



# ASSEMBLY AND OPERATING MANUAL FIREPLACE INSERTS PREMIUM & LEAN

STATUS 06.2023

# **Document information**

Assembly and operating manual for fireplace inserts:

- Premium V-1V-87h
- Premium V-FD-87h
- Premium V-2L-55h
- Premium V-2R-55h
- Premium V-2L-68h
- Premium V-2R-68h
- Premium V-2L-80h
- Premium V-2R-80h
- Premium A-3RL-60h
- Premium A-3RL-80h
- Premium A-U-50h
- Premium A-U-70h
- Premium A-U-70h
- Lean 2R-70h
- Lean 2L-70h
- · Lean 3RL-70h

The descriptions are identical for all above-mentioned models. Any differences will be addressed explicitly. Images show the fireplace insert Premium A-3RL-60h.

The fireplace insert is referred to as the "unit" in this manual. The full system including the fireplace insert, thermal storage medium, pipes and chimney is referred to as the "stove system".

Other applicable documents:

Technical Data"

# Safety information

# **△ DANGER!**

Information marked with the word DANGER indicates a dangerous situation that will lead to severe injuries or death.

# **△ WARNING!**

Information marked with the word WARNING indicates a dangerous situation that may lead to severe injuries or death.

### **↑** CAUTION!

Information marked with the word CAUTION indicates a situation that may lead to minor to medium injuries.

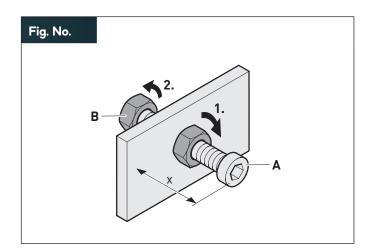
# **⚠ ATTENTION!**

Information marked with the word ATTENTION indicates a situation that may lead to property or environmental damage.

### Symbol explanation for text

- ► Action prompt
- List
- ✓ Check
- Advice or recommendation
- § Indication of standards or directives
- ➡ Reference to other sections of this document
- Reference to other sources to be taken into account

# Symbol explanation for images



- Highlighting of sections requiring action
- 1. Numbered action steps
- A Component designation or dimensions
- x Dimensions in mm
- G Movement and direction arrows



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# **Safety information**

# 1. Safety information

### 1.1 Intended use

The unit is designed to heat the air in a room by burning suitable types of fuel and is exclusively intended for use in private households.

The unit is designed as a time-limited fireplace, the burning time of which can be extended by refuelling it.

§ Time-limited fireplace according to DIN EN 13229, category 1 a.

The following conditions apply to using the unit:

- Only the appropriately authorised target group may install or use the unit or perform other activities on the unit.
- The unit must be installed in a dry living space in an enclosed building.
- Prior to start-up, acceptance by the responsible authorities is required (in German e.g. the district chimney sweep).
- The unit is exclusively fuelled by natural, air-dried logs (remaining humidity max. 20 %) or compressed wood pieces.
  - § Compressed wood pieces approved according to DIN EN ISO 17225-3.
- Extending the combustion period ("permanent fire") by fuelling the unit with larger quantities of wood or by extracting the combustion air is not permissible.
- Operation only with closed firebox door. Only open the door for heating, refuelling and cleaning.
- The national and regional regulations and directives are observed.
  - → "10.3 Standards and regulations" (page 54).
- The requirements and safety information in these instructions are observed.

Any other use is regarded as unintended use. The manufacturer is not liable for damage caused by unintended use.

# 1.2 Authorised target groups

Authorised target groups are divided into groups of persons with different levels of authorisation.

### 1.2.1 Manufacturer

The manufacturer and the manufacturer's agents have the following tasks:

- Delivery of a ready-for-installation unit.
- Setting the unit to its factory settings.
- · Instructing the owner in the intended use of the unit.

### 1.2.2 Owner

The owner is responsible for the building in which the unit is used.

The owner has the following tasks:

- Meeting the requirements for the installation site.
- Ensuring that the unit is always in perfect technical condition.
- Adhering to cleaning and maintenance requirements.
- Instructing the users.
- · Providing and adhering to these instructions.

# 1.2.3 Qualified personnel

Qualified personnel is responsible for installation, commissioning, maintenance, disassembly and disposal. Requirements for qualified personnel:

- Practical professional experience or professional training regarding gas, water and heating systems.
- Experience in installing and maintaining stove systems.
- Experience in the use of electrical and mechanical tools.
- Familiarity with occupational health and safety regulations.
- Knowledge of how to read technical drawings.
- · Familiarity with these instructions.
- Documentation of the work performed.

Electrical work may only be performed by qualified electricians.

# § DIN VDE 0100

Requirements for qualified electricians:

- Familiarity with the basics of electrical engineering.
- Familiarity with country-specific regulations and standards.
- Familiarity with the relevant safety regulations.
- Familiarity with these instructions.

### 1.2.4 Users

Instructed users perform work during use, cleaning and service work.

Requirements for instructed users:

- The users have been instructed in the safe and intended use of the unit.
- The users have been instructed with regard to their work by the owner.
- · Familiarity with these instructions.

Special requirements apply to the following users:

- Children aged 8 and over.
- Persons with decreased physical, sensory or mental capabilities.
- Persons with a lack of experience and knowledge.
   These users may only use the unit under the following conditions:
- The users are supervised.
- The users have been instructed in the safe use of the unit.
- The users understand the dangers of handling the unit.
- Children may not play with the unit.



Children and pets must be supervised at all times and must be kept away from the unit.

We recommend attaching a fixture to protect this group (e.g. in front of hot unit components).

# 1.3 Behaviour in emergencies

Never put yourself at risk of death.

If it is possible without endangering yourself:

- ▶ Warn others.
- ► Instruct others to leave the building.
- ► Deactivate the unit.

# 1.4 Chimney fire

The chimney requires regular cleaning (e.g. in Germany by the district chimney sweep) to prevent formation of a layer of soot in the chimney.

Burning wood may generate sparks that can enter the chimney where they may ignite the layer of soot.

Signs of a burning chimney:

- · Flames emerge from the mouth of the chimney.
- A large amount of flying sparks.
- · Smoke and unpleasant odours.
- · Chimney sides grow very hot.

In the event of a chimney fire:

- Alert the fire brigade by calling the emergency services number
- ► Remove flammable objects from the vicinity of the chimney. Never attempt to extinguish the fire with water!

High temperatures will generate extreme amounts of steam even from a small amount of water. The resulting pressure can be a danger to people and can damage buildings or the stove system.

# 1.5 General safety information

# **△ WARNING!**

# Danger due to non-observance of the operating and assembly instructions!

These instructions contain important information on how to safely handle the unit. Potential dangers are pointed out explicitly. Non-observance can lead to severe injuries or death.

- ► Carefully read these instructions.
- Adhere to the safety information in these instructions.
- ► Keep the instructions in an accessible place.

The unit may not be used in the following cases:

- If the responsible authorities have not given their approval.
- If the unit or individual components are damaged.
- If unauthorised modifications or changes have been made to the unit.
- After improper repairs.
- If safety devices are missing or not functional.
- In garages, stairwells or hallways accessible by the general public.
- In areas at risk of explosion.

In the following cases, the manufacturer shall not accept any liability for damage:

- If these instructions are not adhered to.
- In the event of unintended use.
- In the event of improper handling.
- If the unit is used by unauthorised target groups.
- If the unit is installed or repaired by unauthorised experts.
- In the event of unauthorised conversions.
- If spare parts are used which were not manufactured or approved by the manufacturer.
- If the protective devices of the unit are bypassed.
- If maintenance and cleaning intervals are not adhered to.

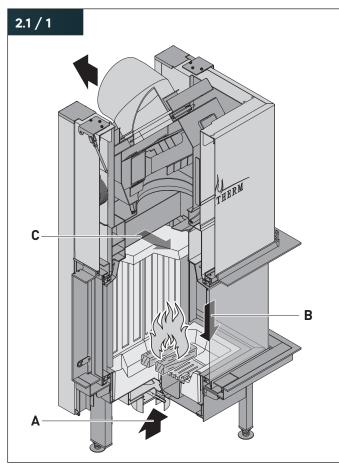
Depending on the work, always adhere to additional relevant safety instructions. The safety instructions can be found in the corresponding chapter of these instructions.

- **→** "4.1 Safety information for assembly" (page 20).
- → "5.1 Safety information for use" (page 36).
- → "6.1 Safety information for cleaning" (page 43).
- → "7.1 Safety information for service work" (page 46).
- → "8.1 Safety information for disassembly" (page 52).

# 2. Product information

# 2.1 Functional principle

The combustion air flows through the combustion air connection into the air connection box. From there, the air is guided to the firebox and combustion. The combustion air volume can be controlled using a combustion air controller.



There are three types of combustion air:

- A Primary air
  - Oxygen-rich, non-preheated fresh air guided toward the fuel from the bottom. Primary air is primarily used for light-up.
- B Secondary air
  - Pre-heated, variable air flow guided into the firebox from above to ensure even, efficient combustion.
- C Tertiary air (optional depending on the unit)
  Heated, oxygen-rich fresh air, which flows into the firebox
  from the rear in addition to the secondary air and reduces
  emission generation by fanning the flames.

### 2.2 Operating modes

The unit can be used in two different operating modes:

- Room air sealed operation only for RLU fireplace inserts.
  - The unit is supplied with combustion air from the outside or from other rooms (e.g. cellar) through a combustion air line connected to the rear or bottom of the unit.
  - § The unit meets the requirements for approval by DIBt (German institute for construction technology) for room air sealed fireplaces and solid fuels according to DIN 18897-1.
- Room air dependent operation –
  for RLA and RLU fireplace inserts.
  The unit is supplied with combustion air from the
  installation room. The combustion air is supplied to the
  unit through the air openings. A combustion air line is not
  required but permissible (e.g. for operation together with
  controlled ventilation and venting systems).

### 2.3 Material

The unit consists of a steel body, which meets the requirements for fireplaces.

§ The unit has been tested according to DIN EN 13229.

The firebox lining contains built-in components or cover panels made of fireclay, ceramics, vermiculite or refractory concrete. Cracks may form in these components as a result of e.g.:

- Physical and production-related residual moisture in the components escaping during the heating process.
- · High temperature differences.

Surface cracks do not affect combustion. If wide cracks form or pieces break out uncovering the unit structure, the firebox lining must be replaced.

### 2.4 Protective devices

- · High-temperature resistant ceramic glass window.
- Self-closing firebox door.
  - On delivery, the unit is equipped with a non-self-closing firebox door.

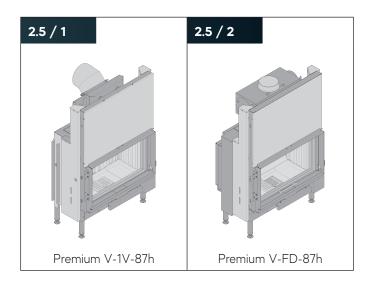
In the following cases conversion to a self-closing firebox door is obligatory:

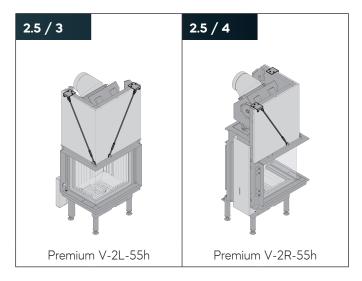
- If legally required (e.g. in Germany).
- In the case of multi-use of the chimney. If the self-closing door function is used, it is necessary to adjust the counterweight correctly during installation.
- "4.7 Adjusting the counterweight (optional)" (page 27).

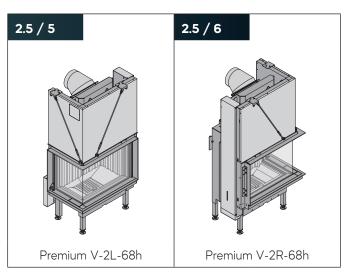


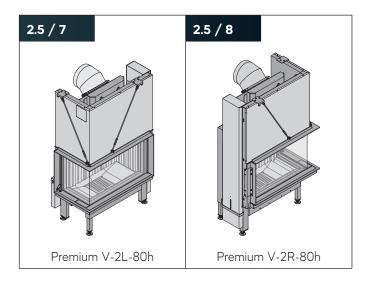
#### 2.5 **Models**

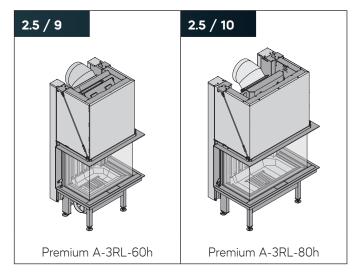
The product series Premium is available in different designs.





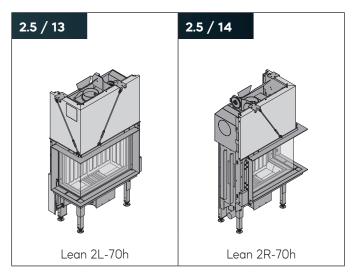


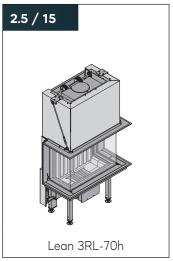




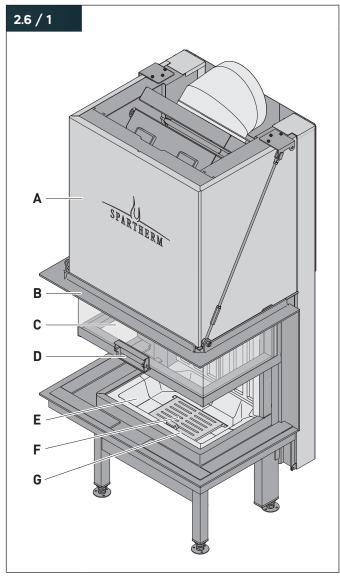


The product series Premium is available in different designs.



