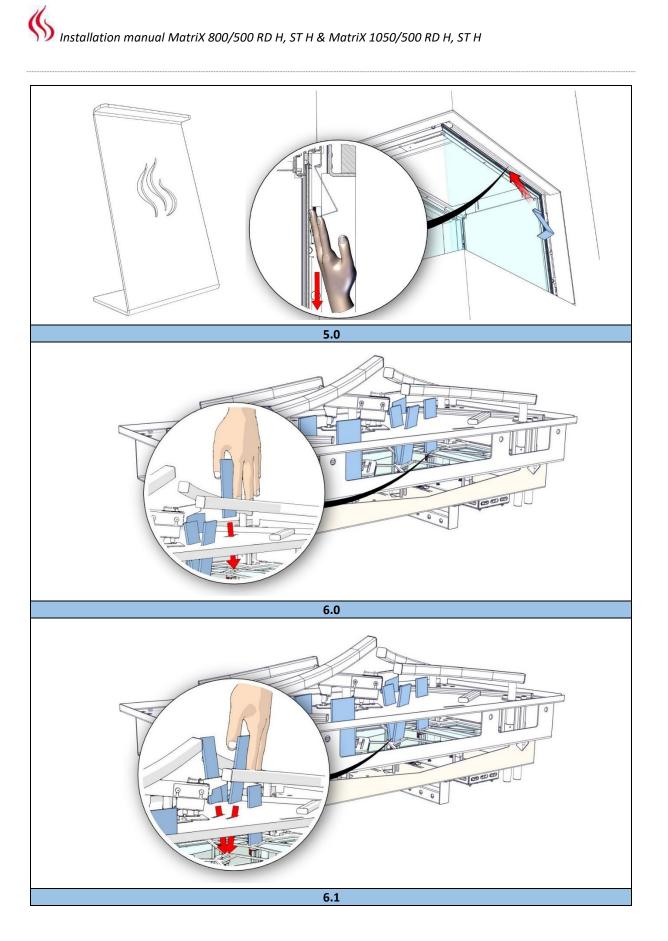
















Dear user

Congratulations on your purchase of a Faber fire! A quality product from which you will experience warmth and atmosphere for many years. We recommend that you read this manual carefully before using the fireplace. If any problem arises despite our strict quality control, you can always contact your dealer.

For any warranty claims, it is essential you first register your fireplace.

Please note!

The details of your fireplace can be found in the user manual.

You can register your fire at: www.faberfires.com

Glen Dimplex Benelux B.V.

Address: Saturnus 8

NL-8448 CC Heerenveen

Tel: +31 (0)513 656 500 Email: contact@faberfires.com Info: www.faberfires.com

1.1 Introduction

Installation and maintenance of the appliance must be carried out by a professional with proven knowledge and competence. A professional takes into account all technical aspects such as heat radiation and gas connection as well as flue gas exhaust requirements.

Where the installation instructions are not clear, national/local regulations must be followed.

1.2 Check

Check the fireplace for transport damage and immediately report any damage to your supplier.

1.3 CE Declaration

We hereby declare that Glen Dimplex Benelux B.V. released Faber gas-atmosphere heating appliance by its design and construction method complies with the Regulation (EU): 2016/426 and (EU) 2015/1188.

Product: gas room heater Model: MatriX 800/500-RD H

> MatriX 800/500-ST H MatriX 1050/500-RD H MatriX 1050/500-ST H

This declaration will become null and void as soon as the unit is in any way modified without written authorization of Glen Dimplex Benelux B.V.

2 Safety instructions

Please note!

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 regularly vulnerable persons can be present in the room without supervision, sufficient protection must always be placed around the fireplace.

- This appliance must be installed according with the rules in force and used only in a sufficiently space.
- The appliance must be checked annually in accordance with this installation manual and the applicable national and local regulations.
- Ensure that the data on the type label matches the local gas type and pressure.
- The appliance is designed for atmosphere and heating purposes. This means that all visible surfaces, including the glass, can become hotter than 100°C. An exception by free standing models is the underside of the fireplace and the control buttons.
- The settings and the construction of the fireplace must not be changed!
- Do not place extra imitation wood or other material on the burner or in the combustion chamber.
- Do not place any combustible materials within 0,5m of the radiation area of the fire.
- Through the natural air circulation of the fireplace moisture and uncured volatile components from paint, building materials and carpeted floors, etc. are attracted. These parts can settle as soot on cold surfaces. Therefore do not light the fireplace shortly after installation.

2.1 Using the fire for the first time

Provide extra ventilation and open all the windows of the room during the initial start-up of the fire. Let the fire burn at the highest setting for a few hours so that the paint gets the chance to harden and any released vapours are safely removed. Keep vulnerable people and pets out of this room during this process.





3 Installation requirements

3.1 Appliance

- This appliance may not be installed in a chlorine-containing environment. (Pools etc.).
- This appliance must be built into an existing or new false chimney.
- For appliances with flexible gas pipes, the control unit (fig. 1.2) is mounted at the bottom of the crate. Detach and mount it together with the control box and remote access door in as low as possible position in the false chimney. (See supplied instruction manual 40011721). (To prevent damage to cables and pipes during transport, they are bound together by tie wraps. Remove these to ensure proper operation of the appliance.)
- The MatriX 800-1050x500-RD,ST H comes standard with a 2 meter pipe set (article number 20901589).

3.2 False chimney

- The false chimney should be of noncombustible material.
- The space above the fire should always be ventilated using grids with minimal free passage of 200cm² per grid.
- The false chimney construction should not rest on the build-in frame of the fireplace.

3.3 Discharge and outlet requirements

First, carry out a flue calculation (see chapter 11) and adjust the correct restrictor value before installing the outlet! (Generally the flue restrictor is adjust to 60, see fig. 1.5b).

