Rüegg CloudFire

INSTALLATION INSTRUCTIONS

rüegg SWITZERLAND

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1 Basics

1.1 Images

The images used in these instructions are designed to be as general as possible and primarily illustrate the key functions. For this reason, the details of individual images may differ from your product.

2 Safety

2.1 regulations

Rüegg CloudFire is type-tested and approved according to:

2014/53/EU: RED Directive

- EN 61010-1:2010
- EN 61010-1:2010/A1:2019/AC Apr.:2019
- EN 62311:2008
- EN 301 489-1 V2.1.1
- EN 301 489-17 V3.1.1
- EN 300 328 V2.1.1

2014/30/EU: EMC Directive

- EN 61326-1:2013
- EN 61000-3-3:2013
- EN55011:2016/A1:2017

Primarily, values from the EN test are published. Where the test does not provide any information, country-specific values from CH and DE were used. The installer is responsible for this validity.

All local regulations – including the relevant national and European standards – must be complied with, and are written above the assembly instructions.

The system's installer is responsible for compliance with country-specific legislation.

Installations may only be carried out by designated specialists or Rüegg partners. If this is not the case, Rüegg rejects any guarantee and liability.

2.2 Warnings

Warning and safety notices identify the following hazards:

⚠ WARNING	Indicate a potentially dangerous situation. Can cause death or serious injury if not avoided.
⚠ CAUTION	Indicate a potentially dangerous situation. Can cause minor injuries if not avoided.
NOTICE	Indicate a potentially harmful situation. If not avoided, may cause property damage to the product or the environment.

2.3 Electronic components – low voltage

The Rüegg CloudFire 9V power supply unit is connected to the home network with a standard 2-pin Euro plug. The provision of the 230V socket in the area of Rüegg CloudFire is to be carried out exclusively by a designated specialist. It is imperative that this junction box is installed so that it is protected against temperature stress and mechanical damage.

⚠ WARNING

The provision of the 230V junction box for the Rüegg CloudFire is to be carried out exclusively by a designated specialist. This junction box must be installed so that it is protected from temperature stress and mechanical damage.

2.4 Electronic components – protection against exposure to heat

Rüegg CloudFire consists of electronic components. The control unit, the actuator motor of the fresh air flap, the display and all electrical lines must not be exposed to temperatures above 50°C.

NOTICE

The control unit, the actuator motor of the fresh air flap, the display and all electrical lines must not be exposed to temperatures above 50°C.

If Rüegg CloudFire is installed inside the fireplace or chimney system, it must be ensured that it is always installed close to the ground, in the cool area (marked green in the following image) of the system.

All control cables must also be laid in the cool area and protected against high temperatures and mechanical damage.

The display for indicating the burn-up values (optional) must be installed on or in an adjacent wall that is not exposed to temperatures above 50°C. This also applies to the control line between the control unit and the display.

NOTICE

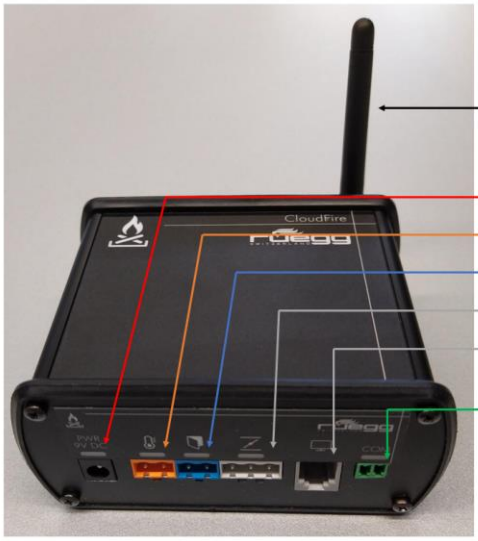
Requirements for the inspection opening:

Unrestricted access to the fresh air flap and the electronics through the inspection opening must be guaranteed at all times for repair purposes.

Position the Wi-Fi antenna of Rüegg CloudFire in a place that is not covered by metallic surfaces. This would severely restrict the Wi-Fi reception.

