

# S21 GO-Line

Heat storage system











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## 1. Explanation of Symbols

## **△** Warnings

Warnings in the text are marked with a warning triangle. In addition, signal words also indicate the type and the severity of the consequences if the measures for averting the danger are not followed. The following signal words are defined and will be used in this document if necessary:

**NOTE** means that damage can occur.

**CAUTION** means that minor to moderately severe injuries can occur.

**WARNING** means that serious to life-threatening injuries can occur.

**DANGER** means that serious to life-threatening injuries can occur.

## important information

Important information is marked with the symbol to the left.

## 2. Safety Information

#### 2.1 Information on these instructions

Read these installation & operating instructions carefully before beginning installation! Camina shall assume no responsibility, liability and/or guarantee for fireplaces installed incorrectly or differently. Nor shall Camina assume any liability for mistakes, printing errors and changes.

i Keep these Installation & operating manual for future reference! The installation and the operating instructions must be handed over to the end user!

## 2.2 General Safety Instructions

Camina fireplace surrounds are built according to the current state of technology and the recognized safety regulations. Nevertheless, injuries and/or damage can occur during use. Always use the product as intended, in proper technical condition and in a safety and hazard-conscious manner. The locally applicable fire safety and building codes, applicable engineering regulations and standards must be complied with by the installer and the end user.

Compliance with the installation instructions serves your safety and is a prerequisite for proper functioning and environmentally friendly operation. Please note that in case of improper installation or operation, the manufacturer's guarantee and your guarantee rights shall be voided.

Request the required spare parts from your specialized dealer. Use only spare parts recommended and offered by us.

## ▲ Installation and commissioning

- The fireplace must be properly installed by a specialized company/fitter.
- The fireplace must be approved by the authorities responsible for approval.
- Commissioning must be carried out and confirmed by an approved specialized company/fitter.
- The end user must obtain detailed briefing by the installer on the mode of operation of the fireplace, on safe, proper operation and on correct, environmentally friendly heating.
- The end user must be instructed by the fitter on special aspects of operation, such as the operation of a fireplace together with a living area ventilation system or an extractor fan hood.
- All technical documents of the heating insert and all accessory parts required for safe operation of the fireplace shall be handed over to the end user and explained if necessary.

## **⚠** WARNING: Observe the requirements for the fireplace builder!

Installation and/or operating errors can result in injuries and/or damage. Installation and commissioning may only be carried out by an expert.

## ⚠ WARNING: Observe the requirements for the end user!

Operating errors can result in injuries and/or damage. Make sure that only those persons have access, who are capable of operating the fireplace properly.

Make sure that in particular children do not operate the fireplace unsupervised or play with it.



## ▲ WARNING: Danger of injury during transport and installation!

There is danger of injury when transporting heavy loads and/or due to improper securing during transport! Never endanger yourself or others. Create conditions which enable hazard-free transport and installation along the transport routes and at the installation location. Observe the safety information in the included documents, on warning stickers and in general transport regulations.

## **△** WARNING: Do not make any changes to the fireplace insert!

Changes to the fireplace insert are generally prohibited. Changes can lead to significant impairment in the safety of the chimney system.

## △ WARNING: Behaviour in an emergency!

Never put yourself or others in a life-threatening situation. Warn other people. If possible, take the fireplace system out of operation. Call required help (e.g. fire department).

## △ CAUTION: Danger from failure to observe the instructions on the fireplace insert and/or instructions of other manufacturers!

Failure to observe the instructions on the fireplace insert and/or the instructions of other manufacturers can result in dangers during installation and operation of the fireplace. Do not begin with the installation until you have read and understood all instructions on the components to be installed! Have any missing instruc- Austria: tions handed out to you.

## △ CAUTION: Danger of burns caused by hot surfaces!

In heating operation, in particular the front of your fireplace heats up considerably. For example, combustion chamber door, handles, fireplace elements and air slides are hot during operation. Improper handling can result in burns. Use the hear protection glove provided to operate the device without danger.

## i Standards and guidelines

When connecting and operating the fireplace, the local, fire safety and building codes, the applicable engineering regulations and standards apply:

#### **Germany:**

FeuV0	German Firing Ordinance	
TR OL 2006, 2010 Edition	German Technical Rules (Specialised Rules) for Furnace and Air Heating Construction	
1. BImSchV	1. German Federal Emission Protection Ordinance	
EnEV	German Energy-Saving Ordinance	
LBO	German State Building Regulations	
DIN 4102	Fire behaviour of building materials and building components	
DIN 4109	Sound insulation in buildings	
DIN EN 13229	Inset appliances including open fires fired by solid fuels	
DIN EN 13384	Chimneys - Thermal and fluid dynamic calculation methods	
DIN EN 15287-1	Chimneys / Part 1: Chimneys for non-roomsealed heating appliances	
<b>DIN EN 15250</b>	Speicherfeuerstätten für feste Brennstoffe	
DIN V 18160-1	Chimneys / Part 1: Design. performance,	

#### Switzerland:

**DIN VDE 0100** 

**DIN 18896** 

SN EN 13229	Inset appliances including open fires fired by solid fuels
LRV	Air Quality Control Regulation
VKF	Swiss Cantonal Association for Fire Insurance
STP	STATE-OF-TECHNOLOGY PAPER (STP) FOR FURNACE AND CHIMNEY CONSTRUCTION Association for Living Area Furnaces, Pavements and Exhaust Systems

Fireplaces fired by solid fuel - Technical

VDE guidelines for electrical installation

specifications for installation

15a B-VG	Agreement according to Art. 15a B-VG on placing of small furnaces on the market and
	on inspection of combustion plants and
	cogeneration plants

**ÖNORM B 8311** Installation and erection of home fireplaces



## **△** WARNING: Danger of explosion!

Do not bring explosive or combustible materials near the fireplace when it is in operation.

Do not store explosive or combustible materials near and/or place them on the fireplace.

Before working with explosive or combustible materials near the fireplace, allow them to burn out and cool down.

Comply with the additional information in the Chapter "5. Fire and heat protection" on Page 7!

## **△** WARNING: Dangerous gases!

Only operate the fireplace with the filling doors closed! Due to the strong degassing process with solid fuels in combination with an insufficient chimney draw, toxic smoke and flue gas can escape when the filling door is opened. Keep the filling door and any other doors closed during heating operation! Note that doors with a self-closing function must always be locked manually, as otherwise they will not be leak-free.

## ▲ WARNING: Combustion air supply, Always ensure a fresh-air supply!

Make sure that the chimney can build up the required draw to ensure danger-free operation of the fireplace. Especially during the transition periods (e.g. autumn or spring) or with poor weather conditions (e.g. fog, high winds, etc.), make sure that the feed pressure of the chimney is sufficient!

If the fireplace obtains its combustion air from the living room, ensure a sufficient supply of fresh air!

The air supply of the fireplace must not be negatively affected by other fireplaces or air extraction systems (e.g. ventilation systems or fume extraction hoods)!

## ♠ Procedure and behaviour in case of a chimney fire!

Never put yourself or others in a life-threatening situation. Warn other people!

- 1. Close the combustion air supply!
- 2. Do not attempt to extinguish the fire yourself!
  Call the fire brigade!
  Tamparatures over 1,000 °C cap result. Never
- Temperatures over 1,000 °C can result. Never extinguish with water; it evaporates explosively and increases its volume by many times in the process. (10 l of ware result in 17,000 l of steam.).
- Enable access to the cleaning openings (e.g. cellar and attic).
- 4. Remove all flammable materials (e.g. furniture) over the entire height of the chimney.

### Before putting the masonry stove into operation again:

- 1. Inform a chimney sweep and have the chimney inspected for damage.
- 2. Have the cause of the chimney fire determined and eliminated by the chimney sweep.

## 3. Information on fireplace

#### 3.1 Proper use

### 3.1.1 Using masonry stove

Schmid masonry stoves are temporarily burning fireplaces according to the standard DINEN13229. They may only be operated as single-room firing systems. Other uses, e.g. use as a sole domestic heater for all living rooms, is not permitted.

For single-room firing systems, the maximum permissible nominal heat output according to 1st German Federal Emission Protection Ordinance (Bundes-Immissions-schutzverordnung - BImSchV) must be complied with (questions on interpretation of the ordinance on small and medium-sized firing systems - 1st BImSchV of the Federal/State Working Group for Emission Protection (LAI)).

The masonry stoves serve to heat the installation room. The masonry stoves are approved for the primary heating of living rooms and may only be operated within them.



#### **3.1.2 Fuels**

The masonry stoves may only be operated with airdried logs with a maximum residual moisture of 20 % or pressed pellets made of natural wood according to the standard DIN 51731. The use of other fuels is not permitted.

## 3.1.3 Combustion air supply

The masonry stoves are fireplaces dependent on room air. An external combustion air supply may not be modified. Make sure that all necessary combustion air lines are open when the fireplace is in operation.