- For supply and discharge always use the prescribed and to be supplied Faber flue materials. Please contact Glen Dimplex Benelux B.V.. Only with use of these materials Faber can guarantee proper performance.
- The distance to combustible materials must be min. 50mm, calculated from outside of the flue material (EN 1856-1 T600 N1 D Vm – L20040 O(50)).

Outlets (fig. 1.3)

The balanced flue pipe for combined air supply and discharge can use a wall terminal or a roof terminal. Verify that the desired outlet meets the local regulations regarding pollution and ventilation openings.

Please note!

For proper functioning, the outlet must at least be 0,5m away from:

- Corners of the building;
- Roof overhangs and balconies;
- Roof edges (with the exception of the ridge edge, see chapter 15).

C11, outlet via facade

Through a wall or façade, use a Faber wall outlet 130/200mm.

C31, outlet via roof

For a (flat) roof, use a Faber roof outlet with a diameter of 100/150mm.

C91, existing chimney

For an existing chimney, use a Faber chimney outlet with a diameter of 100/150mm.

In this case the existing chimney acts as air inlet an inserted flexible stainless steel pipe discharges the flue gas. The top (Faber chimney cover plate) and the bottom (Faber chimney connection set) should be airtight.

Depending on the calculated flue diameter, you must use a flexible stainless steel pipe of Ø100mm (article number AJ005503) or Ø130mm (article number AJ005603) as specified by Faber. For this, contact Glen Dimplex Benelux B.V.

Please note!

- The minimum chimney diameter for a 130mm flexible stainless steel pipe must be 200x200mm and for a 100mm flexible stainless steel pipe and 150x150mm.
- Don't connect more than one fire at the existing chimney.
- The chimney must be in good condition:
 - No leakage;
 - Well cleaned.

For more information about the connections to existing chimney ducts, please request the installation instructions "Chimney Connection Set".





4 Preparation and installation instructions

4.1 Gas connection

The gas connection must comply with the applicable local standards.

Please note!

- Provide a flexible gas connection with at least 0,5m extra length, so that the control unit can be removed for installation and service!
- Calculate the gas pipe so that no pressure drop occurs.

We advise using a gas connection directly from the gas meter to the appliance, with a shut-off valve in the proximity of the appliance, which must always be freely accessible. Position the gas connection so that it is easily accessible for service and the burner unit can be disassembled at any time.

4.2 Electrical connection

Place a <u>double</u> wall socket 230VAC - 50Hz near the fire for connecting the step module or HPL module and the controller (control box FAB1806).

See fig. 1.4 for the wiring diagram:

A = I.T.C. (Intelligent Technical Controller)

B = electronics

C = gas valve

D = solenoid valve

E = Step module or HPL module (optional)

F = ignition pin

G = ionization pin

H = connection cable

I = configuration plug

4.3 Smart Home installation

The controller can be connected to an external source, such as a Domotica system, by using a Faber Interface Unit (article number A9323000).

4.4 Preparing the fireplace

- Remove the fireplace from its packaging.
 Ensure that the gas supply pipes under the appliance are not damaged.
- Prepare the gas connection on the gas valve.

4.5 Setting the restrictor plate

The flue calculation indicates which restrictor plate setting is required for the correct operation of the fireplace. See chapter 11.

The restrictor plate has a scale from 0 to 110 in steps of 10. Standard the restrictor value is set to 60. (See fig. 1.5b and 1.6).

To get good access to the restrictor, you can consider sliding out the top plate, even with the top plate there is a good access to the restrictor. See fig. 1.5a.

Loosened the two screws to adjust the restrictor plate. Move the restrictor plate to the left and slide it to the correct setting. Tighten the screws.

When the calculation shows 0, the restrictor must be set to the top position.

When the calculation indicates 110, the restrictor should be set to the bottom position.

For all other values the intermediate positions must be used.

4.6 Positioning the fireplace

Take into account the installation requirements (see chapter 3). Place the fireplace at the right place and level it.

Rough height adjustment:

• With the adjustable (optional) legs.

Accurate height adjustment:

With the adjustable feet.

4.7 HPL module (Hybrid Pro Light)

Place the power supply (see fig. 1.7) of the HPL module in a cool place and near to the controller (control box).

Please note!

Before installing the false chimney, a functional test of the HPL module is recommended.

Physical check HPL module

Switch on the HPL module with the remote control and check whether the LED spots are on (fig. 1.8).

Electronic check HPL module in the ITC-V2 App

(Only possible in dealer setting).

Make sure the ITC-V2 App is connected

Make sure the ITC-V2 App is connected to the fire, see fig. 1.9a.

- 1. Switch on the glow effect, see fig. 1.9b.
- Navigate to:
 Menu (top left) -> Diagnostics -> Realtime
 Monitor -> HPL MODULE.
- 3. Click on "TEST LED SPOTS", see fig. 1.9c.

If any LED spots are defective, this will be indicated in the App. Use the overview in section 16.1 or 16.3 for the position.





Testing burner sections (step valves)

- Activate the sectional burner by clicking at the "step symbol", see fig. 1.9d.
- Switch the various modes, see fig. 1.9e.

If a step valve is defective, this will be indicated in the App.

4.8 Installing the flue pipes

Install the flue pipes according to the installation manual supplied with the appliance (40011968)!

- The distance to combustible materials must be min. 50mm, calculated from the outside of the flue pipe.
- Never start immediately with an adjustable flue pipe on the appliance.
- Horizontal sections should be installed to allow a slope towards the appliance (3 degrees).
- Built the system from the appliance. If this
 is not possible you can make use of an
 adjustable flue pipe.
- For fitting of the flue system, the 0,5m length-adjustable pipe must be used.
 Make sure that the inner pipe is always 15mm longer than the outer pipe. Walland roof terminal can also be cut. These components must be secured with a self-tapping screw.

4.9 Constructing the false chimney

Before positioning the false chimney, we advise to perform a functional test with the fireplace as defined in chapter 7 "Checking the installation".

