



ASSEMBLY AND OPERATING MANUAL

FIREPLACE INSERTS PREMIUM & LEAN

STATUS 02.2026

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-3RL-100h
- Premium A-U-50h
- Premium A-U-70h
- Premium A-U-90h
- Premium A-1V-87h
- 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".

These instructions reflect the technical status at the time of printing.

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.

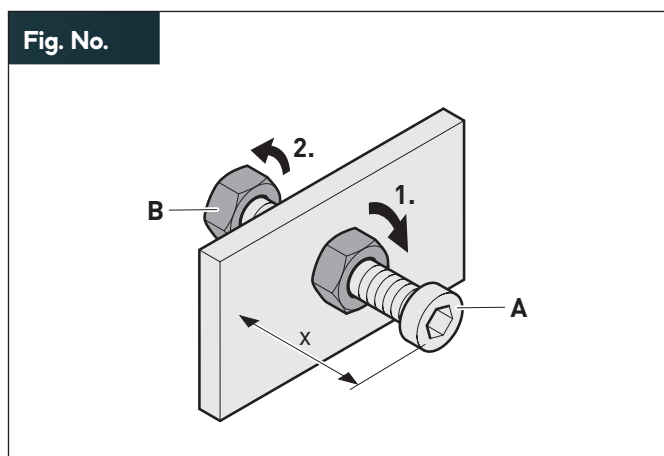
⚠ ATTENTION!

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
- ↻ 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.

§ Fireplace for time-limited combustion according to DIN EN 16510, type BE/CA.

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 Germany 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 78).
- The requirements and safety information in these instructions are observed.

Any other use is regarded as 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 age 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.

To ensure safe use of the unit and a long service life and to avoid damage, adhere to the following:

- Observe this manual and all other applicable documents.
- Use the unit as intended and only allow authorised target groups to use it.
- Always handle the unit correctly.
- Have the unit installed and repaired by authorised experts.
- Only use spare parts manufactured or approved by the manufacturer.
- Adhere to maintenance and cleaning intervals.

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.

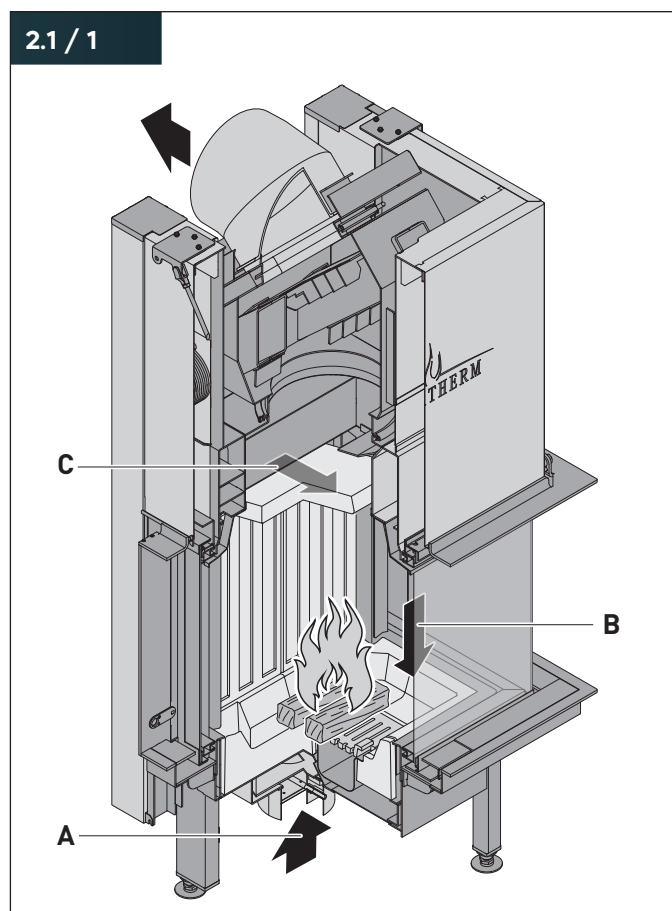
Depending on the work, always adhere to additional relevant safety instructions. The safety instructions can be found in the corresponding chapter of these instructions.

- “4.1 Safety information for assembly” (page 31).
- “5.1 Safety information for use” (page 51).
- “6.1 Safety information for cleaning” (page 59).
- “7.1 Safety information for service work” (page 63).
- “8.1 Safety information for disassembly” (page 77).

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 appliance draws its combustion air from outside or from other rooms (e.g. cellar) via a combustion air pipe connected to the rear, side or bottom of the appliance.
§ The unit has been tested according to DIN EN 16510, type CA.
- 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 16510.

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.

On some models the ceramic glass pane of the unit has an IR coating. This coating increases the temperature of the firebox, reducing emissions, soot adhesions and radiation distances. Depending on your viewing angle and the lighting the ceramic glass pane may be slightly discoloured or reflective.

The firebox door of the unit is equipped with a seal to prevent air from entering and flue gases from escaping in an uncontrolled manner. When delivered, this seal and therefore the door protrude slightly. The seal will adapt to the unit during the first 5 – 10 heating processes. Only at this point will the firebox door reach its final position and tightness.

Depending on the model, the firebox door may be equipped with jointed ceramic glass panels. As the thermal expansion of the material differs, minor visible leaking in the joint area is possible.

2.4 Protective devices

- High-temperature resistant ceramic glass window.
- Self-closing firebox door – only for RLU devices (type CA).
RLA appliances are supplied 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 39).

2.5 Other applicable documents

- Warranty card

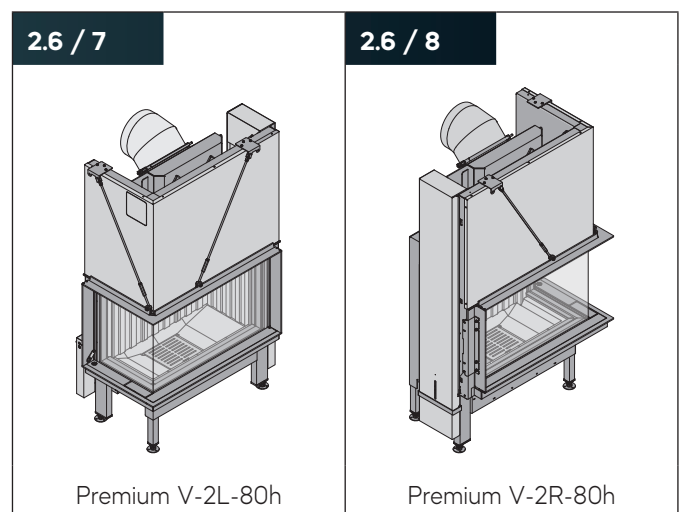
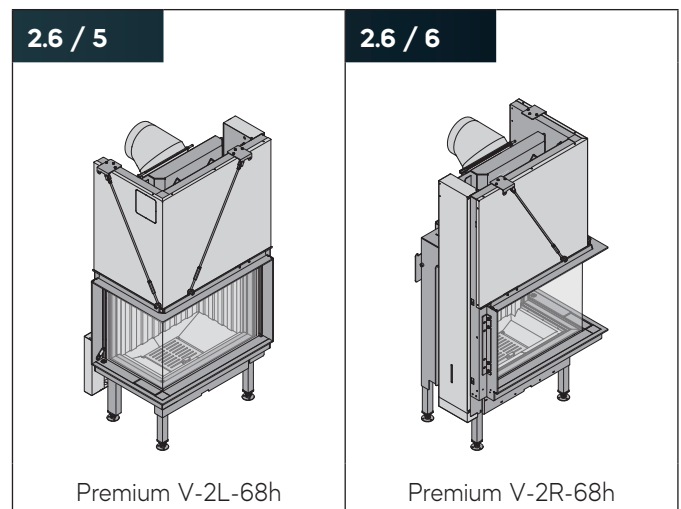
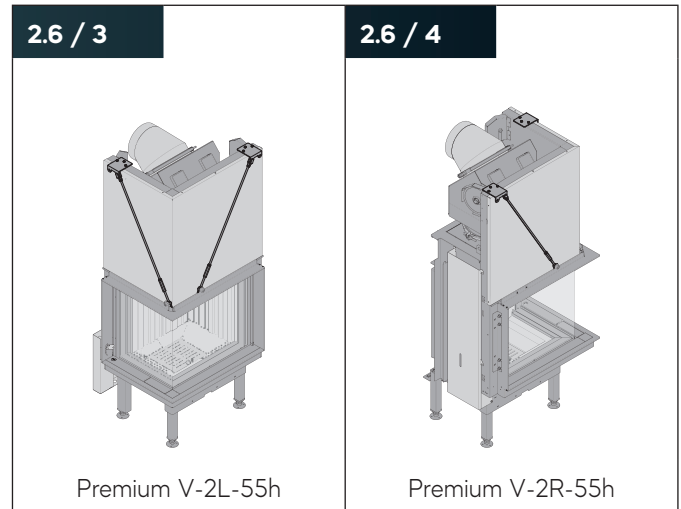
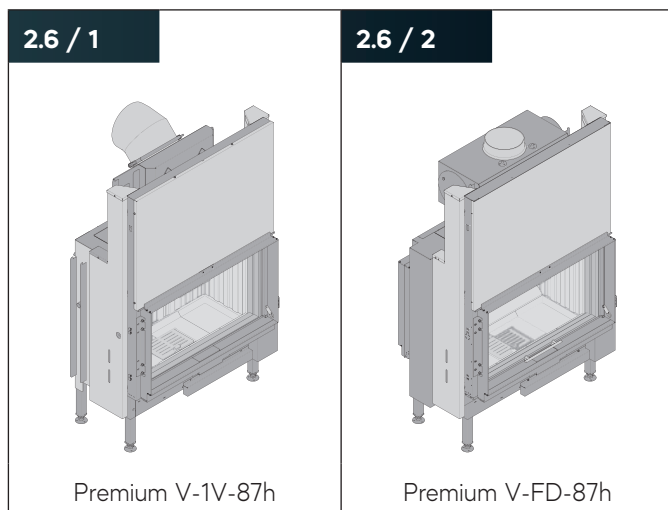
Available on the manufacturer’s website:

- “Technical drawing”, including fire protection drawing
- Product data sheet
- Energy label
- Declaration of performance according to EU 305/2011

 www.spartherm.com

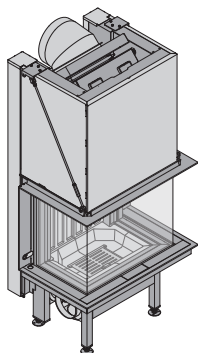
2.6 Models

The product series Premium is available in different designs.



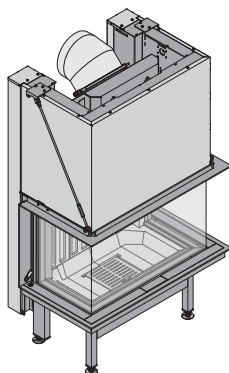
Product information

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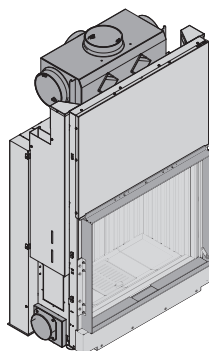
Premium A-3RL-60h

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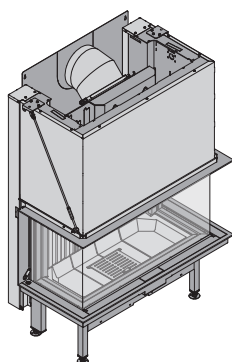
Premium A-3RL-80h

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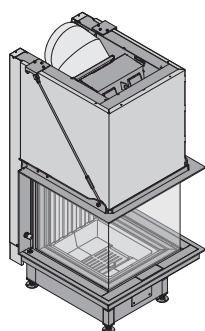
Premium A 1V-87h

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Premium A-3RL-100h

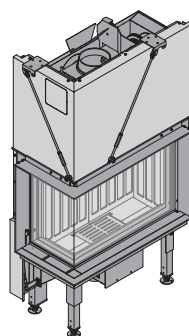
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Premium A-U-50h

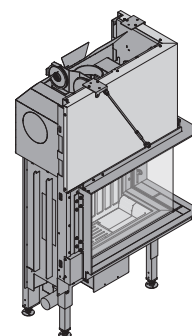
The product series Lean is available in different designs.

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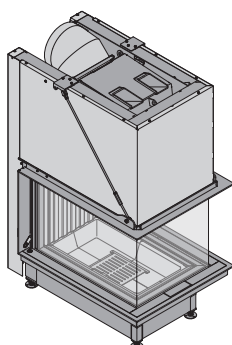
Lean 2L-70h

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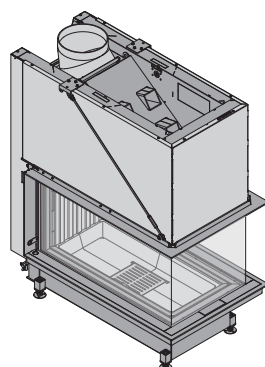
Lean 2R-70h

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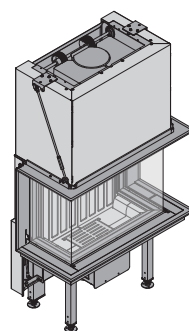
Premium A-U-70h

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Premium A-U-90h

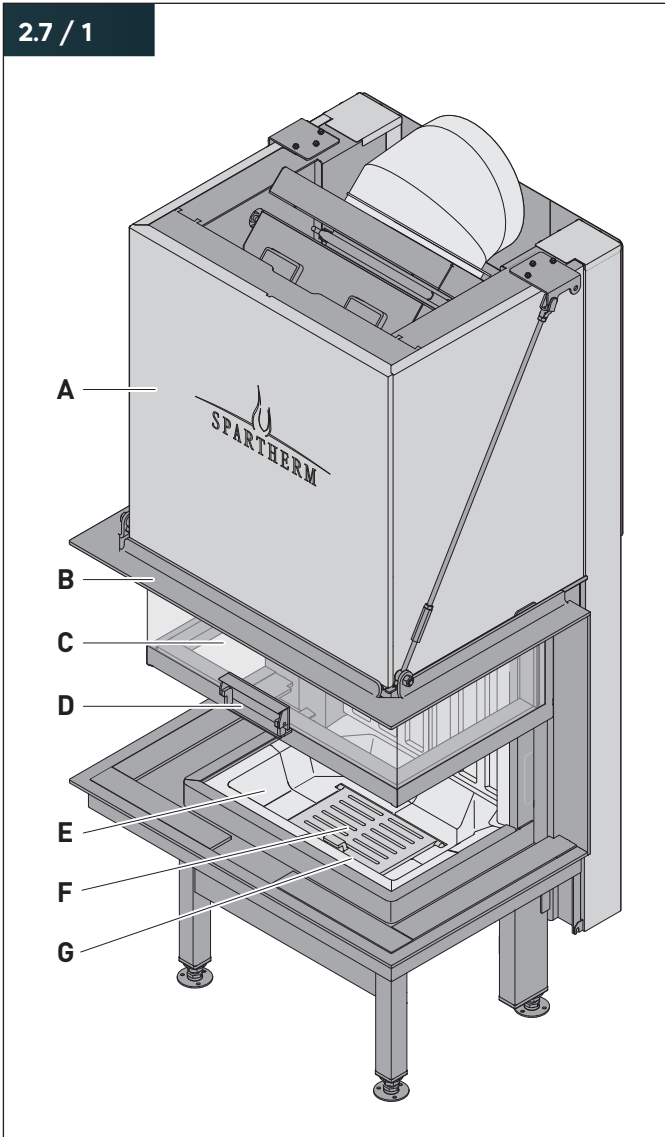
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Lean 3RL-70h

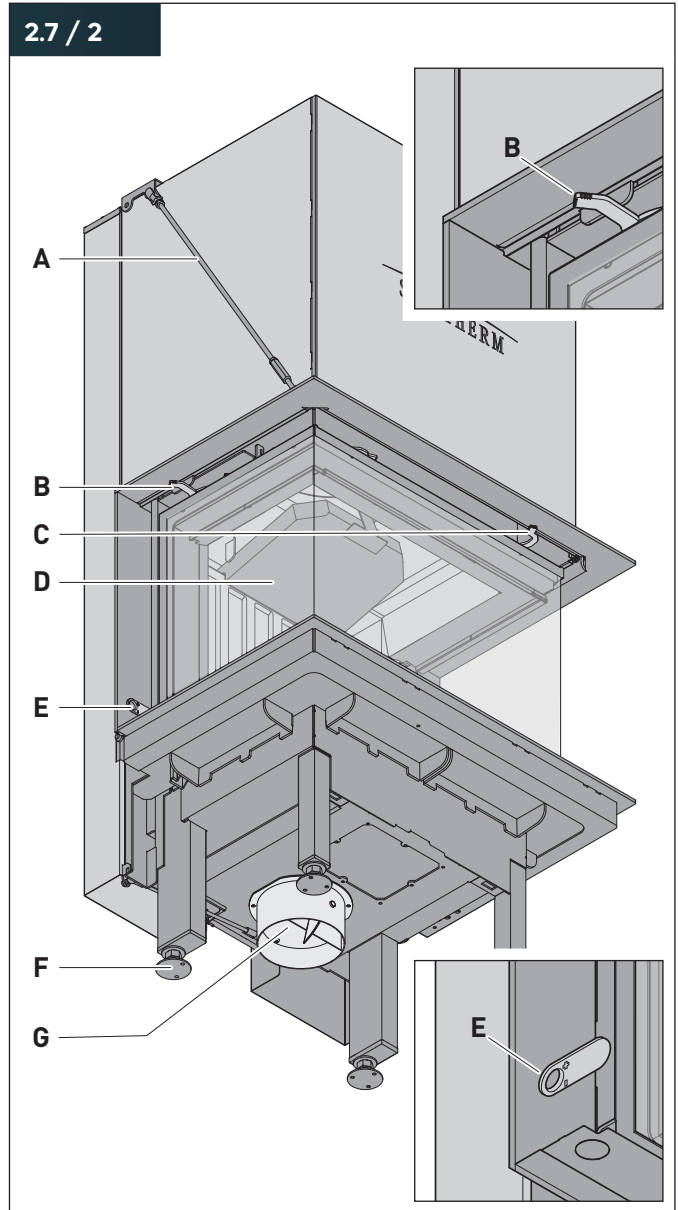
2.7 Product overview

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- 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)