## 3.1.4 Connecting to the flue

The masonry stoves may only be operated when they are connected to a chimney. The chimney connection and the chimney openings must be executed in accordance with the standard DIN V 18160 Part 1, of the 1st BlmSchV and local regulations and accepted by the responsible regional chimney sweep.

#### 3.1.5 Cleaning and servicing, troubleshooting

Cleaning and maintenance intervals must be complied with and faults must be eliminated immediately. These measures are part of proper use!

#### 3.1.6 Operation with multiple connection

With multiple connection, the masonry stove may only be operated with the filling doors closed. If the masonry stove is not operating, all doors and adjustment devices must be closed.

#### 3.2 CE marking

Schmid masonry stoves comply with the European guidelines and the supplementary national requirements. The CE marking verifies that the product conforms with its declared output.

You can request this declaration of performance for the product from: Camina & Schmid Feuerdesign und Technik GmbH & Co. KG, Gewerbepark 18,

49143 Bissendorf, Germany,

e-Mail: info@camina-schmid.de
Internet: www.camina-schmid.de

#### 3.3 Product information

Detailed product information technical data of the individual models, spare parts and accessories are listed in the corresponding chapters of the documentation and can be downloaded at our website.

Spare parts: http://ersatzteile.schmid.st
Website: www.camina-schmid.de

## 4. Preliminary remarks on planning

### 4.1 Installing a safe system

When installing the stove or heating system, be sure to observe all national legal requirements, rules and standards, as well as the installation instructions of the components installed. The installer bears the sole responsibility for the operation and safety of the stove or heating system in its entirety!

## 4.2 Legal regulations

The planning, calculation and execution of the stove or heating system must be carried out in Germany according to the recognized technical rules of the stove and air heating installers trade in their current version (TR OL). For example, the requirements for the materials and components to be used, as well as the specifications for calculations and execution including fire and heat protection, fuel gas channels, combustion air supply, etc. are specified there. Otherwise, observe the respectively applicable national regulations in the country of installation.

The regulations of the district building code, the firing ordinance and the administrative regulations applicable at the installation site must be complied with. National and local regulations must be met.

### 4.3 Materials and components

Materials and components (construction materials) must be suitable for their intended purpose and marked accordance with the district building code. The components must meet requirements and comply with the relevant DIN/EN standards. Materials and components requiring approval as defined in statutory regulations must be officially certified and must comply with the approval conditions. Insulating materials must correspond to the building materials



class A 1 according to DIN 4102 Part 1, with an upper application temperature of at least 700° C (testing according to DIN EN 14303). An insulation code (according to AGI-Q 132) is required, which must not contain the digit sequence "99" at any point! The nominal raw density of the insulating material must not be below 80 kg/m³.

## 4.4 Building safety and stability

The fireplace may only be placed on floors or storey ceilings with a sufficient load-bearing capacity. In ceilings without sufficient lateral distribution, e.g. wood beam ceilings, loads may only be introduced if a corresponding load distribution takes place.

#### 4.5 Determining nominal heat output

The required heating load must be calculated according to DIN EN 12831. The nominal heat output of the masonry stoves must be in a reasonable ratio to the heating load. The correct size of the masonry stove is very important for proper functioning and economical operation!

## 4.6 Chimney design

The correct function of the fireplace mainly depends on the effective chimney height and the cross-section of the chimney.

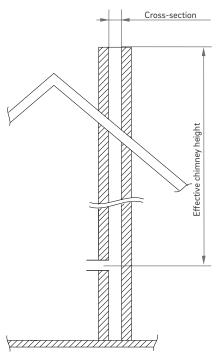


Fig.: 1 Example: Effective chimney height

The minimum area of the chimney cross-section may not be less than 100 cm<sup>2</sup>.

The chimney must dissipate the flue gases with sufficient reliability and must build up the necessary feed pressure. Verification of the sufficient function of the chimney must be calculated according to DIN EN 13384. Use one of the usual calculation programs for the calculation.

For the masonry stoves, a vacuum of approx. 8 Pa (measured on the flue gas connector) is considered to be the feed pressure.

The working pressure of the chimney must be equal to or greater than the necessary total feed pressure for all system parts.

The chimney must be designed for flue gas from solid fuels (temperature resistance of at least T400, sootfire resistance, marking G, corrosion resistance class 3). All openings leading into the chimney (including cleaning doors and condensate drains) must close tightly!

The chimney connection and the chimney must be executed in accordance with the standard DIN V 18160 Part 1 and the 1st BlmSchV. The chimney must be tested in accordance with the local regulations (DIN V 18160 Part 1) – consult the responsible regional chimney sweep.

## 5. Fire and heat protection

 All regulations of the district building code, the firing ordinance and the administrative regulations applicable at the installation site must be complied with. National and local regulations must be met.

### Germany

The fire and heat protection for mounting surfaces made out of or with combustible materials (components to be protected), and for mounting surfaces without combustible materials and without built-in furniture on the back (components not to be protected) must be designed according to the point "6 Fire and heat protection" of the German Stove and Air Heating Constructors Association (Fachregel des Ofen- und Luftheizungsbauerhandwerks) TR OL 2006, Edition 2017-01.



- Walls, floors and ceilings, as well as mounted parts and chimneys of the structure to be protected must be insulated/protected so that no temperatures higher than according to the district building code, generally 85° C, occur.
- Related ordinances (e.g. Ordinance on Firing Installations - FeuVO) must be complied with.

## 5.1 Floor protection in area in front of combustion chamber opening

 Flooring made of combustible materials in front of the combustion chamber opening must be protected by a layer of non-combustible materials.
 The layer must extend to the front by at least 500 mm and to the side by at least 300 mm beyond the front plate (Fig.: 2).

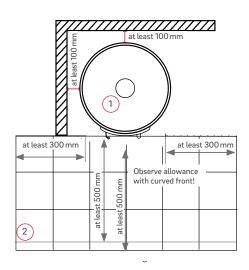


Fig.: 2 Floor protection in area in front of combustion chamber opening

- 1 = Fireplace
- 2 = Layer of non-combustible materials

# 5.2 Components of combustible materials or combustible elements and built-in furniture near fireplaces

The opening of the combustion room door must be located at a distance of at least 800 mm from constructional elements made of combustible materials or parts and built-in furniture to the front, top and sides; if a ventilated radiation guard is fitted on one of the sides, the required distance is 400 mm. The ventilated distance of the radiation guard must be at least 20 mm (Fig.: 3).

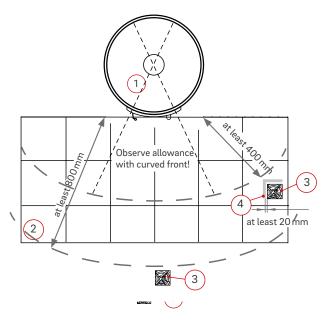


Fig.: 3 Protection of combustible components in radiation zone of combustion chamber opening

- 1 = Fireplace
- 2 = Layer of non-combustible materials
- 3 = Component made of combustible materials, furniture, home textiles
- 4 = Ventilated radiation zone

## 5.3 Connection of combustion air line

The combustion air line must be connected to the combustion air chamber so that no gas can exit.

## 5.4 Combustion air supply

At least 12.5 m³/kg of wood or at least 4 m³/kW rated output of combustion air must be present.

For the Ronda, the minimum combustion air requirement is 46.9 m<sup>3</sup>.

Verification for a sufficient combustion air supply must be carried out according to point 5 of the TR OL. For an input quantity of 1kg of wood, a pure combustion air requirement of approx. 12.5 m³/h, plus extras for air exchange, fume extraction hood, bath, toilet or kitchen exhaust-air fan, vented tumble dryer, etc., must be expected!

These extras are eliminated it the masonry stove is supplied with combustion air outside the installation and/or living room via the external air connector (external combustion air supply (Fig.: 4).

Combustion air lines and their cladding and insulation materials must be made of non-combustible materials (e.g. Schmid accessories: flexible hose).



Mount the opening of the combustion air supply in the same pressure area as the exhaust-gas chimney opening if possible.

The combustion air lines must be provided with heat insulation to avoid heat bridges and condensation.

### 6. General Information



Prior to installation, check all components for completeness and any transport damage! Before beginning work, completely lay out all individual parts of the system and check them for damage with a visual inspection.

Report transport damage to the transport company and the supplier immediately.

i Installation begins by loosely assembling the fireplace surround without adhesive so that the height of the fireplace insert can be adjusted before it is connected to the chimney. Use a level to ensure that the fireplace surround is installed horizontally.

#### 6.1 Positioning and aligning

Cut out screed floors with underfloor heating, floating screed floors or asphalt-screed floors to the plinth depth of the fireplace and fill with bound screed. The installation of noise or heat insulation materials or supply lines (pipes, electrical cables, etc.) is not permitted in the fireplace foundations. The wall must be perpendicular to the floor. If it is not, we recommend:

- inserting wedges to compensate small tolerances up to 5 mm
- larger tolerances must be compensated with an adjusted prewall.