False chimney

- Construct the false chimney of noncombustible material in combination with metal profiles or of masonry/concrete blocks.
- Always use a lintel or reinforcing bars while bricking the false chimney. They should not be placed directly on the fireplace.
- Make sure that the fireplace never functions as a load-bearing construction, because of the expansion of the fireplace through warmth.

Ventilation

Correct ventilation prevents damaging overheating of the gas control block and its electronics and also limits the temperature of the convection air. Use the (optional) Faber ventilation grids (article number A9296400) or a similar alternative with a

minimum free passage of 200cm² per grid, in the space above the fire, when building the false chimney. Within the false chimney, an horizontal screen plate, made of non-combustible material, must be installed just above the ventilation openings. (see "A" in fig. 1.0 or 1.1).

Installation and finishing

Please note!

- Take into account a minimum distance of 2mm due to expansion of the fireplace.
- Take into account the thickness of any finishing layer!

Method I: installation WITH cover strip (fig. 3.0a) For installation and finishing the following points are of interest (fig. 3.0b):

G = Built-in frame H = Spacer profile

- Build the false chimney against the built-in frame G and the spacer profile H (fig. 3.0b).
- Do not build the false chimney (underneath the appliance) higher than the top of the spacer profile H.

Method II: installation WITHOUT cover strip (fig. 3.1a)

For installation and finishing the following points are of interest (fig. 3.1b):

I = Built-in frame

J = Glass support

K = Upper side of the combustion chamber setting.

 Remove all-round spacer profile H (fig. 3.0b).

Please note!

Ensure that the screws of the spacer profiles **H** are replaced to ensure the air tightness of the device.

- For the height of the plateau, observe point **K** (fig. 3.1b).
- Due to the expansion of the fireplace, there should be at least 2mm play between the platform and the glass supports J (fig. 3.1b).





Removing glass

5.1 MatriX 800-1050/500 RD H

To take out the front glass, the side glass must be removed first.

Removing the side glass (see fig. 4.0):

- Remove cover strip "A";
- Place a suction cup on the glass;
- Open both glass clamps at the top;
- Move the glass upwards so that the underside is released from the grooves and pull the glass downwards.

Remove the front glass

- Remove cover strip "B" see fig. 4.1;
- Place the suction cups on the glass;
- Open the glass clamps (see fig. 4.2);
- Push up frame "C" and move slightly forward so that it remains in the open position (see fig. 4.3).

See fig. 4.4:

- Move the glass upwards so that the bottom side is released from the groove.
- Move the glass slightly to the left or right;
- Pull out the glass and store it at a safe place.

For replacing the glass repeat the steps in reverse order. (If necessary, use the tool provided to pull the "C" frame back down, see fig. 5.0).

Adjusting the front glass to the side glass

If the front glass does not fit properly the side glass, the glass can be adjusted by means of adjusting screws (see fig. 4.5).

Please note!

Avoid fingerprints on the glass, these are no longer removable once the fire is used.

5.2 MatriX 800-1050/500 ST H

- Remove cover strips "A" (fig. 4.6).
- Open the glass clips (fig. 4.7).
- Place the suction cups on the glass and slide the upper frame "C" upward (fig. 4.8).
- See fig. 4.9:
 - 1. Slide the glass to the top so that the bottom is released from the slot.
 - 2. Now carefully slide the glass to the left or right.
 - 3. Bring the released side towards you and store the glass at a safe place.

For replacing the glass repeat the steps in reverse order. (If necessary, use the tool provided to pull the "C" frame back down, see fig. 5.0).

Please note!

Avoid fingerprints on the glass, these are no longer removable once the fire is used.

6 Placing decoration material

> Attention!

It is not allowed to add other or more decoration material in the combustion chamber.

Scan the QR code for a clear video instruction on how to decorate the burner:



Keep the included decoration instruction card close.

Chapter 17 provides an overview of the complete wood log setup.

6.1 Switching on HPL module (optional)

To get the right glow effect, the HPL module must be switched on at 100% intensity.

Make sure the ITC-V2 App is connected to the fire, see fig. 1.9a.

- Switch on the glow effect, see fig. 1.9b.
- Click on the "flame" in the circle, see fig. 1.9f.
- Click on the "settings" in the circle, see fig. 1.9g.
- Set "Wood glow" and "Ash bed glow" to maximum, see fig. 1.9h.

Tip:

Regularly check the glow effect on the wooden logs while decorating.

6.2 Installing HPL light guides

Insert the light guides through a slotted opening of the burner plate into a matching recess in the bottom, see chapter 16 and fig. 6.0.

With LED spot **G** two light guides must be placed in one recess, see chapter 16 and fig. 6.1.





When the light guide is placed correctly, light will shine from the top side of the glass. If this is not the case, the light guide must be repositioned.

6.3 Creating ash bed

 Spread the glass granules over the entire bottom plate, with a slightly increasing thicker layer towards the center burner.

> Attention!

Keep some glass granules for correction later on.

- By simultaneously placing (large) chips in front of the light guides (standing between the light guide and the glass granules), this can be largely hidden from view. Cut or break the chips so that they do not protrude higher than the light guide itself, to the detriment of the glow effect on the logs. (See instruction video!)
- Divide the grey mini chips from the center over the glass granules.

6.4 Placing log set

- Place wood log 7 over the center burner.
 Make sure the ignition and ionization pin are not obstructed by the wood log. Keep checking during decorating!
- Place wood log 9 in the back, under wood log 7.
- Place the wooden logs 1 through 4 over the curved burner tubes.

> Attention!

The wood logs should be able to slide slightly over the burner tubes.

- Place the remaining wood logs.
- Distribute the black mini chips around the edge of the bottom plate.
- Distribute the large chips (grey and black) over the bottom plate.