3 Components of Rüegg CloudFire

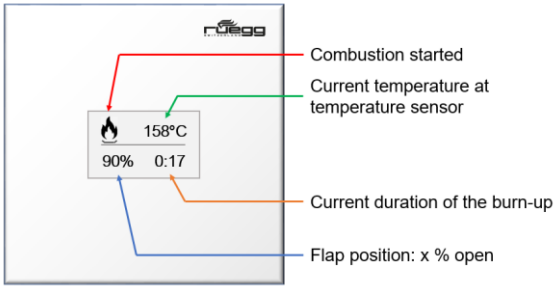
3.1 Rüegg CloudFire control unit



All connections and plugs are colour-coded and protected against accidental polarity reversal.

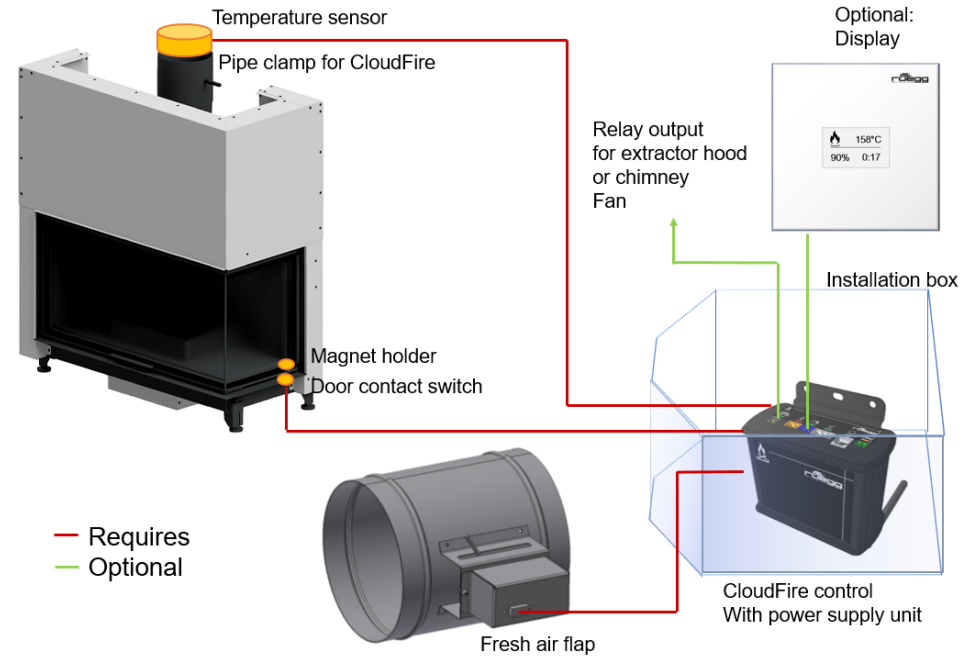
3.2 Rüegg CouldFire Display (Optional)

The display can be ordered as an option for Rüegg CloudFire, and shows the values of the current burn-up.



3.3 Schematic structure Rüegg CloudFire

The following diagram shows the schematic structure of Rüegg CloudFire and its components:



4 Installation

4.1 Installation of temperature sensor with pipe clamp

Pipe clamp

Pipe clamp with temperature sensor mounted

- Use the correct pipe clamp for the flue pipe (note the diameter!)
- Open the pipe clamp by means of the wing nuts
- Attach the pipe clamp to the mounted flue pipe as close as possible to the flue outlet of the fireplace / fireplace insert.
- Make sure that the temperature sensor and the cable are easily accessible at the intended installation location in the event of a subsequent defect, and that the cable does not rest directly on the fireplace / fireplace insert or other components.

NOTICE

If only Rüegg CloudFire (without Rüegg SafeFire) is to be installed, only one hole needs to be drilled in the flue pipe. The second nut remains unused.