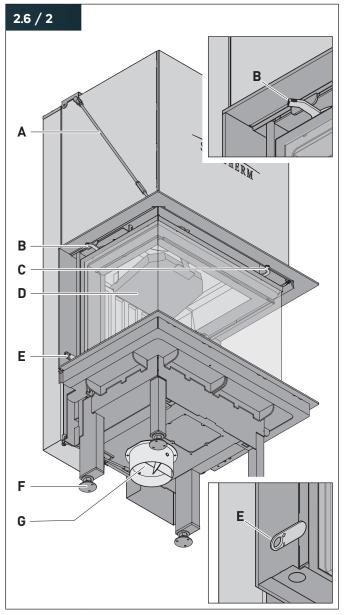


#### 2.6 **Product overview**

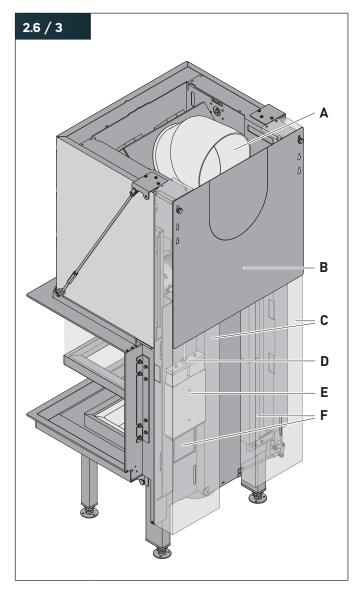


- **A** Door hood
- **B** Solid screen
- **C** Firebox door with ceramic glass
- **D** Door handle
- **E** Firebox with firebox lining
- **F** Ash grate
- **G** Ash pan (below the ash grate)



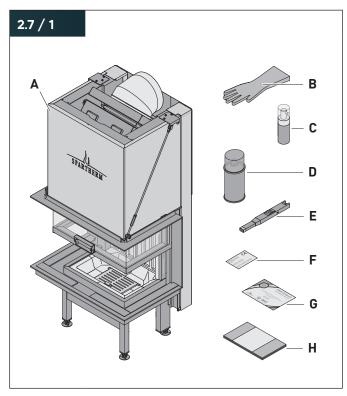


- Α Drawbar
- В Door lock
- **C** Door locking mechanism
- **D** Baffle plate
- Combustion air controller
- Adjustable legs
- **G** Combustion air connector



- A Flue gas connection
- В Radiation protection plate (delivery condition)
- С Weight shaft lining
- D Safety ring
- Counterweight
- F Inspection port

#### 2.7 Scope of delivery



- **A** Fireplace insert
- **B** Heat protection glove
- **C** Glass cleaner
- **D** Spray paint
- **E** Lighter
- Type plate
- **G** Warranty certificate
- **H** Assembly and operating manual

# Optional:

- Combustion control S-Thermatik NEO.
- Secondary air control S-Kamatik 2. (only Premium product
- Electric door lift SESAM III (for opening and closing the firebox door).
- "10.1 Accessories" (page 54).

#### 2.8 **Technical data**

Premium V-	1V-87h	without S-Thermatik NEO (standard)	with S-Thermatik NEO (optional)	with ancillary heating surface (optional)
Nominal hea	t output	9.5 kW	9.5 kW	10.9 kW
Heat output direct/indire	ct	9.5 / – kW	9.5 / – kW	10.9 / – kW
Heat output	range	6.7 – 12.4 kW	6.7 – 12.4 kW	7.6 – 14.2 kW
Energy efficie	ency class	Α+	Α+	A+
Exhaust mas	s flow	9.0 g/s	9.6 g/s	10.5 g/s
Exhaust gas	temperature	275 °C	286 °C	180 °C
Average CO	content	9.5 %	9.1 %	8.7 %
Room heater efficiency	annual use	72.0 %	70.8 %	78.0 %
	Dust	< 40 mg/m <sup>3</sup>	< 40 mg/m <sup>3</sup>	< 40 mg/m³
Room heater	CO	< 1250 mg/m³	< 1250 mg/m³	< 1250 mg/m³
emissions at nominal heat output	NOx	< 200 mg/m³	< 200 mg/m³	< 200 mg/m³
Tiour output	OGC	< 120 mg/m³	< 120 mg/m³	< 120 mg/m³
Auxiliary power con-	at nominal heat output	_	0.004 kW	-
sumption S-Ther-	at minimum heat output	_	0.004 kW	-
matik NEO (optional)	in stand- by	_	0.003 kW	-
Max. input vo		2.8 kg/h	2.8 kg/h	2.8 kg/h
Max. input volume of compressed wood		2.3 kg/h	2.3 kg/h	2.3 kg/h
Efficiency		> 80.0 %	> 80.0 %	> 85.0 %
Combustion air requirement for room air dependent operation		29.7 m³/h	31.4 m³/h	34.6 m³/h
Delivery pres		12.0 Pa	12.0 Pa	12.0 Pa
Weight		350 kg	351 kg	350 kg



Premium V-I	FD-87h	without S-Thermatik NEO (standard)	with S-Thermatik NEO (optional)	with ancillary heating surface (optional)
Nominal hea	t output	10.6 kW	10.6 kW	10.9 kW
Heat output direct / indire	ct	10.6 / - kW	10.6 / - kW	11.1 / - kW
Heat output	range	7.4 – 13.8 kW	7.4 – 13.8 kW	7.8 – 14.4 kW
Energy efficie	ency class	A+	A+	A+
Exhaust mas	s flow	10.2 g/s	10.8 g/s	11.8 g/s
Exhaust gas	temperature	275 °C	268 °C	190 °C
Average CO <sub>2</sub>	content	9.3 %	9.3 %	8.2 %
Room heater efficiency	annual use	72.0 %	70.8 %	77.0 %
	Dust	< 40 mg/m³	< 40 mg/m³	< 40 mg/m³
Room heater	CO	< 1250 mg/m³	< 1250 mg/m³	< 1250 mg/m³
emissions at nominal heat output	NOx	< 200 mg/m³	< 200 mg/m³	< 200 mg/m³
	OGC	< 120 mg/m³	< 120 mg/m³	< 120 mg/m³
Auxiliary power con-	at nominal heat output	-	0.004 kW	-
sumption S-Ther-	at minimum heat output	-	0.004 kW	_
matik NEO (optional)	in stand- by	-	0.003 kW	-
Max. input vo	olume of	3.1 kg/h	3.1 kg/h	3.1 kg/h
Max. input volume of compressed wood		2.6 kg/h	2.6 kg/h	2.6 kg/h
Efficiency		> 80.0 %	> 80.0 %	> 85.0 %
Combustion air requirement for room air dependent operation		33.8 m³/h	34.3 m³/h	37.8 m³/h
Delivery pres		12.0 Pa	12.0 Pa	12.0 Pa
Weight		297 kg	298 kg	297 kg

Premium V-:		without S-Thermatik NEO (standard)	with S-Thermatik NEO (optional)	with ancillary heating surface (optional)
Nominal hea	t output	7.9 kW	7.5 kW	10.9 kW
Heat output direct/indire	ct	7.9 / – kW	7.5 / – kW	10.9 / – kW
Heat output	range	5.5 – 10.3 kW	5.3 – 9.8 kW	7.6 – 14.2 kW
Energy efficie	ency class	A+	A+	A+
Exhaust mas	s flow	6.5 g/s	6.8 g/s	8.9 g/s
Exhaust gas	temperature	263 °C	269 °C	191 °C
Average CO	2 content	10.7 %	9.7 %	10.2 %
Room heater efficiency	annual use	75.0 %	72.7 %	77.0 %
	Dust	< 40 mg/m³	< 40 mg/m³	< 40 mg/m³
Room heater	СО	< 1250 mg/m³	< 1250 mg/m³	< 1250 mg/m³
emissions at nominal heat output	NOx	< 200 mg/m³	< 200 mg/m³	< 200 mg/m³
node odepat	OGC	< 120 mg/m³	< 120 mg/m³	< 120 mg/m³
Auxiliary power con-	at nominal heat output	_	0.004 kW	_
sumption S-Ther-	at minimum heat output	_	0.004 kW	_
matik NEO (optional)	in stand- by	_	0.003 kW	_
Max. input vo	olume of	2.2 kg/h	2.2 kg/h	2.2 kg/h
Max. input vo		1.9 kg/h	1.9 kg/h	1.9 kg/h
Efficiency		85.0 %	> 85.0 %	> 80.0 %
Combustion air requirement for room air dependent operation		21.2 m³/h	22.7 m³/h	30.0 m³/h
Delivery pres		12.0 Pa	12.0 Pa	12.0 Pa
Weight		265 kg	267 kg	265 kg

Premium V-:		without S-Thermatik NEO (standard)	with S-Thermatik NEO (optional)	with ancillary heating surface (optional)
Nominal hea	t output	9.6 kW	9.7 kW	9.9 kW
Heat output direct / indire	ct	9.6 / – kW	9.7 / – kW	9.9 / – kW
Heat output	range	6.7 – 12.5 kW	6.8 – 12.6 kW	6.9 – 12.9 kW
Energy efficie	ency class	A+	A+	Α+
Exhaust mas	s flow	8.8 g/s	8.7 g/s	9.3 g/s
Exhaust gas	temperature	276 °C	261 °C	195 °C
Average CO <sub>2</sub>	content	9.9 %	10.1 %	8.9 %
Room heater efficiency	annual use	72.0 %	72.8 %	77.0 %
	Dust	< 40 mg/m³	< 40 mg/m³	< 40 mg/m <sup>3</sup>
Room heater	CO	< 1250 mg/m³	< 1250 mg/m³	< 1250 mg/m³
emissions at nominal heat output	NOx	< 200 mg/m³	< 200 mg/m³	< 200 mg/m³
	OGC	< 120 mg/m³	< 120 mg/m³	< 120 mg/m³
Auxiliary power con-	at nominal heat output	_	0.004 kW	_
sumption S-Ther-	at minimum heat output	-	0.004 kW	_
matik NEO (optional)	in stand- by	_	0.003 kW	_
Max. input vo	olume of	2.8 kg/h	2.8 kg/h	2.8 kg/h
Max. input volume of compressed wood		2.3 kg/h	2.3 kg/h	2.3 kg/h
Efficiency		> 80.0 %	> 80.0 %	> 85.0 %
Combustion air requirement for room air dependent operation		28.8 m³/h	28.2 m³/h	31.1 m³/h
Delivery pres nominal heat		12.0 Pa	12.0 Pa	12.0 Pa
Weight		310 kg	311 kg	310 kg

Premium V-2L-4 Premium V-2R-		without S-Thermatik NEO (standard)	with S-Thermatik NEO (optional)
Nominal heat ou	tput	10.5 kW	10.2 kW
Heat output dire	ct / indirect	10.5 / – kW	10.2 / – kW
Heat output rang	ge	7.4 – 13.7 kW	7.1 – 13.3 kW
Energy efficiency	class	А	Α+
Exhaust mass flo	w	12.2 g/s	10.6 g/s
Exhaust gas tem	perature	272 °C	266 °C
Average CO <sub>2</sub> cor	ntent	8.2 %	9.0 %
Room heater ann	nual use efficiency	70.0 %	71.8 %
	Dust	< 40 mg/m³	< 40 mg/m³
Room heater emissions at	СО	< 1250 mg/m³	< 1250 mg/m³
nominal heat output	NOx	< 200 mg/m³	< 200 mg/m³
	OGC	< 120 mg/m³	< 120 mg/m³
Auxiliary power	at nominal heat output	_	0.004 kW
consumption S-Thermatik	at minimum heat output	_	0.004 kW
NEO (optional)	in stand- by	-	0.003 kW
Max. input volum	e of hard wood	3.2 kg/h	3.2 kg/h
Max. input volume of compressed wood		2.6 kg/h	2.6 kg/h
Efficiency		80.0 %	> 80.0 %
Combustion air requirement for room air dependent operation		38.9 m³/h	33.7 m³/h
Delivery pressure nominal heat out		12.0 Pa	12.0 Pa
Weight		350 kg	351 kg



Premium A-3RL	60h	without S-Thermatik NEO (standard)	with S-Thermatik NEO (optional)
Nominal heat ou	tput	10.0 kW	10.0 kW
Heat output dire	ct / indirect	10.0 / – kW	10.0 / – kW
Heat output rang	ge	7.0 – 13.0 kW	7.0 – 13.0 kW
Energy efficiency	class	Α+	Α+
Exhaust mass flo	W	10.5 g/s	10.2 g/s
Exhaust gas tem	perature	270 °C	278 °C
Average CO <sub>2</sub> cor	ntent	8.9 %	9.1 %
Room heater ani	nual use efficiency	71.0 %	70.8 %
	Dust	< 40 mg/m³	< 40 mg/m³
Room heater emissions at	СО	< 1250 mg/m³	< 1250 mg/m³
nominal heat output	NOx	< 200 mg/m³	< 200 mg/m³
	OGC	< 120 mg/m³	< 120 mg/m³
Auxiliary power	at nominal heat output	_	0.004 kW
consumption S-Thermatik	at minimum heat output	-	0.004 kW
NEO (optional)	in stand- by	_	0.003 kW
Max. input volum	e of hard wood	3.0 kg/h	3.0 kg/h
Max. input volume of compressed wood		2.5 kg/h	2.5 kg/h
Efficiency		> 80.0 %	> 80.0 %
Combustion air requirement for room air dependent operation		33.7 m³/h	33.0 m³/h
Delivery pressure nominal heat out		12.0 Pa	12.0 Pa
Weight		279 kg	280 kg

Premium A-3RL	80h	without S-Thermatik NEO (standard)	with S-Thermatik NEO (optional)
Nominal heat ou	tput	11.4 kW	12.3 kW
Heat output dire	ct / indirect	11.4 / – kW	12.3 / – kW
Heat output rang	ge	8.0 – 14.8 kW	8.6 – 16.0 kW
Energy efficiency	class	А	А
Exhaust mass flo	W	12.6 g/s	12.6 g/s
Exhaust gas tem	perature	275 °C	296 °C
Average CO <sub>2</sub> co	ntent	8.6 %	9.3 %
Room heater ani	nual use efficiency	70.0 %	69.8 %
	Dust	< 40 mg/m³	< 40 mg/m³
Room heater emissions at	СО	< 1250 mg/m³	< 1250 mg/m³
nominal heat output	NOx	< 200 mg/m <sup>3</sup>	< 200 mg/m³
	OGC	< 120 mg/m³	< 120 mg/m³
Auxiliary power	at nominal heat output	_	0.004 kW
consumption S-Thermatik	at minimum heat output	_	0.004 kW
NEO (optional)	in stand- by	_	0.003 kW
Max. input volum	e of hard wood	3.4 kg/h	3.4 kg/h
Max. input volume of compressed wood		2.9 kg/h	2.9 kg/h
Efficiency		80.0 %	80.0 %
Combustion air requirement for room air dependent operation		40.3 m³/h	40.3 m³/h
Delivery pressure nominal heat out		12.0 Pa	12.0 Pa
Weight		337 kg	338 kg

Premium A-U-5	Oh	without S-Thermatik NEO (standard)	with S-Thermatik NEO (optional)
Nominal heat ou	tput	9.3 kW	9.3 kW
Heat output dire	ct / indirect	9.3 / – kW	9.3 / – kW
Heat output rang	ge	6.5 – 12.1 kW	6.5 – 12.1 kW
Energy efficiency	class	A+	Α+
Exhaust mass flo	W	8.5 g/s	7.7 g/s
Exhaust gas tem	perature	311 °C	294 °C
Average CO <sub>2</sub> cor	ntent	10.3 %	11.1 %
Room heater ann	nual use efficiency	71.0 %	72.8 %
	Dust	< 40 mg/m³	< 40 mg/m³
Room heater emissions at	СО	< 1250 mg/m³	< 1250 mg/m³
nominal heat output	NOx	< 200 mg/m³	< 200 mg/m³
	OGC	< 120 mg/m³	< 120 mg/m³
Auxiliary power	at nominal heat output	_	0.004 kW
consumption S-Thermatik	at minimum heat output	_	0.004 kW
NEO (optional)	in stand- by	_	0.003 kW
Max. input volum	e of hard wood	2.8 kg/h	2.8 kg/h
Max. input volume of compressed wood		2.3 kg/h	2.3 kg/h
Efficiency		> 80.0 %	> 80.0 %
Combustion air requirement for room air dependent operation		27.2 m³/h	24.6 m³/h
Delivery pressure nominal heat out		12.0 Pa	12.0 Pa
Weight		235 kg	236 kg