6.5 Checkpoints

Check:

- That the ignition and ionization pin do not make contact with ash material or a wooden log.
- 2. The glow effect on the wooden logs:
 - That all wooden logs have the right position.
 - That the light guides are not covered by ash material.
- That no glow effect is visible at the back wall.

4. On an even ash bed glow.

Attention!

Start the fire <u>for the first time</u> without the glass installed!

- Start the fire as described in the user manual.
- Assess the flame distribution and the glow effect on the wooden logs. Move or remove chips if necessary to create an even ash bed glow.
- Switch off the fire.
- Place the glass (see chapter 5).

7 Checking the installation

Checking for gas leaks

Check with a gas leak finder all connections and pipes for gas leakage.

Check inlet pressure

Check if the inlet pressure correspond to the data on the rating plate.

Measuring the inlet pressure:

- Close the shutoff valve. Turn the measuring nipple "E" (fig. 1.2) a few turns to open and connect a measuring hose to the gas valve.
- Take this measurement when the fireplace runs at high and low settings.
- Do not use the device if the inlet pressure deviates (+20% and -20%).

Please note!

Close the pressure measuring nipple and check for gas leakage.

Check ignition and burner

Ignite the fire by using the remote control as described in the user manual.

Check:

All section settings of the burner. Now repeat the above check using the ITC-V2 App. (App set at Dealer level).

Navigate to: Menu (top left) -> Diagnostics and:

- Diagnostic messages;
- Realtime Monitor.

Now use a gas leak finder to check all gas pipes from the gas valve to the burner.





7.1 Checking the flame image

Let the fireplace burn for at least 20 minutes at highest setting and check the flame for:

- flame distribution;
- colour of the flames.

When the fire image is acceptable let the fireplace burn at the maximum setting for at least 4 hours. See chapter 2.1.

If one or both points are not acceptable then check:

- The position of the logs and/or the amount of glass granulates;
- The pipe connections for leaks. (in case of blue flames);
- That the flue restrictor is set to the right value (see fig. 1.5a,b);
- The outlet:
 - Wall terminal has the correct position and side up;
 - Roof terminal has the correct position.
- If the maximum lengths of the flue gas outlet is not exceeded.
- If possible, carry out a flue gas analysis (see section 7.2).

7.2 Flue gas analysis

It is possible to check the combustion gases and supply air with a CO/CO_2 flue gas analyser. There are two measuring pipes between the builtin frame and the front glass (fig. 2.1a and b).

X = measuring pipe air supplyY = measuring pipe flue gas

The ratio CO2 and CO must not be greater than 1:100.

Example:

CO2 is 4% and CO is 400ppm, measured at the highest point. If the ratio is greater than 1:100 or flue gases are measured in the air supply, check the points in section 7.1.

8 Instructions for client

- Recommend that the fire should be checked annually by a qualified specialist to ensure the safe use and to guarantee a long service life.
- Provide instructions on the operation of:
 - o the appliance;
 - the remote control;
 - if present, the App and its settings.

 Give advice and instructions on care and cleaning of the glass:



- Emphasize the danger of fingerprint burns at the glass.
- Handover to customer:
 - installation manual;
 - user manual;
 - decoration instruction card;
 - suction cups;
 - o sample Faber glass polish.

9 Annual maintenance

Check

Check and clean if necessary:

- the combustion chamber;
- the burner
- the wooden logs for breakage;
- the glass(es);
- the outlet.

Replace ash material and/or glass granulate if necessary.

Cleaning

Remove the front glass (see chapter 5). You can clean the glass with Faber glass polish. This is a specially formulated cleaning agent that can be ordered at authorized Faber dealers. Never use aggressive cleaning agents or abrasive products.

Please note!

Avoid fingerprints on the glass; these are no longer removable once the fire is used.

Now carry out check-up as described in chapter 7.

For an extensive maintenance instruction "maintenance protocol gas fires" see:







10 Conversion to other gas type

This can only be done by replacing the burner. To do so, please contact your dealer. Always provide the type and serial number of the appliance when ordering.

11 Flue calculation

A simple way to calculate whether the exhaust configuration is possible in combination with your fireplace, use the "Faber Flue App V2":



This is available free of charge and can be downloaded via:

Internet:

Android and PC (Windows Store, (Windows 10)).

App Store:

iPhone, iPad and Mac.

Google Play:

Android smart phones and Android tablets.

Alternatively, you can use the calculation sheet (see chapter 13).

The options for flue lengths and any flue restrictors are defined in a restrictor table, see 11.1 and 11.2. Start Length (STL), Total Vertical Height (TVH) and Total Horizontal Length (THL) are used in the table.

• Start length (STL):

The first part that is placed on the fireplace and represents a certain value (fig. 12.1, 12.2 and 12.3 A, N and F). You can find this value in the upper row of the restrictor table.

• <u>Total Vertical Height (TVH):</u>

TVH is the height difference measured from the top of the appliance to the outlet. This can be measured or determined in the building plan. For clarification, see also 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 entirely in the horizontal plane. See elbows I, K and Q and the elements H, J, L, M, P and R (fig. 12.1 and 12.2).

Horizontal length:

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 elbows are elbows entirely in the horizontal plane
 (fig. 12.1, 12.2 and 12.3 I, K and Q).
- <u>Elbows 45° or 30° in the horizontal plane</u>.
 Horizontal elbows are elbows entirely in the horizontal plane.
- Elbows 90° vertical to horizontal:
 These are 90° elbows, which proceed from horizontal to vertical (fig. 12.2 and 12.3 G, O and S).
- Elbows 45° or 30° vertical to horizontal plane:

These are 30° or 45° elbows vertically offset less than 45° (fig. 12.1 B and D).

Pipes at an angle of inclination:

These are pipes vertically ascending at an angle of 30° or 45° (fig. 12.1 C). Fill in only in combination with at least two 30° or 45° elbows in the vertical part.

Restrictor table:

See restrictor table for the correct vertical (TVH) and horizontal length (THL).