- Unscrew the temperature sensor from the M12 connection adapter and screw the connection adapter into the desired connection nut of the pipe clamp
- Use the Ø 8mm hole of the M12 connection adapter for pre-drilling with a Ø 8mm drill bit.
- Remove the connection adapter from the nut again and drill the hole to Ø 12mm.
- Reattach the temperature sensor in the M12 connection adapter
- Screw the temperature sensor adapter back into the M12 connection nut of the pipe clamp and tighten the screw connection securely.
- Incorrectly drilled holes must be sealed with suitable, heat-resistant sealing material or the flue pipe must be replaced.
- Run the temperature sensor cable along the fireplace insert into the lower part of the system

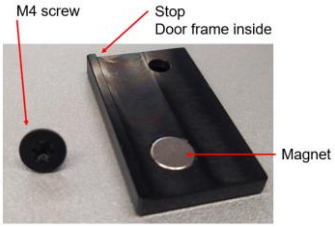
NOTICE

The control side terminal is not heat-resistant, and must be outside the range of high temperatures.

4.2 Installing door contact switch and magnetic holder

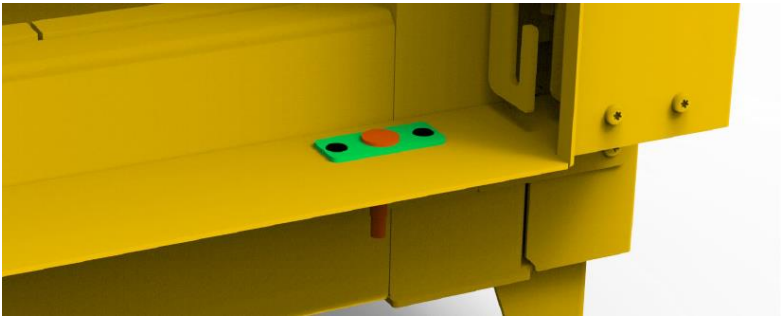
If you order a fireplace / fireplace insert with Rüegg CloudFire, you can order the installation directly from Rüegg at the time of ordering. Should you wish to carry out the assembly yourself, proceed according to the following steps.

1. Mounting the magnet holder

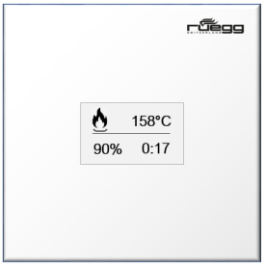


- Align the magnetic holder with the intended stop on the inside of the door frame (typically on the right-hand side in the rear area, on the left-hand side for left-sided fireplace / fireplace inserts).
- Use the existing internal threads on the underside of the door frame to fix the magnetic holder.
- Unscrew the existing screw from the thread.
- Hold the magnet holder against the door frame with the visible part of the magnet facing upwards so that the fixing hole of the magnet holder comes to rest on the internal thread.
- Take the M4 countersunk screw supplied with the magnet holder and fix the magnet holder to the underside of the door frame.

2. Mounting the door contact switch
    - Slide the door down and mark the point where the magnet approaches the base plate. Please note that the magnet is not centred in the magnet holding plate.
    - Align the door contact switch retaining plate so that the door contact switch is vertically centred under the magnet.
    - Mark the two drill holes for fixing the retaining plate accordingly.
    - Draw the opening of the door contact switch as well.
    - Drill the three holes with diameter 3.3 at the marked position.
    - Drill out the opening (middle hole) to 16 mm for mounting the door contact switch.
    - Cut an M4 thread in each of the two mounting holes.
    - Fix the door contact switch with the supplied spacer sleeves so that the door contact switch head has a distance of between 0.5 to 5 mm from the magnet holder when the door is fully closed.
    - Screw the retaining plate with the door contact switch firmly to the base plate.



4.3 Installation display (optional)



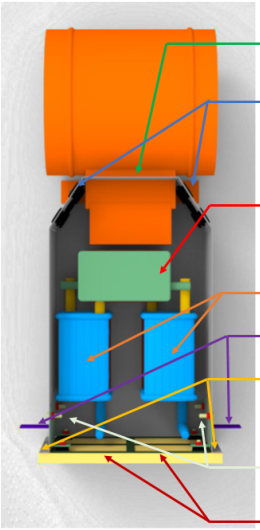
NOTICE

When positioning the display, make sure that the display, as well as the cable, is never exposed to temperatures >50°C. If it is not possible to mount the display in a recessed, insulated wall, an additional surface-mounted box with surface-mounted cable routing is required.