#### 6.2 Regulations

The fireplace must be installed according to the regulations of the standard DIN EN 13229, or respective local building regulations and the installation instructions included with the Schmid fireplace insert. All our fireplaces inserts have been tested and comply with the latest European standards and safety



regulations. As, depending on the country, different safety regulations apply when installing and operating fireplaces You, as the end user of the fireplace system, the fireplace insert and the stove, are responsible yourself for compliance with this standard in your region and for the correct installation of the fireplace.

Camina is not liable for improper installation or operation. Adhere to the country-specific, regional and local regulations, e.g. on:

- Fire protection: A 10 cm thick prewall is required for components to be protected with a thermal resistance > 1.2 m<sup>2</sup> K/W
- Safety distances
- Insulating materials
- Construction law
- Size of spark protection plates/floor panels
- Flue tube and chimney connections.

Should you have questions on this, please contact your specialist dealer or the respective government authorities.

#### 6.3 Installation

The parts of the system should be fixed with acrylic adhesive. To obtain optimum strength, the bonding surfaces must be cleaned and slightly moistened. Acrylic adhesive residues from parts pressed together are removed with a spatula. Any irregularities and shrinkage cracks in the concrete elements can be filled with repair compound and sanded over. For this purpose, mix the adhesive provided with water until it obtains the "consistency of toothpaste". To avoid small cracks between the wall and the surround elements, we recommend using white acrylic compound (Advantage of acrylic: In contrast to silicone, it can be painted over immediately). For possible dismantling of the system later (e.g. due to a relocation), the system components should only be bonded at certain points with acrylic.

**NOTE:** Due to heat expansion, the fireplace surround must not be positioned directly at the fireplace insert. A circumferential distance of 2−3 mm from the fireplace insert door must be complied with. Failure to comply with this condition will result in damage to the concrete elements; this damage will not be covered by the guarantee.

Also use the acrylic adhesive to fill in the joints or for grouting following installation of the fireplace. Filling in the joints or grouting is an important part of the installation and makes a major contribution to the stability of the fireplace.

#### 6.4 Surface design



▲ NOTE: To relax the material tensions, the fireplace must be heated up once before surface finishing! This will reduce or prevent cracks in the surface.

Do not mask off the surface! Painter's masking tape, adhesive tape, etc. can leave behind adhesive residues or even pull off part of the surface.

Coating: Allow the system to dry for approx. 24 hours. It can then be coated with an indoor silicate paint (e.g. Brillux). We recommend priming the system beforehand. Specialized paint dealers or professional painters can advise you locally. Filled surfaces are lightly sanded beforehand with a suitable abrasive. To obtain a clean, even, fine-grained surface, we recommend mixing some of the repair compound into the paint. If necessary, then paint over the system again only with paint.

**Plastering:** Due to the high thermal load, surface cracks can occur on the individual fireplace components. If no visible joints or fine cracks are desired, the system can be plastered.

For this purpose, the system must be provided with a fabric (glass fibre grid) before plastering.

Use suitable materials from specialized stores.



#### 6.5 Fine cracks



The structure around the fireplace can operate - especially newly built houses can develop settling cracks in the first few years. This is completely normal and is no reason for concern. Use the fireplace for a few months. Small cracks can be eliminated by replastering. Scrape out the joints with joint scrapers, then remove the remaining material and dust and fill the joint again with acrylic. Pull the acrylic into the desired shape with suitable tools (or a moistened fingertip).

#### 6.6 Surface condition



The accumulator concrete surround is provided with a reinforcement and is therefore extremely stable!

The concrete elements are delivered from the factory with a concrete appearance and are reworked with a concrete appearance, for example in case of air inclusions, smaller cracks, etc. These works are not a reason for complaints.

If surface chipping occurs during transport and/or installation, this damage can be repaired with the filler compound provided. Before beginning this repair work, moisten the surface with a damp sponge. This removes dust and ensures better adhesion.

To repair large-area damage, fill the damaged area with the filler compound and sand the surface smooth after drying. With deeper damage (from approx. 1 cm) or with considerable damage, the filler compound must be applied in layers to prevent it from shrinking. Before applying the next layer, the previous layer must be cured to a load-bearing degree and earth-moist. Then smooth it with a damp sponge or a trowel and sand off after curing.

The entire system can be finished with a desired surface when suitable materials are used (see Point "3.4 Surface finishing" on Page 6).

## 6.7 Major damage and transport damage/ requirements for spare parts

Report transport damage immediately to the transport company and the supplier. You can request a spare parts shipment from your Camina trading partner. Parts with major damage which cannot be repaired with the filler compound provided can be requested from us as part of the guarantee. When requesting spare parts, we require a photo of the damaged part. Please mark the damaged element on the parts list located at the back of these instructions. Send us the photo and the parts list. We will then send to our trading partner the spare part as quickly as possible.

▲ NOTE: When replacing elements, colour differences can occur for production-related reasons.

## 6.8 Disposal

All packaging materials used are environmentally friendly and recyclable. Dispose of them via your country-specific recycling system (if applicable).

Wearing parts and old devices contain recyclable materials. Sort these components by material groups (ceramics, glass, metal, etc.) and bring them it possible to a recycling company or dispose of them properly.

# 6.9 Cleaning of the system elements made of natural stone, slate and design concrete

Clean these components with a mild soap solution and immediately remove excess adhesive residues if they have resulted during installation.

Never use aggressive agents containing acid, as they attack the surface and the polish. It is



important to use cleaning and sealing agents approved for cleaning and sealing natural stone, slate and design concrete. Specialized retailers will advise you on the various products for surface treatment and cleaning.

## 7. Operation and Handling

7.1 Operating principle and important data 
⚠ NOTE: The maximum wood quantity per day is 1 x
7.5 kg of wood! This maximum quantity must not be exceeded!

NOTE: The system requires an external air connection through the ceiling or wall for operation. The poppet valve, matt stainless steel, Ø 125 mm, is available in the accessories for supply air from the installation room.

- Efficiency = 82%
- Flue gas temperature (mean value) = 175 °C
- Total heat output of the system to the installation room on average over 12 hrs.= 2 kW

## 7.2 Heating

**△** WARNING: WARNING: Life-threatening danger of poisoning!

An insufficient supply of air and/or evacuation of exhaust gas can lead to dangerous escape of combustion gas. Do not modify the fireplace and keep all combustion air openings and flue pipe of the fireplace open during operation! Observe all instructions on your fireplace system!

The duration and intensity of heating operation and the amount of heat extracted from the combustion gas is dependent on the conditions of your fireplace. Type of wood, log thickness, chimney draft and exhaust gas temperature will influence the combustion process. Make yourself familiar with the function and use of your fireplace. Thus you will find quickly out the best easiest way of handling Familiarize yourself with the conditions of your fireplace. This will enable you to quickly determine the best way to use it.



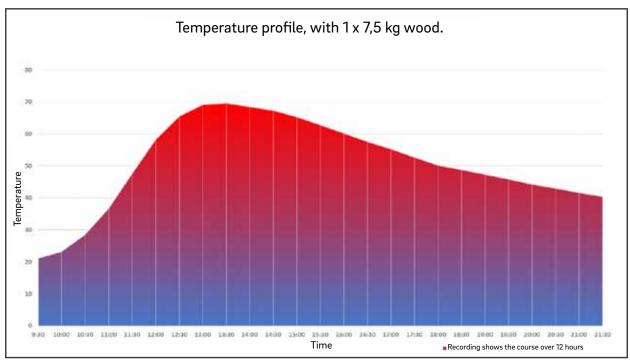


Fig.: 7 Graphic representation of heat emission over time.



## 7.3 Heating in spring and autumn

In the spring and autumn, i.e. at higher outside temperatures, fluctuations in the chimney draft can occur in case of a sudden temperature increase, resulting in the fuel gas not being completely drawn off. Then fill the fireplace insert with smaller amounts of fuel and heat with the maximum combustion air supply. This burns the existing fuel faster with the development of flames, stabilizing the chimney draw. During Spring and autumn, when the outside temperatures can change and rise quickly, the chimney draft could under certain circumstances, be not high enough to extract the combustion gas completely. In this case, load smaller quantities of wood and open more the combustion air lever. The faster combustion with vigorous flames will stabilize the chimney draft.

## 8. Cleaning, Operating Breaksn

## ▲ CAUTION: Danger of burns caused by hot system parts!

Allow the fireplace to cool down before performing any cleaning or maintenance work.

Clean and perform maintenance on the fireplace at regular intervals. These intervals are dependent on the duration of operation, your heating habits and the quality of the fuel. Adjust the frequency of cleaning to these conditions. Shorten the specified maintenance intervals if necessary. The specified maintenance intervals must not be exceeded.



## 8.1 Behaviour in case of a malfunction in heating operation

Proceed according to the instructions for your fireplace insert if a malfunction occurs! Shut down the entire fireplace if necessary.

Call the fire department at the latest when smoke or fire exits from the system.