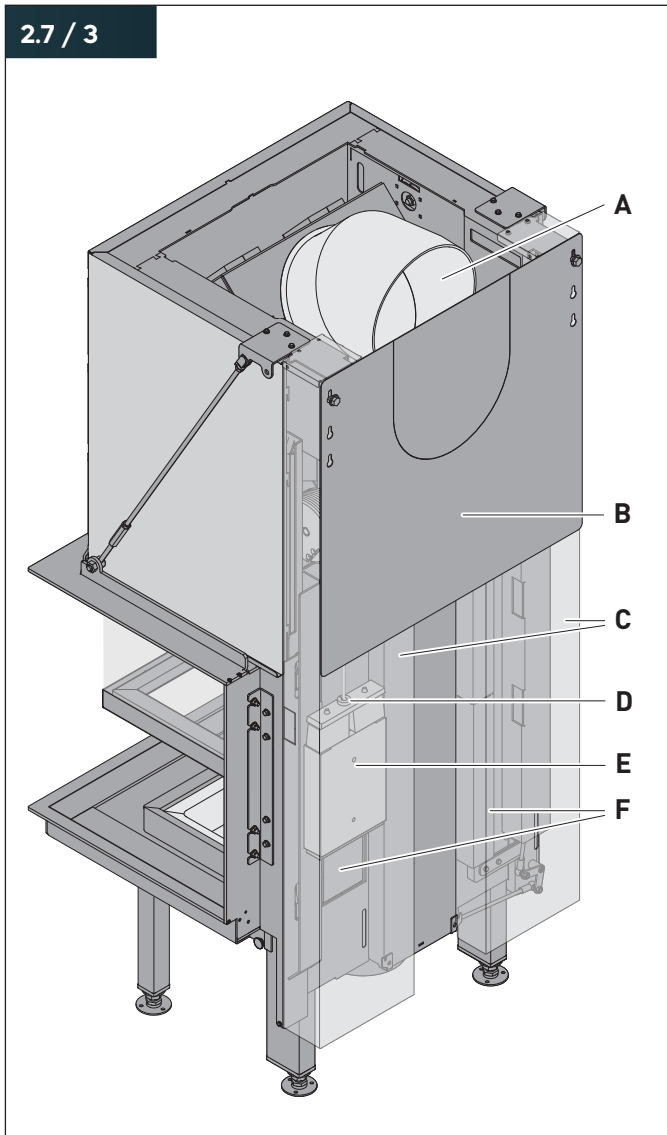
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- A** Drawbar
- B** Door lock
- C** Door locking mechanism
- D** Baffle plate
- E** Combustion air controller
- F** Adjustable legs
- G** Combustion air connector

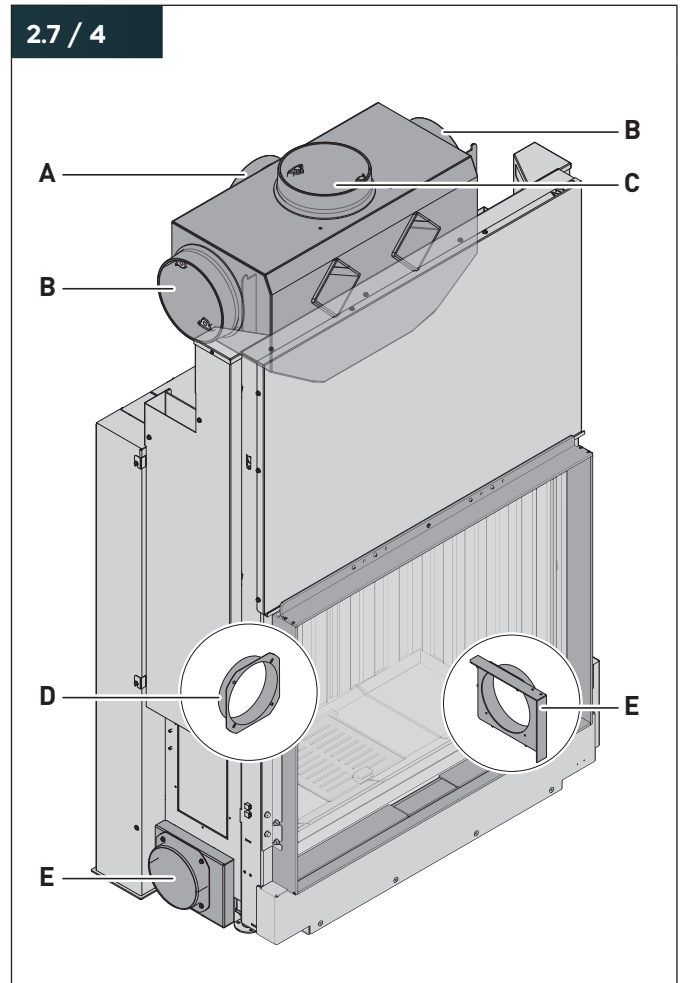
Product information

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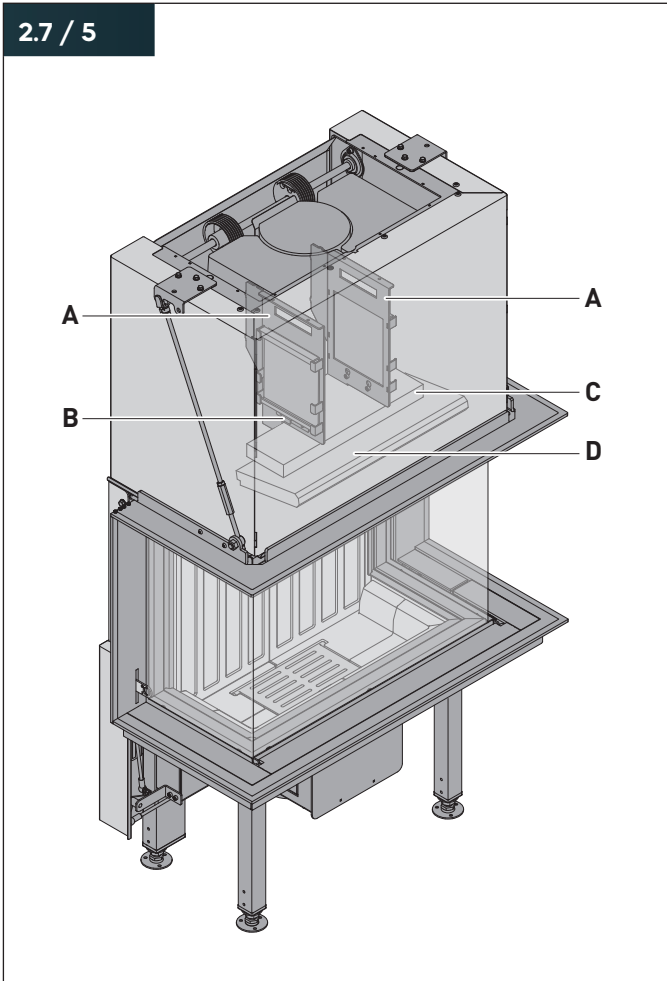
- A** Flue gas connection
- B** Radiation protection plate (delivery condition)
- C** Weight shaft lining
- D** Safety ring
- E** Counterweight
- F** Inspection port

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- A** Flue pipe – rear flue spigot
- B** Flue pipe – side flue spigot
- C** Flue pipe – vertical flue spigot
- D** Combustion air connection – air supply from the rear
- E** Combustion air connection – air supply from the side

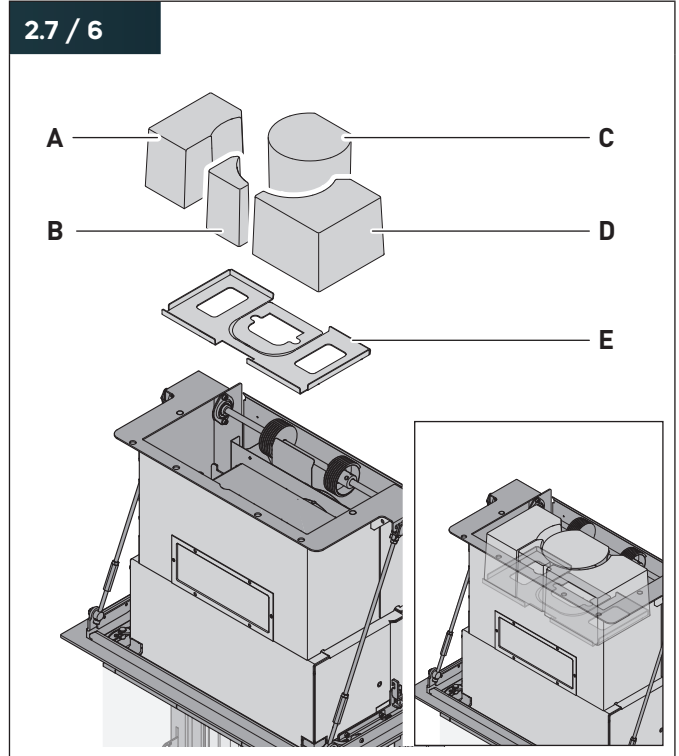
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- A** Blanking plate with bracket
- B** Support bracket
- C** Deflector plate
- D** Baffle plate

Lean 2L-70h, Lean 2R-70h, Lean 3RL-70h with heat storage stones:

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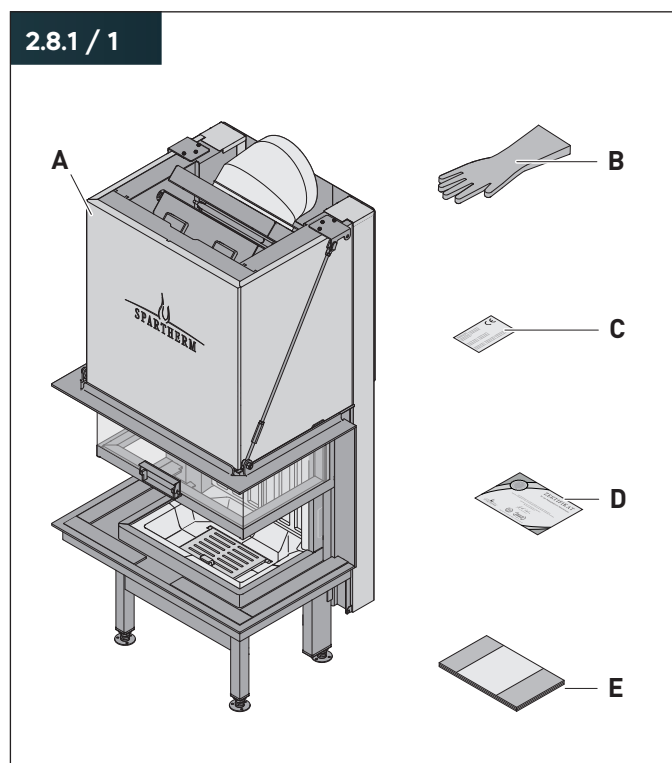
- A** Side stone ¹
- B** Small front stone,
- C** Large front stone
- D** Rear stone
- E** Retaining plate

¹ Only for Lean 3RL-70h.

Product information

2.8 Scope of delivery

2.8.1 Device and additional equipment



- A** Fireplace insert
- B** Heat protection glove
- C** Type plate
- D** Warranty card
- E** Assembly and operating manual

2.8.2 Baffle plate and deflector plate

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- A** Baffle plate
- B** Deflector plate

Model	Baffle plate	Deflector plate
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-3RL-100h	●	●
Premium A-U-50h	○	○
Premium A-U-70h	○	○
Premium A-U-90h	○	○
Premium A-1V-87h	●	○
Lean 2L-70h, Lean 2R-70h	●	●
Lean 3RL-70h	●	●

- included in delivery, must be installed
- pre-assembled

2.8.3 Optional scope of delivery

- Combustion control S-Thermetik NEO.
- S-USI negative pressure monitor.
- Electric door lift SESAM III (for opening and closing the firebox door).
- S-ELA electronic exhaust flap.
- Catalytic converter (only Premium A-3RL-100h, Premium A-U-90h, Lean 2L-70h, Lean 2R-70h, Lean 3RL-70h).
- ➔ "10.1 Accessories" (page 78).

2.9 Technical data

STD	Standard (without optional accessories)
NEO	With combustion control S-Thermatik NEO (optional)
NSH	Ancillary heating surface (optional)
KAT	With catalytic converter (optional)

Premium V-1V-87h



General information		STD	NEO	NSH
Suitable for permanent combustion [CON]		no	no	no
Suitable for time-limited combustion [INT]		yes	yes	yes
Nominal heat output [P _{nom}]	kW	9.5	9.5	11.1
Nominal room heating capacity [P _{SHnom}]	kW	9.5	9.5	11.1
Minimum delivery pressure at nominal heat output [p _{nom}]	Pa	12	12	12
Chimney designation according to the relevant chimney standard [T class]		T400 -G	T400 -G	T400 -G
Heat output range	kW	6.7 – 12.4	6.7 – 12.4	7.6 – 14.2
Efficiency [η _{Wnom}]	%	82	81	88
Annual use efficiency for room heating at nominal heat output [η _s]	%	72	71	78
Energy efficiency index [EEI]		109	107	118
Exhaust mass flow at nominal heat output [Φ _{fg, nom}]	g/s	9.0	9.6	10.9
Temperature on flue gas connection at nominal heat output [T _{snom}]	°C	275	286	296
Flue gas temperature according to NSHF	°C	–	–	180
Average CO ₂ content	%	9.5	9.1	8.7
Convection air opening, free cross-section for outgoing air	cm ²	1280	1280	1280
Convection air opening, free cross-section for incoming air	cm ²	1300	1300	1300
Combustion air requirement for room air dependent operation	m ³ /h	21.7	23.1	25.7
Minimum size of installation space (only for room air sealed units)	m ³	–	–	–
Emissions at nominal heat output [13 % O ₂]				
Dust [PM _{nom}]	mg/m ³	30	29	20
CO [CO _{nom}]	mg/m ³	1250	1137	1250
NO _x [NO _{x, nom}]	mg/m ³	118	98	87
OGC [OGC _{nom}]	mg/m ³	69	46	79
Max. fuelling volume, hardwood	kg/h	3.6	3.7	3.9

General information		STD	NEO	NSH
Max. fuelling volume, compressed wood	kg/h	3.0	3.0	3.2
Mass [m]	kg	350	351	350
Maximum load of a chimney that the unit can bear [m _{chim}]	kg	120	120	120
End of testing cycle	CO ₂ / Mass	Mass	Mass	Mass
Mass of base embers	%/g	< 100	< 100	< 100

Units with S-Thermatik NEO (optional)

Consumption of electric auxiliary energy		
at nominal heat output [e _{l, max}]	W	4.0
at minimum heat output [e _{l, min}]	W	4.0
in stand-by condition [e _{l, SB}]	W	3.0
Supply voltage [E]	V	230
Frequency [f]	Hz	50
Maximum electrical power consumption [W _{max}]	W	5.0

Symbols

Read and follow instructions	
Only use recommended types of fuel ➔ “3. Types of fuel” (page 29).	

Adhere to the fire protection drawing.

➔ “10.5 Fire protection drawings” (page 79).

📄 For further information about the unit and versions with an optional scope of delivery, refer to the separate document “Technical drawing”.

Product information



Premium V-FD-87h

General information		STD	NEO	NSH
Suitable for permanent combustion [CON]		no	no	no
Suitable for time-limited combustion [INT]		yes	yes	yes
Nominal heat output [P _{nom}]	kW	10.6	10.6	11.1
Nominal room heating capacity [P _{SHnom}]	kW	10.6	10.6	11.1
Minimum delivery pressure at nominal heat output [p _{nom}]	Pa	12	12	12
Chimney designation according to the relevant chimney standard [T class]		T400 -G	T400 -G	T400 -G
Heat output range	kW	7.4 – 13.8	7.4 – 13.8	7.8 – 14.4
Efficiency [η _{Wnom}]	%	82	81	87
Annual use efficiency for room heating at nominal heat output [η _s]	%	72	71	77
Energy efficiency index [EEI]		109	107	116
Exhaust mass flow at nominal heat output [Φ _{fg, nom}]	g/s	10.2	11.8	10.8
Temperature on flue gas connection at nominal heat output [T _{snom}]	°C	275	268	190
Flue gas temperature according to NSHF	°C	–	–	190
Average CO ₂ content	%	9.3	8.2	8.2
Convection air opening, free cross-section for outgoing air	cm ²	1020	1020	1020
Convection air opening, free cross-section for incoming air	cm ²	1220	1220	1220
Combustion air requirement for room air dependent operation	m ³ /h	24.0	29.0	37.8
Minimum size of installation space (only for room air sealed units)	m ³	–	–	–
Emissions at nominal heat output [13 % O ₂]				
Dust [PM _{nom}]	mg/m ³	28	24	25
CO [CO _{nom}]	mg/m ³	1250	1250	1250
NO _x [NO _{x, nom}]	mg/m ³	123	130	105
OGC [OGC _{nom}]	mg/m ³	67	43	58
Max. fuelling volume, hardwood	kg/h	4.1	4.1	4.0
Max. fuelling volume, compressed wood	kg/h	3.4	3.4	3.3
Mass [m]	kg	297	298	297
Maximum load of a chimney that the unit can bear [m _{chim}]	kg	120	120	120
End of testing cycle	CO ₂ /Mass	Mass	Mass	Mass
Mass of base embers	%/g	<100	<100	<100

Units with S-Thermatik NEO (optional)


Consumption of electric auxiliary energy		
at nominal heat output [e _{l, max}]	W	4.0
at minimum heat output [e _{l, min}]	W	4.0
in stand-by condition [e _{l, SB}]	W	3.0
Supply voltage [E]	V	230
Frequency [f]	Hz	50
Maximum electrical power consumption [W _{max}]	W	5.0

Symbols

Read and follow instructions	
Only use recommended types of fuel ➔ “3. Types of fuel” (page 29).	

Adhere to the fire protection drawing.

➔ “10.5 Fire protection drawings” (page 79).

 For further information about the unit and versions with an optional scope of delivery, refer to the separate document “Technical drawing”.



Premium V-2L-55h, Premium V-2R-55h

General information	STD	NEO	NSH	
Suitable for permanent combustion [CON]	no	no	no	
Suitable for time-limited combustion [INT]	yes	yes	yes	
Nominal heat output [P _{nom}]	kW	8.0	7.5	10.9
Nominal room heating capacity [P _{SHnom}]	kW	8.0	7.5	10.9
Minimum delivery pressure at nominal heat output [p _{nom}]	Pa	12	12	12
Chimney designation according to the relevant chimney standard [T class]	T400 -G	T400 -G	T400 -G	
Heat output range	kW	5.6 – 10.4	5.3 – 9.8	7.6 – 14.2
Efficiency [η _{Wnom}]	%	85	83	87
Annual use efficiency for room heating at nominal heat output [η _s]	%	75	73	77
Energy efficiency index [EEI]		113	110	116
Exhaust mass flow at nominal heat output [Φ _{fg, nom}]	g/s	6.5	6.8	8.9
Temperature on flue gas connection at nominal heat output [T _{snom}]	°C	263	269	229
Flue gas temperature according to NSHF	°C	–	–	191
Average CO ₂ content	%	10.7	9.7	10.2
Convection air opening, free cross-section for outgoing air	cm ²	650	650	950
Convection air opening, free cross-section for incoming air	cm ²	780	780	1140
Combustion air requirement for room air dependent operation	m ³ /h	16.0	17.0	22.0
Minimum size of installation space (only for room air sealed units)	m ³	–	–	–
Emissions at nominal heat output [13 % O ₂]				
Dust [PM _{nom}]	mg/m ³	27	19	21
CO [CO _{nom}]	mg/m ³	1250	1250	925
NO _x [NO _{x, nom}]	mg/m ³	102	102	97
OGC [OGC _{nom}]	mg/m ³	73	70	51
Max. fuelling volume, hardwood	kg/h	3.0	2.8	3.9
Max. fuelling volume, compressed wood	kg/h	2.4	2.3	3.3
Mass [m]	kg	265	267	265
Maximum load of a chimney that the unit can bear [m _{chim}]	kg	120	120	120
End of testing cycle	CO ₂ /Mass	Mass	Mass	Mass
Mass of base embers	%/g	< 100	< 100	< 100

Units with S-Thermatik NEO (optional)


Consumption of electric auxiliary energy		
at nominal heat output [e _{l, max}]	W	4.0
at minimum heat output [e _{l, min}]	W	4.0
in stand-by condition [e _{l, SB}]	W	3.0
Supply voltage [E]	V	230
Frequency [f]	Hz	50
Maximum electrical power consumption [W _{max}]	W	5.0

Symbols

Read and follow instructions	
Only use recommended types of fuel ➔ “3. Types of fuel” (page 29).	