Premium A-U-7	Oh	without S-Thermatik NEO (standard)	with S-Thermatik NEO (optional)
Nominal heat ou	tput	11.4 kW	11.6 kW
Heat output dire	ct / indirect	11.4 / - kW	11.6 / - kW
Heat output ranç	ge	8.0 – 14.8 kW	8.1 – 15.1 kW
Energy efficiency	class	Α+	Α+
Exhaust mass flo	W	11.2 g/s	11.0 g/s
Exhaust gas tem	perature	296 °C	288 °C
Average CO <sub>2</sub> cor	ntent	9.6 %	9.9 %
Room heater and	nual use efficiency	71.0 %	70.8 %
	Dust	< 40 mg/m³	< 40 mg/m³
Room heater emissions at	СО	< 1250 mg/m³	< 1250 mg/m³
nominal heat output	NOx	< 200 mg/m³	< 200 mg/m³
	OGC	< 120 mg/m³	< 120 mg/m³
Auxiliary power	at nominal heat output	-	0.004 kW
consumption S-Thermatik	at minimum heat output	_	0.004 kW
NEO (optional)	in stand- by	_	0.003 kW
Max. input volum	ne of hard wood	3.4 kg/h	3.4 kg/h
Max. input volume of compressed wood		2.8 kg/h	2.8 kg/h
Efficiency		> 80.0 %	> 80.0 %
Combustion air r	•	35.7 m³/h	35.3 m³/h
Delivery pressure nominal heat out		12.0 Pa	12.0 Pa
Weight		357 kg	358 kg



Lean 2L-70h Lean 2R-70h		without S-Thermatik NEO (standard)	with S-Thermatik NEO (optional)
Nominal heat ou	tput	7.9 kW	7.9 kW
Heat output direc	ct / indirect	7.9 / – kW	7.9 / – kW
Heat output rang	ge	5.5 – 10.3 kW	5.5 – 10.3 kW
Energy efficiency	class	A+	А
Exhaust mass flo	W	7.2 g/s	7.6 g/s
Exhaust gas tem	perature	300 °C	308 °C
Average CO <sub>2</sub> cor	ntent	9.3 %	9.3 %
Room heater ann	nual use efficiency	71.0 %	69.8 %
	Dust	< 40 mg/m³	< 40 mg/m³
Room heater emissions at	CO	< 1250 mg/m³	< 1250 mg/m³
nominal heat output	NOx	< 200 mg/m³	< 200 mg/m³
	OGC	< 120 mg/m³	< 120 mg/m³
Auxiliary power	at nominal heat output	_	0.004 kW
consumption S-Thermatik	at minimum heat output	_	0.004 kW
NEO (optional)	in stand- by	_	0.003 kW
Max. input volum	e of hard wood	2.4 kg/h	2.4 kg/h
Max. input volume of compressed wood		2.0 kg/h	2.0 kg/h
Efficiency		> 80.0 %	80.0 %
Combustion air requirement for room air dependent operation		25.6 m³/h	25.9 m³/h
Delivery pressure nominal heat out		12.0 Pa	12.0 Pa
Weight		260 kg	261 kg

Lean 3RL-70h		without S-Thermatik NEO (standard)	with S-Thermatik NEO (optional)
Nominal heat ou	tput	7.5 kW	7.2 kW
Heat output dire	ct / indirect	7.5 / – kW	7.2 / – kW
Heat output rang	ge	5.3 – 9.8 kW	5.0 – 9.4 kW
Energy efficiency	class	Α+	A+
Exhaust mass flo	W	6.3 g/s	6.1 g/s
Exhaust gas tem	perature	311 °C	301 °C
Average CO <sub>2</sub> cor	ntent	9.9 %	9.8 %
Room heater annual use efficiency		71.0 %	70.7 %
	Dust	< 40 mg/m³	< 40 mg/m³
Room heater emissions at	СО	< 1250 mg/m³	< 1250 mg/m³
nominal heat output	NOx	< 200 mg/m³	< 200 mg/m³
	OGC	< 120 mg/m³	< 120 mg/m³
Auxiliary power	at nominal heat output	_	0.004 kW
consumption S-Thermatik	at minimum heat output	_	0.004 kW
NEO (optional)	in stand- by	_	0.003 kW
Max. input volum	e of hard wood	2.2 kg/h	2.1 kg/h
Max. input volum	e of compressed	1.9 kg/h	1.8 kg/h
Efficiency		> 80.0 %	> 80.0 %
Combustion air r	•	22.8 m³/h	22.1 m³/h
Delivery pressure nominal heat out		12.0 Pa	12.0 Pa
Weight		231 kg	232 kg

Information on the model (e.g. type, inspection number, year of manufacture) can be found on the type plate.

The type plate is required for regular inspection of the unit (e.g. in Germany by the chimney sweep).

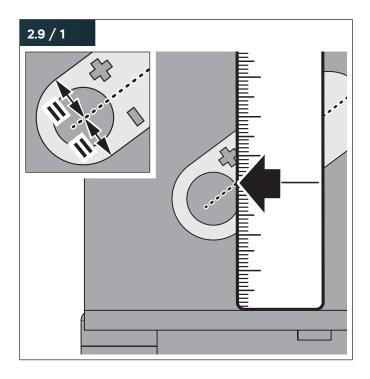
- → Figure 2.7 / 1 (page 10).
- For further information and versions with an optional scope of delivery, refer to the separate document "Technical Data".

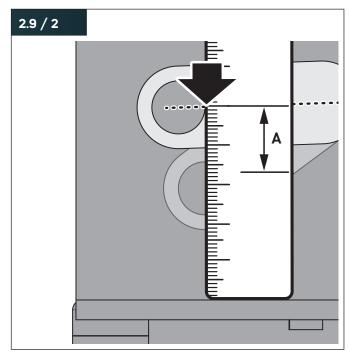
#### 2.9 Nominal heat output

The nominal heat output of the unit can be checked in the defined position "NHO position" of the combustion air slider.

To adjust the NHO position, first move the combustion air slider all the way down to close the air supply. Then position a ruler on the bottom screen to measure the following intersection:

- Line that divides the combustion air slider in half lengthwise.
- Edge of the round opening of the combustion air slider.





Starting from the measured intersection, push the combustion air slider upwards by value (A).

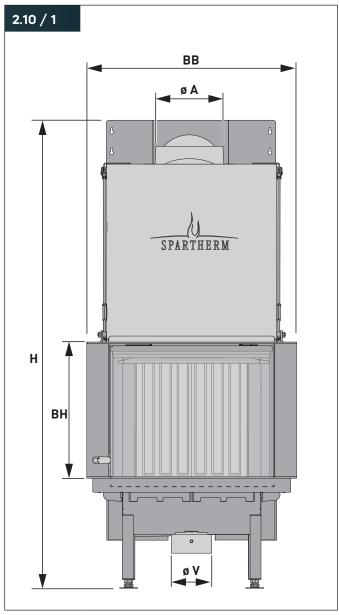
- Premium V-1V-87h 21 mm
- Premium V-FD-87h 16 mm
- Premium V-2L-55h 17 mm
- Premium V-2R-55h 17 mm
- Premium V-2L-68h 16 mm Premium V-2R-68h - 16 mm
- Premium V-2L-80h 26 mm
- Premium V-2R-80h 26 mm
- Premium A-3RL-60h 10 mm
- Premium A-3RL-80h 19 mm
- Premium A-U-50h 15 mm
- Premium A-U-70h 26 mm
- Lean 2L-70h 27 mm
- Lean 2R-70h 27 mm
- Lean 3RL-70h 22 mm

The nominal heat output can only be achieved by adjusting the NHO position under test bench conditions. In heating mode the value represents an approximate value. The ideal position of the combustion air slider depends on the situation and is affected by a variety of factors.

⇒ "5.2.3 Controlling the heating process" (page 40).



# 2.10 Dimensions



Н	Total height
BB	Screen width 1
BH	Screen height
Т	Total depth

Diameter of flue gas connection Diameter of combustion air connection

Dimensions (mm)	Premium V-1V-87h	Premium V-FD-87h	Premium V-2L-55h	Premium V-2R-55h	Premium V-2L-68h	Premium V-2R-68h
Н	1561	1561	1561	1561	1636	1636
ВВ	888	888	642	642	772	772
вн	501	501	501	501	501	501
Т	564	640	495	495	492	492
øΑ	200	200	180	180	250	250
ø۷	150	150	150	150	150	150

Dimensions (mm)	Premium V-2L-80h	Premium V-2R-80h	Premium A-3RL-60h	Premium A-3RL-80h	Premium A-U-50h	Premium A-U-70h
Н	1636	1636	1636	1636	1735	1735
ВВ	895	895	772	972	675	675
ВН	501	501	501	501	501	501
Т	594	594	625	655	747	675
øΑ	250	250	200	200	200	200
ø۷	150	150	150	150	150	150

Dimensions (mm)	Lean 2L-70h	Lean 2R-70h	Lean 3RL-70h
Н	1457	1457	1465
BB	768 <sup>1</sup>	768 <sup>1</sup>	834
ВН	492	492	492
Т	478	478	468
øΑ	150	150	150
øV	100	100	100

Total width of the unit: 873 mm.

The total width of the unit may be larger.

# Types of fuel

#### 3. Types of fuel

#### 3.1 Information on types of fuel

Wood primarily consists of cellulose, lignin, resins, fats and oils. Wood does not burn directly. The components of wood become gaseous at different temperatures and burn up if enough oxygen is available.

Using fuel with a residual moisture of > 20 % will lead to decreased output and increased emissions.

Good, fast combustion and good gas release are crucial for problem-free operation of the unit.

Bark prevents moisture from escaping. Gas release is only ensured at "injured" sections of wood, making it necessary to split the wood.

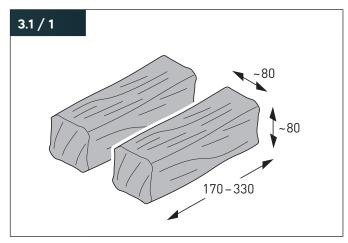
If the temperatures required for gas release and clean combustion are not reached, this will interfere with combustion. The unburned substances will negatively impact the environment and will adhere to the stove system as deposits (e.g. soot, tar). These deposits increase the effort required for cleaning and may damage the stove system.

Hardwood is particularly suitable as firewood. It burns slowly with a calm flame and turns into embers that glow for a long time.

Softwood is rich in resin, burns faster and has an increased tendency to generate sparks.

Q We recommend beech wood as the ideal fuel.

- § According to DIN EN 13229 a combustion period of 45 min in a time-limited fireplace requires a fuel volume of 2.2 - 3.7 kg of wood (depending on the model).
  - → "2.8 Technical data" (page 10).



2.2 kg of wood corresponds to two average logs (length 170 - 330 mm, width / height approx. 80 mm).

1 kg of beech wood generates an output of approx. 4 kW. Compressed wood pieces have an approx. 20 % higher output.



#### 3.2 Permissible types of fuel

Only the following types of fuel are approved for use:

- Natural, air-dried split logs (residual moisture max. 20 %).
- Compressed wood pieces
  - § Compressed wood pieces according to DIN EN ISO 17225-3.

The following fuel types are not permissible:

- Chemically treated wood
- Painted or varnished wood
- Synthetically coated wood
- Damp wood (residual moisture higher than 20 %)
- Chipboards
- Wood of Euro pallets
- **Trimmings**
- Bark waste
- **Pellets**
- Coal
- Coke
- Household waste
- Plastics
- Waste paper
- Old clothes
- § Burning non-permissible types of fuel is punishable by law in many countries e.g.:
  - In Germany as a violation of the Federal Immission Control Act (BImSchG).
  - In Switzerland as a violation of the Clean Air Act (LRV).

#### 3.3 Permissible igniters

The following igniters are permissible:

- Igniter cube
- Igniter pad
- Wood wool igniter
- Igniter wood

Other igniter types are not permitted.

Never use:

- Flammable fluids and fire accelerants (e.g. ethyl alcohol or kerosene) - there is a risk of deflagration!
- Paper burns fast and results in flying ash!

#### 3.4 Fuel storage

Storage outside of buildings:

- If possible, store the fuel on the sunny side of a building.
- Ensure that the storage location is ventilated and protected against precipitation.
- Stack logs loosely along a wall and support them on at least one side.
- Ensure that there is a gap between logs so that the air flowing through them can carry off the moisture escaping from the wood surface.

# Storage in buildings:

In a dry and well-ventilated room.

Storage of freshly cut (green) wood in film or in closed rooms without sufficient air exchange prevents drying and causes the wood to become mouldy.

# Storage period:

- At least one year for soft wood (e.g. coniferous wood,
- At least two years for hard wood (e.g. beech, oak).
- We recommend a drying period of 2-3 years.

#### 3.5 Size of the fuel pieces

- Small logs (width / height approx. 60 mm) for fast burning and briefly high output.
- Large logs (width / height approx. 100 mm) for slow, even burning.

# Ideal log size:

- Length ideally approx. 180 mm.
- Maximum length 330 mm.
- Width / height approx. 80 mm.

#### **Assembly** 4.

#### 4.1 Safety information for assembly

# **WARNING!**

# Danger due to non-adherence to assembly instructions!

Incorrect assembly of the unit may lead to severe injuries. This chapter contains important information for safe assembly of the unit.

- Carefully read this chapter prior to assembly.
- Adhere to the the safety information.
- Perform the assembly work as described.

Only qualified personnel may assemble the unit. Electrical work may only be performed by qualified electricians.

⇒ "1.2.3 Qualified personnel" (page 4).

The owner is responsible for meeting the requirements for the installation site.

⇒ "1.2.2 Owner" (page 4).

To prevent danger, always adhere to the following

- Do not store or deposit flammable materials or fluids on or near the unit.
- Do not position flammable objects (e.g. furniture, carpets, flowers) in front of the firebox opening.
- Ensure that the unit is undamaged and in perfect condition prior to assembly.
- Before assembling the unit, ensure that the prerequisites for assembly and the requirements for the installation site are met, in particular the legal requirements for fireplaces.

#### 4.2 Requirements for assembly

The stove system must be installed and operated according to the valid standards and directives. Note the following documents and / or regulations prior to assembly:

- Technical documents of the product.
- Local fire safety regulations issued by the responsible authorities.
- Provisions under building law.
- Relevant state building and firing installation regulations.
- Local construction regulations regarding the installation conditions (e.g. firing installation regulations).