- Remove the display from the supplied flush-mounted box
- Create a suitable exit point for the cable feed-through on the flush-mounted box.
- Position the flush-mounted box at the suitable installation location and fix it with mortar or mounting adhesive. Make sure that the adhesive does not cause odours and evaporation at temperatures up to 70°C!
- Connect the display with the supplied cable and lead the other end through the exit point of the flush-mounted box.
- Connect the loose end to the control unit.
- Place the display in the flush-mounted box as a test.
- Remove the display from the flush-mounted box again and disconnect the plug from the display.
- Secure the loose cable end in the flush-mounted box so that it cannot fall back into the wall during plastering work.
- After the plastering work has been completed, the display can be reconnected to the cable.
- Insert the display into the flush-mounted box using gentle pressure in each corner of the display, so that it is flush with the plaster of the casing.

4.4 Installation of the installation box for Cloud- and SafeFire

The installation box with service opening for CloudFire and SafeFire is an elegant way to install Rüegg CloudFire and/or SafeFire in your fireplace system, and to allow access to potentially defective components at any time in the event of service. The installation box offers space for a maximum of one CloudFire control unit and one SafeFire vacuum monitor.



1. Brick the bottom row of the fireplace casing to the desired position of the service box
2. Remove the service door attached with magnets from the installation box and keep it safe.
3. Make sure that the service box must always be installed close to the ground
4. Adjust the thickness of the fireplace casing using the adjustable back stop
5. Place the service box between the bottom row of the fireplace casing.
6. **Suspend masonry work until you have completed instruction no. 16**
7. Connect the fresh air flap to an aluminium flex hose on both sides and connect it to the fireplace insert and the supply air connection as usual.
8. Insert the fresh air flap through the insertion opening of the service box and fasten it with the wing nuts provided
9. Note: the cover of the fresh air flap motor is fixed with a magnetic catch. This allows the motor to be changed once installed in the event of servicing.
10. Feed all cables through the cable glands into the service box
11. Pull the drawer out of the service box and connect all connections to the fresh air flap, the power supply unit and Rüegg CloudFire.

⚠WARNING

Please note that work on the 230VAC mains connection may only be carried out by trained specialists, taking into account the expected temperature development.

12. Now place the power supply unit in the drawer as shown in the picture above.
13. **Place the Rüegg CloudFire in the drawer with the Wi-Fi antenna facing forwards as shown in the picture. Otherwise, the Direct Wi-Fi connection cannot be ensured!**
14. Commission the mains connection with your specialist electrician, and check the correct operation of Rüegg CloudFire using the LED displays in Chapter 6.
15. Switch off the power supply again with your specialist electrician until the installation work is completed
16. Slide the drawer into the service box and make sure that no cables are trapped
17. Finish the masonry work on the fireplace casing
18. Attach the door to the service box before plastering. Note that the door does not completely cover the opening of the service box. The lid has a 7 mm wide opening at the top and bottom so that the room air can circulate around the electronics during operation.
19. Align the service door using the magnet spacers so that it is flush with the fireplace casing.
20. Plaster the fireplace casing incl. the service door
21. Complete the painting work on the fireplace casing
22. **⚠WARNING**

    Make sure that the air regulation plate of the fireplace is completely open with the air regulation lever and lock the position of the plate. On most Rüegg fireplaces, the lever can be removed from its holder to avoid any operating errors.
23. Before the first firing up process, check that the control unit is ready for operation (according to chapter 6 and close the service door again so that a gap of equal width remains open at the upper and lower ends of the door for air purging

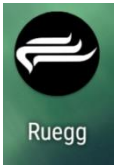
4.5 Configuration with the APP

NOTICE

The Rüegg APP can also be downloaded by private users to monitor the burning steps. Please note that the APP can only be used for control by means of a direct Wi-Fi connection. A smartphone must, therefore, be reconnected to the RUEGG SSID each time it is used. This has the advantage that Rüegg CloudFire can be used independently of the operator's Wi-Fi infrastructure.