In case of an "X" or if the values are outside the restrictor table, the combination is not permitted. Then adjust TVH or THL.

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

The value found indicates the setting of the flue restrictor value.

When the calculation shows 0, the restrictor must be set to the top position.

When the calculation indicates 110, the restrictor should be set to the bottom position.

For all other values the intermediate positions must be used.

The default value is set to 60, see fig. 1.5b and 1.6.





11.1 Restrictor table (100/150) MatriX 800/500 RD H, ST H and MatriX 1050/500 RD H, ST H

Start length (STL) Vertical (TVH) and Horizontal (THL)

S.	TL	0,2				
TI	HL	0	1	2	3	4
	0	х	х	х	х	х
	0,5	х	х	х	x	х
	1	х	х	х	х	х
	1,5	х	х	х	х	х
	2	0,2	х	х	х	х
	3	0,2	х	х	х	х
	4	60,2	х	х	х	х
	5	70,2	х	х	х	х
	6	80,2	х	х	х	х
	7	90,2	х	х	х	Х
	8	90,2	х	х	х	х
	9	100,2	х	х	х	х
	10	100,2	х	х	х	х
	11	110,2	х	х	х	х
	12	110,2	х	х	х	х
	13	110,2	х	х	х	х
₹	14	110,2	х	х	х	х
·	15	110,2	х	х	х	х
	16	110,2	х	х	х	х
	17	110,2	х	х	х	х
	18	110,2	х	х	х	х
	19	110,2	х	х	х	х
	20	110,2	х	х	х	х
	21	110,2	х	х	х	х
	22	110,2	х	х	х	х
	23	110,2	Х	х	х	х
	24	110,2	х	х	х	х
	25	110,2	х	х	х	х
	26	110,2	х	х	х	х
	27	110,2	Х	х	х	х
	28	110,2	Х	х	х	х
	29	110,2	Х	х	х	х
	30	110,2	Х	Х	х	х





11.2 Restrictor table (130/200) MatriX 800/500 RD H, ST H and MatriX 1050/500 RD H, ST H

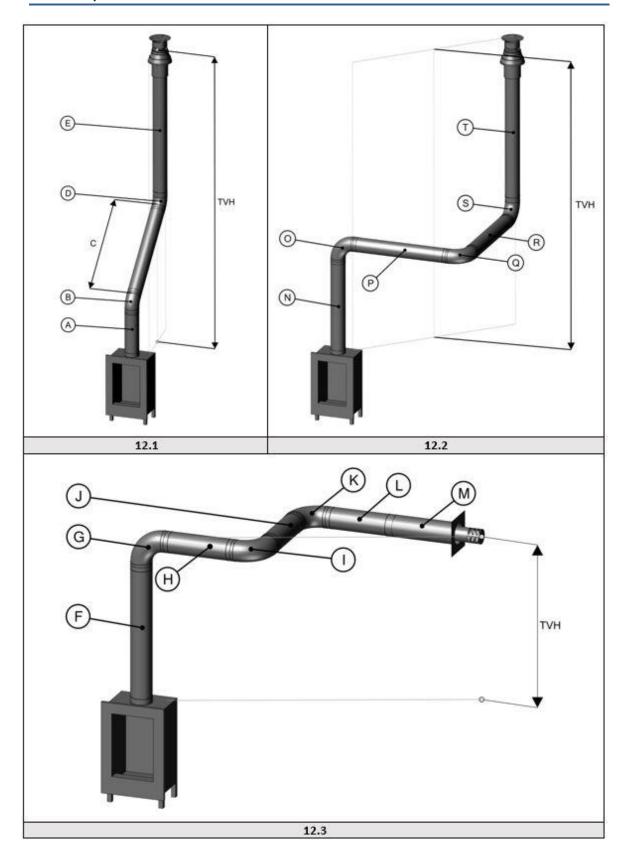
Start length (STL) Vertical (TVH) and Horizontal (THL)

S	TL	0,2	0,5	1	1	1	1	1	1	1.5	1.5	1.5
Т	HL	0	1	2	3	4	5	6	7	8	9	10
	0	х	х	х	х	х	х	х	х	х	х	х
	0,5	х	0,4	х	х	х	х	х	х	х	х	х
	1	х	60,4	0,4	0,4	0,4	0,4	0,4	0,4	х	х	х
	1,5	х	60,4	0,4	0,4	0,4	0,4	0,4	0,4	х	х	х
	2	0,4	70,4	60,4	0,4	0,4	0,4	0,4	0,4	0,4	х	х
	3	80,4	80,4	70,4	60,4	60,4	0,4	0,4	0,4	0,4	0,4	0,4
	4	90,4	90,4	80,4	70,4	60,4	0,4	0,4	0,4	0,4	0,4	0,4
	5	100,4	90,4	90,4	80,4	70,4	60,4	0,4	0,4	0,4	0,4	0,4
	6	100,4	100,4	90,4	90,4	80,4	70,4	60,4	0,4	0,4	0,4	0,4
	7	110,4	100,4	100,4	90,4	90,4	80,4	70,4	60,4	0,4	0,4	0,4
	8	110,4	100,4	110,4	100,4	90,4	90,4	80,4	70,4	60,4	0,4	0,4
	9	110,4	100,4	110,4	110,4	100,4	90,4	90,4	80,4	70,4	60,4	0,4
	10	110,4	100,4	110,4	110,4	110,4	100,4	90,4	90,4	80,4	70,4	60,4
	11	110,4	100,4	110,4	110,4	110,4	110,4	100,4	90,4	90,4	80,4	70,4
	12	110,4	100,4	110,4	110,4	110,4	110,4	110,4	100,4	90,4	90,4	80,4
_	13	110,4	100,4	110,4	110,4	110,4	110,4	110,4	110,4	100,4	90,4	90,4
₹	14	110,4	100,4	110,4	110,4	110,4	110,4	110,4	110,4	110,4	100,4	90,4
	15	110,4	100,4	110,4	110,4	110,4	110,4	110,4	110,4	110,4	110,4	100,4
	16	110,4	100,4	110,4	110,4	110,4	110,4	110,4	110,4	110,4	110,4	110,4
	17	110,4	100,4	110,4	110,4	110,4	110,4	110,4	110,4	110,4	110,4	110,4
	18	110,4	100,4	110,4	110,4	110,4	110,4	110,4	110,4	110,4	110,4	110,4
	19	110,4	100,4	110,4	110,4	110,4	110,4	110,4	110,4	110,4	110,4	110,4
	20	110,4	100,4	110,4	110,4	110,4	110,4	110,4	110,4	110,4	110,4	110,4
	21	110,4	100,4	110,4	110,4	110,4	110,4	110,4	110,4	110,4	110,4	х
	22	110,4	100,4	110,4	110,4	110,4	110,4	110,4	110,4	110,4	х	х
	23	110,4	100,4	110,4	110,4	110,4	110,4	110,4	110,4	х	х	х
	24	110,4	100,4	110,4	110,4	110,4	110,4	110,4	х	х	х	х
	25	110,4	100,4	110,4	110,4	110,4	110,4	х	х	х	х	х
	26	110,4	100,4	110,4	110,4	110,4	х	х	х	х	х	х
	27	110,4	100,4	110,4	110,4	×	×	х	х	х	×	×
	28	110,4	100,4	110,4	×	×	х	х	×	х	х	х
	29	110,4	100,4	х	х	х	х	х	х	х	х	х
	30	110,4	х	Х	Х	Х	Х	Х	Х	Х	Х	Х