## 8.2 Servicing After operating breaks:

After all operating breaks and longer interruptions of heating, check the interior of the fireplace and the flue system, and in particular the chimney pipe for clogging and eliminate this if present before resuming operation. Also check the entire fireplace for possible defects!

## At start of heating period:

Check the operation of all existing safety equipment and displays (e.g. control unit). Make sure that the flue system is clean. Have all existing faults or defects eliminated by an expert.

## At end of heating period:

i We recommend carrying out annual maintenance at the end of the heating period.



## **Transport**

## WARNING: Danger of crushing!

Stoves and their accessory parts are very heavy. There is danger of injury when carrying heavy loads and/or due to improper securing during transport!

Lift and carry the components with a sufficient number of people. If necessary, remove the individual components, e.g. refractory, and transport them separately. Use suitable means of transport, e.g. a hand truck with a lashing strap or a lift truck. Secure all components against tipping and falling when transporting and storing.

## 9.1 Delivery

Standard delivery is generally carried out on several pallets. Please report transport damage to your supplier immediately!

## 9.2 Transport weight

The weight and dimensions of the standard delivery vary depending on the equipment variant. See the freight papers for these data.

The following approx. transport weights apply for the masonry stove and the fire clay container:

Masonry stove	Ronda GO 4557	heat storage system S21
Basic body	240	
Refractory rotary chimney (6 rings)		180
Parts of heat storage system		440

All weights are approximate - specified in kg!

## 9.3 Transport to and at installation site

Secure the transported materials against tipping and falling. Make sure that the means of transport, the transport routes and the number of persons available are suitable for danger-free transport.

#### 10. Fuels

#### Permissible fuels



(natural wood, air-dried, max. moisture content 20 %, Fig. with rule of thumb for max. ø)



Pressed wooden pellets, wood briquette (made of natural wood. according to DIN 51731)



## Impermissible fuels (examples)



Fig.: 8 Example of permissible/impermissible fuels

Waste

## 10.1 Permissible fuels 10.1.1 Logs

The 1st. German Federal Emission Protection Ordinance (Bundes-Immissionsschutzverordnung) only requires a residual moisture of under 25% for logs, based on the dry weight of the fuel. We stipulate a maximum residual moisture of 20% for our fireplace cassettes!

Combustion of impermissible fuels applies, for example in Germany, as a violation of the 1st German Federal Emission Protection Ordinance (Bundes-Immissionsschutzverordnung).

Only use untreated, air-dried, well-seasoned, split logs with a residual moisture content of less than 20% (if correctly dried, this can be achieved after approx. 2 - 3 years).



## 10.1.2 Pressed wooden pellets

Pressed wooden pellets can be of greatly differing quality. Use pressed pellets of natural wood according to DIN 51731.

Please note that pressed wooden pellets increase in volume in the fire! Take the manufacturer's product information into account when using.

## 10.2 Impermissible fuels10.2.1 Impermissible due to design

The masonry stoves are designed exclusively for burning wood. Coal, peat, wood pellets or other fuels approved for households according to the 1st BImSchV may not be used.

## 10.2.2 Impermissible according to the 1st German Federal Emission Protection Ordinance (Bundes-Immissionsschutzverordnung)

According to the 1st BImSchV, the following fuels are, among other things, impermissible: freshly cut, impregnated, lacquered, glued or coated wood, chipboard, planing shavings and sawdust, bark and chipboard waste, cardboard, recycled paper briquettes, plastic, household waste, etc.!

## 11. Commissioning



Before the stove system can be used for heating, commissioning must be carried out. Before commissioning, the conditions for safe, proper use must be ensured. See chapter:

- "2. Safety Information" on Page 3
- "3. Information on fireplace" on Page 5
- "5. Fire and heat protection" on Page 7



## NOTE: Damage can be caused by improper commissioning!

Commissioning must be carried out by an approved specialized company. The fire clay bricks of the masonry stove and other ceramic stove parts, the flue gas channels and possibly also the chimney must dry slowly. The stove system must be dry-heated and all

other conditions for safe, proper use must be ensured. If necessary, additional documents of other manufacturers must be observed for commissioning.



#### **CAUTION: Vapours can occur!**

The lacquering of the masonry stove obtains its special strength at operating temperature during commissioning. This can briefly lead to slight odours. Avoid directly inhaling. Provide for sufficient ventilation of the installation room during this phase.



## WARNING: Life-threatening danger due to poisoning!

An insufficient supply of air can result in dangerous escaping of fuel gas. Do not modify the combustion air supply and keep all combustion air openings of the stove system open during operation!



## WARNING: Danger caused by incorrect operation!

Observe all safety instructions in the chapters

- "2. Safety Information" on Page 3,
- "3. Information on fireplace" on Page and
- "5. Fire and heat protection" on Page 7!

Only operate the stove system in proper condition and as intended!

The ceramic stove section, the flue gas channels and possibly also the chimney must dry slowly. In the summer, this is achieved by opening the combustion chamber door completely when cold. The tile stove must always be slowly dry-heated.

You can slowly begin the dry-heat the stove approximately 1 - 2 weeks after completion. The water used during construction escapes as steam through the chimney and partially through the porous fire clay material. Depending on the size of the system, this phase may take up to two weeks.

For dry heating, only little fuel (a maximum of two logs in one layer) may be laid in the insert and ignited. Do



not begin heating until the fuel has nearly burned down completely. Use the maximum combustion air setting (cold start/heat-up). Carefully wipe off any condensation which forms on the masonry stove or on the cladding immediately before residues can burn into the surface coating. Provide for sufficient ventilation of the installation room during this phase.

A newly built stove system must never be used for dry-heating of living rooms.

### 12. Handover to owner

Instruct the owner on the operation and maintenance of the furnace system. Hand over the operating instructions for all installed parts (e.g. controller etc.) to the owner following instruction.

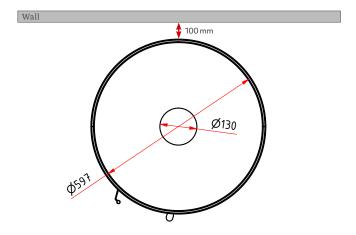
Hand over one or, if necessary, several commissioning reports etc. to the owner.

Produce a handover log and list all documents handed over and the instruction of the owner carried out in it.

A report is provided on the last page for removal.



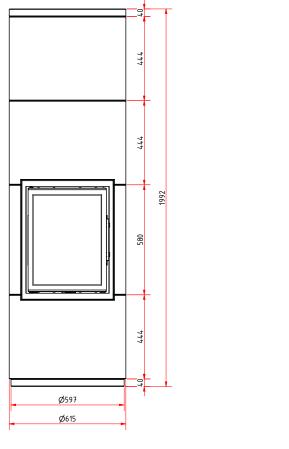
## 13. Recess in Screed for S21 GO-Line



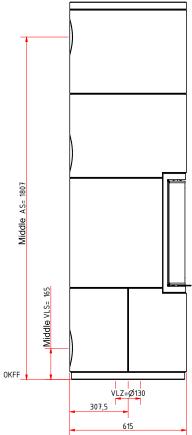
Recess in screed



## 14. Dimensional Drawing/Connection Dimensions for S21 GO-Line



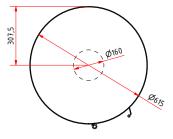
Front view



Lateral view

**Please note:** With **optional accessories** please observe the information in

 $\textbf{AS:} \ \textbf{Exhaust gas spigot}, \textbf{VLS:} \ \textbf{Combustion air intake}, \\ \textbf{OKFF:} \ \textbf{Upper edge of finished floor}.$ 



Top view



## 15. Exploded views of S21 GO-Line heat storage system

## 15.1 External cladding and masonry stove of S21 GO-Line heat storage system



15.2 Installation part set for ceiling connection 15.3 Installation part set for wall connection







## 16. Delivery Scope

## Contained in delivery scope:

- Small installation accessories
- Repair compound
- Acrylic adhesive/natural stone adhesive
- System parts
- Installation and operating instructions
- Ceramic tape
- Sealing tape
- Adhesive for sealing tape
- Pipe expander, Ø 150 mm to Ø 160 mm (only in wall connection set).
- Ronda GO 4557 with Front Kristall
- Rotary chimney

## 17. Required materials

### Required materials:

- Tape measure
- Angle
- Level
- Spatula
- Container for mixing repair compound
- Angle grinder (with grinding wheel for stone)
- Connecting tube for connection to the chimney
- Cartridge gun
- Allen key set, 2.5 mm/4 mm/5 mm
- Flat-blade screwdriver
- Spanner, 24 mm

## 18. Installing S21 GO-Line heat storage system

i We recommend dry installation for checking the exact fit of all components and of all parts relative to the spatial situation in advance.

## 18.1 Starting installation of S21 GO-Line heat storage system for wall and ceiling connection

i The first installation steps are identical for the S21 GO-Line heat storage system wall and ceiling connection variant and are described in the following chapter.