As an example, the following applies in Germany:

- § Fireplace inserts fired by solid fuel according to DIN EN 13229.
- § Residential solid fuel burning appliances according to EN 16510-2-2:2022.
- Chimney and flue gas connection according to DIN 18160.
- § Chimney dimensions according to DIN EN 13384-1, DIN EN 13384-2.
- BlmSchV Second directive for implementation of the German Federal Immission Control Act.
- § TROL Professional regulations of the tiled stove and air heater construction trade (ZVSHK).
- ✓ The general technical approval has been given by the building authorities or the manufacturer has applied for it.



#### 4.3 Requirements for the installation site

#### Installation room 4.3.1

- The installation room must be suitable for safe use.
- The installation room must be dry and protected against freezing.
- The unit must be protected against freezing and weather
- The installation surface must have a suitable load-bearing capacity, keeping the weight of the unit in mind.
  - → "2.8 Technical data" (page 10).
- The installation surface must be level and horizontal.
- If the floor in front of the firebox door is flammable, it must be protected by a spark guard plate.
- A sufficient fresh air supply must be ensured by means of a ventilation opening to the outdoors (cross section at least 150 cm<sup>2</sup>) or by a combustion air network with other rooms.
- If air extracting units are used at the same time (e.g. extraction hoods, hot-air system, ventilating or exhaust air systems), a safety device must be installed or a unit certified for room air sealed use and connected accordingly must be installed. The safety devices must monitor the permissible underpressure in the installation room (deviation max. 8 Pa from outdoors) and prevent gases from entering the room. A general technical approval must have been given by the responsible authorities.

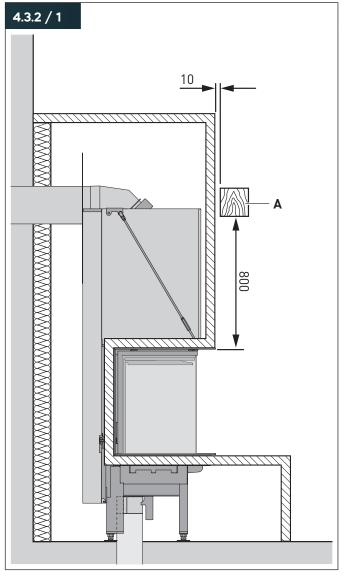
#### 4.3.2 Safety distances

# **△ WARNING!**

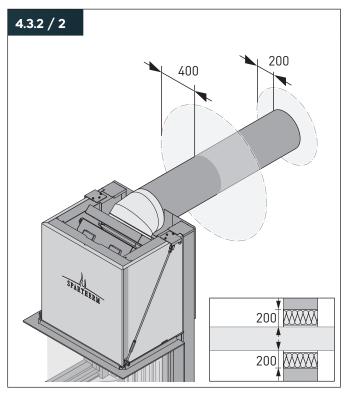
# Risk of fire resulting from non-adherence to safety distances!

Using the unit creates very high temperatures. Smoke and sparks may escape when opening the firebox door. Sensitive items near the unit may become damaged or deformed, may melt or catch fire.

▶ Ensure that flammable objects and materials (e.g. wooden beams) are taken into account for assembly. Ensure a sufficient distance or use protective devices.



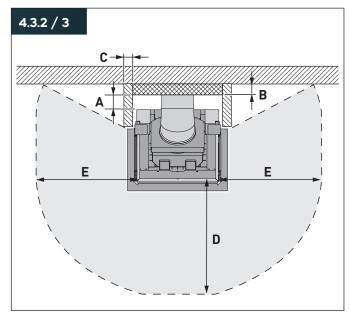
A Flammable construction material



- Area around the connection opening to the chimney:
- Distance of the connection pipe from walls or ceilings: 400 mm.

If the connection pipe is guided through ceilings or flammable walls, suitable construction material must be installed:

- Non-flammable.
- Low heat conductivity.
- 200 mm around the connection pipe.
- With building authority usability certificate.
- $\mathbb{Q}$  Complete systems for routing pipes through walls and ceilings with building authority usability certificates are commercially available.



- Distance to convection chamber
- Insulation on rear 1,
- С Insulation on side 1
- Radiation area, front viewing window
- Radiation area, side viewing window
- Insulating material Silca 250 KM

Dimensions (mm)	Premium V-1V-87h	Premium V-FD-87h	Premium V-2L-55h	Premium V-2R-55h	Premium V-2L-68h	Premium V-2R-68h
А	120	80	100	100	80	80
B 1	140	_	100	100	60	60
C 1	100	100	100	100	60	60
D	2300	1790	1200	1200	1400	1400
Е	_	_	1000	1000	1200	1200

For components with a U value (heat transmission coefficient) > 0.4 W/m<sup>2</sup>K. If the U value is < 0.4W/m<sup>2</sup>K, observe country-specific requirements.



Dimensions (mm)	Premium V-2L-80h	Premium V-2R-80h	Premium A-3RL-60h	Premium A-3RL-80h	Premium A-U-50h	Premium A-U-70h
А	80	80	80	80	60	80
B 1	60	60	60	80	60	60
C 1	60	60	-	_	_	_
D	2100	2100	1180	1180	850	850
Е	1300	1300	880	900	1000	1100

For components with a U value (heat transmission coefficient) >  $0.4 \text{ W/m}^2\text{K}$ . If the U value is  $< 0.4 \text{W/m}^2 \text{K}$ , observe country-specific requirements.

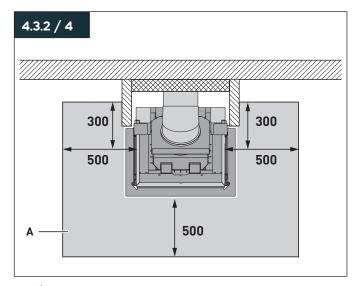
Dimensions (mm)	Lean 2L-70h	Lean 2R-70h	Lean 3LR-70h
А	20	20	20
B 1	60	60	60
C 1	60	60	_
D	1100	1100	800
Е	800	800	800

For components with a U value (heat transmission coefficient) > 0,12W/m<sup>2</sup>K. If the U value is  $< 0.12 \text{ W/m}^2\text{K}$ , observe country-specific requirements.

# Installation on floors requiring protection

Floors requiring protection are flammable or unsuitable for permanent exposure to temperatures above 85 °C due to their structure and material type.

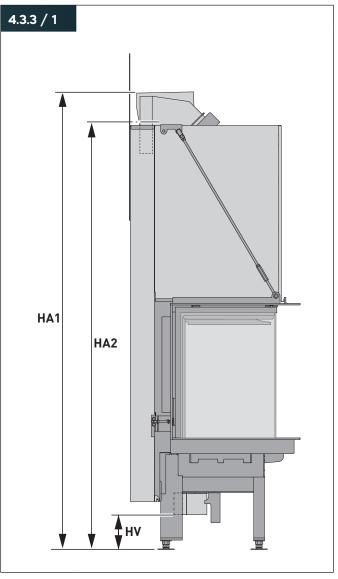
Floors requiring protection in front of the firebox opening must be covered by a floor covering (e.g. cover plate) made of nonflammable material.



A Floor protection

- In front of firebox opening: Minimum 500 mm.
- Next to firebox opening on the side: At least 300 mm.

#### 4.3.3 Installation dimensions



HA1 Height of flue gas connection, top HA2 Height of flue gas connection, rear HV Height of combustion air connection

# Unit dimensions:

→ "2.10 Dimensions" (page 17).

Dimensions (mm)	Premium V-1V-87h	Premium V-FD-87h	Premium V-2L-55h	Premium V-2R-55h	Premium V-2L-68h	Premium V-2R-68h
HA1	1626	1570	1626	1626	1626	1626
HA2	1498	_	1499	1499	1522	1522
HV	129	129	129	129	129	129

Dimensions (mm)	Premium V-2L-80h	Premium V-2R-80h	Premium A-3RL-60h	Premium A-3RL-80h	Premium A-U-50h	Premium A-U-70h
HA1	1626	1626	1626	1626	1472	1472
HA2	1521	1521	1498	1498	1344	1344
HV	130	130	129	129	97	120

Dimensions (mm)	Lean 2L-70h	Lean 2R-70h	Lean 3RL-70h
HA1	1339	1339	1339
HA2	1195	1195	1195
HV	112	112	112

For further information and versions with an optional scope of delivery, refer to the separate document "Technical Data".



#### 4.3.4 Convection air apertures

Convection air apertures meeting the following requirements are required on site for heat dissipation

(Free cross section circulating air / supply air):

- Premium V-1V-87h 1280 / 1300 cm<sup>2</sup>
- Premium V-FD-87h 1020 / 1220 cm<sup>2</sup>, with ancillary heating surface: 510 / 610 cm<sup>2</sup>
- Premium V-2L-55h 650 / 780 cm<sup>2</sup>, with ancillary heating surface: 950 / 1140 cm<sup>2</sup>
- Premium V-2R-55h  $650/780 \text{ cm}^2$ , with ancillary heating surface: 950 / 1140 cm<sup>2</sup>
- Premium V-2L-68h 890 / 1070 cm<sup>2</sup>,
- Premium V-2R-68h 890 / 1070 cm<sup>2</sup>,
- Premium V-2L-80h 1360 / 1625 cm<sup>2</sup>
- Premium V-2R-80h 1360 / 1625 cm<sup>2</sup>
- Premium A-3RL-60h 650 / 860 cm<sup>2</sup>
- Premium A-3RL-80h 830 / 990 cm<sup>2</sup>
- Premium A-U-50h 560 / 680 cm<sup>2</sup>
- Premium A-U-70h 650 / 1200 cm<sup>2</sup>
- Lean  $2L-70h 740 / 850 \text{ cm}^2$
- Lean  $2R-70h 740 / 850 cm^2$
- Lean  $3RL-70h 540/650 \text{ cm}^2$

#### 4.3.5 Flue gas routing

The flue gas routing requires a chimney on site meeting the following requirements:

- The flue gases must be extracted through a chimney.
- As a rule, the chimney must discharge the flue gases via the roof.
- The dimensions for flue gas routing and the chimney must be calculated for each individual case.
- The chimney height from the flue gas inlet must be at least
- Only approved pipe systems may be used for connections to the chimney. It must be possible to clean the connection line at any time. Suitable cleaning hatches must be provided.
- The pipe systems must be routed so that they are as short as possible and at an incline (incline of the horizontal section min. 50 mm per metre).
- The necessary delivery pressure must be observed. A higher delivery pressure will increase the output and emissions, causing increased strain on the stove system, which may damage the system. A lower delivery pressure reduces the output, the emissions increase and the burning behaviour is impacted. This may lead to black discolouration of the glass and fireclay. The optimum delivery pressure is 12 – 18 Pa (measured near the flue gas connection).
- Remove all flammable and temperature-sensitive materials around the connection opening to the chimney - on and in
- Local laws and regulations must be adhered to.
  - § E.g. in Germany, the relevant building regulations.

- The flue gas routing must comply with local regulations. § E.g. in Germany with DIN 18160.
- The chimney must have been inspected and approved for use (in Germany e.g. by the district chimney sweep). A permit for use must be present.
- The chimney requires regular cleaning (e.g. in Germany by the district chimney sweep) to prevent formation of a layer of soot in the chimney.
  - → "1.4 Chimney fire" (page 5).

Measured values for the unit for chimney calculation:

→ "2.8 Technical data" (page 10).

The thermal output of the unit depends on the delivery pressure of the chimney. An auxiliary air system can be installed in the flue gas system to compensate for any occurring fluctuations.

If you would like an auxiliary air system:

► Contact the manufacturer or a specialised company.

Based on the operating mode, the following requirements must also be met.

# Room air sealed operation

- Lean 2R-70h RLU, Lean 2L-70h RLU, Lean 3RL-70h RLU: Multi-use of the chimney is permissible. All other units connected to the chimney must be approved for multi-use.
- The combustion air is supplied to the unit from a different room air network (e.g. from the cellar) or from outdoors (e.g. through an external air connection).
- The combustion air line must be dimensioned in accordance with the valid regulations.
- The combustion air line must be permanently connected with the combustion air connection of the unit and sealed. Ensure that it is leak-tight.
- The combustion air line must be equipped with a locking device meeting the following requirements:
  - The locking device does not close on its own.
  - The position of the locking device is visible at all times (e.g. due to the position of the operating lever).
  - The locking device does not impede processes and work on the unit.
- To prevent condensate formation, insulate the combustion air line and route it so that no water or other substances can enter the unit. Ensure that any formed condensate can be discharged.

### Room air dependent operation

- Multi-use of the chimney is permissible if the unit has a self-closing firebox door. All other units connected to the chimney must be approved for multi-use.
- If the self-closing door function is not used (not permissible in Germany), the unit must be connected to its own chimney draught. Multi-use is not permissible.
- Note the combustion air requirement.
  - → "2.8 Technical data" (page 10).

### Preparation for assembly

- Familiarise yourself with the unit and the associated documents:
  - Assembly and operating manual.
  - Accessories and equipment.
  - Installation site.
  - Flue gas routing.
  - Operating mode.
  - If applicable, instructions of additional components (e.g. heat generator, heating controller).
- Check whether the self-closing door function is used.
  - → "2.4 Protective devices" (page 6).
- Prepare the necessary materials and tools:
  - Tools from the field of stove and ventilation construction, stove and tiled stove manufacture.
  - Industrial vacuum cleaner with ash separator.
  - Hexagon wrench, width across flats 13 and 14.
  - Allen key 3 mm and 4 mm.
  - Work gloves.

The following materials are also absolutely required for installing the unit:

- Flue gas pipes.
- Combustion air pipes (optional).

Suitable flue gas connection bend sets are available from the manufacturer.

- "10.1 Accessories" (page 54).
- Keep the installation site free of objects which may be damaged or destroyed during assembly.
- Ensure that the flue gas routing complies with the valid regulations.
- Ensure compliance with the chimney requirements.
- Perform a chimney calculation.
- Check adherence to the required delivery pressure.

#### 4.5 Transporting the unit

# **△ WARNING!**

# Risk of injury caused by heavy loads!

The size and weight of the unit require plenty of strength during installation. Incorrect lifting or the unit tipping may lead to severe injuries.

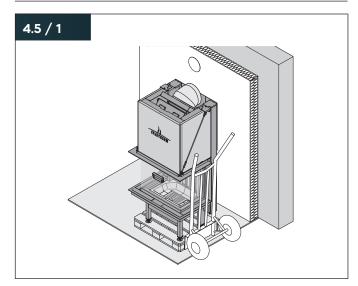
- Adhere to the transport labels on the packaging.
- Use suitable transport equipment (e.g. lift truck, hand truck with tension belt).
- Secure the unit against sliding, tipping and falling.
- Only lift the unit at the points intended for this purpose.
- Have at least two persons present to install the unit.
- ► Ensure a stable position during installation.
- ▶ Ensure that no additional persons remain in the work area.

### ▲ ATTENTION!

# Risk of material damage caused by improper transport!

Rough handling may damage sensitive components on the front of the unit (e.g. the glass of the firebox door). Glass or ceramic surfaces may break if the unit is pulled or jammed.

- ▶ Use suitable transport equipment (e.g. lift truck, hand truck with tension belt).
- Only position the transport equipment at the marked points on the packaging.
- Only transport the unit in a standing or slightly inclined position leaning on the rear sides.
- Move the unit with care and caution.