12 Examples flue materials







13 Calculation sheet

		Sta	arter leng	th (STL)				
First part on top	of the applia	Value						
Flue length from	n 0,1m till 0,4	0,2						
Flue length from	n 0,5m till 0,90	0,5						
Flue length fro	m 1m till 1,4r	1						
Flue length fro	m 1,5m till 2r	n		1,5				
Flue length	2m or more			2				
	d 90°			0,1				
Bend 45°,				0,2				
	erminal			1				
Wall te				0				
wante	ai				Value			
	To	tal \	Vertical H	eight (TVH)				
,	measured height							
			met	er	meter			
	Tot	al H	orizontal I	Length (THL)				
	Calculation	า						
Part	number	x	value	result				
Total Length in meters		х	1					
90° Bend, vertical to horizontal		х	0,4					
45° Bend, vertical to		х	0,2					
horizontal	••••••							
90° Bend in horizontal direction x 1,5								
45° Bend in horizontal direction x 1								
flue pipes at an angle in		х	0,7					
meters			0,1		rounded value			
			Total	+	meter			





		found value						
Search in the table at TVH and THL and enter the value that i	s found.							
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.								
Results								
Restrictor size = Value for the comma		mm						
Extra information = Value behind the comma		mark						
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, in case of roof terminal just before the terminal.								
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

14.1 MatriX 800/500 RD H, ST H

	Te	echnical dat	a				
Type indication(s)			N	1atriX 800/500	RD ST H		
Type appliance			C11/C31/C91				
Diameter outlet/inlet	130/200						
Gas connection	3/8"						
Indirect heating functionality				no			
Category				II2H3P			
	Symbol					Unit	
Reference gas/inlet pressure			G20-20		G31-37	mbar	
Emissions in space heating	NOx		90		118	mg/kWh _{input} (GVC)	
Direct heating output							
Nominal heat output	P _{nom}		10,7		10,2	kW	
Minimum heat output (indicative)	P _{min}		1,5		1,5	kW	
Useful efficiency (NCV)							
At nominal heat output	η _{th,nom}		89,3		87,8	%	
At minimum heat output (indicative)	$p_{th,min}$		68,8		65,7	%	
Appliance input data							
Input	Hi		12,0		11,6	kW	
			1,29		0,47	m³/h	
Gas rate at full mark					0,90	kg/h	
Burner pressure at full mark			13,0		28,0	mbar	
Power requirement for permanent pilot light							
Power requirement for permanent pilot light (if applicable)	P _{pilot}		0		0	kW	
Additional electricity consumption							
At nominal heat output	el _{max}		0,0309		0,0309	kW	
At minimum heat output	el _{min}		0,0114		0,0114	kW	
In standby mode	el _{SB}		0,0021		0,0021	kW	
Energy-efficiency							
Energy-efficiency class			В		В		
Energy-efficiency index	EEI		88		86		
Type heating output/control room temperature				Other co	ontrol options	5	
One step heat output, no control of room tempe	rature	no	Control of	room tempera	ature with		
Two or more manually adjustable stages, no control of room temperature		no		Control of room temperature, with no presence detection			
With mechanical control of the room temperature by		no	Control of ro	om temporatus	re with once		
thermostat With electronic control of the room temperature		no		Control of room temperature, with open window detection yes			
With electronic control of the room temperature p time switch	olus day-	no					
With electronic control of the room temperature p time switch	yes	With optional remote control yes			yes		
Glen Dimplex B	enelux Sat	urnus 8 Heer	enveen The N	etherlands			