Adhere to the fire protection drawing.

➔ “10.5 Fire protection drawings” (page 79).

 For further information about the unit and versions with an optional scope of delivery, refer to the separate document “Technical drawing”.

Product information



Premium V-2L-68h, Premium V-2R-68h

General information	STD	NEO	NSH
Suitable for permanent combustion [CON]	no	no	no
Suitable for time-limited combustion [INT]	yes	yes	yes
Nominal heat output [P _{nom}]	kW 9.6	9.7	9.9
Nominal room heating capacity [P _{SHnom}]	kW 9.6	9.7	9.9
Minimum delivery pressure at nominal heat output [p _{nom}]	Pa 12	12	12
Chimney designation according to the relevant chimney standard [T class]	T400 -G	T400 -G	T400 -G
Heat output range	kW 6.7 – 12.5	6.8 – 12.6	6.9 – 12.9
Efficiency [η _{Wnom}]	% 82	83	87
Annual use efficiency for room heating at nominal heat output [η _s]	% 72	73	87
Energy efficiency index [EEI]	109	110	116
Exhaust mass flow at nominal heat output [Φ _{fg, nom}]	g/s 8.8	8.7	9.3
Temperature on flue gas connection at nominal heat output [T _{snom}]	°C 276	261	379
Flue gas temperature according to NSHF	°C –	–	195
Average CO ₂ content	% 9.9	10.1	8.9
Convection air opening, free cross-section for outgoing air	cm ² 890	890	890
Convection air opening, free cross-section for incoming air	cm ² 1070	1070	1070
Combustion air requirement for room air dependent operation	m ³ /h 22.5	22.0	27.7
Minimum size of installation space (only for room air sealed units)	m ³ –	–	–
Emissions at nominal heat output [13 % O ₂]			
Dust [PM _{nom}]	mg/m ³ 28	19	40
CO [CO _{nom}]	mg/m ³ 1237	1137	1250
NO _x [NO _{x, nom}]	mg/m ³ 131	126	121
OGC [OGC _{nom}]	mg/m ³ 60	63	54
Max. fuelling volume, hardwood	kg/h 3.7	3.7	3.6
Max. fuelling volume, compressed wood	kg/h 3.0	3.0	3.0
Mass [m]	kg 310	311	310
Maximum load of a chimney that the unit can bear [m _{chim}]	kg 120	120	120
End of testing cycle	CO ₂ /Mass	Mass	Mass
Mass of base embers	%/g <100	<100	<100

Units with S-Thermatik NEO (optional)


Consumption of electric auxiliary energy		
at nominal heat output [e _{l, max}]	W	4.0
at minimum heat output [e _{l, min}]	W	4.0
in stand-by condition [e _{l, SB}]	W	3.0
Supply voltage [E]	V	230
Frequency [f]	Hz	50
Maximum electrical power consumption [W _{max}]	W	5.0

Symbols

Read and follow instructions	
Only use recommended types of fuel ➔ “3. Types of fuel” (page 29).	

Adhere to the fire protection drawing.

➔ “10.5 Fire protection drawings” (page 79).

 For further information about the unit and versions with an optional scope of delivery, refer to the separate document “Technical drawing”.



Premium V-2L-80h, Premium V-2R-80h

General information	STD	NEO
Suitable for permanent combustion [CON]	no	no
Suitable for time-limited combustion [INT]	yes	yes
Nominal heat output [P _{nom}]	kW 10.5	10.2
Nominal room heating capacity [P _{SHnom}]	kW 10.5	10.2
Minimum delivery pressure at nominal heat output [p _{nom}]	Pa 12	12
Chimney designation according to the relevant chimney standard [T class]	T400 -G	T400 -G
Heat output range	kW 7.4 – 13.7	7.1 – 13.3
Efficiency [η _{Wnom}]	% 80	82
Annual use efficiency for room heating at nominal heat output [η _s]	% 70	72
Energy efficiency index [EEI]	106	109
Exhaust mass flow at nominal heat output [φ _{fgnom}]	g/s 12.2	10.6
Temperature on flue gas connection at nominal heat output [T _{snom}]	°C 272	266
Flue gas temperature according to NSHF	°C –	–
Average CO ₂ content	% 8.2	9.0
Convection air opening, free cross-section for outgoing air	cm ² 1360	1360
Convection air opening, free cross-section for incoming air	cm ² 1625	1625
Combustion air requirement for room air dependent operation	m ³ /h 34.0	27.3
Minimum size of installation space (only for room air sealed units)	m ³ –	–
Emissions at nominal heat output [13 % O ₂]		
Dust [PM _{nom}]	mg/m ³ 34	26
CO [CO _{nom}]	mg/m ³ 1250	1137
NO _x [NO _{xnom}]	mg/m ³ 167	144
OGC [OGC _{nom}]	mg/m ³ 88	55
Max. fuelling volume, hardwood	kg/h 4.1	3.9
Max. fuelling volume, compressed wood	kg/h 3.4	3.2
Mass [m]	kg 350	351
Maximum load of a chimney that the unit can bear [m _{chim}]	kg 120	120
End of testing cycle	CO ₂ / Mass	Mass
Mass of base embers	%/g < 100	< 100

Units with S-Thermatik NEO (optional)


Consumption of electric auxiliary energy		
at nominal heat output [e _{lmax}]	W	4.0
at minimum heat output [e _{lmin}]	W	4.0
in stand-by condition [e _{lSB}]	W	3.0
Supply voltage [E]	V	230
Frequency [f]	Hz	50
Maximum electrical power consumption [W _{max}]	W	5.0

Symbols

Read and follow instructions	
Only use recommended types of fuel ➔ “3. Types of fuel” (page 29).	

Adhere to the fire protection drawing.

➔ “10.5 Fire protection drawings” (page 79).

 For further information about the unit and versions with an optional scope of delivery, refer to the separate document “Technical drawing”.

Product information



Premium A-3RL-60h

General information	STD	NEO
Suitable for permanent combustion [CON]	no	no
Suitable for time-limited combustion [INT]	yes	yes
Nominal heat output [P _{nom}]	kW 10.0	10.0
Nominal room heating capacity [P _{SHnom}]	kW 10.0	10.0
Minimum delivery pressure at nominal heat output [p _{nom}]	Pa 12	12
Chimney designation according to the relevant chimney standard [T class]	T400 -G	T400 -G
Heat output range	kW 7.0 – 13.0	7.0 – 13.0
Efficiency [η _{Wnom}]	% 81	81
Annual use efficiency for room heating at nominal heat output [η _s]	% 71	71
Energy efficiency index [EEI]	107	107
Exhaust mass flow at nominal heat output [φ _{fgnom}]	g/s 10.5	10.2
Temperature on flue gas connection at nominal heat output [T _{snom}]	°C 270	270
Flue gas temperature according to NSHF	°C –	–
Average CO ₂ content	% 8.9	9.1
Convection air opening, free cross-section for outgoing air	cm ² 650	650
Convection air opening, free cross-section for incoming air	cm ² 860	860
Combustion air requirement for room air dependent operation	m ³ /h 25.4	24.3
Minimum size of installation space (only for room air sealed units)	m ³ –	–
Emissions at nominal heat output [13 % O ₂]		
Dust [PM _{nom}]	mg/m ³ 38	35
CO [CO _{nom}]	mg/m ³ 1250	1250
NO _x [NO _{xnom}]	mg/m ³ 141	140
OGC [OGC _{nom}]	mg/m ³ 106	84
Max. fuelling volume, hardwood	kg/h 3.9	3.9
Max. fuelling volume, compressed wood	kg/h 3.2	3.2
Mass [m]	kg 279	280
Maximum load of a chimney that the unit can bear [m _{chim}]	kg 120	120
End of testing cycle	CO ₂ / Mass	Mass
Mass of base embers	%/g < 100	< 100

Units with S-Thermatik NEO (optional)


Consumption of electric auxiliary energy	
at nominal heat output [e _{lmax}]	W 4.0
at minimum heat output [e _{lmin}]	W 4.0
in stand-by condition [e _{lSB}]	W 3.0
Supply voltage [E]	V 230
Frequency [f]	Hz 50
Maximum electrical power consumption [W _{max}]	W 5.0

Symbols

Read and follow instructions	
Only use recommended types of fuel ➔ “3. Types of fuel” (page 29).	

Adhere to the fire protection drawing.

➔ “10.5 Fire protection drawings” (page 79).

 For further information about the unit and versions with an optional scope of delivery, refer to the separate document “Technical drawing”.



Premium A-3RL-80h

General information	STD	NEO
Suitable for permanent combustion [CON]	no	no
Suitable for time-limited combustion [INT]	yes	yes
Nominal heat output [P _{nom}]	kW 11.4	12.3
Nominal room heating capacity [P _{SHnom}]	kW 11.4	12.3
Minimum delivery pressure at nominal heat output [p _{nom}]	Pa 12	12
Chimney designation according to the relevant chimney standard [T class]	T400 -G	T400 -G
Heat output range	kW 8.0 – 14.8	8.6 – 16.0
Efficiency [η _{Wnom}]	% 80	80
Annual use efficiency for room heating at nominal heat output [η _s]	% 70	70
Energy efficiency index [EEI]	106	106
Exhaust mass flow at nominal heat output [φ _{fgnom}]	g/s 12.6	12.6
Temperature on flue gas connection at nominal heat output [T _{snom}]	°C 275	296
Flue gas temperature according to NSHF	°C –	–
Average CO ₂ content	% 8.6	9.3
Convection air opening, free cross-section for outgoing air	cm ² 830	830
Convection air opening, free cross-section for incoming air	cm ² 990	990
Combustion air requirement for room air dependent operation	m ³ /h 32.0	32.5
Minimum size of installation space (only for room air sealed units)	m ³ –	–
Emissions at nominal heat output [13 % O ₂]		
Dust [PM _{nom}]	mg/m ³ 25	37
CO [CO _{nom}]	mg/m ³ 1250	1137
NO _x [NO _{xnom}]	mg/m ³ 150	134
OGC [OGC _{nom}]	mg/m ³ 76	50
Max. fuelling volume, hardwood	kg/h 4.5	4.8
Max. fuelling volume, compressed wood	kg/h 3.7	4.0
Mass [m]	kg 337	338
Maximum load of a chimney that the unit can bear [m _{chim}]	kg 120	120
End of testing cycle	CO ₂ / Mass	Mass
Mass of base embers	%/g < 100	< 100

Units with S-Thermatik NEO (optional)


Consumption of electric auxiliary energy		
at nominal heat output [e _{lmax}]	W	4.0
at minimum heat output [e _{lmin}]	W	4.0
in stand-by condition [e _{lSB}]	W	3.0
Supply voltage [E]	V	230
Frequency [f]	Hz	50
Maximum electrical power consumption [W _{max}]	W	5.0

Symbols

Read and follow instructions	
Only use recommended types of fuel ➔ “3. Types of fuel” (page 29).	

Adhere to the fire protection drawing.

➔ “10.5 Fire protection drawings” (page 79).

 For further information about the unit and versions with an optional scope of delivery, refer to the separate document “Technical drawing”.

Product information



Premium A-3RL-100h

General information		STD	NEO	KAT
Suitable for permanent combustion [CON]		no	no	no
Suitable for time-limited combustion [INT]		yes	yes	yes
Nominal heat output [P _{nom}]	kW	13	12	13
Nominal room heating capacity [P _{SHnom}]	kW	13	12	13
Minimum delivery pressure at nominal heat output [p _{nom}]	Pa	12	12	12
Chimney designation according to the relevant chimney standard [T class]		T400 -G	T400 -G	T400 -G
Heat output range	kW	9.1 – 16.9	8.4 – 15.6	9.1 – 16.9
Efficiency [η _{Wnom}]	%	83	81	84
Annual use efficiency for room heating at nominal heat output [η _s]	%	73	71	74
Energy efficiency index [EEI]		110	107	112
Exhaust mass flow at nominal heat output [Φ _{fg, nom}]	g/s	12.1	14.1	12.7
Temperature on flue gas connection at nominal heat output [T _{snom}]	°C	253	249	246
Flue gas temperature according to NSHF	°C	–	–	–
Average CO ₂ content	%	9.1	7.4	9.0
Convection air opening, free cross-section for outgoing air	cm ²	1090	1090	1090
Convection air opening, free cross-section for incoming air	cm ²	1310	1310	1310
Combustion air requirement for room air dependent operation	m ³ /h	33.2	38.7	34.8
Minimum size of installation space (only for room air sealed units)	m ³	–	–	–
Emissions at nominal heat output [13 % O ₂]				
Dust [PM _{nom}]	mg/m ³	38	38	39
CO [CO _{nom}]	mg/m ³	1072	841	789
NO _x [NO _{x, nom}]	mg/m ³	107	129	111
OGC [OGC _{nom}]	mg/m ³	51	26	42
Max. fuelling volume, hardwood	kg/h	4.9	4.7	4.9
Max. fuelling volume, compressed wood	kg/h	4.1	3.9	4.0
Mass [m]	kg	375	376	376
Maximum load of a chimney that the unit can bear [m _{chim}]	kg	120	120	120
End of testing cycle	CO ₂ /Mass	Mass	Mass	Mass
Mass of base embers	%/g	<100	<100	<100

Units with S-Thermatik NEO (optional)


Consumption of electric auxiliary energy		
at nominal heat output [e _{l, max}]	W	4.0
at minimum heat output [e _{l, min}]	W	4.0
in stand-by condition [e _{l, SB}]	W	3.0
Supply voltage [E]	V	230
Frequency [f]	Hz	50
Maximum electrical power consumption [W _{max}]	W	5.0

Symbols

Read and follow instructions	
Only use recommended types of fuel ➔ “3. Types of fuel” (page 29).	

Adhere to the fire protection drawing.

➔ “10.5 Fire protection drawings” (page 79).

 For further information about the unit and versions with an optional scope of delivery, refer to the separate document “Technical drawing”.



Premium A-U-50h

General information	STD	NEO
Suitable for permanent combustion [CON]	no	no
Suitable for time-limited combustion [INT]	yes	yes
Nominal heat output [P _{nom}]	kW 9.3	9.3
Nominal room heating capacity [P _{SHnom}]	kW 9.3	9.3
Minimum delivery pressure at nominal heat output [p _{nom}]	Pa 12	12
Chimney designation according to the relevant chimney standard [T class]	T400 -G	T400 -G
Heat output range	kW 6.5 – 12.1	6.5 – 12.1
Wirkungsgrad [η _{Wnom}]	% 81	83
Annual use efficiency for room heating at nominal heat output [η _s]	% 71	73
Energy efficiency index [EEI]	107	110
Exhaust mass flow at nominal heat output [φ _{fgnom}]	g/s 8.5	7.7
Temperature on flue gas connection at nominal heat output [T _{snom}]	°C 311	294
Flue gas temperature according to NSHF	°C –	–
Average CO ₂ content	% 10.3	11.1
Convection air opening, free cross-section for outgoing air	cm ² 560	560
Convection air opening, free cross-section for incoming air	cm ² 680	680
Combustion air requirement for room air dependent operation	m ³ /h 20.0	18.6
Minimum size of installation space (only for room air sealed units)	m ³ –	–
Emissions at nominal heat output [13 % O ₂]		
Dust [PM _{nom}]	mg/m ³ 25	18
CO [CO _{nom}]	mg/m ³ 1210	1250
NO _x [NO _{xnom}]	mg/m ³ 108	109
OGC [OGC _{nom}]	mg/m ³ 90	95
Max. fuelling volume, hardwood	kg/h 3.6	3.5
Max. fuelling volume, compressed wood	kg/h 3.0	2.9
Mass [m]	kg 235	236
Maximum load of a chimney that the unit can bear [m _{chim}]	kg 120	120
End of testing cycle	CO ₂ / Mass	Mass
Mass of base embers	%/g < 100	< 100

Units with S-Thermatik NEO (optional)


Consumption of electric auxiliary energy		
at nominal heat output [e _{lmax}]	W	4.0
at minimum heat output [e _{lmin}]	W	4.0
in stand-by condition [e _{lSB}]	W	3.0
Supply voltage [E]	V	230
Frequency [f]	Hz	50
Maximum electrical power consumption [W _{max}]	W	5.0

Symbols

Read and follow instructions	
Only use recommended types of fuel ➔ “3. Types of fuel” (page 29).	

Adhere to the fire protection drawing.

➔ “10.5 Fire protection drawings” (page 79).

 For further information about the unit and versions with an optional scope of delivery, refer to the separate document “Technical drawing”.

Product information



Premium A-U-70h

General information	STD	NEO
Suitable for permanent combustion [CON]	no	no
Suitable for time-limited combustion [INT]	yes	yes
Nominal heat output [P _{nom}]	kW 11.4	11.6
Nominal room heating capacity [P _{SHnom}]	kW 11.4	11.6
Minimum delivery pressure at nominal heat output [p _{nom}]	Pa 12	12
Chimney designation according to the relevant chimney standard [T class]	T400 -G	T400 -G
Heat output range	kW 8.0 – 14.8	8.1 – 15.1
Efficiency [η _{Wnom}]	% 81	81
Annual use efficiency for room heating at nominal heat output [η _s]	% 71	71
Energy efficiency index [EEI]	107	107
Exhaust mass flow at nominal heat output [φ _{fgnom}]	g/s 11.3	11.0
Temperature on flue gas connection at nominal heat output [T _{snom}]	°C 296	288
Flue gas temperature according to NSHF	°C –	–
Average CO ₂ content	% 9.6	9.6
Convection air opening, free cross-section for outgoing air	cm ² 650	650
Convection air opening, free cross-section for incoming air	cm ² 1200	1200
Combustion air requirement for room air dependent operation	m ³ /h 27.0	35.2
Minimum size of installation space (only for room air sealed units)	m ³ –	–
Emissions at nominal heat output [13 % O ₂]		
Dust [PM _{nom}]	mg/m ³ 23	22
CO [CO _{nom}]	mg/m ³ 1081	1073
NO _x [NO _{xnom}]	mg/m ³ 106	104
OGC [OGC _{nom}]	mg/m ³ 70	74
Max. fuelling volume, hardwood	kg/h 4.4	4.5
Max. fuelling volume, compressed wood	kg/h 3.7	3.7
Mass [m]	kg 357	358
Maximum load of a chimney that the unit can bear [m _{chim}]	kg 120	120
End of testing cycle	CO ₂ / Mass	Mass
Mass of base embers	%/g < 100	< 100

Units with S-Thermatik NEO (optional)


Consumption of electric auxiliary energy	
at nominal heat output [e _{lmax}]	W 4.0
at minimum heat output [e _{lmin}]	W 4.0
in stand-by condition [e _{lsb}]	W 3.0
Supply voltage [E]	V 230
Frequency [f]	Hz 50
Maximum electrical power consumption [W _{max}]	W 5.0

Symbols

Read and follow instructions	
Only use recommended types of fuel ➔ “3. Types of fuel” (page 29).	