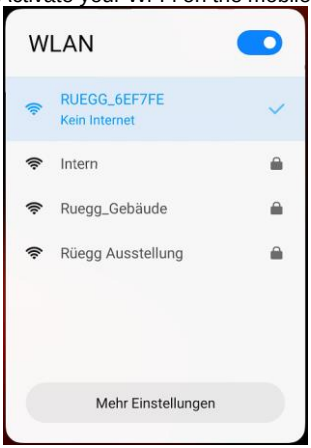
4.5.1 Installation of the Rüegg APP

- Install the Rüegg APP in the APP Store or on Google Play.



4.5.2 Connecting the APP to Rüegg CloudFire for the first time

- Activate your Wi-Fi on the mobile phone



SSID: RUEGG_xXxxXx

[the SSID always starts with 'RUEGG_' followed by a six-digit alphanumeric string].

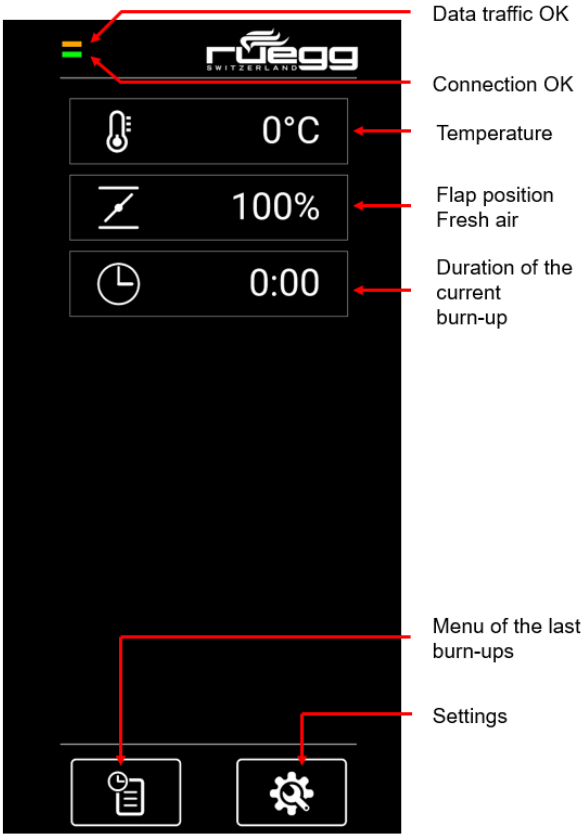
Password: rueggruegg

NOTICE

A message may appear stating that the selected Wi-Fi connection has no connection to the Internet. In that case, it must be confirmed on the mobile phone that the connection is to be maintained.