14.2 MatriX 1050/500 RD H, ST H

	Te	echnical dat	а						
Type indication(s)			M	atriX 1050/50	0 RD ST H				
Type appliance			C11/C31/C91						
Diameter outlet/inlet		130/200							
Gas connection	·			3/8"					
Indirect heating functionality				no					
Category				II2H3P					
Category	Symbol			1121131		Unit			
Reference gas/inlet pressure	3,201		G20-20		G31-37	mbar			
Emissions in space heating	NOx		97		122	mg/kWh _{input} (GVC)			
Direct heating output	110%		3,		122	g,			
Nominal heat output	P _{nom}		10,7		10,2	kW			
Minimum heat output (indicative)	P _{min}		1,5		1,5	kW			
Useful efficiency (NCV)			ŕ		•				
At nominal heat output	η _{th,nom}		89,0		88,3	%			
At minimum heat output (indicative)	ր _{th,min}		69,5		72,1	%			
Appliance input data									
Input	Hi		12,0		11,6	kW			
			1,25		0,47	m³/h			
Gas rate at full mark					0,90	kg/h			
Burner pressure at full mark			13,0		28,0	mbar			
Power requirement for permanent pilot light									
Power requirement for permanent pilot light (if applicable)	P _{pilot}		0		0	kW			
Additional electricity consumption									
At nominal heat output	el _{max}		0,0309		0,0309	kW			
At minimum heat output	el _{min}		0,0114		0,0114	kW			
In standby mode	el _{SB}		0,0021		0,0021	kW			
Energy-efficiency									
Energy-efficiency class			В		В				
Energy-efficiency index	EEI		88		87				
Type heating output/control room temperature				Other co	ontrol options	5			
One step heat output, no control of room temper	ature	no	Control of	room tempera	ature, with				
Two or more manually adjustable stages, no control of room temperature		no	pr	presence detection					
With mechanical control of the room temperature by thermostat		no		om temperatu		yes			
With electronic control of the room temperature		no	W	window detection yes					
With electronic control of the room temperature pl time switch		no	With or	With optional remote control yes					
With electronic control of the room temperature pl time switch	us week-	yes	With optional remote control yes						

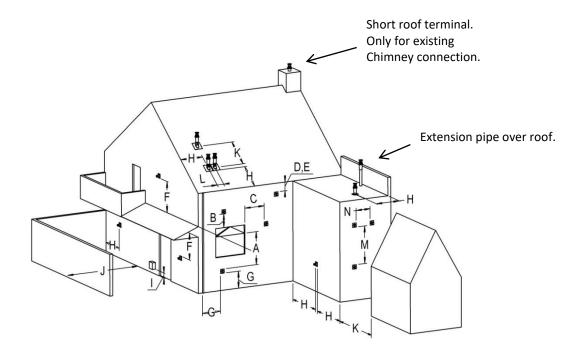




15 Outlet position

Please note!

These rules apply only for the proper functioning of the unit, for ventilation and environmental protection you need to comply with the applicable rules as defined in the building regulations.



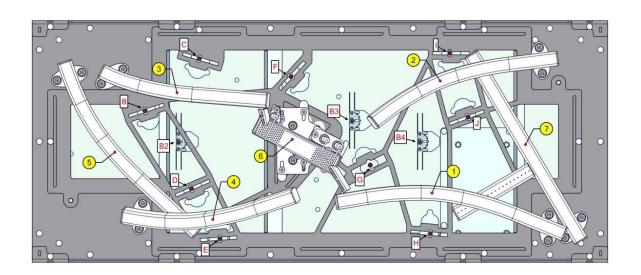
Location	Position outlet	Distance mm
D	Under a gutter	500
Е	Under a roof edge	500
F	Under a carport or balcony	500
G	Vertical downpipe	300
Н	Inside and outside corners	500
J	From wall surface to a wall outlet	1000
К	Two gable outlets against over each other	1000
L	Distance between two roof outlets	450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



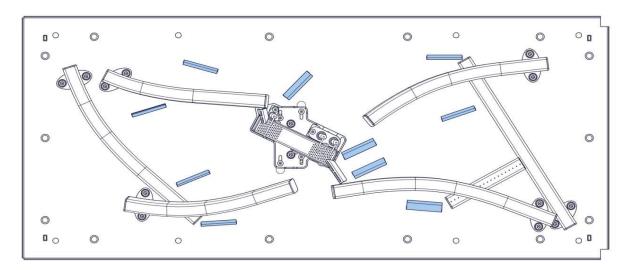


16 Top view sectional burner

16.1 Position led spots and burners MatriX 800/500 RD H, ST H



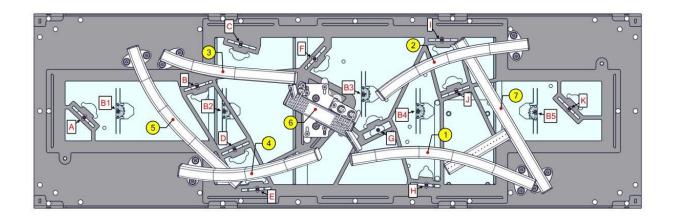
16.2 Position light guides MatriX 800/500 RD H, ST H



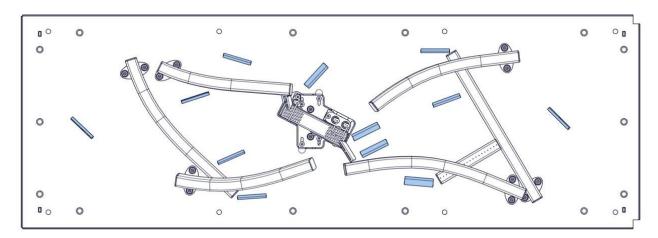




16.3 Position led spots and burners MatriX 1050/500 RD H, ST H $\,$



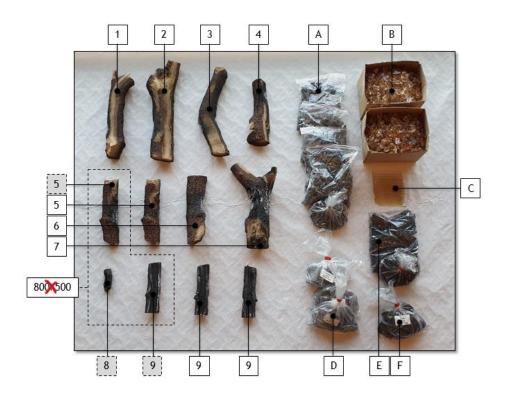
16.4 Position light guides MatriX 1050/500 RD H, ST H