Transport the unit to the installation site.



#### Unpacking the unit 4.6

- Check the packaging for damage.
- Remove the packaging.
- Undo the screws of the transport securing mechanism on the pallet.
- Lift the unit off the pallet.
- Check the scope of delivery for completeness and ensure that it is not damaged.
  - → "2.7 Scope of delivery" (page 10).

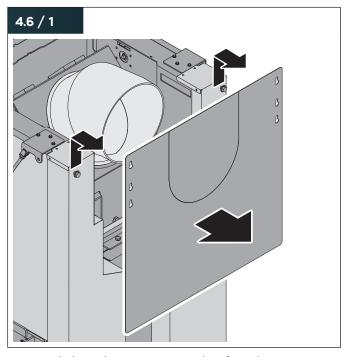
In the event of damage or incompleteness:

Contact the manufacturer.

If the packaging is no longer required:

- Properly dispose of the packaging material.
  - ⇒ "9.1 Disposing of the packaging" (page 53).

When delivered, the radiation protection plate is attached to the unit in the transport position. Installation in the assembly position is only performed in the corresponding assembly step.



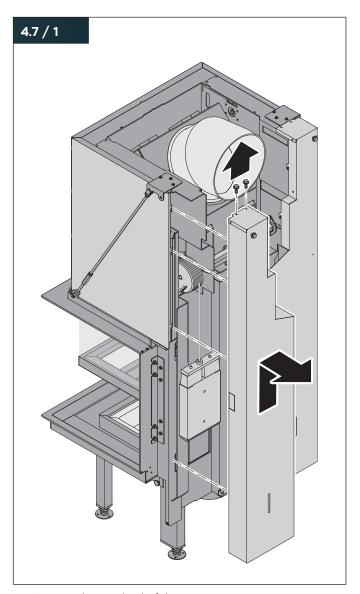
Detach the radiation protection plate from the unit.

#### 4.7 Adjusting the counterweight (optional)

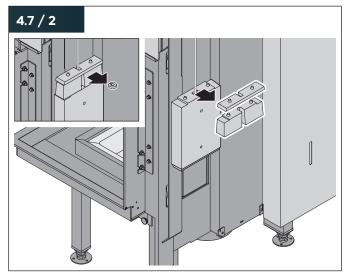
This step is required if the self-closing door function is used.

"2.4 Protective devices" (page 6).

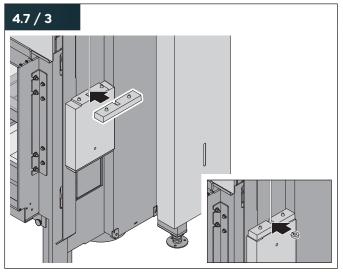
Conversion to a self-closing firebox door is performed by removing weighted pieces. The counterweight is set correctly, when the firebox door closes slowly and with a constant speed.



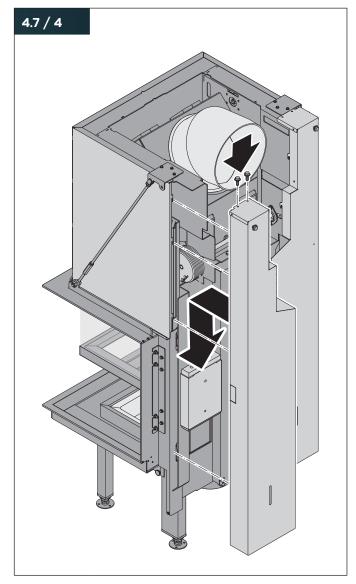
Remove the weight shaft lining.



- Undo the safety ring.
- Remove a suitable number of weighted pieces.



- If necessary, insert a suitable number of weighted pieces.
- Reinsert the safety ring.
- Ensure that the firebox door closes slowly and with a constant speed.
- Tighten the safety ring.

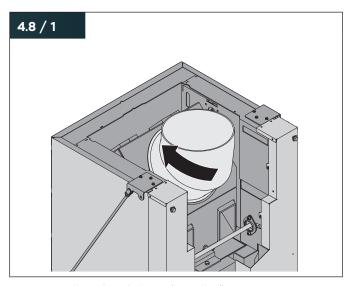


► Fasten the weight shaft lining.

For units with two weight shafts, perform this step on both sides.

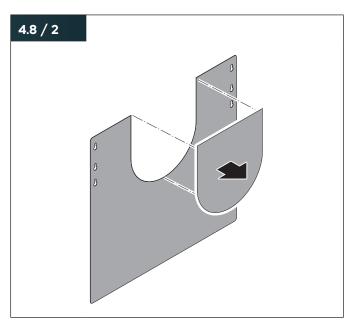


#### 4.8 Connecting the flue gas routing

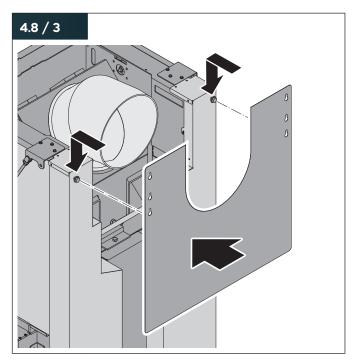


- Loosen the V-band clamp from the flue gas connection.
- Correctly align the flue gas connection on the unit.
- Re-tighten the V-band clamp.

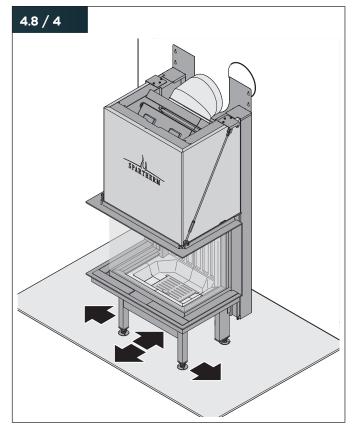
To guide the flue gas pipe rearward to the wall by the shortest path, it is possible to adapt the radiation protection plate. For other flue gas paths (e.g. flue gas pipe to the ceiling), the radiation protection plate remains unchanged.



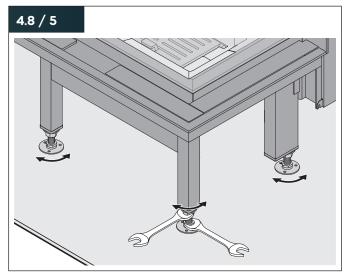
If necessary, remove the pre-punched section from the radiation protection plate.



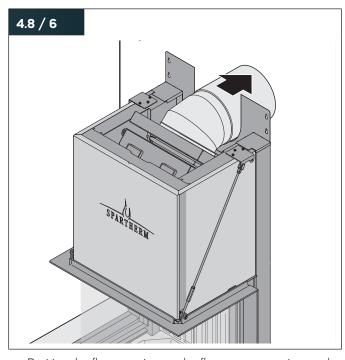
Fasten the radiation protection plate in the assembly position on the unit.



- Position the unit, taking into account the requirements for the installation site.
  - → "4.3 Requirements for the installation site" (page 21).



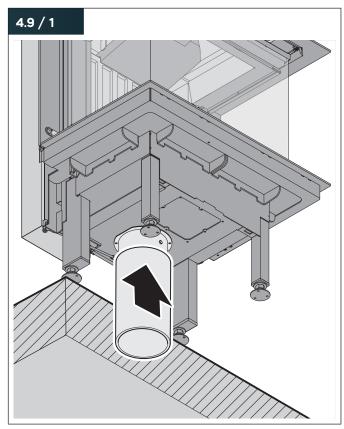
- Turn in the pre-installed adjustable legs.
- Adjust the unit vertically and horizontally.
- Secure the adjustable legs by tightening the nuts.



- Position the flue gas pipe on the flue gas connection on the
- Route the flue gas pipe to the chimney horizontally with an incline along the shortest path.
- Connect the flue gas pipe with the chimney.
- Ensure that the flue gas pipe does not protrude into the chimney.
- Ensure that the pipe connections are sealed.
- We recommend using a double wall lining for the connection to the chimney.

#### 4.9 Connecting the combustion air line (optional)

The unit can be connected to a combustion air line.



Connect the combustion air line with the combustion air connection on the unit.

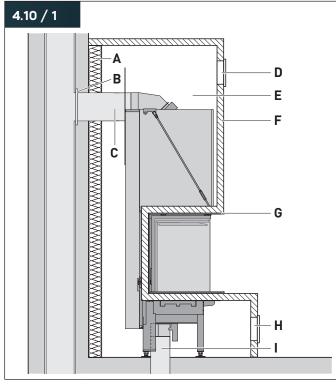


# 4.10 Installing the unit on site

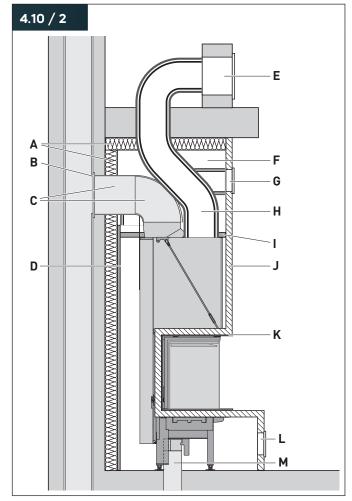
The brickwork for the convection chamber and the lining of the unit is installed on site. To ensure problem-free operation, absolutely adhere to the requirements listed in this chapter.

The following images of installation situations are used as examples for all units.

# With non-flammable construction materials

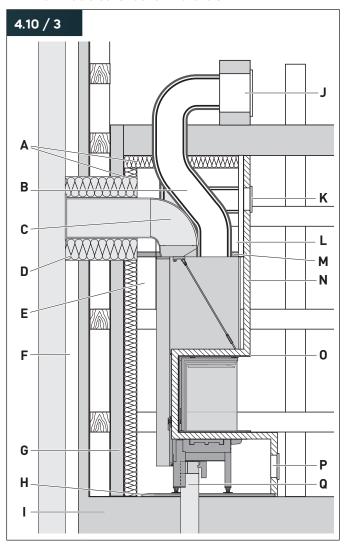


- Insulation of the convection chamber 1
- В Wall collar
- Flue gas pipe (connection piece)
- Air supply grating (hot air outlet)<sup>2</sup>
- Convection chamber Ε
- Fireplace lining made from non-flammable construction material
- Support frame with insulation strips
- Circulating air grating (cold air supply)
- Combustion air line (optional)
- For information on the insulating material thickness, refer to the separate document "Technical Data".
- 500 mm distance between top edge and ceiling.



- Insulation of the convection chamber 1
- Wall collar
- C Insulated flue gas pipe (connection piece)
- D Convection air housing (optional)<sup>2</sup>
- Ε Hot air outlet
- Convection chamber
- G Air supply grating<sup>3</sup>
- Hot air line 4
- Insulation of the convection air housing 5
- Fireplace lining made from non-flammable construction
- Support frame with insulation strips K
- Circulating air grating (cold air supply)
- M Combustion air line (optional)
- For information on the insulating material thickness, refer to the separate document "Technical Data".
- If a convection air housing is used, all connections must be connected to hot air lines.
- 500 mm distance between top edge and ceiling.
- <sup>4</sup> Insulation required if temperatures above 85 °C are possible (depending on the specific installation situation).
- Insulation with shape-retaining mineral wool, min. 30 mm thick.

### With flammable construction materials



- Insulation of the convection chamber 1
- **B** Hot air line <sup>2</sup>
- C Insulated flue gas pipe (connection piece)<sup>2</sup>
- **D** Pipe routing through walls and ceilings (with building authority usability certificate)
- Convection air housing made of sheet steel (optional)
- Rear ventilation (50 mm)
- G Brickwork 4
- **H** Floor protection layer <sup>5</sup>
- Flammable construction material (wooden floor) 1
- J Hot air outlet
- **K** Air supply grating (hot air outlet) <sup>6</sup>
- L Convection chamber
- **M** Insulation of the convection air housing <sup>7</sup>
- N Fireplace lining made from non-flammable construction material
- Support frame with insulation strips 0
- Circulating air grating (cold air supply)
- **Q** Combustion air line (optional)
- For information on the insulating material thickness, refer to the separate document "Technical Data".
- Insulation required if temperatures above 85 °C are possible (depending on the specific installation situation).
- If a convection air housing is used, all connections must be connected to hot air lines.
- 100 mm thick, if necessary replacement insulating material (e.g. calcium silicate).
- Within the convection chamber made of non-flammable material, provided no insulation is required.
- 500 mm distance between top edge and ceiling.
- Insulation with shape-retaining mineral wool, min. 30 mm thick.



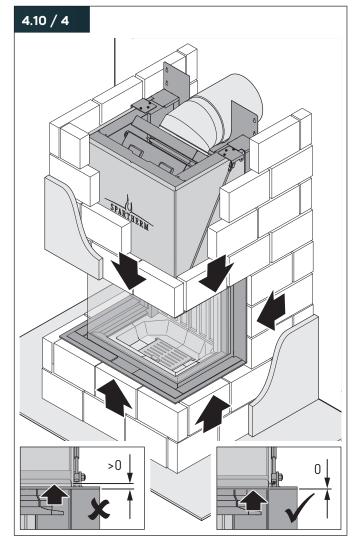
The solid screen is suitable for direct brickwork lining with the following maximum loads:

- Premium V-1V-87h 300 kg
- Premium V-FD-87h 300 kg
- Premium V-2L-55h 100 kg
- Premium V-2R-55h 100 kg
- Premium V-2L-68h 100 kg
- Premium V-2R-68h 100 kg Premium V-2L-80h - 100 kg
- Premium V-2R-80h 100 kg
- Premium A-3RL-60h 200 kg
- Premium A-3RL-80h 200 kg
- Premium A-U-50h 200 kg
- Premium A-U-70h 200 kg
- Lean 2L-70h 100 kg
- Lean 2R-70h 100 kg
- Lean 3RL-70h 150 kg

Ensure that there is no direct connection of the unit with the cover panel. To prevent expansion cracks, add expansion joints and seal them (e.g. using sealing tape).

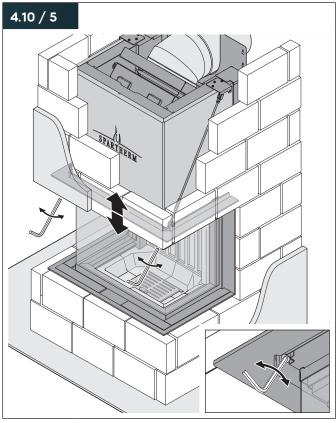
To compensate for the heat expansion of the unit, attach insulating material (e.g. glass fibre ceramic material or glass fibre paper, thickness 2 mm) between the screen and the brickwork.

Ensure that there is a minimum distance of 6 mm between the door frame and the support frame to allow removal of the firebox door (e.g. when replacing the window).



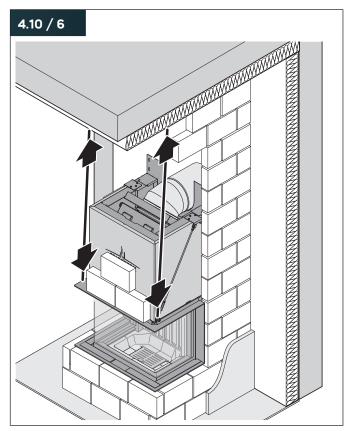
When creating the convection chamber, ensure that the support frame and the screen are not positioned lower than the door hood of the unit.