Adhere to the fire protection drawing.

➔ “10.5 Fire protection drawings” (page 79).

 For further information about the unit and versions with an optional scope of delivery, refer to the separate document “Technical drawing”.



Premium A-U-90h

General information	STD	NEO	KAT	
Suitable for permanent combustion [CON]	no	no	no	
Suitable for time-limited combustion [INT]	yes	yes	yes	
Nominal heat output [P _{nom}]	kW	17.5	16.9	17.1
Nominal room heating capacity [P _{SHnom}]	kW	17.5	16.9	17.1
Minimum delivery pressure at nominal heat output [p _{nom}]	Pa	13	14	12
Chimney designation according to the relevant chimney standard [T class]	T400 -G	T400 -G	T400 -G	
Heat output range	kW	12 – 23	12 – 22	12 – 22
Efficiency [η _{Wnom}]	%	81	79	82
Annual use efficiency for room heating at nominal heat output [η _s]	%	71	69	72
Energy efficiency index [EEI]		107	103	108
Exhaust mass flow at nominal heat output [Φ _{fg, nom}]	g/s	16.1	17.2	15.6
Temperature on flue gas connection at nominal heat output [T _{snom}]	°C	300	310	290
Flue gas temperature according to NSHF	°C	–	–	–
Average CO ₂ content	%	9.5	8.7	9.5
Convection air opening, free cross-section for outgoing air	cm ²	1060	1060	1060
Convection air opening, free cross-section for incoming air	cm ²	1140	1140	1140
Combustion air requirement for room air dependent operation	m ³ /h	50.9	50.8	49.5
Minimum size of installation space (only for room air sealed units)	m ³	–	–	–
Emissions at nominal heat output [13 % O ₂]				
Dust [PM _{nom}]	mg/m ³	37	34	40
CO [CO _{nom}]	mg/m ³	1207	1250	828
NO _x [NO _{x, nom}]	mg/m ³	126	128	139
OGC [OGC _{nom}]	mg/m ³	46	60	48
Max. fuelling volume, hardwood	kg/h	6.8	6.8	6.8
Max. fuelling volume, compressed wood	kg/h	5.6	5.6	5.4
Mass [m]	kg	390	391	391
Maximum load of a chimney that the unit can bear [m _{chim}]	kg	120	120	120
End of testing cycle	CO ₂ /Mass	Mass	Mass	Mass
Mass of base embers	%/g	< 100	< 100	< 100

Units with S-Thermatik NEO (optional)


Consumption of electric auxiliary energy		
at nominal heat output [e _{l, max}]	W	4.0
at minimum heat output [e _{l, min}]	W	4.0
in stand-by condition [e _{l, SB}]	W	3.0
Supply voltage [E]	V	230
Frequency [f]	Hz	50
Maximum electrical power consumption [W _{max}]	W	5.0

Symbols

Read and follow instructions	
Only use recommended types of fuel ➔ “3. Types of fuel” (page 29).	

Adhere to the fire protection drawing.

➔ “10.5 Fire protection drawings” (page 79).

 For further information about the unit and versions with an optional scope of delivery, refer to the separate document “Technical drawing”.

Product information



Premium A-1V-87h

General information	STD	NEO
Suitable for permanent combustion [CON]	no	no
Suitable for time-limited combustion [INT]	yes	yes
Nominal heat output [P _{nom}]	kW 13.8	12.9
Nominal room heating capacity [P _{SHnom}]	kW 13.8	12.9
Minimum delivery pressure at nominal heat output [p _{nom}]	Pa 12	12
Chimney designation according to the relevant chimney standard [T class]	T400 -G	T400 -G
Heat output range	kW 9.7 – 17.9	9.0 – 16.8
Efficiency [η _{Wnom}]	% 81	79
Annual use efficiency for room heating at nominal heat output [η _s]	% 71	69
Energy efficiency index [EEI]	107	104
Exhaust mass flow at nominal heat output [φ _{fgnom}]	g/s 14.1	15.7
Temperature on flue gas connection at nominal heat output [T _{snom}]	°C 273	252
Flue gas temperature according to NSHF	°C –	–
Average CO ₂ content	% 8.4	7.1
Convection air opening, free cross-section for outgoing air	cm ² 1200	1200
Convection air opening, free cross-section for incoming air	cm ² 1500	1500
Combustion air requirement for room air dependent operation	m ³ /h 35.5	39.9
Minimum size of installation space (only for room air sealed units)	m ³ –	–
Emissions at nominal heat output [13 % O ₂]		
Dust [PM _{nom}]	mg/m ³ 33	39
CO [CO _{nom}]	mg/m ³ 825	1250
NO _x [NO _{xnom}]	mg/m ³ 123	119
OGC [OGC _{nom}]	mg/m ³ 30	64
Max. fuelling volume, hardwood	kg/h 5.3	5.1
Max. fuelling volume, compressed wood	kg/h 4.4	4.2
Mass [m]	kg 415	416
Maximum load of a chimney that the unit can bear [m _{chim}]	kg 120	120
End of testing cycle	CO ₂ / Mass	Mass
Mass of base embers	%/g < 100	< 100

Units with S-Thermatik NEO (optional)


Consumption of electric auxiliary energy	
at nominal heat output [e _{lmax}]	W 4.0
at minimum heat output [e _{lmin}]	W 4.0
in stand-by condition [e _{lSB}]	W 3.0
Supply voltage [E]	V 230
Frequency [f]	Hz 50
Maximum electrical power consumption [W _{max}]	W 5.0

Symbols

Read and follow instructions	
Only use recommended types of fuel ➔ “3. Types of fuel” (page 29).	

Adhere to the fire protection drawing.

➔ “10.5 Fire protection drawings” (page 79).

 For further information about the unit and versions with an optional scope of delivery, refer to the separate document “Technical drawing”.



Lean 2L-70h, Lean 2R-70h

General information		STD	NEO
Suitable for permanent combustion [CON]		no	no
Suitable for time-limited combustion [INT]		yes	yes
Nominal heat output [P _{nom}]	kW	7.9	7.9
Nominal room heating capacity [P _{SHnom}]	kW	7.9	7.9
Minimum delivery pressure at nominal heat output [p _{nom}]	Pa	12	12
Chimney designation according to the relevant chimney standard [T class]		T400 -G	T400 -G
Heat output range	kW	5.5 – 10.3	5.5 – 10.3
Efficiency [η _{Wnom}]	%	81	80
Annual use efficiency for room heating at nominal heat output [η _s]	%	71	70
Energy efficiency index [EEI]		107	106
Exhaust mass flow at nominal heat output [φ _{fgnom}]	g/s	7.2	7.6
Temperature on flue gas connection at nominal heat output [T _{snom}]	°C	300	308
Flue gas temperature according to NSHF	°C	–	–
Average CO ₂ content	%	9.3	9.3
Convection air opening, free cross-section for outgoing air	cm ²	740	740
Convection air opening, free cross-section for incoming air	cm ²	850	850
Combustion air requirement for room air dependent operation	m ³ /h	17.0	19.0
Minimum size of installation space (only for room air sealed units)	m ³	50	50
Emissions at nominal heat output [13 % O ₂]			
Dust [PM _{nom}]	mg/m ³	39	38
CO [CO _{nom}]	mg/m ³	829	978
NO _x [NO _{xnom}]	mg/m ³	119	117
OGC [OGC _{nom}]	mg/m ³	71	62
Max. fuelling volume, hardwood	kg/h	3.1	3.1
Max. fuelling volume, compressed wood	kg/h	2.5	2.6
Mass [m]	kg	260	261
Maximum load of a chimney that the unit can bear [m _{chim}]	kg	120	120
End of testing cycle	CO ₂ / Mass	Mass	Mass
Mass of base embers	%/g	< 100	< 100

Units with S-Thermatik NEO (optional)


Consumption of electric auxiliary energy			
at nominal heat output [e _{lmax}]	W		4.0
at minimum heat output [e _{lmin}]	W		4.0
in stand-by condition [e _{lSB}]	W		3.0
Supply voltage [E]	V		230
Frequency [f]	Hz		50
Maximum electrical power consumption [W _{max}]	W		5.0

Symbols

Read and follow instructions	
Only use recommended types of fuel ➔ “3. Types of fuel” (page 29).	

Adhere to the fire protection drawing.

➔ “10.5 Fire protection drawings” (page 79).

 For further information about the unit and versions with an optional scope of delivery, refer to the separate document “Technical drawing”.

Product information



Lean 3RL-70h

General information	STD	NEO
Suitable for permanent combustion [CON]	no	no
Suitable for time-limited combustion [INT]	yes	yes
Nominal heat output [P _{nom}]	kW 7.5	7.2
Nominal room heating capacity [P _{SHnom}]	kW 7.5	7.2
Minimum delivery pressure at nominal heat output [p _{nom}]	Pa 12	12
Chimney designation according to the relevant chimney standard [T class]	T400 -G	T400 -G
Heat output range	kW 5.3 – 9.8	5.0 – 9.4
Efficiency [η _{Wnom}]	% 81	81
Annual use efficiency for room heating at nominal heat output [η _s]	% 71	71
Energy efficiency index [EEI]	107	107
Exhaust mass flow at nominal heat output [φ _{fgnom}]	g/s 6.3	6.1
Temperature on flue gas connection at nominal heat output [T _{snom}]	°C 311	301
Flue gas temperature according to NSHF	°C –	–
Average CO ₂ content	% 9.9	9.8
Convection air opening, free cross-section for outgoing air	cm ² 540	540
Convection air opening, free cross-section for incoming air	cm ² 650	650
Combustion air requirement for room air dependent operation	m ³ /h 15.0	15.0
Minimum size of installation space (only for room air sealed units)	m ³ 40	–
Emissions at nominal heat output [13 % O ₂]		
Dust [PM _{nom}]	mg/m ³ 24	29
CO [CO _{nom}]	mg/m ³ 1216	1027
NO _x [NO _{xnom}]	mg/m ³ 104	117
OGC [OGC _{nom}]	mg/m ³ 81	69
Max. fuelling volume, hardwood	kg/h 2.9	2.8
Max. fuelling volume, compressed wood	kg/h 2.4	2.3
Mass [m]	kg 231	232
Maximum load of a chimney that the unit can bear [m _{chim}]	kg 120	120
End of testing cycle	CO ₂ / Mass	Mass
Mass of base embers	%/g < 100	< 100

Units with S-Thermatik NEO (optional)


Consumption of electric auxiliary energy		
at nominal heat output [e _{lmax}]	W	4.0
at minimum heat output [e _{lmin}]	W	4.0
in stand-by condition [e _{lSB}]	W	3.0
Supply voltage [E]	V	230
Frequency [f]	Hz	50
Maximum electrical power consumption [W _{max}]	W	5.0

Symbols

Read and follow instructions	
Only use recommended types of fuel ➔ “3. Types of fuel” (page 29).	

Adhere to the fire protection drawing.

➔ “10.5 Fire protection drawings” (page 79).

 For further information about the unit and versions with an optional scope of delivery, refer to the separate document “Technical drawing”.

2.10 Type plate

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

The type plate is attached to the unit and shown on the warranty card.

➔ Figure 2.8.1 / 1 (page 12).

📄 Warranty card

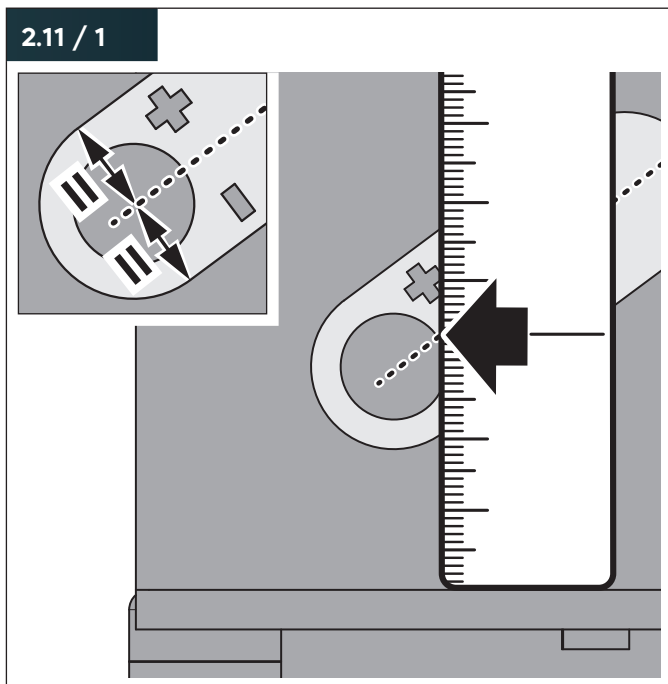
The type plate is required for the regular inspection of the appliance (e.g. in Germany by the chimney sweep).

2.11 Nominal heat output

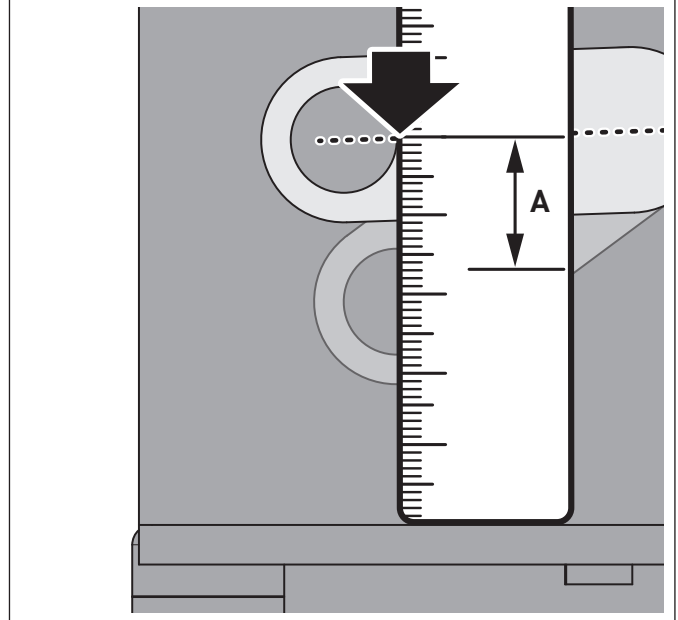
The nominal heat output of the unit can be checked in the defined position “NHO position” of the combustion air slider.

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.



2.11 / 2



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

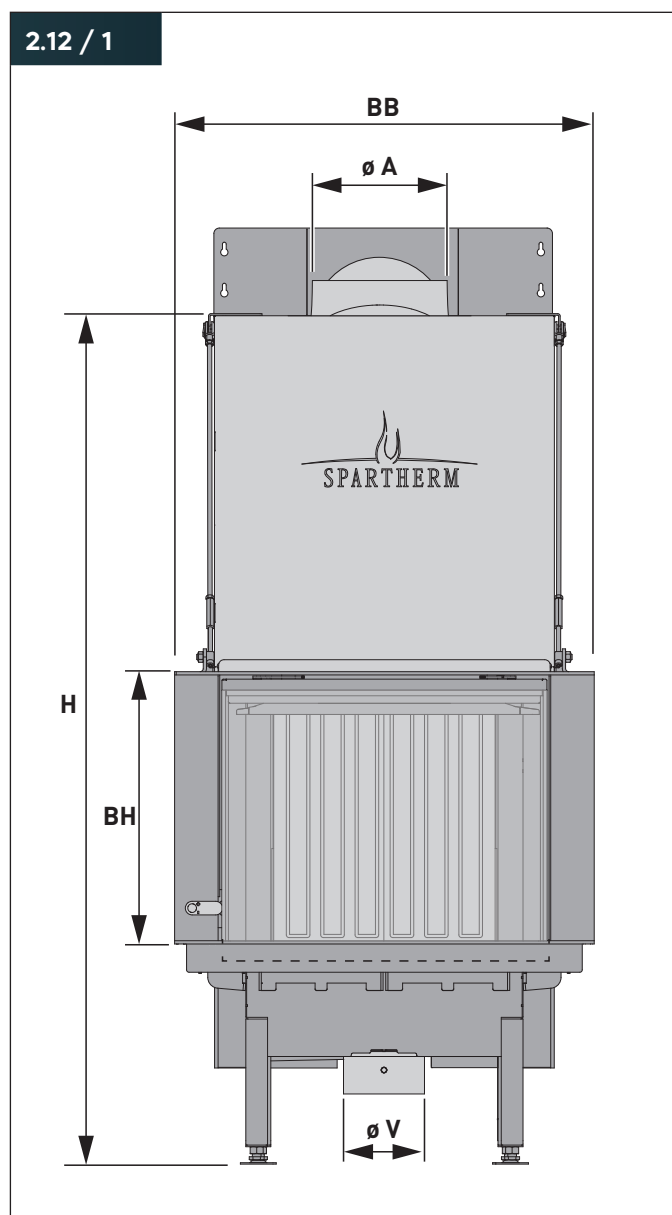
- Premium V-1V-87h – 21 mm
- Premium V-FD-87h – 16 mm
- Premium V-2L-55h – 17 mm
- Premium V-2R-55h – 17 mm
- Premium V-2L-68h – 16 mm
- Premium V-2R-68h – 16 mm
- Premium V-2L-80h – 26 mm
- Premium V-2R-80h – 26 mm
- Premium A-3RL-60h – 10 mm
- Premium A-3RL-80h – 19 mm
- Premium A-3RL-100h – 25 mm
- Premium A-U-50h – 26 mm
- Premium A-U-70h – 26 mm
- Premium A-U-90h – mm
- Premium A-1V-87h – 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 56).

Product information

2.12 Dimensions



- H** Total height
- BB** Screen width¹
- BH** Screen height
- T** Total depth
- øA** Diameter of flue gas connection
- øV** Diameter of combustion air connection

¹ The total width of the unit may be larger.

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
H	1561	1561	1561	1561	1636	1636
BB	888	888	642	642	772	772
BH	501	501	501	501	501	501
T	564	640	597	597	597	597
øA	200	200	180	180	250	250
øV	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-3RL-100h	Premium A-U-50h
H	1636	1636	1636	1636	1625	1735
BB	895	895	772	972	1172	675
BH	501	501	501	501	501	501
T	631	631	625	655	655	773
øA	250	250	200	200	250	200
øV	150	150	150	150	150	150

Dimensions (mm)	Premium A-U-70h	Premium A-U-90h	Premium A-1V-87h	Lean 2L-70h	Lean 2R-70h	Lean 3RL-70h
H	1390	1391	1647	1457	1457	1457
BB	675	675	888	768 ¹	768 ¹	834
BH	501	501	689	492	492	492
T	978	1196	564	480	480	468
øA	200	250	200	150	150	150
øV	150	150	150	100	100	100

¹ Total width of the unit: 873 mm.

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.