- 1. Align the floor panel in the desired position on the floor.
- Distance to rear wall = 10 cm
- Distance from wall to side wall = 10 cm.
- Distance to ceiling = 20 cm.
- Distance within radiation zone of viewing window pane = 80 cm



2. If the supply air is not routed from below through the floor panel, then please insert the included inlay cover in the opening.



3. Place the rear base on the floor panel **without gluing**.



4. Remove the upper fire clay ring and lay aside.



5. Now remove the interior lining from the Ronda GO.



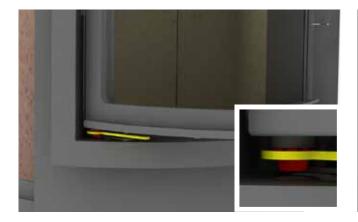
6. Remove the fire clay retaining ring on both sides with a 10 mm spanner and lay the outer fire clay sleeve aside!



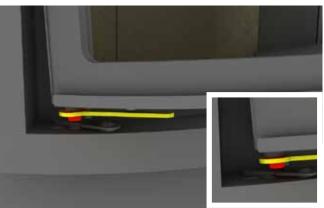
7. Pull off the door securing clip with a pair of needle-nosed pliers.



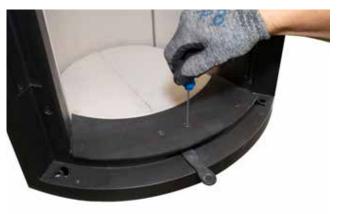
8. Open the door, fit the tensioning spanner on the spring head and hold it parallel to the door.



9. Push the door section upwards with the tensioning spanner until the pin protrudes from the lower opening in the door frame.



10. Lift the door and pull it away downward out of the upper pin. Lay the door aside!



11. Remove the air deflector plate!



12. Remove the air adjustment lever.



13. Unscrew all 4 screws of the door frame with the 4 mm Allen key and carefully lay the frame aside!



14. Set the Ronda GO body on the positions provided on the floor panel ...





15. ... and adjust it to a height of 285 mm using the adjustment screws from the upper edge of the floor panel up to the lower edge of the body.



16. Mount the combustion air supply (flexible hose, Ø 125 mm) with the quick-action clamp on the lower connector.



17. Insert the outer fire clay sleeve with the sealing fleece and remount the fire clay retaining ring.



18. Carefully insert the interior lining again and lay on the front sealing fleece.



19. Place on the upper fire clay ring.



20. Align the masonry stove body with a spirit level and readjust if necessary.



21. Place the front base on the floor panel **without gluing**.



22. Mount the door frame again at the specified position with the M  $6 \times 10$  screw and align the body evenly.



23. Place the right and left-hand side panels on the base **without gluing** and align them evenly relative to the frame.



24. Before installing the rotary chimney, already adjust the rotary chimney on the pallet by turning it **(only for wall connection)**. The edge line of the transitions must lie over each other (see arrow).



25. Draw a vertical installation guide line in the centre of the connection with the spirit level **(only for wall connection)**.



26. Then draw an installation guide line in the centre on the back side of the upper fire clay ring. **(Only for wall connection)**.





27. Place the sealing cord in the groove of the upper fire clay ring.



28. Lay on the first fire clay ring. Align the installation guide line on the fire clay ring exactly with the installation guide line on the lower fire clay ring. (Only for wall connection).



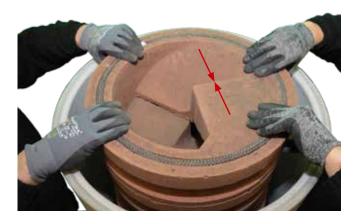
29. To simplify installation, please lay on the strips from the packaging strips of the system at four points and place the upper section on the side panels **without gluing**. Remove the installation aids again.



 $30.\,\mathrm{Now}$  place on the second fire clay ring evenly...



31. ... and adjust the rotary chimney by turning. The edge line of the transitions must lie over each other (see arrow).



32. Place on the third fire clay ring and adjust the rotary chimney direction by turning. The edge lines of the transitions must lie over each other.



33. Place on the fourth fire clay ring and adjust the rotary chimney direction by turning. The edge lines of the transitions (inside) must lie over each other. (see arrow).



34.To simplify installation, please lay on the packaging strips at all four corners again and position the hood section **without gluing** (then remove the installation aids again).



The further installation steps differ for the S21 GO-Line heat storage system wall and ceiling connection variant and are described in the following chapters.

#### 18.2 Continuation of installation of S21 GO-Line with wall connection



35. Place on the fifth fire clay ring with the connection hole and adjust the rotary chimney direction by turning.



36. Prepare pipe expander. Please wrap the sealing fleece around the Ø 150 mm and cut to fit.



37. Now fit the pipe expander,  $\emptyset$  150 mm to  $\emptyset$  160 mm with the sealing fleece in the connection hole.



38. Place on final fire clay ring with connecting hole.

39. Remove all components (with the exception of the floor panel) again while marking and drilling the connections (fireplace connection)

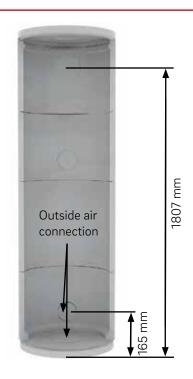
#### Connections:

Flue gas connector Ø 160 mm:

Connection height from upper edge of finished floor (OKFF) to centre of connection = 1807 mm

External air connection Ø 125 mm: Connection height from upper edge of finished floor (OKFF) to centre of connection = 165 mm

Wall distance to rear wall = 100 mm



## **Installing poppet valve (option)**

i Installation is only necessary if the required supply air must be taken from the installation room!





40. First the distance from the inner plate is preset to 40 mm and locked .

41. Press the installation frame into the  $\emptyset$  125 mm flexible aluminium hose...



42... then press the poppet valve into the installation frame.



43. Route the flexible aluminium hose back into the system and glue the entire poppet valve into the opening provided.



44. Refit all parts with acrylic adhesive and lay the inner ceiling plate (40 mm Vermiculite) in the hood section from above.



45. Carefully lay on the ceiling plate and align.



We recommend sealing all connecting joints with acrylic adhesive and coating the entire system. Suitable paints are, for example, indoor silicate paints (e.g. Brillux), clay plaster and clay paints. Specialized paint dealers or professional painters can advise you locally.

To obtain a fine-grained surface, mix some of the repair compound into the paint. If necessary, then paint over the system again only with paint.

## 18.3 Continuation of installation of S21 GO-Line with ceiling connection



46. Lay on the fifth fire clay ring and adjust the rotary chimney direction by turning.



47. Lay on final fire clay ring with connection to ceiling.

48. Remove all components (with the exception of the floor panel) again while marking and drilling the connections (fireplace connection)

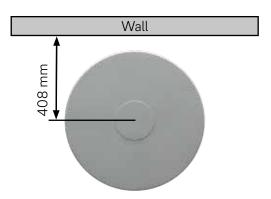
#### Connections:

Flue gas connector Ø 160 mm:

Centre the system connection relative to the ceiling. Distance from the wall (including 100 mm wall distance) = 408 mm

External air connection Ø 125 mm: Connection height from upper edge of finished floor (OKFF)

to centre of connection = 165 mm







## **Installing poppet valve (option)**

i Installation is only necessary if the required supply air must be taken from the installation room!



49. First the distance from the inner plate is preset to 40 mm and locked .



50. Press the installation frame into the Ø 125 mm flexible aluminium hose...



51. ... then press the poppet valve into the installation frame.



52. Route the flexible aluminium hose back into the system and glue the entire poppet valve into the opening provided.



53. Drill the position of the connection relative to the ceiling (pre-marked on underside of ceiling plate) for a 160 mm connection.



54. Mark the drilling position on the inside ceiling plate (Vermiculite) and also drill for a 160 mm connection.

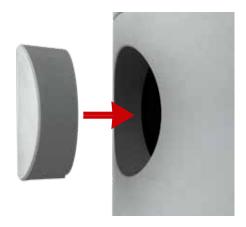




55. Refit all parts with acrylic adhesive and lay the inner ceiling plate (40 mm Vermiculite) in the system from above.



56. Carefully lay on the ceiling plate and align.



57. Connection openings not required on the back side are closed off by gluing in the corresponding cover!

We recommend sealing all connecting joints with acrylic adhesive and coating the entire system. Suitable paints are, for example, indoor silicate paints (e.g. Brillux), clay plaster and clay paints. Specialized paint dealers or professional painters can advise you locally.

i To obtain a fine-grained surface, mix some of the repair compound into the paint. If necessary, then paint over the system again only with paint.







59. Remount the lower air deflector panel.



60. Remount the door in the reverse order (see Photo 8-11).



### 19. Service

### 19.1 Safety instructions for operation



## WARNING: Life-threatening danger due to poisoning!

An insufficient supply of air and/or fuel-gas exhaust can result in dangerous escaping of fuel gas. Do not modify the combustion air supply and keep all combustion air openings and fuel gas lines of the stove system open during operation!