If required, the position of the support frame and the screen can be re-adjusted while they are installed. This adjustment is made with the aid of the drawbars.



- Set the position of the support frame and screen so that they are flush with the door hood of the unit.
- Ensure that the firebox door is easy to open and move.

In the case of convection chamber attachments that are flush with the ceiling or attachments with a high weight, the screen must be fastened on site (e.g. using drop-in anchors combined with steel link chains).



- Detach the drawbars from the unit.
- Fasten the drawbars on the wall or ceiling.
- Align the screen horizontally (e.g. using a spirit level).



# Checking the installation

- Remove the attached adhesive labels from the unit and from the connection pipes.
- Ensure that all connections between the stove system and chimney are leak-tight.
- Ensure that the necessary protective devices are functional.
- → "2.4 Protective devices" (page 6). Ensure that the necessary safety distances are observed.
- → "4.3.2 Safety distances" (page 21).
- Ensure that sufficient fresh air is supplied to the installation room.

# 4.12 Performing initial start-up

The initial start-up must be performed by qualified personnel. ⇒ "1.2.3 Qualified personnel" (page 4).

Before the unit is used for the first time, the requirements for safe and intended use must be met:

- The stove systems complies with the valid regulations and has been approved by the approval authority or supervisory authority (in Germany e.g. district chimney sweep).
- The unit is fully installed and connected. Its proper installation has been checked.
  - → "4.11 Checking the installation" (page 35).
- The unit is dirt-free, all cleaning agent has been removed.
  - → "6. Cleaning" (page 43).

# Preparation:

- ► Ensure sufficient fresh air supply.
- ▶ If installed, open the locking devices in the combustion air pipe or in the flue gas connection.
- Ensure that the ash pan has been emptied.
- ▶ Ensure that no flammable materials or objects are located on the unit or near the unit.

The first heating process dries out the applied protective paint and burns the corrosion protection coating into the surface of the unit. This may generate an odour as well as some smoke and cause water to emerge from the firebox lining.

### How to proceed:

- Only use a small volume of wood during the first heating
- Heat up the unit.
  - → "5.2.2 Heating up the unit" (page 39).
- Increase the quantity of wood to the nominal heat output in 3 - 5 burning processes.
  - → "2.8 Technical data" (page 10).

If no more smoke generation can be detected on the unit:

▶ Perform another combustion process.

The burn-in process up to the temperature reached in the final combustion process is complete.

As long as the first heating process is ongoing:

- ► Ensure that nobody touches the unit.
- Ensure that no objects are placed on the unit.
- Thoroughly ventilate the installation room and all connected rooms.
- Ensure that no persons remain in these rooms for a longer

If problems related to the delivery pressure and flue gas extraction occur on the chimney:

Measure the delivery pressure of the chimney.

# 4.13 Instructing the owner

Prior to initial use, the qualified personnel performing installation must instruct the owner in the following matters:

- Instruction on the intended use of the unit.
- Instruction on safe, proper, environment-friendly heating.
- Explanation of permissible types of fuel and the consequences of using unintended types of fuel.
- Explanation of the effects and operation of the unit, particularly taking into account safety-relevant actions.
- Explanation of the necessity of cleaning and servicing for safe, environmentally friendly operation.
- Note that the stove system may not be modified.
- Information about the owner's responsibility and tasks.
  - → "1.2.2 Owner" (page 4).

Once the first heating process has been completed successfully:

- ✓ The first start-up and transfer have been logged.
- ✓ This manual and all technical documents have been handed over to the owner.

#### 5. Use

#### 5.1 Safety information for use

# **WARNING!**

# Danger due to non-adherence to operating instructions!

Incorrect use of the unit may lead to death or severe injuries. This chapter contains important information for safe use of the unit.

- Carefully read this chapter.
- Adhere to the safety information.
- Only use the unit as described here.

Only allow instructed users to use the unit.

⇒ "1.2.4 Users" (page 4).

To prevent danger during use of the unit, adhere to the following requirements at all times:

- Do not store or deposit flammable materials or fluids
  - · on the unit,
  - near the unit.
  - in the compartment behind the bottom cover panel

It is also not permissible to dry laundry items.

- Do not use candles in the unit.
- Do not position flammable objects (e.g. furniture, carpets, flowers) in front of the firebox opening.
- The firebox door must always be kept closed in cold condition and during operation. Opening is only permissible for heating, refuelling and cleaning.
- The unit must be monitored during operation and after operation until it has fully cooled down.
- The unit may only be operated with the approved fuel.
  - ⇒ "3.2 Permissible types of fuel" (page 19).
- The maximum permissible fuel volume is not exceeded.
  - "2.8 Technical data" (page 10).
  - → "3.5 Size of the fuel pieces" (page 19).
- Allow the fire in the stove system to burn down and the stove system to cool down before working with explosive of highly flammable substances in the vicinity.
- The chimney requires regular cleaning (e.g. in Germany by the district chimney sweep) to prevent formation of a layer of soot in the chimney.
  - → "1.4 Chimney fire" (page 5).

# **△ WARNING!**

# Danger of death by poisoning!

During operation of the unit, hazardous materials which are inevitably generated during the burning process can enter the indoor air. During room air dependent operation, additional breathing air is removed from the room air. An insufficient supply of breathing air and fresh air can lead to headaches, nausea and dizziness and even loss of consciousness and death.

- ▶ Prior to using the stove for heating, open the locking mechanisms in the combustion air path.
- Ensure that the firebox door is closed during heating
- Ensure that sufficient fresh air is supplied to the installation room during heating operation. This also applies to simultaneous use of the stove system and additional heatgenerating devices.
- ▶ Ensure that the required safety devices are installed if the unit is used in an interlinked system with extraction hoods, hot-air systems or ventilating systems.
- ▶ Do not use the unit during extreme weather conditions (e.g. severe storm, severe low pressure or severe precipitation).

### **⚠ WARNING!**

# Risk of injury due to contact with hot surfaces!

Unit components (e.g. cover panel, pipes, firebox door, door handle, combustion air controller) may become very hot during operation. Contact may lead to burns.

- ► Ensure that children do not stay near the hot unit. Children under the age of 8 and pets must be supervised at all times and must be kept away from the unit.
- Use the heat protection glove:
  - When opening and closing the firebox door.
  - When refuelling the unit.
  - When operating the combustion air controller.

The heat protection glove is intended for protection and is not fireproof.

# **△ CAUTION!**

# Risk of injury when closing the firebox door!

The open firebox door is subject to tension and closes automatically. When the firebox door is closed or slammed shut, fingers may be crushed.

- ▶ Do not reach into the closing area.
- Wear protective gloves.

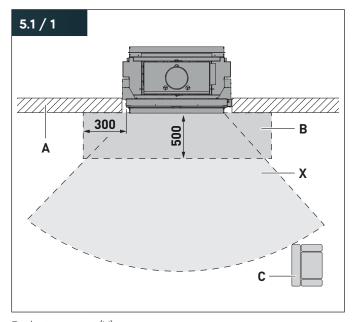


# **△ WARNING!**

# Risk of fire resulting from non-adherence to safety distances!

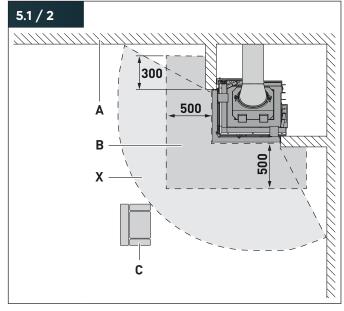
Using the unit creates very high temperatures. Smoke and sparks may escape when opening the firebox door. Sensitive items near the unit may become damaged or deformed, may melt or catch fire.

- Ensure that the necessary safety distances are observed at
- Ensure that flammable objects and materials (e.g. furniture, textiles) are located at a sufficient distance from the unit.
- **A** Wall
- B Floor covering made of non-flammable material (if
- Flammable object (e.g. armchair)
- **X** Radiation area Minimum distance from flammable objects and materials.



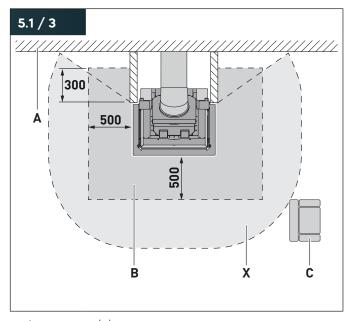
Radiation range (X):

- Premium V-1V-87h 2300 mm
- Premium V-FD-87h 1790 mm



# Radiation range (X):

- Premium V-2L-55h 1200 mm front, 1000 mm side
- Premium V-2R-55h 1200 mm front, 1000 mm side
- Premium V-2L-68h 1400 mm front, 1200 mm side
- Premium V-2R-68h 1400 mm front, 1200 mm side
- Premium V-2L-80h 2100 mm front, 1300 mm side
- Premium V-2R-80h 2100 mm front, 1300 mm side
- Lean 2L-70h 1100 mm front, 800 mm side
- Lean 2R-70h 1100 mm front, 800 mm side



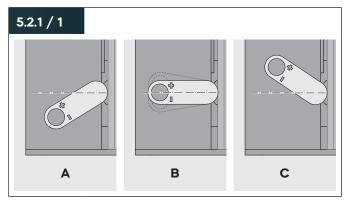
# Radiation range (X):

- Premium A-3RL-60h 1180 mm front, 880 mm side
- Premium A-3RL-80h 1180 mm front, 900 mm side
- Premium A-U-50h 850 mm front, 1000 mm side
- Premium A-U-70h 850 mm front, 1100 mm side
- Lean 3RL-70h 800 mm front, 800 mm side

#### 5.2 Heating mode

#### 5.2.1 Preparing the heating process

- Pay attention to the weather. Do not use the unit during extreme weather conditions (e.g. severe storm, severe low pressure or severe precipitation).
- Ensure sufficient fresh air supply.
- If installed, open the locking devices in the combustion air pipe or in the flue gas connection.
- Ensure that the air openings are not blocked.
- Ensure that the ash pan has been emptied.
- Check whether it is necessary to remove combustion residue from the firebox.
- Ensure that no flammable materials or objects are located on the unit or near the unit.



The combustion air is controlled in an infinitely variable manner by using the combustion air controller while the firebox door is

"2.1 Functional principle" (page 6).

# A Air supply closed.

No combustion air is supplied to the firebox. The air supply and additional locking devices in the air guide may only be closed once the fuel has completely burned down.

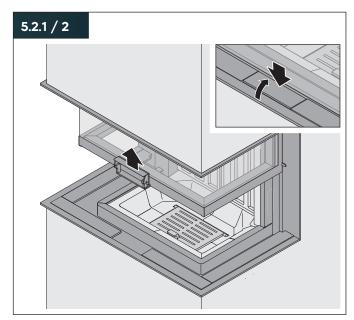
**B** Combustion (nominal heat output).

The primary air supply is closed. Secondary air flows against the ceramic glass pane via the window cleaning

Opening or closing the combustion air controller affects the burning behaviour.

C Air supply open.

The maximum combustion air volume is supplied to the firebox as primary and secondary air.



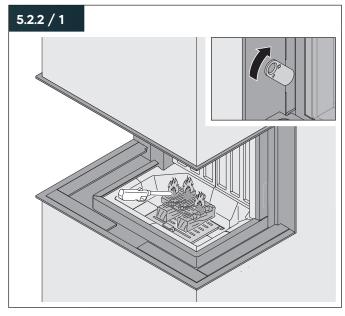
Open the firebox door by pulling the door handle.

To prevent damage caused by overheating (e.g. discolouration) and ensure perfect function, it is necessary to fire up the unit in the correct manner. Do not exceed the maximum fuel volume.

→ "2.8 Technical data" (page 10).



#### 5.2.2 Heating up the unit



If glowing embers are still present from the previous day, it may be enough to stoke the ash-and-ember bed:

- Push the combustion air controller all the way up to open it (C).
- Place thin wooden chips on top.
- As a foundation for firing up we recommend an approx. 2-5 cm thick layer of ash and unburned residue.

When heating up from a cold condition:

- Push the combustion air controller all the way up to open it (C).
- Deposit logs in the firebox in multiple layers:
  - Thick logs at the bottom.
  - Thin logs at the centre.
  - Small pieces of soft wood kindling at the top.
- Position ignition agents on the top of the wood.
- Ignite the ignition agents with a long match or a stick lighter.
- Close the firebox door.
- Monitor the heating process.

# After lighting:

- A pilot fire is generated, which slowly eats through the stack of wood from the top to the bottom while generating few
- Smoke will form and darken the firebox, particularly in the top section. A light-coloured firebox lining will become darker.
- The longer the fire burns, the higher the temperature in the unit rises and the dark areas become lighter again, first in small spots, followed by entire sections.

Once the fuel has burned down to embers:

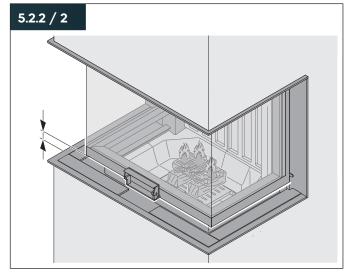
- Refuel the unit.
  - ⇒ "5.2.4 Refuelling the unit" (page 41).

Under normal conditions, the operating temperature is reached after two burning processes and all surfaces should be free of dark discolourations.

If the chimney is cold, delivery problems may occur during the light-up phase. The chimney does not draw enough air, which is detectable from a small or extinguishing flame. On the other hand, excessive delivery pressure is indicated by inclined flames, soiled windows and fire noises.

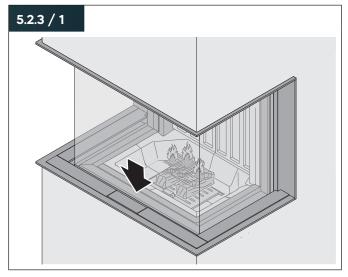
If the delivery problems persist for a longer period even when the weather is suitable:

- End the heating process.
  - ⇒ "5.2.5 Ending the heating process" (page 42).
- Contact a specialised company to inspect the chimney.



- Leave the firebox door slightly ajar in the first minutes after lighting the fire so that a gap remains.
- Ensure that the firebox door does not lock automatically.
- Monitor the burning behaviour.
- Immediately close the firebox door if flue gas emerges.
- Close the firebox door when the fuel is completely on fire or no later than after 15 minutes.

#### 5.2.3 Controlling the heating process



Ensure that the firebox door is completely closed.

When starting the fire or refuelling:

Push the combustion air controller all the way up (**C**).

During the heating process (approx. 30 – 45 minutes after the start):

Push the combustion air controller to a centre position (B).

The precise position and the thermal output achieved with it depend on the specific situation and are affected by many factors:

- Size, type and residual moisture of the fuel.
- Volume of fuel placed in the unit.
- Stove temperature.
- Delivery pressure of the chimney.
- External weather conditions.
- Select a setting that creates a calm, bright flame pattern.
- Familiarise yourself with the unit and find out what the best settings are.