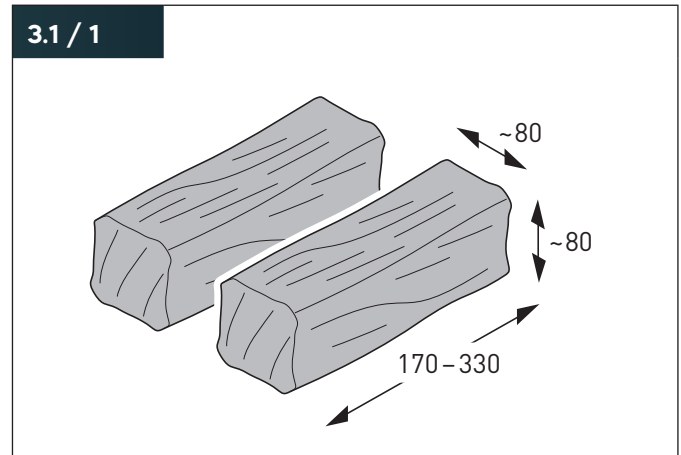
If the temperatures required for gas release and clean combustion are not reached, this will interfere with combustion. The unburned substances will negatively impact the environment and will adhere to the stove system as deposits (e.g. soot, tar). These deposits increase the effort required for cleaning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

💡 We recommend beech wood as the ideal fuel.

- § According to DIN EN 16510 a combustion period of 40 min in a time-limited fireplace requires a fuel volume of 1.5 – 5.3 kg of wood (depending on the model).
➔ “2.9 Technical data” (page 13).



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.

Types of fuel

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
- Flammable liquids

§ 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 ignition agents

The following ignition agents 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, poplar).
- 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.

4. Assembly

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 requirements:

- 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 local, national and European 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:

- § Fireplaces fired by solid fuel in residential buildings according to DIN EN 16510.
 - § Ecodesign directive (EU) 2015/1185.
 - § Chimney and flue gas connection according to DIN 18160.
 - § Chimney dimensions according to DIN EN 13384-1, DIN EN 13384-2.
 - § BImSchV Second directive for implementation of the German Federal Immission Control Act
 - § TROL Professional regulations of the tiled stove and air heater construction trade (ZVSHK).
 - § DIN 18896: Fireplaces fired by solid fuel. Technical specifications for installation and operation.
- ✓ 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

4.3.1 Installation room

- 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 factors.
- The installation surface must have a suitable load-bearing capacity, keeping the weight of the unit in mind.
 - ➔ "2.9 Technical data" (page 13).
 If the available structure does not meet this condition, take suitable measures to ensure compliance (e.g. installing a plate for load distribution and use of load distributors installed in the floor screed).
- 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 cm²) 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 device must monitor the permissible underpressure in the installation room and prevent gases from entering the room. The difference from the outside air must not exceed 15 Pa according to DIN EN 16510. A general technical approval must have been given by the responsible authorities.

Assembly

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.
- ▶ Ensure that the necessary safety distances are observed at all times.

⚠ WARNING!

Risk of fire due to glass surfaces!

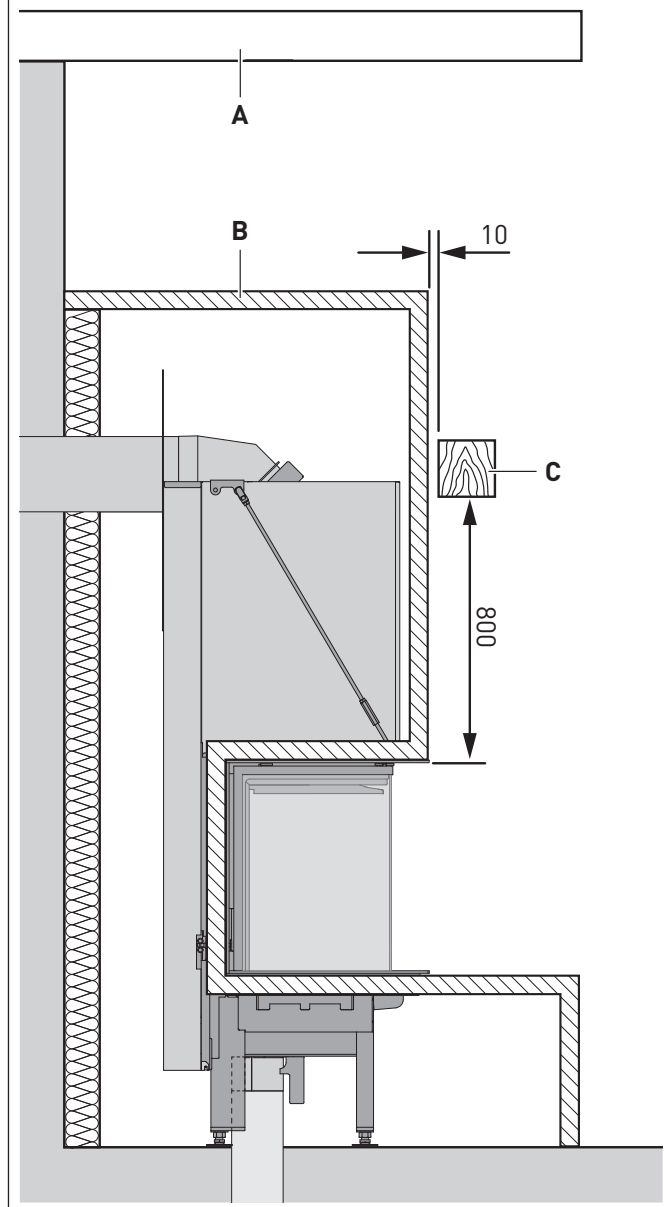
When operating the unit, heat radiation can become stronger due to glass surfaces (e.g. glasses, bottles, vases) and ignite flammable objects in the area.

- ▶ Ensure that there are no glass objects in the radiation area of the unit.
- ▶ Ensure that flammable objects and materials (e.g. furniture, textiles) are located at a sufficient distance from the unit.

Adhere to the fire protection drawings.

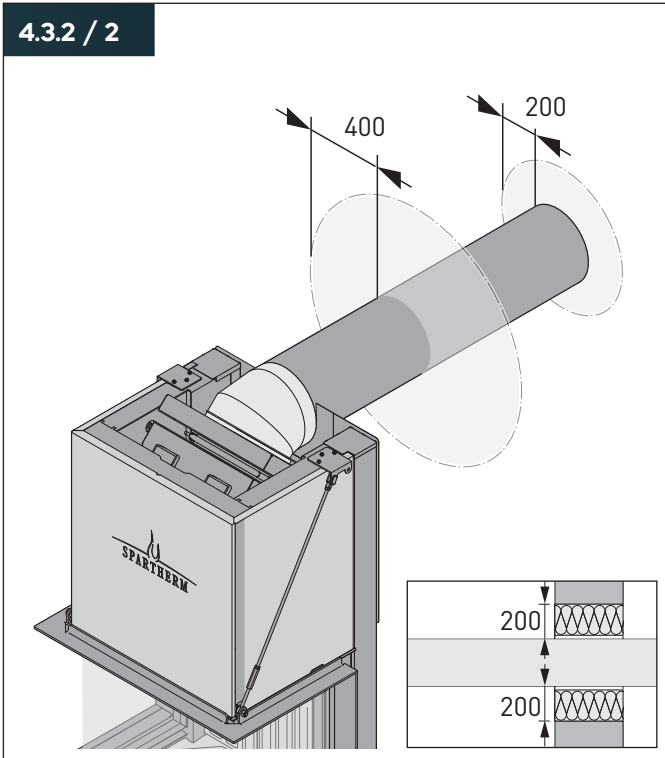
- ➔ “10.5 Fire protection drawings” (page 79).

4.3.2 / 1



- A Ceiling
- B Insulation
- C Combustible building material

4.3.2 / 2



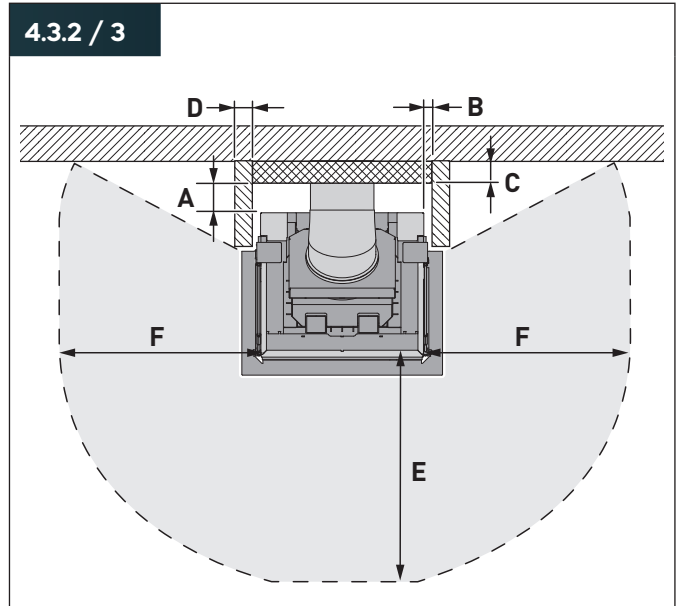
- Area around the connection opening to the chimney: 200 mm.
- Distance of the connection pipe from walls or ceilings: 400 mm.

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.

💡 Complete systems for routing pipes through walls and ceilings with building authority usability certificates are commercially available.

4.3.2 / 3



- A** Distance between heating chamber and rear
- B** Distance between heating chamber and sides
- C** Insulation on rear ¹
- D** Insulation on side ¹
- E** Radiation area, front viewing window
- F** Radiation area, side viewing window

¹ 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
A	120	80	100	100	80	80
B	120	80	100	100	80	80
C ¹	140	-	100	100	60	60
D ¹	100	100	100	100	60	60
E	2300	1790	1200	1200	1400	1400
F	-	-	1000	1000	1200	1200

¹ For components with a U value (heat transmission coefficient) > 0.4 W/m²K.
If the U value is < 0.4W/m²K, observe country-specific requirements.

Assembly

Dimensions (mm)	Premium V-2L-80h	Premium V-2R-80h	Premium A-3RL-60h	Premium A-3RL-80h	Premium A-3RL-100h	Premium A-U-50h
A	80	80	80	80	100	60
B	80	80	-	-	-	-
C ¹	60	60	60	80	80	60
D ¹	60	60	-	-	-	-
E	2100	2100	1180	1440	1200	850
F	1300	1300	880	900	600	1000

Dimensions (mm)	Premium A-U-70h	Premium A-U-90h	Premium A-1V-87h	Lean 2L-70h	Lean 2R-70h	Lean 3LR-70h
A	80	100	100	20	20	20
B	-	-	140	20	20	-
C ¹	60	30	100	60	60	60
D ¹	-	-	100	60	60	-
E	850	1200	1700	1100	1100	1000
F	1100	1200	-	800	800	800

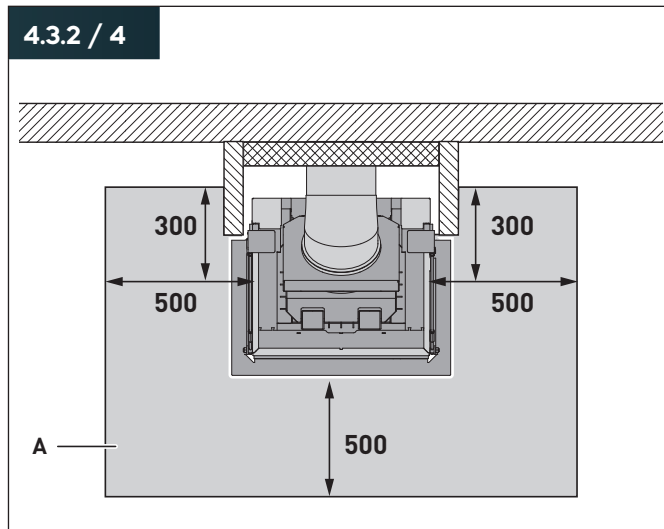
¹ For components with a U value (heat transmission coefficient) > 0.4 W/m²K.
If the U value is < 0.4W/m²K, observe country-specific requirements.

Adhere to the fire protection drawings.
➔ “10.5 Fire protection drawings” (page 79).

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 non-flammable material. The floor covering made of non-flammable material protects the floor against flying sparks, falling embers and heat radiation out of the fireplace.



Spark arrestor plate

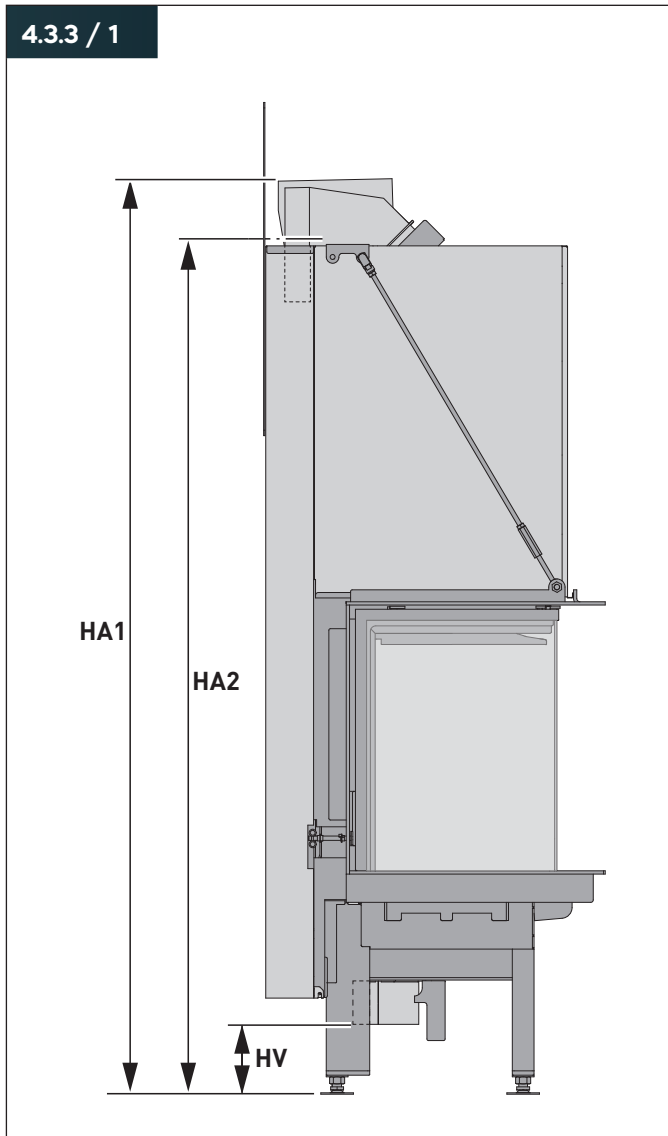
In the context of fire protection, a larger area may require protection in addition to the spark arrestor plate (A).

- Distance on the floor in front of the front glass [d_F]
- Distance on the floor in front of the side glasses [d_{FS}]

Adhere to the fire protection drawings.

➔ “10.5 Fire protection drawings” (page 79).

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:
 ➔ "2.12 Dimensions" (page 28).

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	1624	1570	1621	1621	1625	1625
HA2	1498	-	1498	1498	1498	1498
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-3RL-100h	Premium A-U-50h
HA1	1625	1625	1625	1624	1624	1471
HA2	1498	1498	1498	1498	1498	1344
HV	129	129	129	129	129	97

Dimensions (mm)	Premium A-U-70h	Premium A-U-90h	Premium A-1V-87h	Lean 2L-70h	Lean 2R-70h	Lean 3RL-70h
HA1	1471	1471	1647	1339	1339	1339
HA2	1344	1369	1469	1195	1195	1195
HV	120	120	92	112	112	112

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

4.3.4 Heat output

Sufficient heat dissipation from the chimney breast must be ensured. Heat dissipation can be achieved by means of the following measures:

- Convection air (hot air systems, convection air vents).
- Heat radiation from the cladding (basic stove, hypocaust system, closed stove cladding).
- Convection air and heat radiation from the cladding (handcrafted ceramic heating gas flues).

The planning and implementation of individual measures for heat dissipation must be carried out by a specialist company. The following points must be observed:

Warm air systems

- The values specified in the 'Technical Data' section must be observed for the cross-sections of the incoming and outgoing convection air openings. Different cross-sections are possible if verified by calculation.
 - ➔ "2.9 Technical data" (page 13).
- When using the convection air jacket ("WLM", optional), all four connection pieces must be used. The air incoming and outgoing convection air openings must not be closable.
- The air ducts must be made of non-combustible, dimensionally stable materials.
- There must be no combustible / flammable building materials or objects in the area around the outgoing convection air openings (e.g. wooden ceilings, built-in furniture):
 - Sideways 300 mm.
 - 📄 Please note the "Technical Drawing" for the area above.

Convection air vents

- Convection air openings provided by the customer must meet the requirements described in the separate document 'Technical Drawing'.
 - 📄 "Technical Drawing".

Closed stove cladding

- The chimney breast must be designed and constructed in accordance with the relevant local standards and regulations (in Germany, for example, in accordance with TROL).
 - ➔ "10.3 Standards and regulations" (page 78).
- The size of the heat-emitting surface must be determined based on the heat output and heat demand.
- The construction components must meet whichever regulations are most stringent (in Germany, for example, in accordance with TROL).
- The specialist company constructing the chimney breast must inform the operator in writing of the specific design and special features in use.
 - ➔ "1.2 Authorised target groups" (page 4).

- The amount of wood per burn must correspond to the heat output of the surface or the storage capacity of the storage medium. In most cases, this means a maximum of 2 – 3 burns per day.
- For lift-up firebox doors, the temperature at the deflection or guide rollers and at the bearings must not exceed 270 °C. If the temperature is higher, areas of the appliance with moving mechanical parts must be insulated separately.
- When installing accessories, the relevant installation instructions must be observed, in particular the permissible operating or ambient temperatures and accessibility requirements.
 - 📄 Instructions for accessories.

- 💡 We recommend protecting areas made of combustible / flammable building materials with active rear ventilation in addition to the required thermal insulation.
- 💡 We recommend using sufficient storage material (e.g. Magnetherm) to make optimum use of the heat and avoid the risk of overheating during temperature peaks.

Handcrafted ceramic heating gas flues

- The dimensions and structure must be designed and constructed in accordance with the relevant local standards and regulations (in Germany, for example, in accordance with TROL).
- The exhaust gas temperature must be sufficient to operate the chimney system after exiting the ceramic flue.
- The chimney breast must have a sufficiently large cross-section for the stove.
- The specialist company constructing the chimney breast must inform the operator in writing about how the stove system works and how to use it correctly.
 - ➔ "1.2 Authorised target groups" (page 4).

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 4 m.
- 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 meter).
- The exhaust gas system (pipe systems and chimney) must, at minimum, meet the requirements of temperature class “T400 protected against soot fires”.
- The exhaust gas system (pipe systems and chimney) must be adapted to the exhaust gas temperature of the unit.
 - ➔ “2.9 Technical data” (page 13).
- 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 the wall.
- 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.
 - § In the European Union, EN 15287 and EN 13384 (Flue gas systems – Thermal and flow calculation methods) must be complied with.
- 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:

- ➔ “2.9 Technical data” (page 13).

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.
- ⚠ If lines are particularly long or there are several direction changes, we recommend a line with a diameter of $D = 200$ mm that is reduced to $D = 150$ mm upstream of the unit. The calculation is made according to TROL or DIN EN 13384-1.
- The combustion air line must be permanently connected with the combustion air connection of the unit and sealed. Ensure that it is leak-tight.
- ⚠ We recommend using pipes that are approved for a room air sealed system and have the necessary certificates.
- Protect flexible aluminium pipes from mechanical stress.
- Do not install the unit in rooms in which ventilation systems create a negative pressure of more than 15 Pa compared to the outside air.
- 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.
 - ➔ "2.9 Technical data" (page 13).