- Only now you may open the APP for the first time

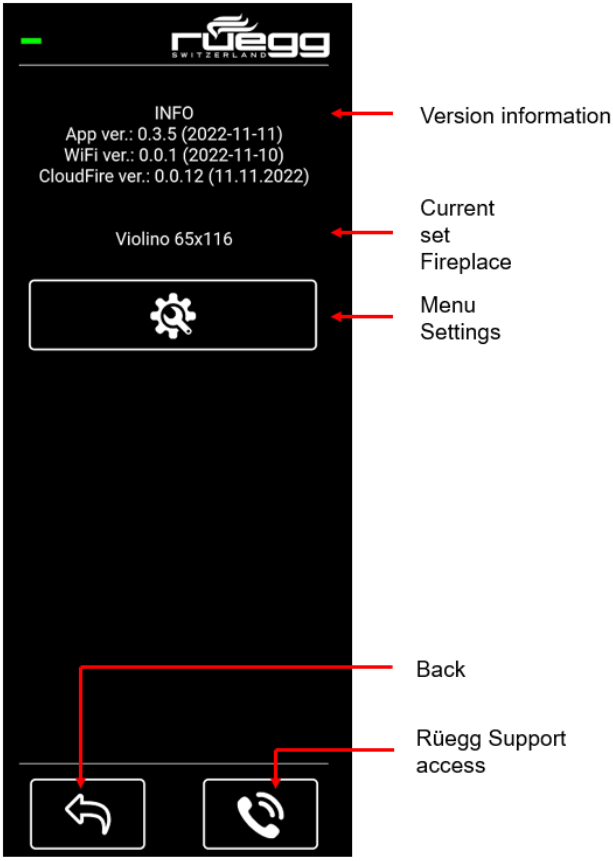
4.5.3 Start screen



4.5.4 Set up fireplace

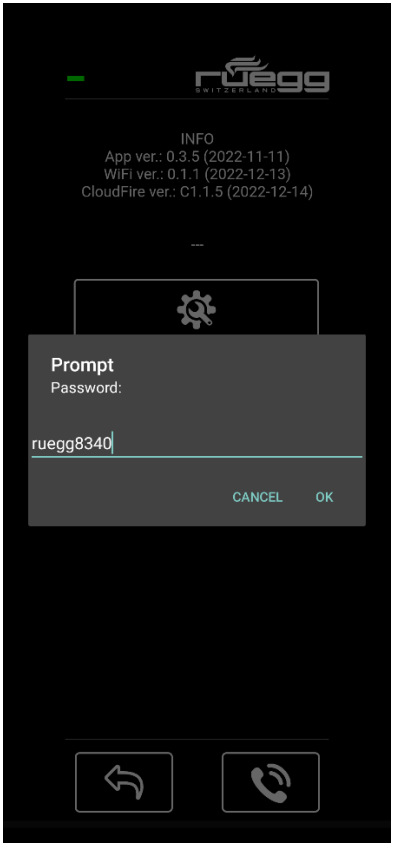
- Access the settings

- The info about the current version appears.



- Access the settings menu

- The password prompt appears

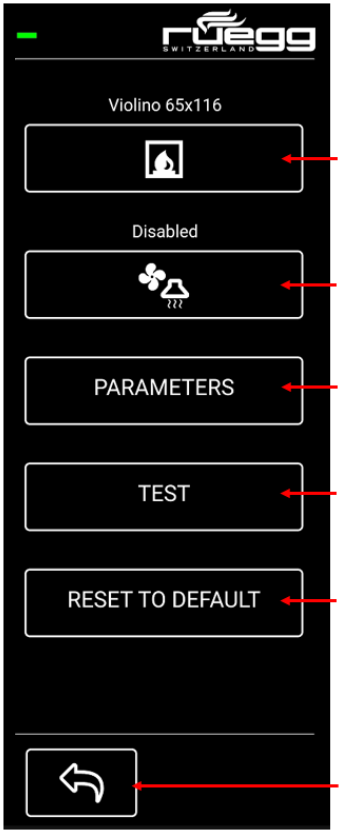


Password: ruegg8340

NOTICE

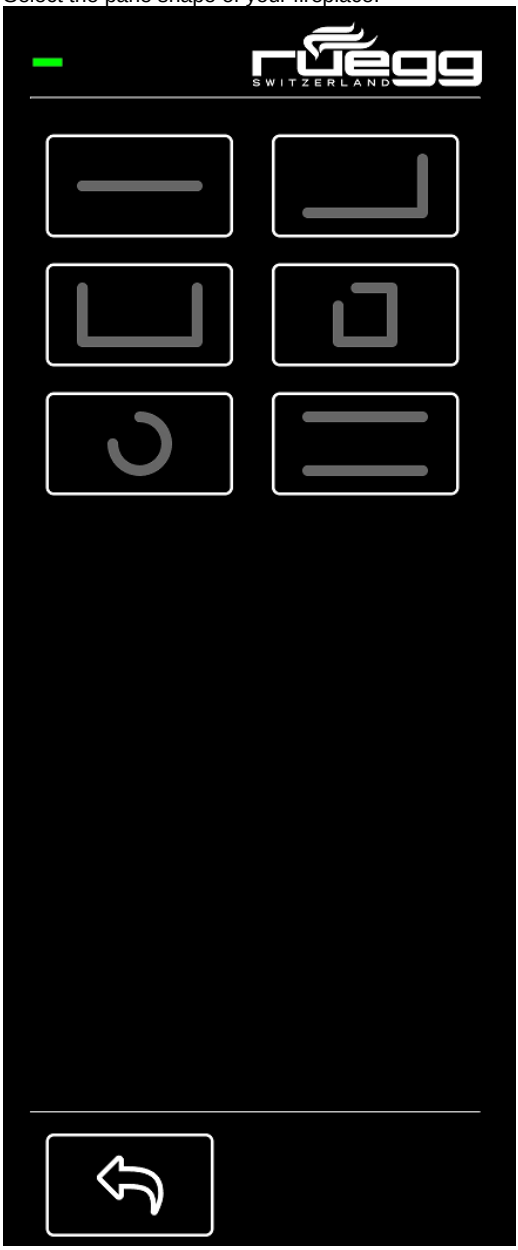
Changing the settings is reserved exclusively for the specialist installer. Please do not hand out this password to the end customer under any circumstances.
The password "rueggruegg" for creating the WLAN connection between the cell phone and the controller may be given to the end customer.