Position of the combustion air slider with tested nominal heat

"2.9 Nominal heat output" (page 16).

The following signs can be used to detect whether the fire in the unit is clean and low-emission:

- The ash should be white. A dark colour indicates charcoal residue and therefore incomplete burning.
- The flue gases on the chimney stack should be as invisible as possible – less smoke indicates better burning behaviour.
- The firebox lining in the unit is light-coloured and not sooty after the heating process.

If the fire burns with an excessively large flame:

▶ Push the combustion air controller down without fully closing the air supply.

The air volume is reduced, stabilising the burning process. This prevents overloading of the unit and reduces emission generation.

If the air supply is reduced too much, the fire may extinguish. The result may be incomplete burning and severe soot formation.

▶ Push the combustion air controller up (**C**).

If the weather conditions change during the heating process (e.g. oncoming storm or precipitation) and this causes the heating process to deteriorate:

- Allow the fire to extinguish.
- Do not add additional logs.

If outdoor temperature are above 15 °C, the delivery pressure may fluctuate.

Measures for malfunction-free operation:

- Stoke the flames frequently.
- Only insert very little additional fuel.
- ► Ensure that the heap of ash and embers does not grow excessively. Otherwise end the heating process, allow the unit to cool down sufficiently, then clean it.
  - → "6.3 Simple cleaning" (page 43).



#### 5.2.4 Refuelling the unit

# **⚠ WARNING!**

# Risk of injury caused by hot door handle!

With increasing duration of use, the unit components (e.g. door handle and combustion air controller) become very hot. Contact may lead to burns.

- Use the heat protection glove:
  - When opening and closing the firebox door.
  - When refuelling the unit.
  - When operating the combustion air controller.

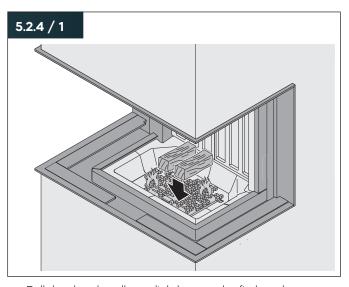
The heat protection glove is intended for protection and is not fireproof.

# **⚠ ATTENTION!**

### Risk of fire caused by burning particles falling out!

When the firebox door is opened during the heating process, sparks or fuel particles may emerge from the unit.

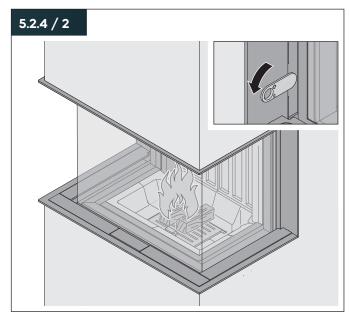
- Open the firebox door slowly to avoid creating swirls.
- Only refuel the stove when the fuel has burned down to embers.



- Pull the door handle to slightly open the firebox door.
- Wait 2-3 seconds for pressure equalisation to take place.
- Only fully open the firebox door after this time.
- Place smaller logs (up to 250 mm) on the embers or place larger logs vertically on the embers.
- Ensure that the embers are not extinguished as you refuel.
- Close the firebox door.

Do not exceed the maximum fuel volume.

→ "2.8 Technical data" (page 10).



Once the inserted wood burns (approx. 2 – 5 minutes after insertion):

▶ Push the combustion air controller to a centre position (**B**).

#### 5.2.5 Ending the heating process

# **⚠ ATTENTION!**

### Risk of material damage caused by explosion!

If fire, heat or glowing embers remain in the unit and the air paths are closed, flue gas is generated, which may ignite in an explosive manner. This could cause severe damage to the unit and components in the environment of the unit.

- ▶ Only close the air supply when no flames are visible.
- Ensure that no heat or glowing embers remain in the
- Ensure that no smouldering, unburned wood remains in the

To reduce the cool-down of the room air, the remaining embers can be used for some more time (approx. 2 hours).

▶ Leave the combustion air controller in the centre position (B) for this time.

Combustion only ends when the wood has burned down completely and no smouldering or incomplete burning is

- Ensure that no open flame remains.
- Ensure that no heat or glowing embers remain in the firebox.
- Push the combustion air controller all the way down (A).

To fully end the heating process:

- ▶ Allow the fire to extinguish for a sufficiently long period (e.g. over night).
- Ensure that the combustion air controller is in the bottommost position (A).



#### 6. Cleaning

#### 6.1 Safety information for cleaning

### 

# Risk of material damage caused by improper cleaning!

Incorrect cleaning may damage the unit (e.g. damage to surfaces and varnish, glass breaking). This chapter contains important information for cleaning the unit.

- Carefully read this chapter.
- Adhere to the safety information.
- Perform the cleaning work as described.

Cleaning may only be performed by instructed users. ⇒ "1.2.4 Users" (page 4).

- Always fully remove any dirt. Remaining dirt may be burnt in and can then no longer be removed.
- Ensure that cleaning agent does not make contact with seals or varnished surfaces (e.g. as a result of spraying). The seals may harden, leading to the glass breaking.
- Keep objects that may cause scratches on the unit (e.g. rings on your finger) away from the unit.
- Do not use objects that may scratch surfaces when cleaning the firebox.
- Only use suitable cleaning agents. Harsh, caustic or scouring cleaning agents are not suitable.
- Note the information and specifications on the cleaning agents used.

A suitable ash extractor (industrial supplies / specialist retail) can be used to remove fine deposits in the firebox.

# Prior to any cleaning work:

- Ensure that the unit and other accessible components have cooled down.
- Please note that glowing embers in the fuel residue may persist for up to 24 hours or longer.
- Protect the surroundings of the stove system, e.g. by covering the floor and furniture.
- Wear work clothing and protective gloves.
- Ensure that the open firebox door has been secured against falling shut.
  - → Figure 5.2.1 / 2 (page 38).

#### 6.2 Cleaning intervals

The cleaning intervals depend on:

- Intensity of use.
- Heating habits.
- Fuel quality.

To ensure a good fire quality, regularly clean the ash pan and ash grate - if possible after each heating process.

Simple cleaning can be performed as required and based on the degree of soiling.

→ "6.3 Simple cleaning" (page 43).

The annual cleaning, which includes dismantling and reinstalling unit components must be performed once a year. If necessary (e.g. after chimney cleaning or intensive use), this cleaning process may have to be performed additional

"6.4 Annual cleaning" (page 45).

#### 6.3 Simple cleaning

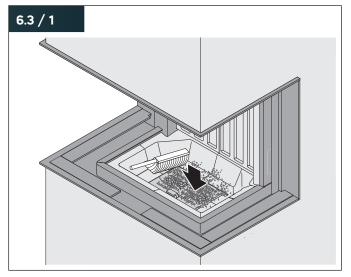
### **Surfaces**

- ▶ Clean the surfaces and door handle with a dry or damp cloth - do not use a microfibre cloth.
- Clean the stainless steel surfaces with conventional stainless steel cleaning agents. Always clean in the sanding direction.

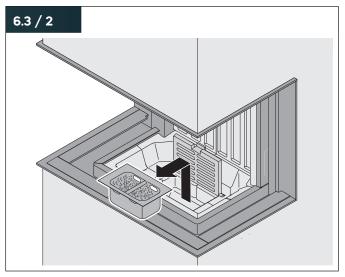
# Cleaning

### **Firebox**

▶ Push the firebox door up all the way.



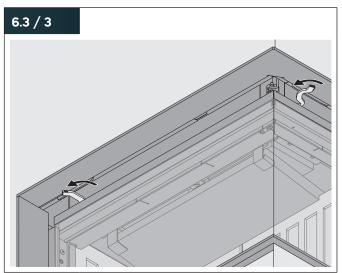
- Remove severe soiling (fuel residue and coarse dirt).
- Use a hand broom to clean the firebox lining and the ash
- Clean the air openings.
- Clean all components of the firebox lining.
- Clean the ash grate.



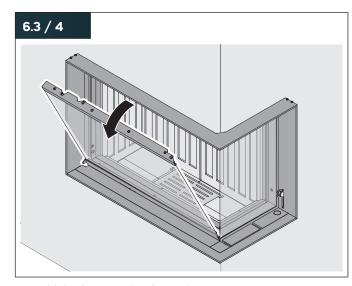
- Fold up the ash grate.
- Empty the ash pan.

# Viewing window

Only for Premium V-1V-87h, Premium V-FD-87h, Premium V-2L-55h, Premium V-2R-55h, Premium V-2L-68h, Premium V-2R-68h, Premium V-2L-80h, Premium V-2R-80h, Lean 2R-70h, Lean 2L-70h:



- Ensure that the firebox door is completely closed.
- Undo the two door locking mechanisms on the front window and side window.

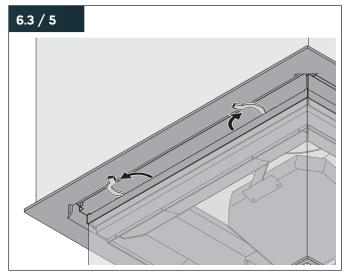


- Fold the front window forward.
- Clean minor soiling with a damp cloth.
- In the case of severe soiling, carefully apply glass cleaner with a cloth or a rag.
- Ensure that the cleaning agent does not make contact with seals or varnished surfaces.

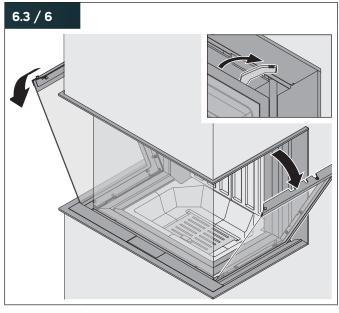
After cleaning, close the front window again and lock the front window and side window.



Only for Premium A-3RL-80h, Premium A-3RL-80h, Premium A-U-50h, Premium A-U-70h, Premium A-U-70h, Lean 3RL-70h:



- Ensure that the firebox door is completely closed.
- Undo the two door locking mechanisms on the front window.



- Undo the door locks on the side windows.
- Fold the side windows forward.
- Clean minor soiling with a damp cloth.
- In the case of severe soiling, carefully apply glass cleaner with a cloth or a rag.
- Ensure that the cleaning agent does not make contact with seals or varnished surfaces.

After cleaning, close and lock the side windows again.

#### 6.4 **Annual cleaning**

Annual cleaning includes the measures for simple cleaning as well as the disassembly and reassembly of unit components. Ash residue and fire dust are unpreventable during this process.

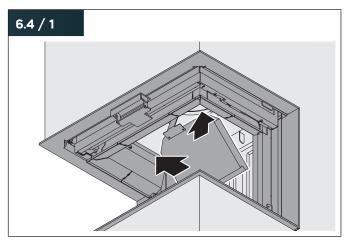
- Protect the area surrounding the unit.
- First clean the firebox.
  - → "6.3 Simple cleaning" (page 43).

# **△** ATTENTION!

# Risk of material damage caused by improper handling!

The size and weight of the baffle plate require strength and attention when inserting it. If the baffle plate falls down, it may cause damage to the unit, floor and other objects.

- Hold the baffle plate tightly.
- When depositing the baffle plate, ensure that it cannot slide out of place.



- Push the firebox door up all the way.
- Lift the baffle plate on the firebox ceiling.
- Carefully tilt the baffle plate slightly sideways.
- Take out the baffle plate toward the bottom.
- Use a hand broom to clean the baffle plate.
- Use a hand broom to clean the area above the firebox.
- Reinsert the baffle plate.
- Check the proper condition:
  - All components are in the correct position.
  - There is no gap between the components.
- Clean the surfaces and the viewing window glass.
  - → "6.3 Simple cleaning" (page 43).

# Service work

#### **7**. Service work

#### 7.1 Safety information for service work

### **WARNING!**

# Danger due to non-adherence to service work instructions!

Incorrect servicing of the unit may lead to severe injuries. This chapter contains important information for safe servicing of the unit.

- Carefully read this chapter.
- Adhere to the safety information.
- Perform the service work as described.

Maintenance and repair work may only be performed by qualified experts.

⇒ "1.2.3 Qualified personnel" (page 4).

Measures for repairing malfunctions may be performed by instructed users.

⇒ "1.2.4 Users" (page 4).

To prevent danger, always adhere to the following requirements:

- Immediately eliminate any detected defects.
- Only use spare parts manufactured or approved by the manufacturer.

### Prior to any work on the unit:

- Ensure that the unit and other accessible components have cooled down.
- Please note that glowing embers in the fuel residue may persist for up to 24 hours or longer.
- Protect the surroundings of the stove system, e.g. by covering the floor and furniture.
- Wear work clothing and protective gloves.
- Ensure that the open firebox door has been secured against falling shut.
  - → Figure 5.2.1 / 2 (page 38).

Only qualified personnel may replace or repair components.

Contact the manufacturer or a specialised company.

#### 7.2 Maintenance intervals

After the heating period has ended, regular, thorough maintenance must be performed by a specialised company. The maintenance intervals depend on the following factors:

- Duration of use.
- Heating habits.
- Fuel quality.
- We recommend performing maintenance work on the unit at least once a year.

#### 73 Maintenance measures

# **WARNING!**

# Risk of injury due to contact with hot components!

Unit components (e.g. cover panel, pipes, firebox) may remain very hot after use. The firebox may contain glowing embers and hot ash. Contact may lead to burns.

- Ensure that the unit and all accessible components have cooled down.
- Use the heat protection glove.

#### 7.3.1 Stove system

- Remove dirt and soot from all components of the stove system.
- Clean the flue gas pipe to the chimney.
- ► Check the incoming air, combustion air and circulating air paths. If necessary, clean the air paths.
- Check the overall system for perfect function.
- Ensure that all connections between the stove system and chimney are leak-tight.
- Ensure that the necessary protective devices are functional. → "2.4 Protective devices" (page 6).
- ▶ Ensure that the necessary safety distances are observed.
  - → "4.3.2 Safety distances" (page 21).

#### 7.3.2 Combustion air and flue gas pipe

Perform maintenance according to the pipe manufacturer's specifications.



#### 7.3.3 Firebox door

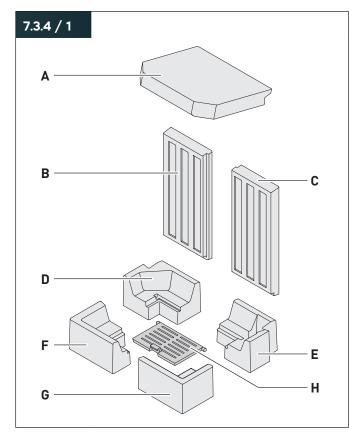
When the firebox door is opened:

- Ensure that the open firebox door has been secured against falling shut.
  - → Figure 5.2.1 / 2 (page 38).

The firebox door is sealed with special seals.