4.4 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 7).
- ▶ 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 78).

- ▶ 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.

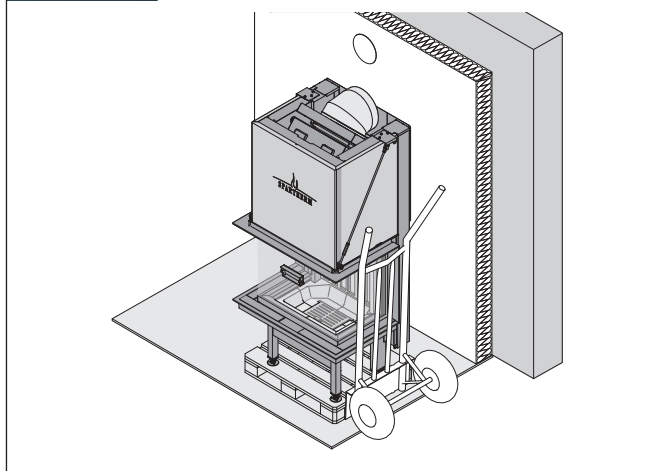
⚠ ATTENTION!

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.

4.5 / 1



- ▶ Transport the unit to the installation site.

4.6 Unpacking the unit

- ▶ 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.
 - ➔ “2.8 Scope of delivery” (page 12).

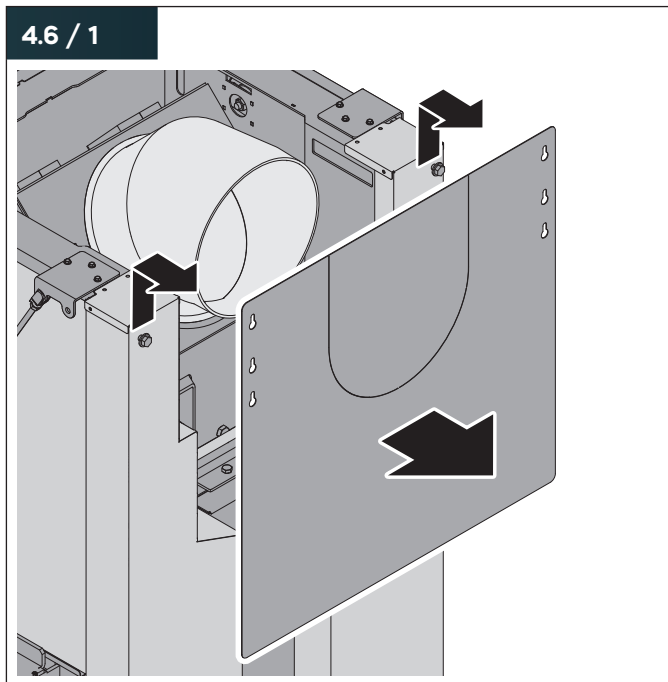
In the event of damage or incompleteness:

- ▶ Contact the manufacturer.

If the packaging is no longer required:

- ▶ Properly dispose of the packaging material.
 - ➔ “9.1 Disposing of the packaging” (page 77).

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.



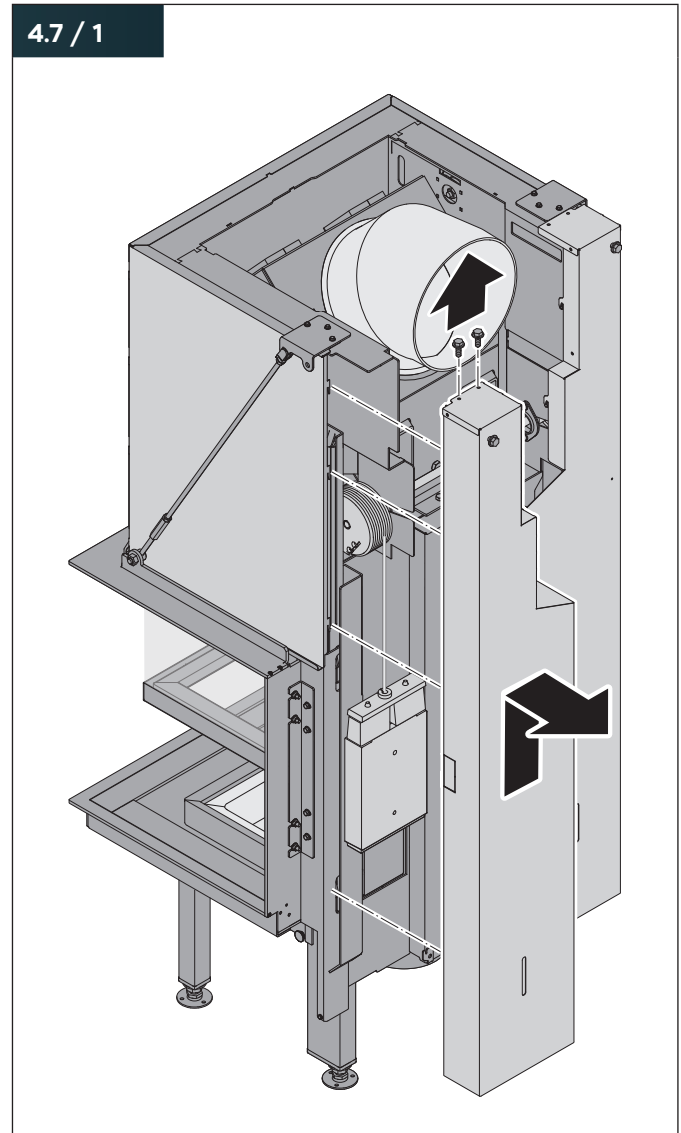
- ▶ Detach the radiation protection plate from the unit.

4.7 Adjusting the counterweight (optional)

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

- ➔ “2.4 Protective devices” (page 7).

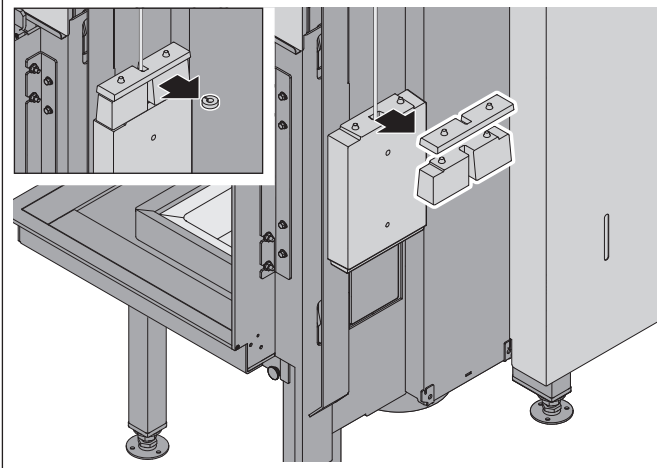
Conversion to a self-closing firebox door is performed by removing weighted pieces. The counterweight is set correctly, when the firebox door closes slowly and with a constant speed.



- ▶ Remove the weight shaft lining.

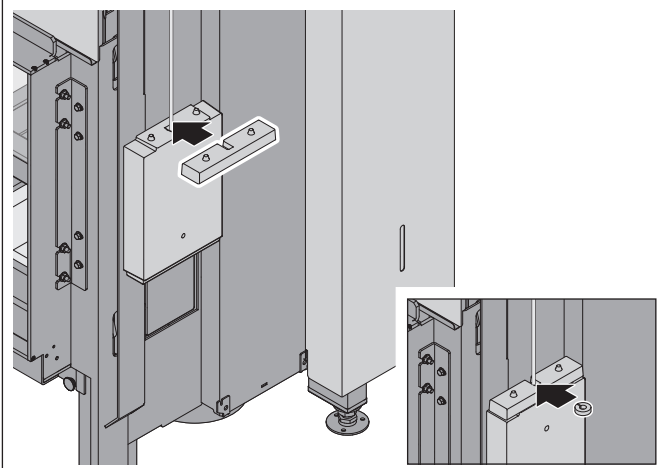
Assembly

4.7 / 2



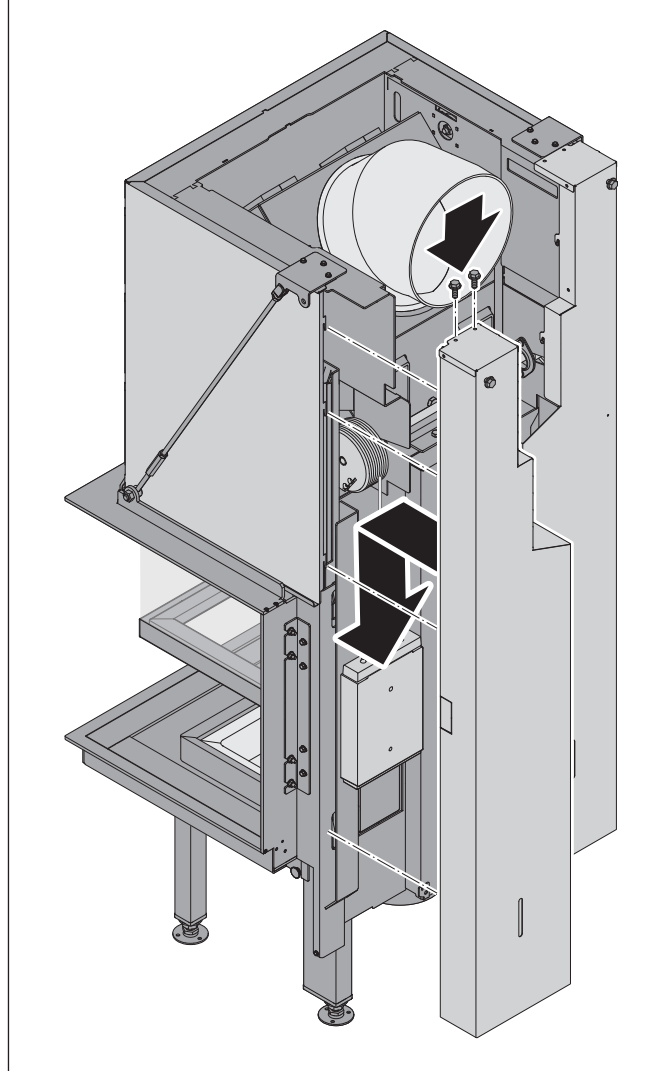
- ▶ Undo the safety ring.
- ▶ Remove a suitable number of weighted pieces.

4.7 / 3



- ▶ 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.

4.7 / 4



- ▶ Fasten the weight shaft lining.

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

4.8 Installing the storage stones (optional)

Additional storage stones (available for the models Lean 3RL-70h, Lean 2R-70h, Lean 2R-70h) increase the heat storage capacity of the unit. Their high density and high weight allows them to store heat for several hours and emit it into the room where the unit is installed.

⚠ WARNING!

Risk of injury caused by the unit falling over!

High models will become top-heavy if the storage stones are used and may tip over. The high weight may cause severe injuries.

- ▶ Secure the unit against unintentional movement.

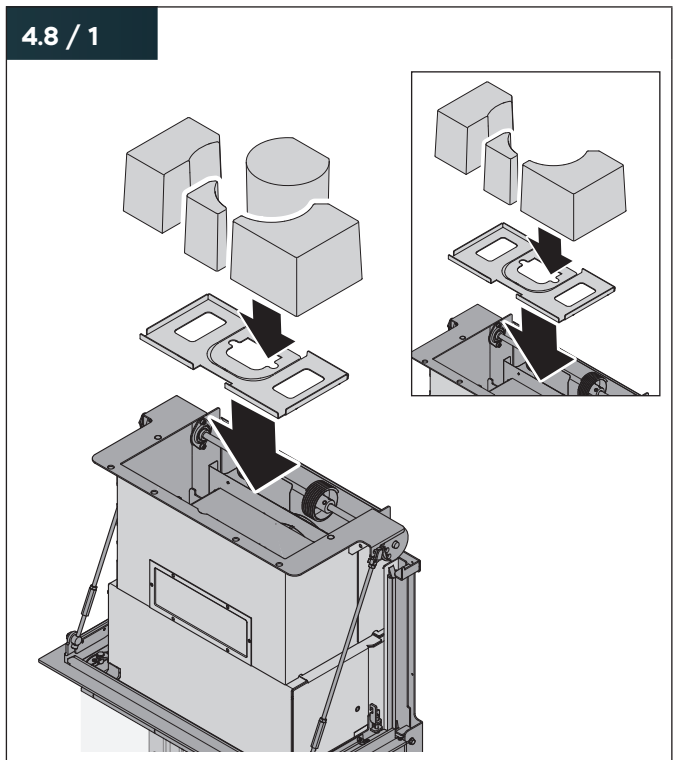
⚠ CAUTION!

Risk of injury caused by sharp edges!

Storage stones may be heavy and have sharp edges. If the storage stones shift during movement, this may lead to hand injuries.

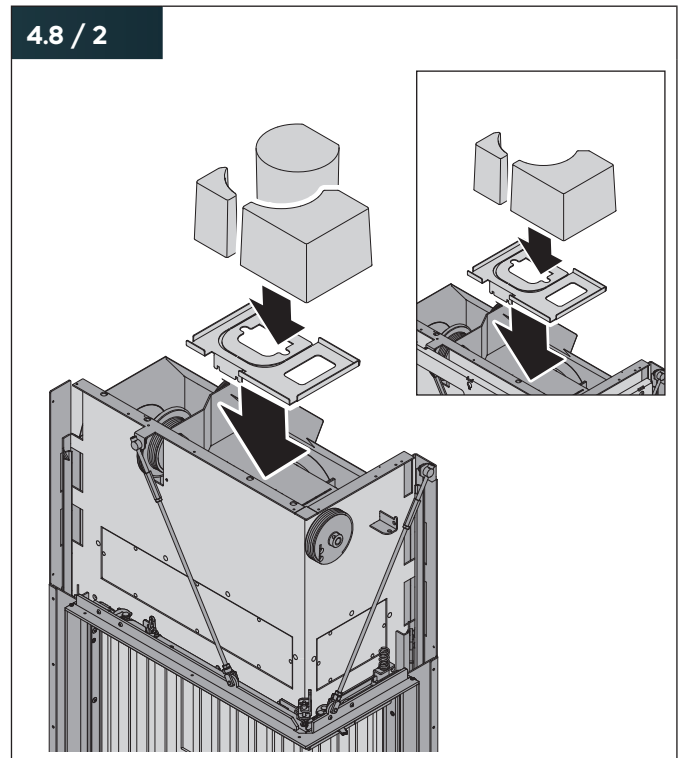
- ▶ Wear protective gloves when installing the storage stones.

Lean 3RL-70h:



- ▶ Insert the holding plate.
- ▶ Insert the storage stones:
 - For flue gas routing to the rear, all storage stones.
 - For upward flue gas routing, only the front stones and the storage stones on the side.

Lean 2R-70h, Lean 2R-70h:

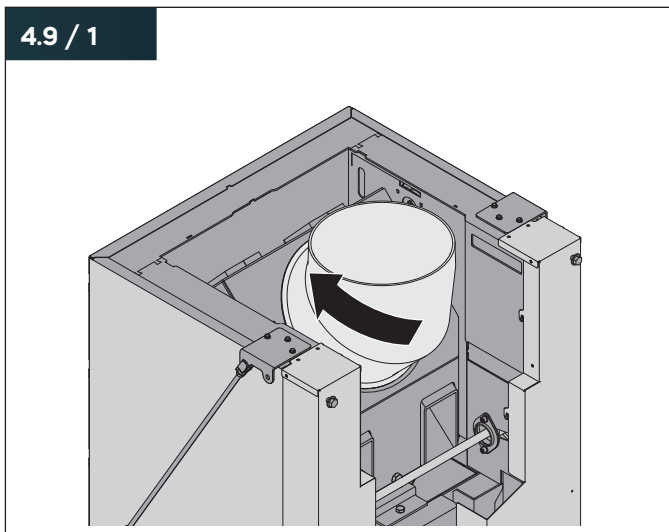


- ▶ Insert the holding plate.
- ▶ Insert the storage stones:
 - For flue gas routing to the rear, all storage stones.
 - For upward flue gas routing, only the front stones and the storage stones on the side.

Assembly

4.9 Connecting the flue gas routing

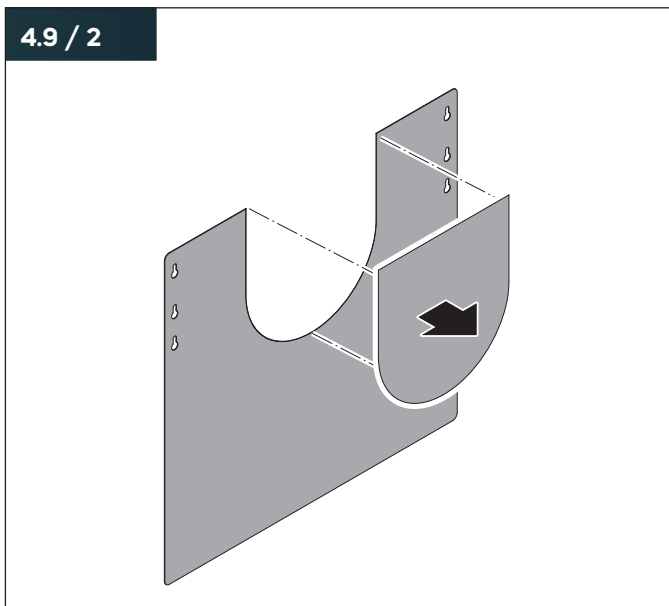
4.9 / 1



- ▶ 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.

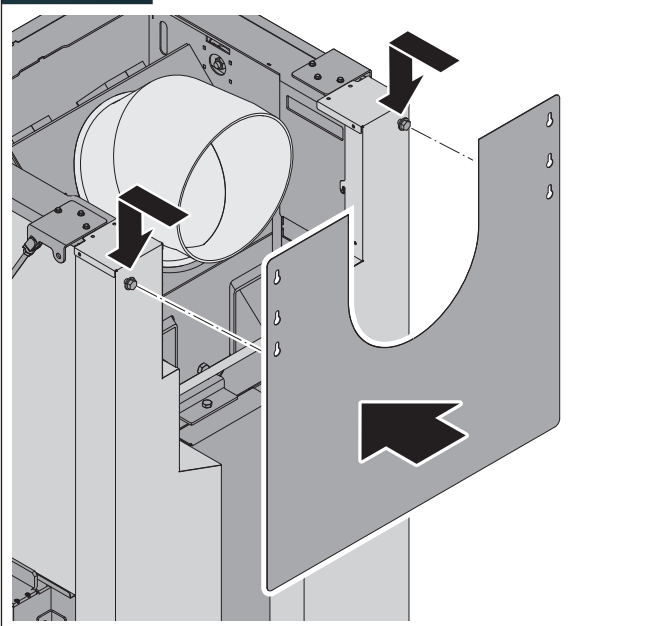
To guide the flue gas pipe rearward to the wall by the shortest path, it is possible to adapt the radiation protection plate. For other flue gas paths (e.g. flue gas pipe to the ceiling), the radiation protection plate remains unchanged.