All filling doors must be kept closed!



## WARNING: Danger caused by incorrect operation!

Observe all safety instructions in the chapters

- "2. Safety Information" on Page 3,
- "3. Information on fireplace" on Page 5 and
- "5. Fire and heat protection" on Page 7

Only operate the stove system in proper condition and as intended!

## 19.2 Heating

## 19.2.1 Preparations before each heat-up

 Make sure that there is a sufficient supply of fresh air and all necessary combustion air lines and fuel gas lines of the fireplace are open.



If necessary, remove excessively large quantities of combustion remains from the combustion chamber when cooled. It is not necessary to completely remove the ash. A remaining bed of ashes promotes combustion. However, make sure that the combustion air inlets are not covered by new ash produced during combustion.

#### 19.2.2 Filling combustion chamber

Wood mainly consists of cellulose, wood hemicellulose and lignin. The basic substances do not directly burn, but instead only their gases, which result at correspondingly high temperatures. Splitting the wood significantly helps promote this degassing process. Use only split,

dry wood to fill your masonry stove. Clean combustion is only achieved with a sufficient supply of oxygen and compliance with the combustion temperature.

Combustion starts with little smoke and lasts longer when it takes place from top to bottom (ignite top layer).

 In contrast to a campfire, the fire in the masonry stove is ignited from above. Lay the smallest possible split, dry soft wood on top of the log as a firing-up module (Fig.: 9).

Completely open the combustion air slide for heating up (see "22.3 Stellungen der Bedienelemente" on Page <?>).

The quantity of fuel used decisively determines the heating output. Fill the stove in accordance with Chapter "23 Log tables, heating values", on Page 48.

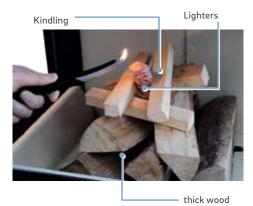


Fig.: 9 Example of igniting process, use log quantity in accordance with the specification "23 Scheitholztabelle" on Page 48.

#### How to fill the combustion chamber?



Fill the combustion chamber with lying logs and a wood quantity as described in the manual "23 Scheitholztabelle" auf Seite 48.

also see the brochure:

www.schmid.st/heizenmitholz.html





## WARNING: Danger of fire caused by ignition flame or deflagration

Never use liquid fuels, such as spirit, petrol, oil or other flammable liquids! Use paraffin igniters or other igniting aids, e.g. stove igniters made of wood chips with three to four small pieces of wood.

NOTE: The maximum wood quantity per day is 1 x 7.5 kg of wood! This maximum quantity must not be exceeded!

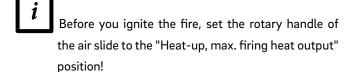
combusted gases can form. When opening the filling door, the sudden supply of air can trigger a deflagration! Smoke and flames can exit when the combustion chamber door is opened during combustion. Do not open the door until flames can no longer be seen.



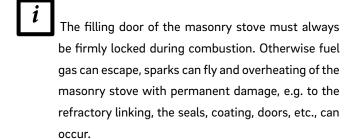
#### **CAUTION: Hot surfaces!**

The masonry stove heats up considerably during heating operation. Use the heat protection glove provided for danger-free operation.

## 19.2.3 Igniting fire



 Ignite the fire with a long match or a long lighter. As soon as the igniter catches fire, close the filling door and lock it with the door handle.



# 19.2.4 The combustion steps are controlled with the swivelling handle controller

WARNING: Dangerous gases are produced!
Watch the respective direction of rotation for
"Open" and "Closed" on your masonry stove model in
accordance with Chapter "22.3 Stellungen der Bedienelemente" on Page 42!

## $\Lambda$

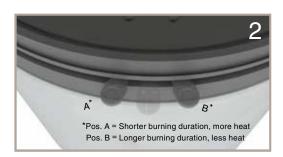
### WARNING: Danger of deflagration!

Do not close the air slide completely during the combustion phase, as otherwise incompletely



#### Stage 1: Heat-up and heating phase

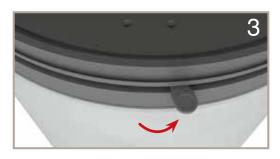
 Set the rotary handle to "Heat-up, max. firing heat output". This setting enables feeding of the required, full combustion air requirement. Following ignition, leave this setting until no blazing (yellow) flames are no longer produced!



#### Stage 2: Work phase

Set the rotary handle to "Nominal heat output". This
throttles the air supply and extends the duration of
combustion. When a bed of glowing charcoal has
formed, additional fuel can be added if necessary.
If no addition fuel is added, you can continue with
Stage 3.





## Stage 3: Ember phase

 Set the rotary handle to "Reduced nominal heat output". The combustion of the charcoal ends and the air supply can therefore be throttled. With the air slide in this position, rapid cooling of the masonry stove via the chimney draw is prevented. A further heating cycle must now be ignited again beginning with Stage 1.

## Example: efficient heating in two stages

 Leave the rotary handle in the "Heat-up, max. firing heat output", position after ignition as long as flames can still be clearly recognised (see Fig.: 10).



Fig.: 10 Wood fire with flame

 Set the rotary handle to the "Reduced nominal heat output" position as soon as there is a bed of embers with few flames (Fig.: 11).



Fig.: 11 Bed of embers with charcoal

#### 19.2.5 Following combustion

 When combustion has ended and no fuel has been added, set the rotary handle to the "Closed" position.
 This prevents the stove system and the living rooms from cooling via the chimney.

## 19.2.6 Disposing of ashes after combustion

CAUTION: Danger of burns and fire!

The embers can glow for 24 hours and longer.

Do not dispose of ashes while hot. Carefully remove the ashes from the stove. Dispose of ashes in closed, non-combustible containers.

## 19.3 Heating in spring and autumn

In the spring and autumn, i.e. at higher outside temperatures, fluctuations in the chimney draw can occur in case of a sudden temperature increase, resulting in the fuel gas not being completely drawn off. Then fill the masonry stove with smaller quantities of fuel and heat with the "Heat-up, max. firing heat output" setting on the rotary handle. This burns the existing fuel faster with the development of flames stabilizing the chimney draw.

## Masonry stove becomes too hot/fire is too strong:

- Do not attempt to extinguish the fire or remove the fuel from the masonry stove.
- Set the rotary handle to "Reduced nominal heat output" to reduce the flame (heat).
- Open all windows to dissipate additional heat.
- Call the fire brigade at the latest when smoke or fire exits from the system.



#### 19.4 Care, maintenance, operating breaks



## CAUTION: Danger of burns caused by hot system parts!

Allow the stove system to cool down before performing any cleaning or maintenance work.

If the masonry stove is not operating, all doors and adjustment devices must be closed.

Clean and perform maintenance on the masonry stove at regular intervals. These intervals are dependent on the duration of operation, your heating habits and the quality of the fuel. Adjust the frequency of cleaning to these conditions. Shorten the specified maintenance intervals if necessary.

#### 19.4.1 Care instructions

#### Türverglasung reinigen

Your masonry stove is glazed with a high-temperature resistant ceramic glass.

If the stove is not optimally operated (e.g. when fired with wet wood, improper lighting of the fire, when the fire smoulders and in the spring and autumn when heat requirements are low, the glass panels of your doors can frequently become coated with soot. The windows can effortlessly cleaned with a non-abrasive cleaning agent, e.g. commercially available fireplace glass cleaner available from your specialised dealer or at our website: http://ersatzteile.schmid.st erhalten.

Do not saturate or moisten the glass seals with the cleaning agent!



We also have an eco-friendly tip: Dip a damp cloth or soft newspaper in the ashes and use it to clean the window. Then wipe off with a dry cloth.

#### Removing ashes

When cleaning, do not use objects that can cause scratching! A flat bed of ashes may remain in the combustion chamber. This promotes the next combustion cycle. However, remove the ashes at the latest when the supply of air is hampered. If necessary, clean the side combustion chamber interior linings with a hand brush.



## 19.4.2 Remedies for Minor Problems Sooty glass

Always heat according to the instructions in this manual. Is your wood really dry enough? Only use wood with a residual moisture content of less than 20%.

Check the door seals for cracks, defects, etc. and replace defective seals.

An excessively high "draw" in the flue gas line will lead to the scavenging air being cut off at the glass panel. Have the chimney draw checked and, if necessary, reduced.

#### Device does not draw

Are the flue gas pipes unobstructed? Close the slide, open the controller and have the chimney cleaned if necessary.

Check the moisture of the wood; only use wood with a residual moisture content of less than 20 %.

Is the outside temperature too high? Then add the maximum combustion air.

Are several stove systems connected to your chimney (multiple assignment)? Keep the filing doors of all stove systems closed. Close the combustion air supply of the fireplaces not in operation.

#### Refractory defective

Cracks are signs of wear that can especially occur when the fuel is knocked against the lining. However, you can continue heating. Do not exce3ed the log sizes. A maximum diameter of approx. 15 cm applies as a rule of thumb. Only have the refractory replaced when the stone crumbles badly. Commission an expert to do this.