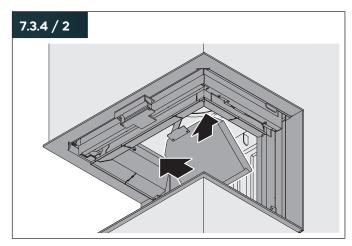
- Check the condition of the door and glass seals.
- Check the seals for wear (e.g. elasticity, distortion, leaks).
- If necessary, replace the seal.
- We recommend replacing the door seal after no more than three heating periods.

#### 7.3.4 Firebox lining

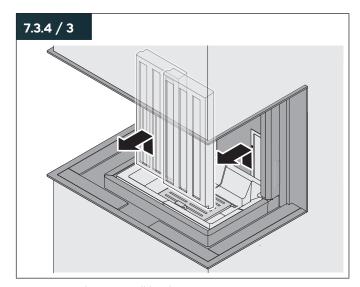


- A Baffle plate
- B Rear wall brick, left
- C Rear wall brick, right
- **D** Base brick, rear left
- **E** Base brick, rear right
- Base brick, front left F
- **G** Base brick, front right
- **H** Ash grate

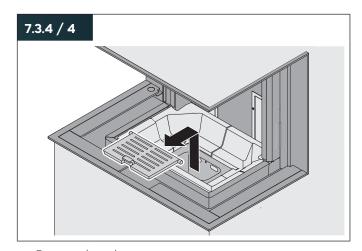
▶ Push the firebox door up all the way.



► Remove the baffle plate.

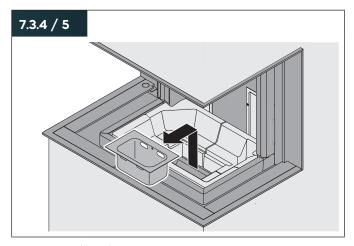


Remove the rear wall bricks.

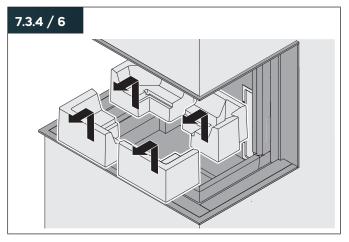


Remove the ash grate.

# Service work



Remove the ash pan.



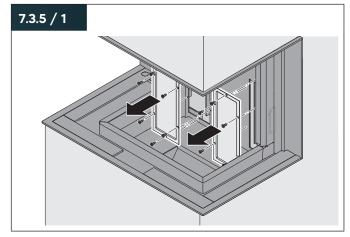
- Remove the base bricks.
- Remove dirt and soot from the components.
- Correctly reinsert the components after cleaning.
- Check the proper condition of the firebox lining:
  - All components are in the correct position.
  - There is no gap between the components.

#### Self-closing firebox door 7.3.5

Conversion to a self-closing firebox door is possible even after installation of the unit by adjusting the counterweight. The weighted pieces are accessible through the inspection ports in the firebox.

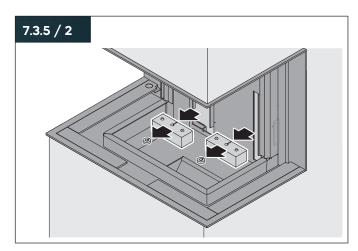
Prerequisites for conversion:

- Use of the self-closing door function is clear.
  - → "2.4 Protective devices" (page 6).
- The unit is fully cooled down and cleaned.
- The firebox lining has been removed.
  - → "7.3.4 Firebox lining" (page 47).



Remove the inspection ports.

The number of counterweights is correct when the firebox door closes slowly and with a constant speed.



- ▶ Undo the safety ring.
- ▶ Remove a suitable number of counterweights.
- ► Reinsert the safety ring.
- Ensure that the firebox door closes slowly and with a constant speed.
- Tighten the safety ring.



#### 7.4 Malfunction repair

Possible malfunctions are described in the following section:

# What malfunction is occurring?

- Cause of the malfunction.
  - ► Eliminating the malfunction.
  - Reference to the relevant chapter.

### The unit smokes, there is an odour of varnish.

- The protective paint of the unit is drying out.
  - ► Ensure sufficient ventilation of the installation space with fresh air.
  - Reduce the fuel volume.
  - ▶ Do not overheat the unit.
- The corrosion protection coating of the unit is burned in. Ensure sufficient ventilation of the installation space with fresh air.
  - Reduce the fuel volume.
  - Do not overheat the unit.

### Smoke nuisance.

- Too much fuel or fuel not fully burned down.
  - ▶ Only insert the volume of fuel required for the current heating output.
  - ▶ Only refuel the stove when the fuel has burned down to embers.
- The flue gas path is soiled.
  - ► Clean the unit and the stove system.
- The firebox door is leaking.
  - ► Check the seal of the firebox door. If necessary, replace the seal.
- The firebox door was opened too fast.
  - ▶ Open the firebox door slowly and carefully.
- The delivery pressure of the chimney is too low.
  - ► Have the chimney checked by a specialised company.

### Deflagration occurs.

- The air supply is closed or insufficient.
  - ▶ Push the combustion air controller up.
  - ▶ If installed, ensure that the locking mechanism of the combustion air line is open.
  - ► Check the air supply from outside (e.g. external air grid not blocked).
- The fuel volume is too high.
  - ► Only insert the volume of fuel required for the heating output.

- The fuel is too fine-grained.
  - ► Only use permissible types of fuel.
  - ⇒ "3.2 Permissible types of fuel" (page 19).
- Back-up of flue gases in the chimney or insufficient delivery
  - ► Have the chimney checked by a specialised company.

# The fire does not burn properly. The stove system does not heat up.

- The fuel is unsuitable (e.g. wood too damp).
  - ▶ Only use permissible types of fuel.
  - ⇒ "3.2 Permissible types of fuel" (page 19).
- The fuel volume is unsuitable (e.g. too many or overly large loas).
  - ▶ Use fuel pieces of the correct size and in the correct quantity.
  - "2.8 Technical data" (page 10).
  - → "3.5 Size of the fuel pieces" (page 19).
- The weather conditions are critical (e.g. fog, outdoor temperature above 15 °C, inversion).
  - ► Stoke the flames frequently.
  - ▶ Only insert very little additional fuel.
  - ▶ Ensure that the combustion air slider has been pushed all the way up.
- The air supply is insufficient.
  - ► Ensure that the combustion air controller has been pushed all the way up.
  - ▶ If installed, ensure that the locking mechanism of the combustion air line is open.
  - ► Check the air supply from outside (e.g. external air grid not blocked).
  - ► Clean the combustion air line.
- The air openings in the unit are closed.
  - ▶ Ensure that the air openings are not blocked.
  - ▶ Ensure that the ash pan has been emptied.
  - ► Check whether it is necessary to remove combustion residue from the firebox.
- The chimney is cold, the delivery pressure is too low.
  - ► Light a "pilot fire" in the firebox using suitable ignition agents.
  - → "3.3 Permissible igniters" (page 19).
  - ► Check the connection pipes to the chimney. If necessary, clean the connection pipes or seal the connection pipes.
  - ▶ If necessary, have the chimney cleaned by a specialised
- The inspection openings of the chimney are leaking or not
  - ▶ Ensure that the inspection openings of the chimney are leak-tight.
  - ► Close the inspection openings.
- The chimney is clogged (e.g. by a bird nest).
  - ► Have the chimney checked by a specialised company.

# Service work

### The firebox door does not close or lock.

- The closing device is defective.
  - ▶ Have the closing device replaced by a specialised company.

# The stove system heats excessively. The fire burns too fast.

# Loud noise (whistling, crackling) in the unit.

- The fuel volume is too high.
  - ▶ Only insert the volume of fuel required for the heating output.
  - ▶ Use fuel pieces of the correct size.
  - → "3.5 Size of the fuel pieces" (page 19).
- The wood is extremely dry.
  - ▶ Use wood with a residual moisture of 15 18 %.
  - → "3.2 Permissible types of fuel" (page 19).
- The air supply setting is not suitable.
  - ▶ Reduce the combustion air supply by pushing the combustion air controller down.
- The firebox door is leaking.
  - ► Check the seal of the firebox door. If necessary, replace the seal.
- The firebox door is not fully closed.
  - ► Check the closing mechanism of the firebox door.
- The delivery pressure of the chimney is too high.
  - ▶ Have the chimney checked by a specialised company.
  - ▶ If necessary, have an auxiliary air device installed.
- The stove system is overheating.
  - ▶ Do not add additional logs.
  - ▶ Reduce the combustion air supply.
  - ► Allow the fire to extinguish.
  - ▶ Ventilate the room where the stove is installed.
  - Determine the cause.

# The viewing window turns black. The fireclay does not burn freely. The firebox lining remains or turns black.

- The fuel is unsuitable (e.g. wood too damp).
  - ► Only use permissible types of fuel.
  - ⇒ "3.2 Permissible types of fuel" (page 19).
- The fuel volume is unsuitable (e.g. too many or overly large logs).
  - ▶ Use fuel pieces of the correct size and in the correct quantity.
  - "2.8 Technical data" (page 10).
  - → "3.5 Size of the fuel pieces" (page 19).
- The weather conditions are critical (e.g. fog, outdoor temperature above 15 °C, inversion).
  - ► Stoke the flames frequently.
  - ▶ Only insert very little additional fuel.
  - ▶ Ensure that the combustion air slider has been pushed
- The chimney is cold, the delivery pressure is too low.
  - ► Light a "pilot fire" in the firebox using suitable ignition agents.
  - ⇒ "3.3 Permissible igniters" (page 19).
  - ► Check the connection pipes to the chimney. If necessary, clean the connection pipes or seal the connection pipes.
  - ▶ If necessary, have the chimney cleaned by a specialised
- The inspection openings of the chimney are leaking or not closed.
  - Ensure that the inspection openings of the chimney are leak-tight.
  - Close the inspection openings.
- The firebox door is leaking.
  - ► Check the seal of the firebox door. If necessary, replace the seal.
- The delivery pressure of the chimney is too high.
  - ▶ Have the chimney checked by a specialised company.
  - ▶ If necessary, have an auxiliary air device installed.
- The air supply is insufficient.
  - ▶ Ensure that the combustion air slider has been pushed all the way up.
  - ► Ensure that the locking mechanism of the combustion air line is open.
  - ► Check the air supply from outside (e.g. external air grid not blocked).
  - Clean the combustion air line.



# Cracks in the firebox lining.

- Frequent operation with excessive fuel volume.
  - ► Only insert the volume of fuel required for the heating output.
  - ▶ Use fuel pieces of the correct size.
  - → "3.5 Size of the fuel pieces" (page 19).
- Incorrect handling during refuelling.
  - ► Ensure that you position fuel carefully do not throw it
  - Have the firebox lining replaced if wide cracks are visible or pieces have broken out.

# The firebox door is hard to open. The firebox door does not remain open on its own.

- The cable on the counterweight has torn.
  - ▶ Have the cable replaced by a specialised company.

If a malfunction cannot be repaired:

► Contact the manufacturer or a specialised company.

# **Disassembly**

#### 8. Disassembly

#### 8.1 Safety information for disassembly

# **WARNING!**

# Danger due to non-adherence to disassembly instructions!

Incorrect disassembly of the unit may lead to severe injuries. This chapter contains important information for safe disassembly of the unit.

- Carefully read this chapter prior to disassembly.
- Adhere to the safety information.
- Perform the disassembly work as described.

Only qualified personnel may disassemble the unit. Electrical work may only be performed by qualified electricians.

⇒ "1.2.3 Qualified personnel" (page 4).

To prevent danger, always adhere to the following

- The unit and other parts that you may come in contact with have cooled down for a sufficient period (e.g. several
- No heat or glowing embers remain in the firebox.
- The surroundings of the stove system are protected, e.g. by means of covers for the floor and furniture.

Prior to disassembly, clean the unit and the stove system. For cleaning work, remove the baffle plate from the firebox.

**→** "6. Cleaning" (page 43).

#### 8.2 Dismantling the unit

- Remove all connections between the stove system and the
- Remove all pipes from the flue gas routing system.
- If installed, remove all pipes from the combustion air line.



#### 9. **Disposal**

#### 9.1 Disposing of the packaging

# **△** ATTENTION!

# Risk of environmental damage caused by improper disposal of the packaging!

- Do not dispose of the packaging with the normal household waste.
- Ensure that the packaging is recycled in a proper, environment-friendly manner.

The packaging is intended to protect the unit from transport damage. The packaging materials have been selected based on their environment-friendly characteristics and are made of recyclable materials. The packaging materials can be returned to the raw material cycle after use.

▶ Dispose of the packaging in an environmentally friendly manner, separated by the types of material.



#### 9.2 Disposing of the unit

# **△** ATTENTION!

# Risk of environmental damage caused by improper disposal

- ▶ Do not dispose of the unit with the normal household waste.
- Ensure that the unit is recycled in a proper, environmentfriendly manner.
- ▶ Dispose of the unit according to the legal regulations through a specialised disposal company or your local disposal facilities.



# **Appendix**

# 10. Appendix

### 10.1 Accessories

- · Combustion control S-Thermatik NEO.
- Secondary air control S-Kamatik 2 (only Premium product series).
- Electric door lift SESAM III (for opening and closing the firebox door).

If required and for additional information (e.g. brochures, spare parts, price lists):

- Please contact the manufacturer or a specialist shop.
- www.spartherm.com

# 10.2 Warranty terms

The warranty terms and other information about the warranty are available on the manufacturer's website:

www.spartherm.com

# 10.3 Standards and regulations

Relevant regulations – without claim to completeness:

- FeuVo: Firing installation regulation of the respective German state.
- LBO: State construction regulations or fire protection regulations.
- VKF: Association of Fire Insurances of the Cantons (Switzerland).
- LRV: Clean air act (Switzerland).
- 1. BlmSchV: First directive for implementation of the German Federal Immission Control Act.
- TROL: Professional regulations of the tiled stove and air heater construction trade (ZVSHK).
- DIN 1298 / DIN EN 1856: Connecting flue pipes for heat generating systems.
- **DIN EN 13229**: Fireplace inserts fired by solid fuel.
- **DIN 18896**: Fireplaces fired by solid fuel. Technical specifications for installation and operation.
- DIN EN 13384: Calculation methods for chimneys.
- DIN 18160-1/2: Flue gas systems / chimneys.
- DIN 4751 / DIN EN 12828: Heating systems in buildings Design for water-based heating systems.
- VDI 2035: Water treatment for heating systems.
- Art. 15a: Federal Constitutional Law (Austria).

### 10.4 Declarations of conformity

The design and operating behaviour of this product complies with the European directives and the additional national requirements. This compliance is certified by the CE label.

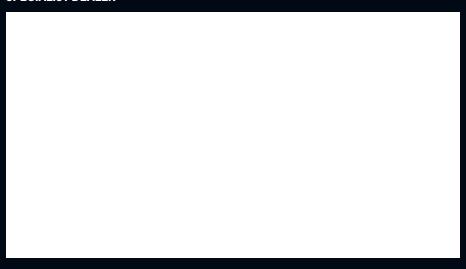
A declaration of performance in line with directive EU 305/2011 is available on the manufacturer's website:

www.spartherm.com





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