4.9 / 2



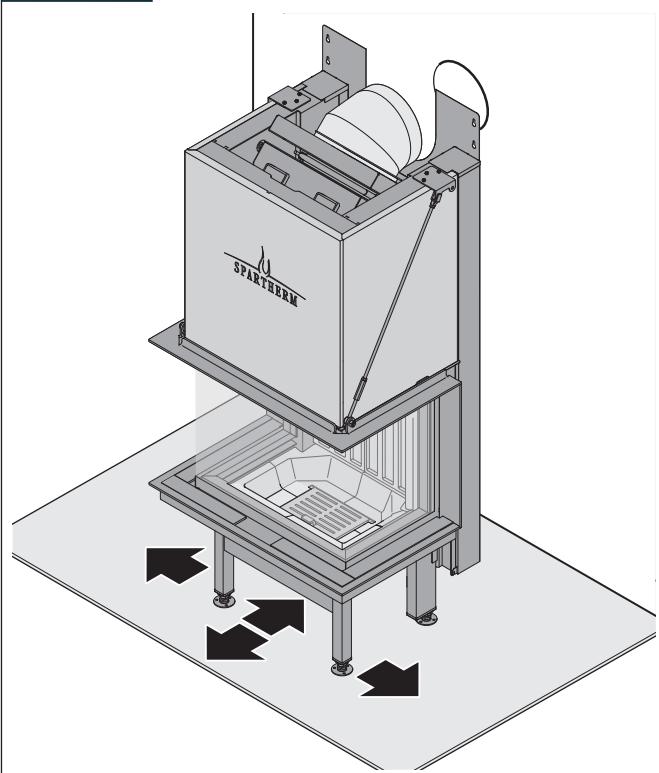
- ▶ If necessary, remove the pre-punched section from the radiation protection plate.

4.9 / 3



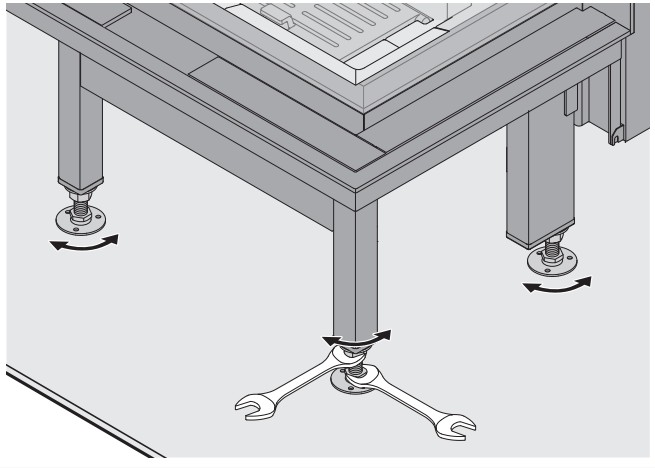
- ▶ Fasten the radiation protection plate in the assembly position on the unit.

4.9 / 4



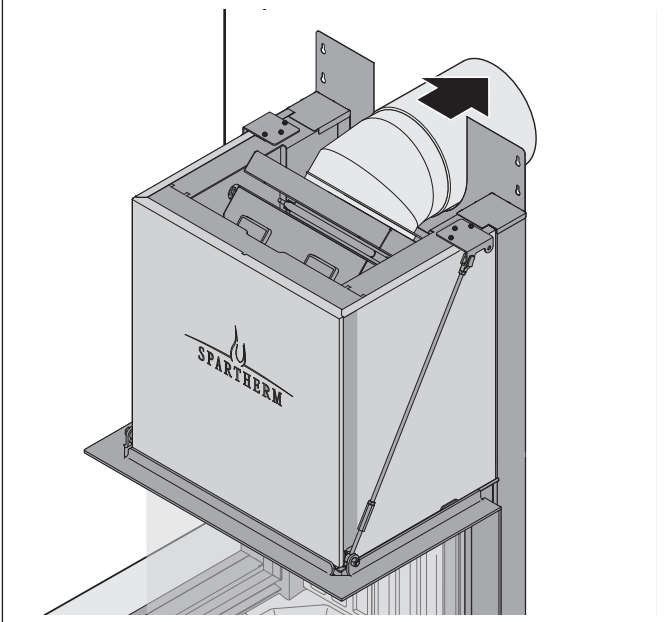
- ▶ Position the unit, taking into account the requirements for the installation site.
 - “4.3 Requirements for the installation site” (page 31).

4.9 / 5



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

4.9 / 6



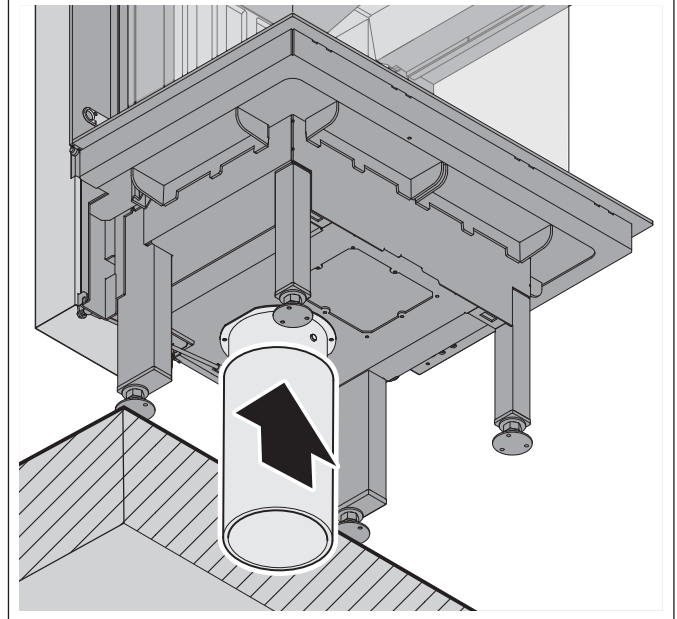
- ▶ Position the flue gas pipe on the flue gas connection on the unit.
- ▶ Route the flue gas pipe to the chimney horizontally with an incline along the shortest path.
- ▶ Connect the flue gas pipe with the chimney.
- ▶ Ensure that the flue gas pipe does not protrude into the chimney.
- ▶ Ensure that the pipe connections are sealed.

ⓘ We recommend using a double wall lining for the connection to the chimney.

4.10 Connecting the combustion air line

For room-sealed operation, the appliance must be connected to the combustion air pipe. For room-vented operation, the appliance can be connected to the combustion air pipe.

4.10 / 1



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

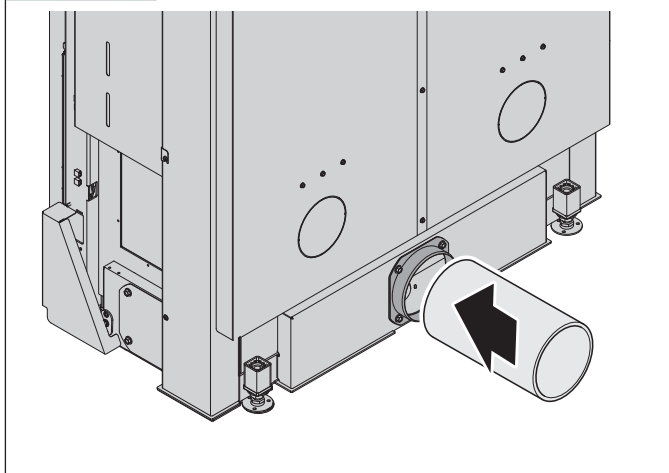
Assembly

Premium A-1V-87h only:

Depending on the situation at the installation site, the exhaust gasses are routed from the rear or side, via the flue spigot.

If the flue pipe is routed from the rear:

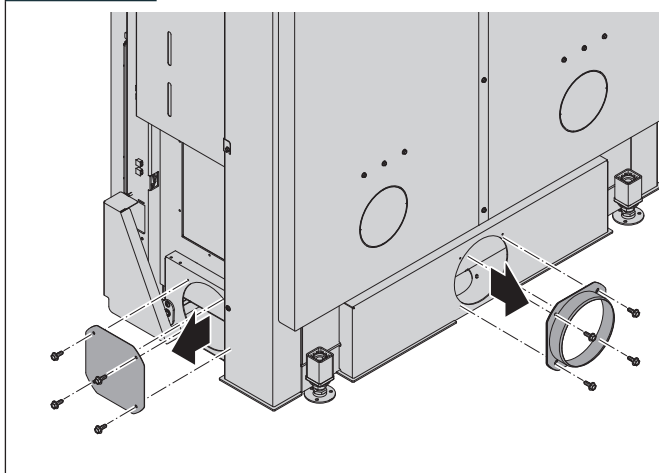
4.10 / 2



- ▶ Connect the flue pipe to the flue spigot on the appliance.

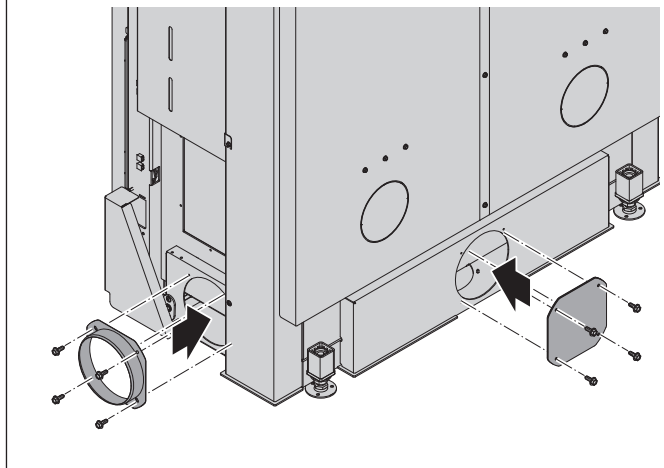
If the flue pipe is routed from the side:

4.10 / 3



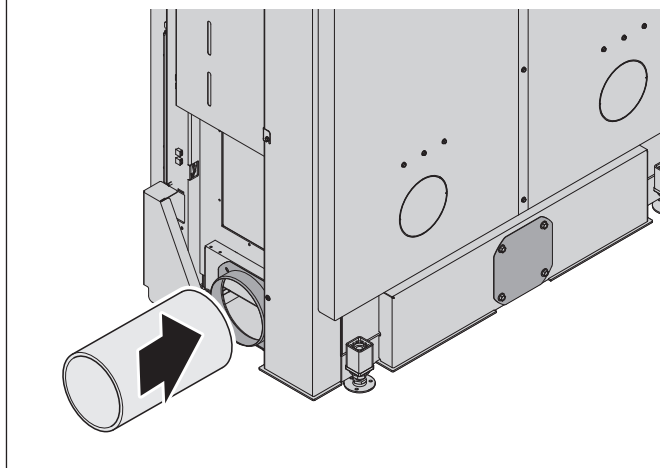
- ▶ Loosen the flue spigot.
- ▶ Loosen the blanking plate on the side of the appliance.

4.10 / 4



- ▶ Screw the flue spigot to the side of the appliance.
- ▶ Screw the blanking plate to the rear of the appliance.

4.10 / 5



- ▶ Connect the flue pipe to the flue spigot on the appliance.

4.11 Installing the deflector plate and baffle plate

If a catalytic converter (optional) is used:

- ▶ Now insert the catalytic converter elements.
- 📄 Catalytic converter instructions

The deflector plate and baffle plate are used to direct exhaust gases above the combustion chamber. Depending on the model, the baffle plate is included in the scope of delivery and must be installed in the appliance. For the Premium A-3RL-100h model and appliances in the Lean model series, the deflector plate must also be installed.

⚠ ATTENTION!

Risk of material damage caused by improper handling!

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

- ▶ Hold the deflector plate and baffle plate tightly.
- ▶ When depositing the deflector plate and baffle plate, ensure that they cannot slide out of place.

- ▶ Check whether the deflector plate needs to be installed.
 - ➔ “2.8.2 Baffle plate and deflector plate” (page 12).

If the deflector plate needs to be installed:

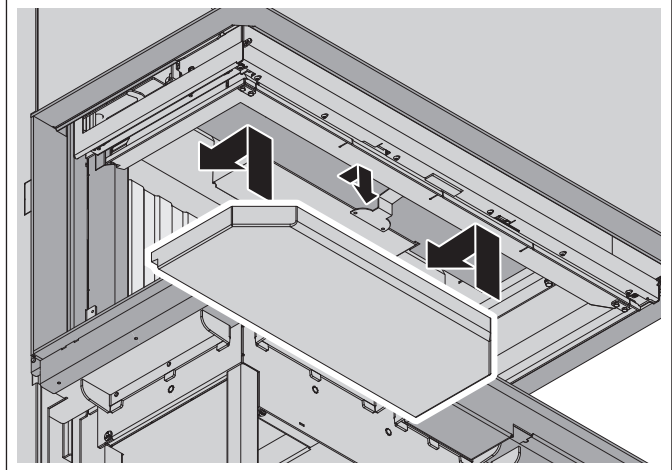
- ▶ Familiarise yourself with the design of the deflector plate on your model.
 - ➔ “7.3.4 Firebox lining” (page 64).

- ▶ Check whether the baffle plate needs to be installed.
 - ➔ “2.8.2 Baffle plate and deflector plate” (page 12).

If the baffle plate needs to be installed:

- ▶ Familiarise yourself with the design of the baffle plate for your model.
 - ➔ “7.3.4 Firebox lining” (page 64).

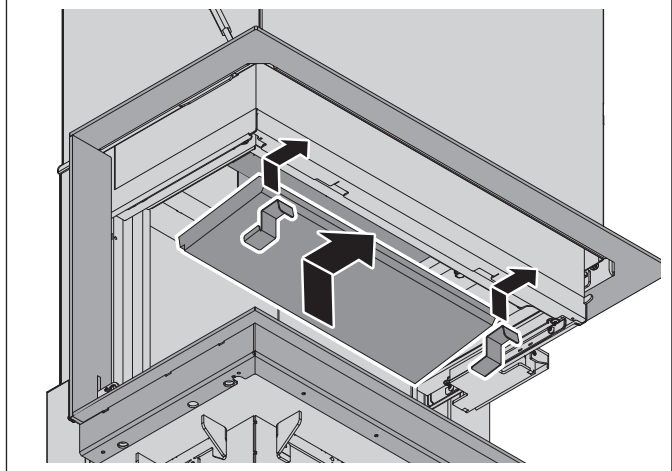
4.11 / 2



- ▶ Move the baffle plate into the combustion chamber vertically.
- ▶ Tilt the baffle plate above the firebox lining.
- ▶ Place the baffle plate on the rear firebox lining and the bracket.

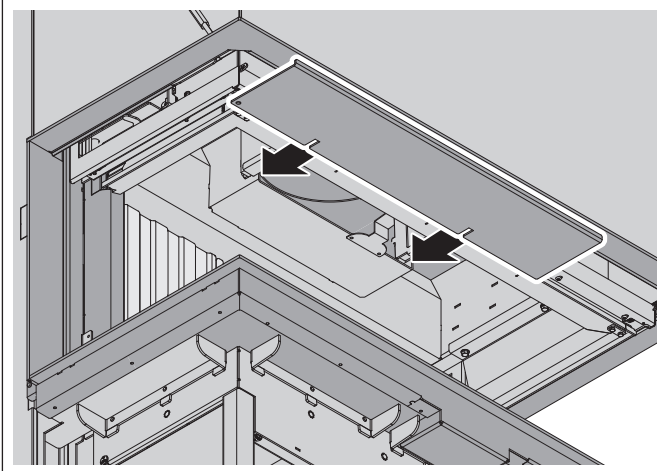
Lean 2L-70h, Lean 2R-70h, Lean 3RL-70h only:

4.11 / 3



- ▶ Place the baffle plate on top of the rear firebox lining and do not let go of it.
- ▶ Hook the brackets into place.
- ▶ Rest the baffle plate on the bracket.

4.11 / 1



- ▶ Move the deflector plate into the combustion chamber vertically.
- ▶ Place the deflector plate into its bracket, tilting it slightly forwards.

Assembly

4.12 Installing the unit on site

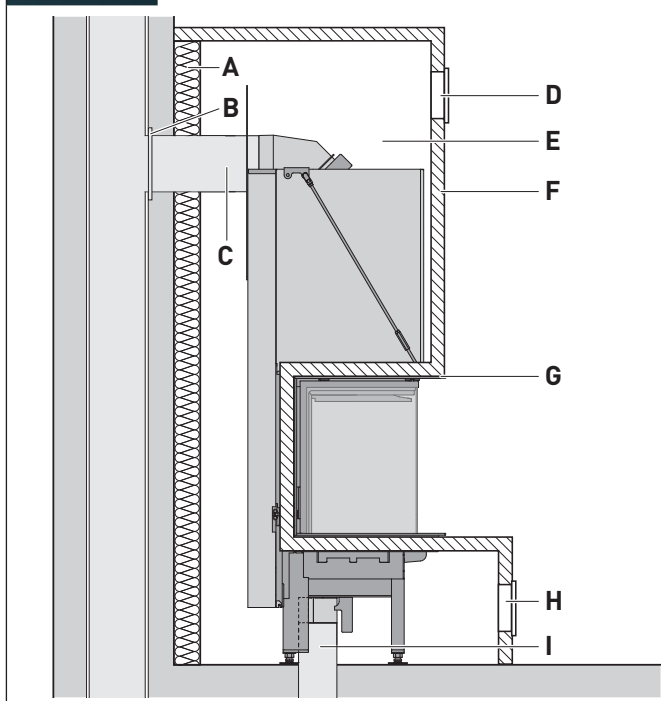
The brickwork for the convection chamber and the lining of the unit is installed on site. To ensure problem-free operation, absolutely adhere to the requirements listed in this chapter.

- Ensure that all ventilation grilles (incoming and outgoing) are installed in such a way that they cannot be accidentally blocked or closed.

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

For non-combustible / non flammable building materials

4.12 / 1

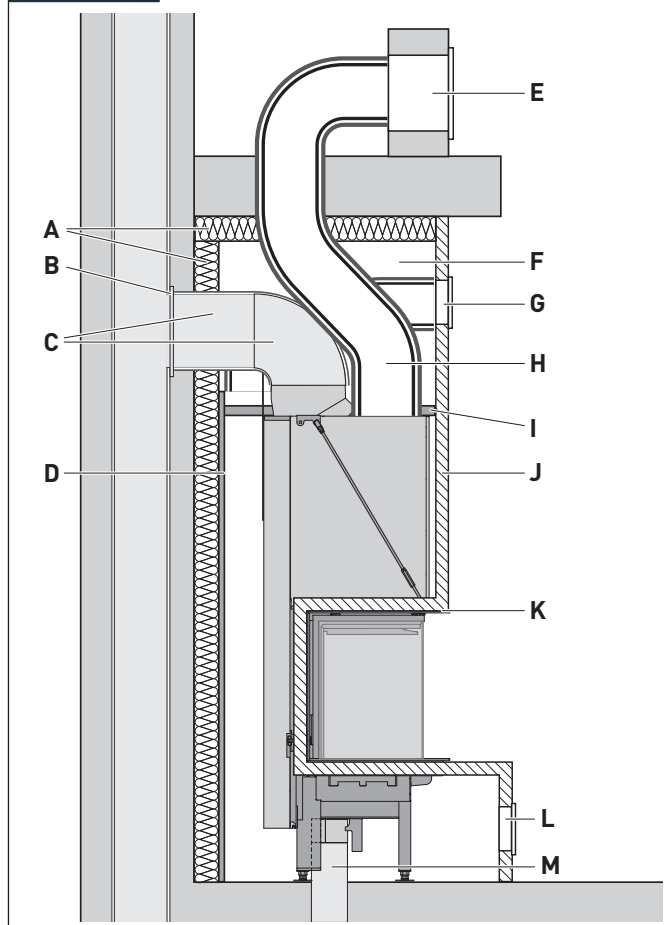


- A** Insulation of the convection chamber¹
- B** Wall collar
- C** Flue gas pipe (connection piece)
- D** Air supply grating (hot air outlet)²
- E** Convection chamber
- F** Fireplace lining made from non-flammable construction material
- G** Support frame with insulation strips
- H** Circulating air grating (cold air supply)
- I** Combustion air line (optional)

¹ For information on insulation thicknesses, please refer to the separate document “Technical Drawing”.