#### Paint damage

Touch up paint damage with stove lacquer. For larger damage, use spray lacquer. Ask your dealer about Schmid stove lacquer or purchase it at the website: http://ersatzteile.schmid.st.

#### 19.4.3 Servicing



Observe the additional maintenance instructions (instructions of other manufacturers) for your stove system.

#### In case of operating faults, defects

In case of faults or defects, e.g. failing heating capacity, decreasing draw, escaping smoke, shut down the stove system. Have the causes eliminated by an expert immediately.

#### After operating breaks

After all operating breaks and longer interruptions of heating, check the heating and flue-gas paths, and in particular the chimney for clogging and eliminate this if present before resuming operation. Also check the entire stove system for defects!

#### At start of heating period

Make sure that all flue-gas paths are clear. Have all existing faults or defects eliminated by an expert.

#### At end of heating period



We recommend carrying out annual maintenance at the end of the heating period.

Allow the masonry stove to cool. Dispose of the ashes and close the air supply if necessary.

#### Annual maintenance of masonry stove

Have the masonry stove, the flue gas channels and the flue gas pipes examined by and expert annually or, with heavier loading (frequent heating, incomplete combustion of fuel gases), more often and also after cleaning the chimney, for deposits, malfunctions and defects and, if necessary, cleaned and repaired.

# 19.5 Environmental protection and disposal 19.5.1 Environmental protection

When used properly, the masonry stoves meet the flue gas values/emission values of the 2nd Stage the 1st German Federal Emission Protection Ordinance (Bundes-Immissionsschutzverordnung).

#### 19.5.2 Disposal

All packaging materials used are environmentally friendly and recyclable. Dispose of them via your country-specific recycling system.

Wearing parts and old devices contain recyclable materials. Sort these components by material groups (ceramics, glass, metal, etc.) and bring them to a recycling company or dispose of them properly.



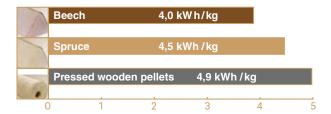
### 20.Log table, heating values

		Recommended filling quantity		
Heat storage system		S21 GO-Line		
Max. log length	[cm]	33		
Max. residual moisture content	[%]	20		
Recommended filling quantity	[kg]*	1 x 7,5 kg**		

<sup>\*</sup> All kg specifications are approx. specifications! \*\* Max. filling quantity within 12 hours!

#### Heating value chart

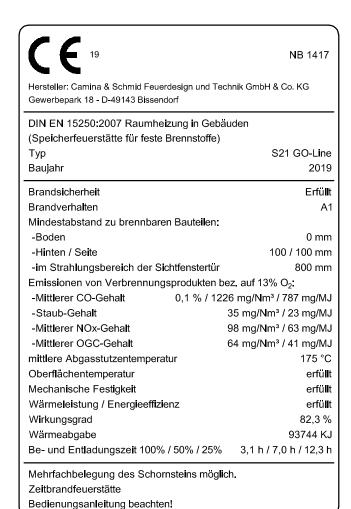
Using the chart, the heating value in kWh/kg (based on 20% residual moisture content) can be determined for the firewood used most often.





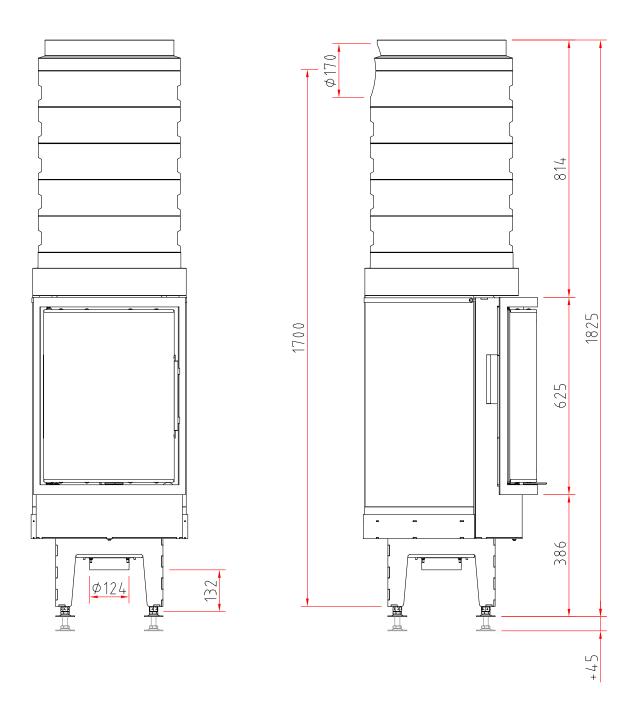
### 21. Technical specifications

#### 21.1 Label type



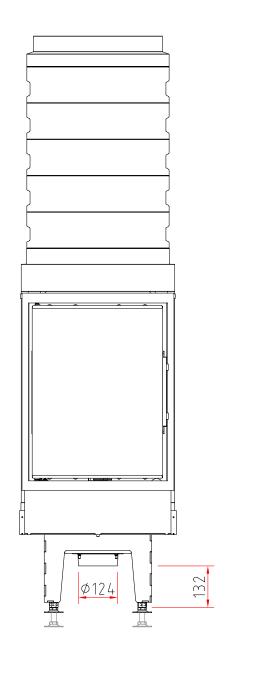


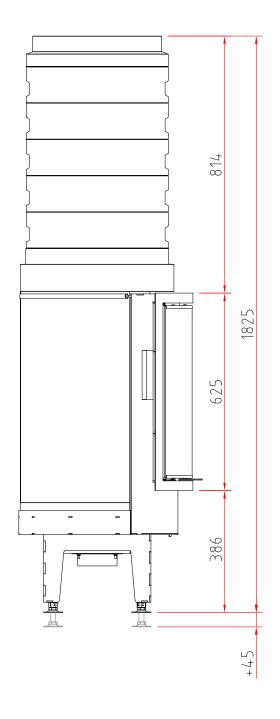
### 21.2 Dimensional diagram Ronda GO 4557 with rear connection





### 21.3 Dimensional diagram Ronda GO 4557 with top connection







## 22.Parts list for S21 G0 heat storage system (for reorders)

No.	Quantity	Designation
1	1x	Ceiling plate
2	1x	Insulating panel
3	1x	Fireplace connection cover
4	1x	Hood section
5	1x	Upper section
6	1x	Side panel, left
7	1x	Side panel, right
8	1x	Base, front
9	1x	Base, rear
10	1x	Insert for floor panel

Remarks:		

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No.	Quantity		Designation
11	1x		Floor panel
12	1x		Sealing cord for first fire clay ring
13	1x		Inlay cover, bottom centre
14	4 x		Fire clay ring 2
15	1x		Fire clay ring 2 only for ceiling connection
16	1x		Fire clay ring 3 only for wall connection
17	1x		Fire clay ring 4 only for wall connection
18	1x		Fire clay ring 5 only for ceiling connection
19	1x		Ceramic tape
20	1x		Repair compound
21	1x	Acryl	Acrylic adhesive

Kemarks	S:			



#### 23. General warranty conditions

According to current state of technology, this product is an innovative, Germany quality product made by Schmid. In the production of our products we place particular emphasis on good design, high-quality craftsmanship and perfect technology. However, should a fault occur, the following is required to invoke your warranty rights:

#### **Conditions for warranty claims**

- 1. Proof of purchase (the sales receipt or the invoice) and the filled-out warranty certificate. If these cannot be provided, your warranty rights will be invalid.
- 2. The products have been installed and taken into operation by a specialised company in compliance with statutory regulations.
- 3. The fireplace, the flue gas channels and the related secondary units must be inspected annually and, if necessary, serviced as required by a specialised company. In this case, the presentation of a confirmation of the specialist company on the maintenance work performed will be required.
- 4. The specialist company must be informed within one week of the occurrence of the problem by the owner.
- 5. The specialist company will send the manufacturer a written notification on the complaint. An independent elimination of the complaint by the specialist company is only possible with prior written agreement and clarification of the costs with the manufacturer.

#### Troubleshooting - repair

Our customer service department will remedy functional faults as part of the works warranty under the following conditions:

1. Installation and connection was carried out in compliance with the valid Schmid assembly and installation instructions so that it can be proved that the problem is caused by manufacturing or material faults.

#### Warranty period

The warranty period for our products begins with the date of delivery from the factory, depending on the product:

5 years Cast metal-masonry stoves
 5 years Masonry-stove combustion chambers
 5 years Inset stoves, fireplace cassettes
 2 years Boiler systems

- for the electronic components
- Operating elements, like handles, door hinges, running rails
- Interior linings\*
   Surfaces and glass panels\*
   Seals\*
   Fragile objects\*

#### **Excluded from the warranty:**

- Parts in contact with fire\*\*
- Wearing parts\*\*\*

#### \*Inner lining

2 years

Cracks in the inner lining occurring as the result of the high temperatures in the combustion chamber and different reactions to the high thermal loads are unavoidable, as this is a natural product (fire clay, Vermiculite). As long as no large pieces break out of the panels, operation of the stove system can continue without any problems.