17 Decoration instruction card 800-1050/500 RD H, ST H







Use the included decoration instruction card, or for a clear instruction video, scan the QR code:

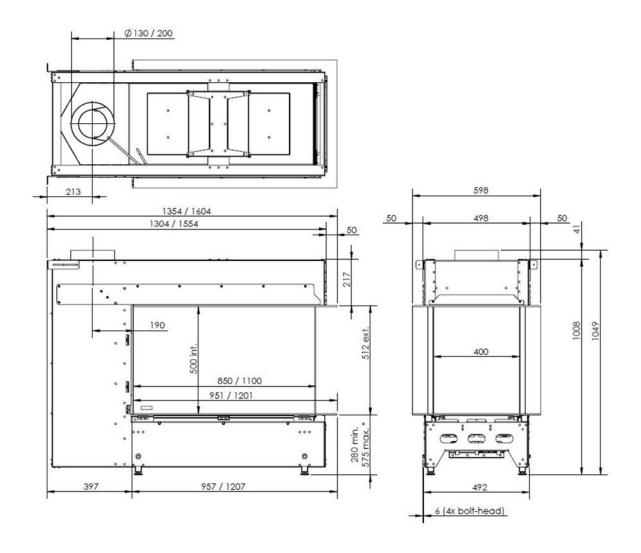






Dimensional drawings 18

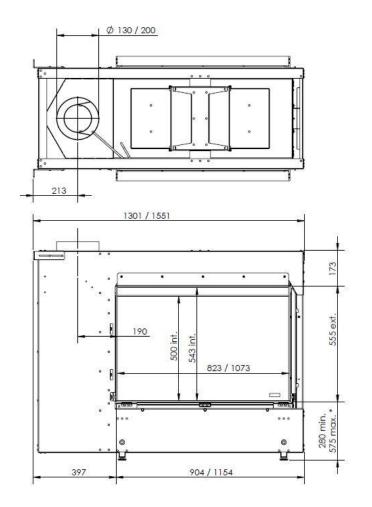
MatriX 800/500 RD H and MatriX 1050/500 RD H 18.1

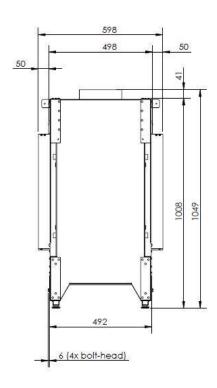






18.2 MatriX 800/500 ST H and MatriX 1050/500 ST H

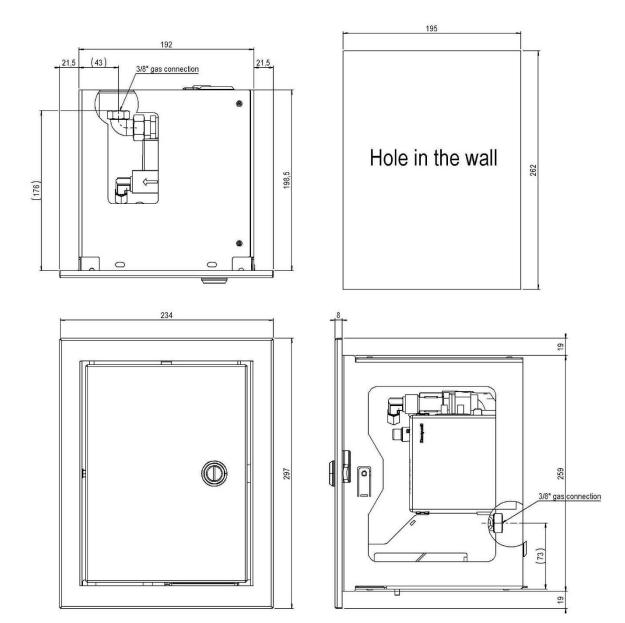








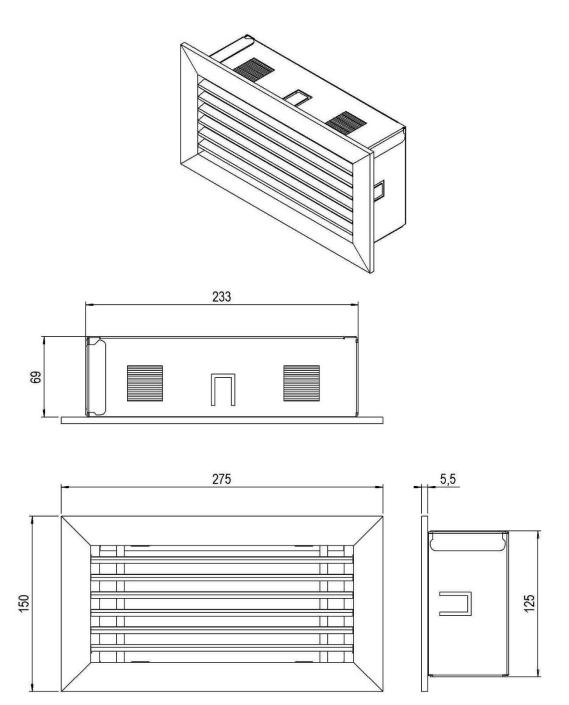
18.3 Control box FAB1806







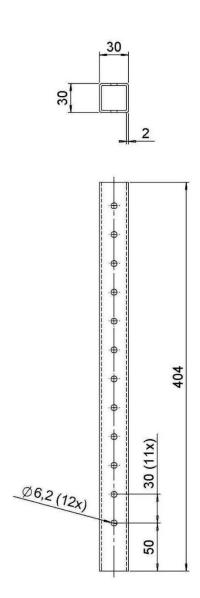
18.4 Ventilation grid (article number A9296400)







18.5 Adjustable feet (article number A9319696)







Installation manual MatriX 800/500 RD H, ST H & MatriX 1050/500 RD H, ST H





Installation manual MatriX 800/500 RD H, ST H & MatriX 1050/500 RD H, ST H





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