4.5.5 Menu – Settings

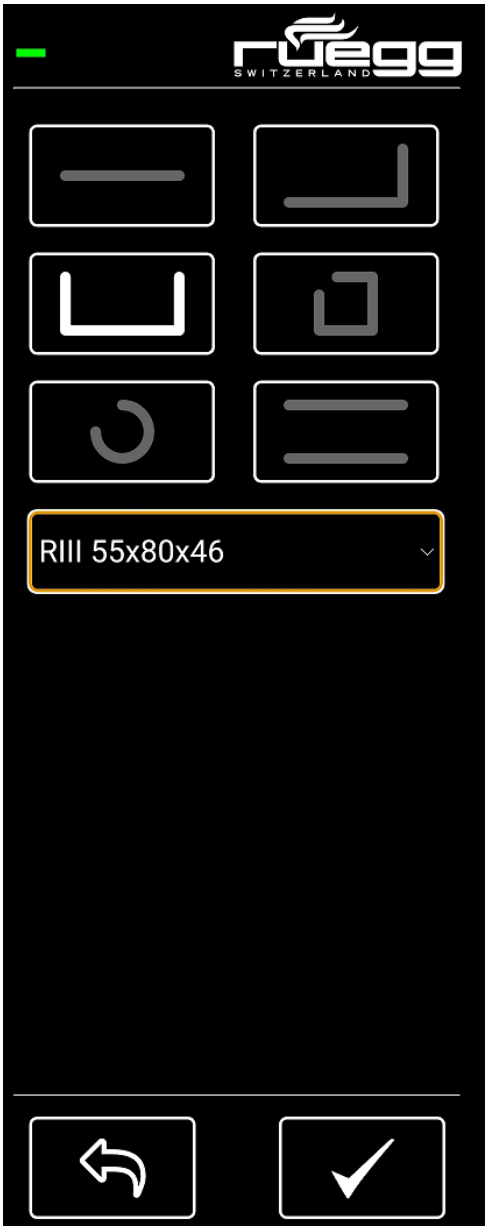


4.5.6 Select fireplace type

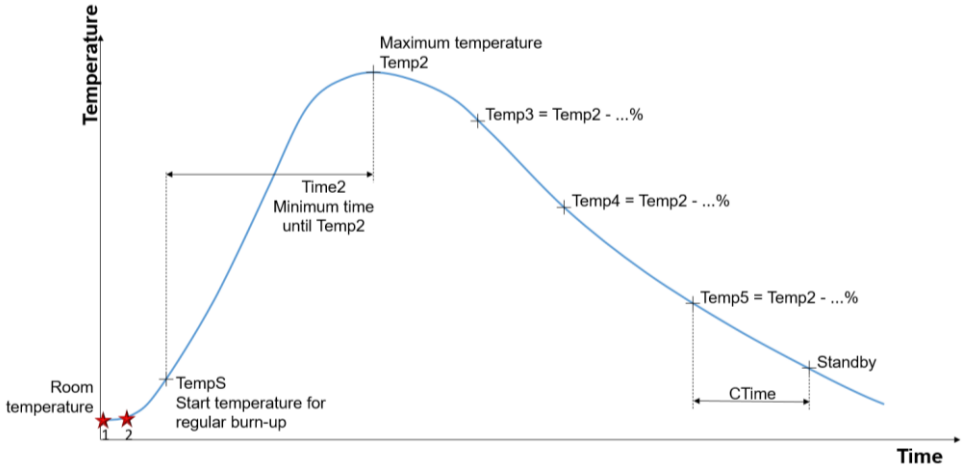
- Select the pane shape of your fireplace:



- Select your fireplace type from the list:



4.6 Functionality based on the temperature curve



The fresh air flap position follows the temperature curve in the flue pipe. The values stored for your type of fireplace correspond to the optimum setting under standard pressure of 12 Pascal when using an amount of wood in accordance with the operating instructions for your type of fireplace. If the burn-up does not take place as desired (weak flame formation, too little air in the combustion chamber), the parameters can be individually adjusted by the expert in the 'Parameters' menu.

Event	Description	Flap position
1	Opening the door	100% open
2	Closing the door	100% open
TempS	TempS marks the start temperature for a regular burn-up. If this is not reached (because there is no combustion), the air flap closes again to 0%.	100% open
Time2	Time2 determines the minimum time in which the flap remains open at 100%.	100% open
Temp2	After the time Time2 has elapsed or when the maximum temperature is reached	...% open
Temp3	Temp3 denotes the percentage temperature value compared to the maximum temperature of the respective burn-up: Temp3 = Temp2*(1-...%), Ex. Temp3 = 90% of Temp2	...% open

Temp4	Temp4 denotes the percentage temperature value compared to the maximum temperature of the respective burn-up: Temp4 = Temp2*(1-...%), Ex. Temp4 = 60% of Temp2	...% open
Temp5	Temp5 denotes the percentage temperature value compared to the maximum temperature of the respective burn-up: Temp5 = Temp2*(1-...%), Ex. Temp5 = 30% of Temp2	...% open
CTime	CTime indicates the time until the fresh air flap is completely closed.	After reaching CTime, flap 0% open

5 Additional functions

5.1 Control of an external fan or extractor hood

Rüegg CloudFire has a built-in relay that can be used to connect external devices.
On the one hand, a flue gas fan can be activated when operating your fireplace, if the draught conditions of the chimney system are insufficient.
On the other hand, you can use this relay to switch off air pressure-reducing installations, such as the extractor hood, a bathroom fan or an electronically controlled ventilation, while your fireplace is in operation to avoid undesirable negative pressure.

⚠ WARNING

Switching off the air pressure-reducing installations (e.g. an extractor hood) while your fireplace is in operation is purely for convenience. However, this in no way replaces tested and certified safety equipment such as a vacuum monitor.

The relay function can be defined in the Rüegg APP in the ‘Settings’ menu:

APP menu item	**Function**
Disabled	No relay function
OFF while flap is open	Switching off air pressure-reducing installations (e.g. the extractor hood) as long as the fresh air flap is >0% open
OFF while door is open	Switching off installations that reduce air pressure (e.g. the extractor hood) as long as the fireplace door is open.
ON until T-start is reached	Switching on the flue gas fan when the start temperature is exceeded
ON while flap is open	Switching on the flue gas fan as long as the fresh air flap is >0% open

6 Displays on the CloudFire control unit

	Luminaires		**Flashing**	
	Green	Red	Green	Orange
PWR	Voltage from the power supply unit is OK.		No voltage from power supply unit (40 seconds to functional failure)	CloudFire processor OK.
Temperature sensor	Temperature sensor is connected correctly	Temperature sensor incorrectly connected or defective (check values on display)		
Door contact	Door closed			
Fresh air flap	Signals the movement of the flap			
Display				Display connected and communication OK.
COM				Communication OK.
Switching relay	Relay contact is closed			
	Wi-Fi module is functional			

7 Technical Data

Power Supply		Temperature resistance	
Input Voltage	230V AC, 50Hz	Temperature sensor	< 1200°C
Output Voltage	9V DC	Temperature sensor connection	< 400°C
Output Current	3A	Door contact switch	< 200°C
Standby Consumption	2W	Magnet to door contact switch	< 360°C
		Door contact switch connection	< 200°C
		Servomotor of fresh air flap	< 50°C
		Control unit, display, cables	< 50°C

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