A warranty claim for the interior lining can only become effective if the panels/shaped bricks crumble in sandy or solid form due to poor dimensions and the desired protective function is therefore impaired.

#### \*Surfaces and glass panels

Discolouration on galvanic or painted surfaces, sooty or baked glass panels and all changes resulting from the effects of excessively high temperatures are excluded from the warranty.

#### \*Seals

Faulty seals which result in leakage due to ageing effects, which in most cases lead to leakage, are excluded from the warranty.

\*Damage to **fragile objects**, such as ceramic glass resulting from incorrect transport, storage or use as well as faulty maintenance work is excluded from the warranty.



#### \*\*Parts in contact with fire

This applies to all interior components which come in contact with the fire. The heavy loading results due to the high temperatures in the combustion chamber and different reactions to high thermal and mechanical loads. Applies to the glass panel, seal, cast metal grate and other individual parts of the combustion chamber.

#### \*\*\*Wearing parts

Wear refers to the progressing loss of surface material of a solid body (basic body). This is caused by mechanical causes, i.e. contact and relative movement of a solid, liquid or gaseous counter body, i.e. the loss of mass (surface removal) of a material surface due to grinding, rolling, striking, scratching, chemical and thermal loading. In general language usage, wear is also equivalent to other types of abrasion.

Please note that the warranty period of the product is not extended and does not recommence in the event of repair or replacement of various elements!

The warranty does not cover costs resulting in the context of installation and removal of parts.

#### Liability

Liability regulations are included in our General Terms and Conditions, which can be viewed at

www.camina-schmid.de.

### 24.Glossary

#### **Stove system**

A stove system is a stove unit consisting of several individual components (e.g. masonry stove + reheater box + tile stove + chimney draws, etc.) and which is used in its entirety to produce heat.

#### Proper use

Defines the intended purpose and the basic conditions for use of the product.

#### Operating pressure (heating system)

The operating pressure is the pressure in the lines of the heating system filled with liquid.

#### **Owner**

The one who operates or owns the stove system or the one who has been assigned the technical operation of this system is considered the owner.

According to EU definition, the owner is any natural or legal person who operates or owns the system or who-if provided for in the national legal regulations - has been assigned the decisive economic authority to dispose over the technical operation of the system (1999/13/EC).

#### Single-room firing systems

Single-room firing systems are fireplaces for which use is (legally and technically) limited to the heating of single living rooms.

#### Commissioning

Commissioning is the first(!) operation of a system after its final completion. For stove systems, commissioning is subject to special basic conditions (dry heating). Commissioning is carried out by a specialised company/expert.

#### **Specialised company:**

A specialised company is a commercial entity with professionally trained staff.

#### **Expert**

An expert is a person with extensive theoretical and practical knowledge and experience in the field of work and a knowledge of the relevant standards.

#### Fireplace

A fireplace is a technical device for generating heat through combustion of suitable fuels. It must be accepted in Germany by the district master chimney sweep and inspected regularly (generally semi-annually).

#### Feed pressure

The feed pressure or boost is the pressure difference between the installation room of the device and the flue gas outlet (chimney head).

#### Flue gas

Flue gas is the gas resulting during combustion, which has not yet given off its heat.

#### Heating value

The heating value is the maximum usable quantity of heat generated during combustion based on the quantity of fuel (for wood based on the residual moisture content).



## Nominal heat output/Nominal heating capacity

The nominal heat output is the heat energy given off per unit of time when the fireplace is operated according to the specified filling quantities in its work phase.

#### Fireplace dependent on room air

A fireplace dependent on room air removes the combustion air completely or partially from the installation room.

A fireplace dependent on room air can be equipped with a supply line which feeds in the combustion air from outdoors. Nevertheless, this variant is considered to be dependent on room air, as the fireplace itself does not hat the increased leak-tightness to prevent the removal of combustion air from the installation room. Schmid masonry stoves are fireplaces dependent on room air, which are provided with a connection for the supply of air from the outside.

#### Fireplace independent of room air

A fireplace independent of room air does not remove the combustion air from the installation room. The stove system must meet certain technical conditions (leak-tightness) and must be approved for this use.

#### Return line

The return line is the connection side at which the cooled heating water is fed into the boiler from the heating circuit.

#### **Self-closing door**

A self-closing door falls back into the door frame (usually with spring force) without any action by the operator. However, in this position, the door is not locked or closed and the the door seal does not seal tightly. Therefore, these doors must always be locked with operating the stove system.

#### Safety device

A safety device is a protective system for the prevention of damage. The function of safety devices must be checked regularly. On a heating water circuit, e.g. the thermal discharge safety device and the safety valve, at least once a year.

#### Thermal discharge safety device

The thermal discharge safety device is a safety device which adds cold drinking water to the system at excessively high heating water temperatures (approx. 97° C). It must never be locked, tampered with

or deactivated.

#### Combustion air line

The combustion air line is the component that routes the combustion air to the fireplace.

#### Supply line

The supply line is the connection side at which the heated heating water is routed from the boiler back into the heating circuit.

#### Thermal output range

The thermal output range specifies the limits for the minimum/maximum thermal output within which the fireplace can still be properly operated. This thermal output primarily results from the quantity of fuel used and the quantity of air provided.

#### Temporarily burning fireplace

The term temporarily burning fireplace describes (in highly simplified terms) that your fireplace requires intervention in the combustion process during the combustion period.

For the term continuously burning fireplace may only be applied to fireplaces which continue to burn without the addition of fuel and without intervention in the combustion process for a certain minimum period and at a low setting so that the embers (at least as large as the basic mass of embers before adding the fuel) can be started again at the end of the period.

All fireplaces operated with a wood fire always require intervention in the combustion process, among other things to be able to meet the requirements for Germany in accordance with the 1st BImSchV and are therefore temporarily burning fireplaces.

However, the term temporarily burning fireplace does not specify a time restriction for the operating duration. Ultimately, the combustion duration is determined by the quantity of fuel used and the quantity of air provided. If combustion is ended, the next combustion can also be started again immediately with the embers. This means, your needs determine how long and how often you heat.



## 25. Commissioning report

plant operator		specialist	
surname		surname	
address		address	
postcode / location		postcode / town	
Facility data			Dania atawa asmahwatian
device type	heating insert	fireplace insert	Basic stove combustion chamber
marking Schmid		serial number	
AB-number		_	
downstream connection	coasters	 Туре	
	ceramic flue gas ducts	length	(m)
	attachments storage	Туре	
	heating flap	Others	
Chimney / connecting	cable		
connecting line	diameter	(n	nm)_
	extended length		<u>(m)</u>
	deflections		
chimney	effective height		<u>(m)</u>
	diameter	(n	<u>nm)</u>
	single shell	more shells	Outer wall (stainless steel
Combustion air supply			
operation	room air composite		
combustion air line	firmly connected	not installed	
	room air dependent (cor	nbustion air duct sealed off to th	ne convection area)
	room air dependent (cor	nbustion air duct is located in th	e convection area)
	outside air connection w	ith connection piece connected	to the device diameter
	diameter	(mm)	<u></u>
	extended length		(m)
Ventilation system (cor	ntrolled ventilation, extracto	r hood. etc.)	<u> </u>
during commissioning	no facility available	Plant available	
safety device	unavailable	available / type	
•		aramasis / type	
control engineering	_	_	
combustion control	unavailable	available / type	
further regulations	Water regulation / type		<u></u>
	Others		<u></u>
Briefing and delivery			
The plant operator was b	oriefed on the operation and m	aintenance of the plant.	Yes
The plant operator was in	nformed of dangers during the	operation of the plant.	Yes
The plant operator was g	given the installation and opera	ting instructions.	Yes
place	_	date	
Signature plant operator		Signature specialist com	pany











#### Heat storage-stone fireplaces

The storage stone from Camina is a reinforced casting compound that still stores and gently gives off the radiated heat of the fireplace for many hours after com-

The systems are easy to install and can be removed again quickly when moving or in case of a desired design change.

Camina exclusively uses Schmid firing technology as the "motor" of the systems - on request also with water systems. - some models are on request also with water heating.

#### Classic natural stone fireplaces

Camina offers a broad range of surrounds for your fireplace. For example, also a uniquely diverse line of natural stone facades - with both classic and modern designs.

Natural stone is, as the name already denotes, a product grown in the natural world over millions of years, to which we can ,only' add the shape and the final touches.

Natural stone systems are rightly considered to be especially valuable. After all, a great deal of craftsmanship is required to produce them. Each system is truly unique!

















#### Modern natural stone fireplaces

Natural stone is a product grown in the natural world over millions of years, to which we can ,only' add the shape and the final touches.

Slight deviations in the colour, structure and pattern are therefore perfectly normal. Every system produced from it is truly unique, which accounts for the high value of this product.