² Minimum distance of 500 mm between the upper edge and the ceiling; please refer to the separate document “Technical Drawing”.

4.12 / 2



- A** Insulation of the convection chamber¹
- B** Wall collar
- C** Insulated flue gas pipe (connection piece)
- D** Convection air housing (optional)²
- E** Hot air outlet
- F** Convection chamber
- G** Convection air grille (warm air outlet)³
- H** Hot air line⁴
- I** Insulation of the convection air housing⁵
- J** Fireplace lining made from non-flammable construction material
- K** Support frame with insulation strips
- L** Circulating air grating (cold air supply)
- M** Combustion air line (optional)

¹ For information on insulation thicknesses, please refer to the separate document “Technical Drawing”.

² If a convection air housing is used, all connections must be connected to hot air lines.

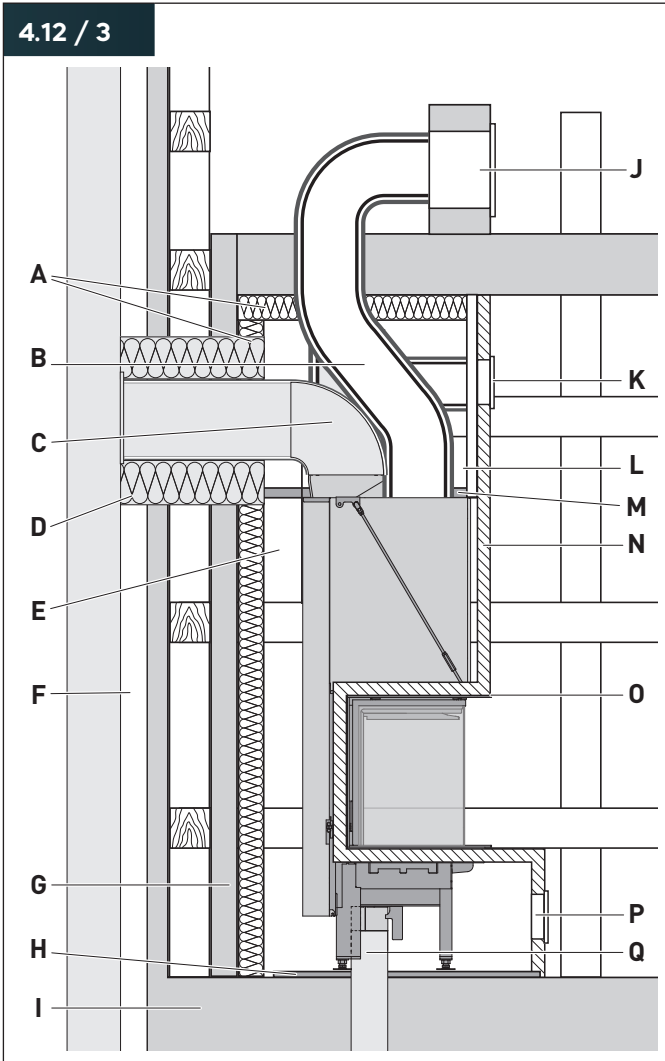
³ Minimum distance of 500 mm between the upper edge and the ceiling; please refer to the separate document “Technical Drawing”.

⁴ Insulation required if temperatures above 85 °C are possible (depending on the specific installation situation).

⁵ Insulation with shape-retaining mineral wool, min. 30 mm thick.

For combustible / flammable building materials

4.12 / 3



- A** Insulation of the convection chamber¹
- B** Hot air line²
- C** Insulated flue gas pipe (connection piece)²
- D** Pipe routing through walls and ceilings (with building authority usability certificate)
- E** Convection air housing made of sheet steel (optional)
- F** Rear ventilation (50 mm)
- G** Brickwork⁴
- H** Floor protection layer⁵
- I** Flammable construction material (wooden floor)
- J** Hot air outlet
- K** Air supply grating (hot air outlet)⁶
- L** Convection chamber
- M** Insulation of the convection air housing⁷
- N** Fireplace lining made from non-flammable construction material
- O** Support frame with insulation strips
- P** Circulating air grating (cold air supply)
- Q** Combustion air line (optional)

- ¹ For information on insulation thicknesses, please refer to the separate document "Technical Drawing".
- ² Insulation required if temperatures above 85 °C are possible (depending on the specific installation situation).
- ³ If a convection air housing is used, all connections must be connected to hot air lines.
- ⁴ 100 mm thick, if necessary replacement insulating material (e.g. calcium silicate).
- ⁵ Within the convection chamber made of non-flammable material, provided no insulation is required.
- ⁶ Minimum distance of 500 mm between the upper edge and the ceiling; please refer to the separate document "Technical Drawing".
- ⁷ Insulation with shape-retaining mineral wool, min. 30 mm thick.

Assembly

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

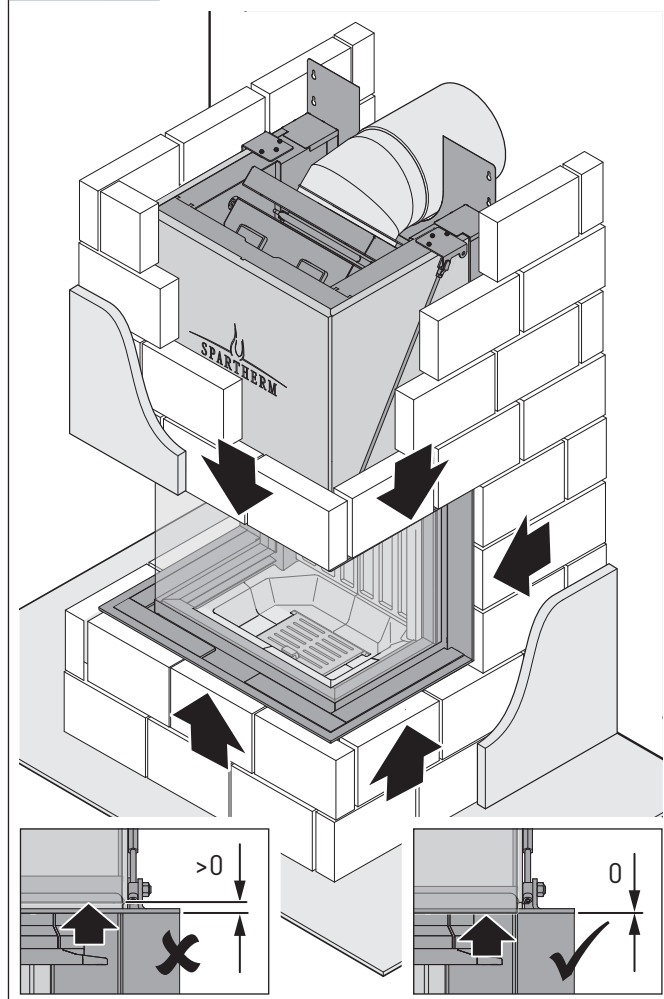
- Premium V-1V-87h – 300 kg
- Premium V-FD-87h – 300 kg
- Premium V-2L-55h – 100 kg
- Premium V-2R-55h – 100 kg
- Premium V-2L-68h – 100 kg
- Premium V-2R-68h – 100 kg
- Premium V-2L-80h – 100 kg
- Premium V-2R-80h – 100 kg
- Premium A-3RL-60h – 200 kg
- Premium A-3RL-80h – 200 kg
- Premium A-3RL-100h – 200 kg
- Premium A-U-50h – 200 kg
- Premium A-U-70h – 200 kg
- Premium A-U-90h – 200 kg
- Premium A-1V-87h – 300 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).

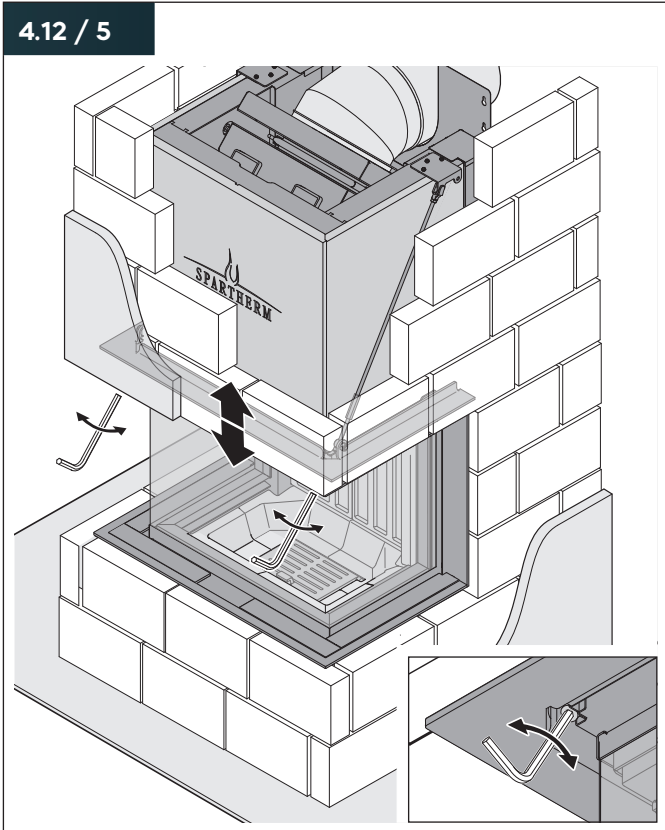
4.12 / 4



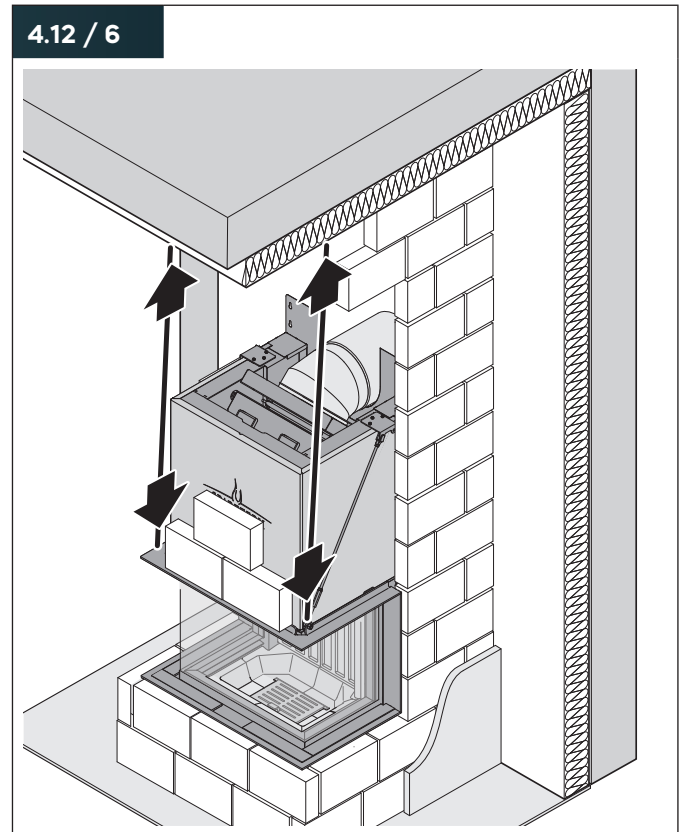
- When creating the convection chamber, ensure that the support frame and the screen are not positioned lower than the door hood of the unit.

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.

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).



- ▶ 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.



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

4.13 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 7).
- ▶ Ensure that the necessary safety distances are observed.
 - ➔ “4.3.2 Safety distances” (page 32).

For room-air-independent operation:

- ▶ Ensure that the combustion air supply and flue are built using appropriate and approved materials.

For room air-dependent operation:

- ▶ Ensure that sufficient fresh air is supplied to the installation room.

4.14 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 system 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.
 - ➔ “4.13 Checking the installation” (page 50).
- The unit is dirt-free, all cleaning agent has been removed.
 - ➔ “6. Cleaning” (page 59).

Preparation:

- ▶ Ensure sufficient fresh air supply.
- ▶ If installed, open the locking devices in the combustion air pipe and 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 process.
- ▶ Heat up the unit.
 - ➔ “5.2.2 Heating up the unit” (page 54).
- ▶ Increase the quantity of wood to the nominal heat output in 3 – 5 burning processes.
 - ➔ “2.9 Technical data” (page 13).

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 period.

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

- ▶ Measure the delivery pressure of the chimney.

4.15 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, particularly not in the radiation area, 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 30).
- The maximum permissible fuel volume is not exceeded.
 - ➔ "1.4 Chimney fire" (page 5).
 - ➔ "3.5 Size of the fuel pieces" (page 30).
- Allow the fire in the stove system to burn down and the stove system to cool down before working with explosive or 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).


The connection line between the chimney and unit must also be cleaned regularly (in Germany this is not carried out by the district chimney sweep).
- Shut-off devices in the combustion air path (e.g. ventilation grilles) must be open during operation.

Keep the necessary safety distances at all times.

- ➔ "4.3.2 Safety distances" (page 32).

 Only use recommended types of fuel.

- ➔ "3. Types of fuel" (page 29).

 Read and observe the operating manual.

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 operation.
- ▶ 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 heat-generating 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).
- ▶ Ensure that exhaust gases can dissipate without obstructions through the chimney and the connection lines.
- ▶ Ensure that the chimney and connection lines are cleaned professionally at regular intervals.
- ▶ Do not operate the unit if the door seal is damaged.

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 due to glass surfaces!

When operating the unit, heat radiation can become stronger due to glass surfaces (e.g. glasses, bottles, vases) and ignite flammable objects in the area.

- ▶ Ensure that there are no glass objects in the radiation area of the unit.
- ▶ Ensure that flammable objects and materials (e.g. furniture, textiles) are located at a sufficient distance from the unit.

⚠ 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 all times.
- ▶ 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-combustible material to protect against flying sparks and falling embers
- C** Flammable object (e.g. armchair)
- X** Radiation area – Minimum distance from flammable objects and materials.

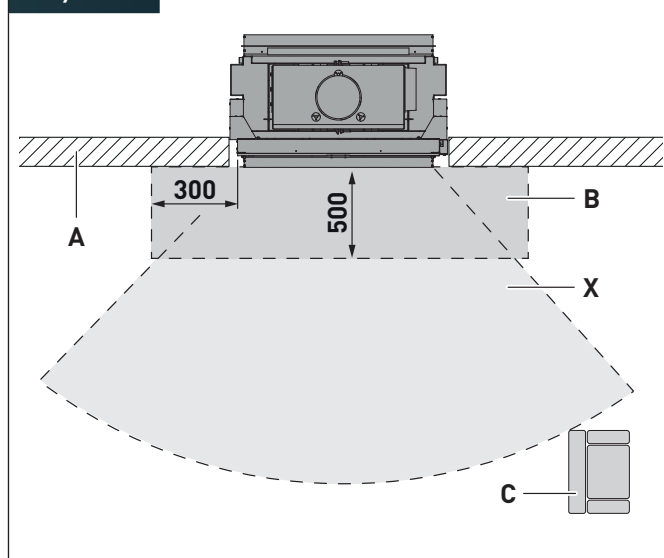
In the context of fire protection, a larger area may require protection in addition to the spark arrestor plate (**B**).

- Distance on the floor in front of the front glass [d_F]
- Distance on the floor in front of the side glasses [d_{FS}]

Adhere to the fire protection drawings.

- ➔ “10.5 Fire protection drawings” (page 79).

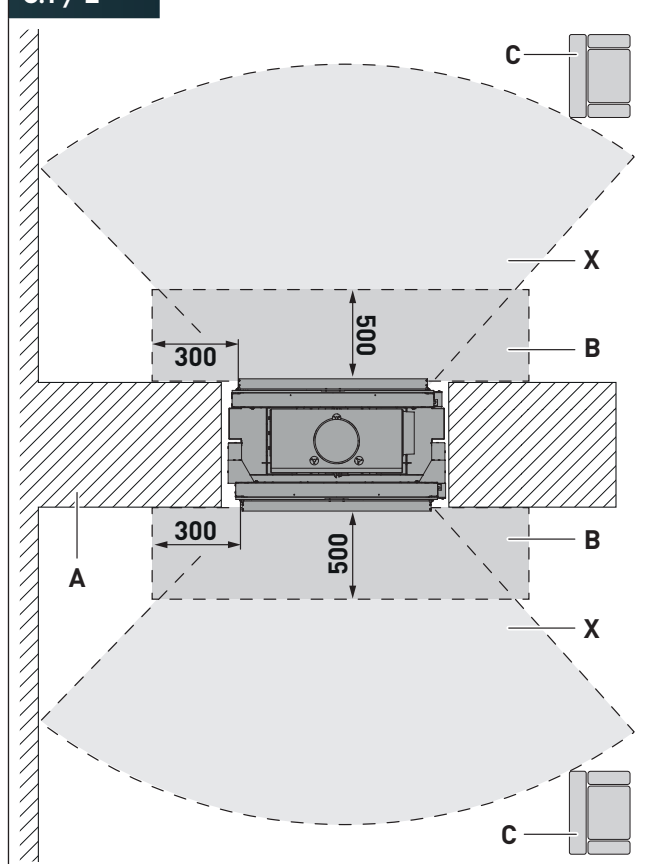
5.1 / 1



Radiation range (X):

- Premium V-1V-87h – 2300 mm
- Premium A-1V-87h – 1700 mm

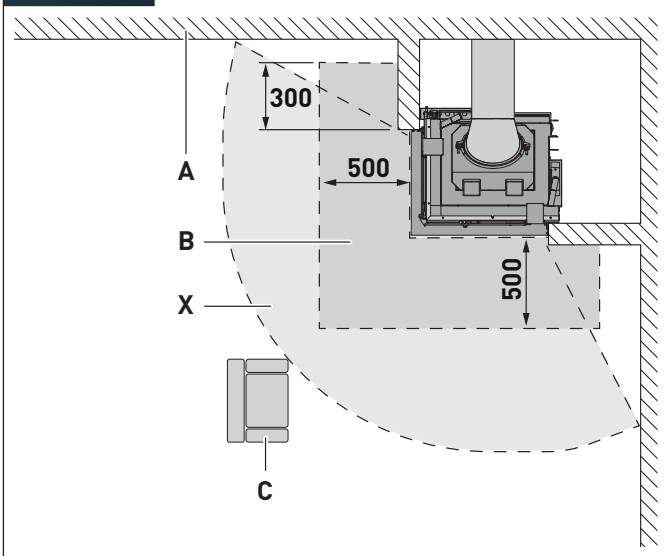
5.1 / 2



Radiation range (X):

- Premium V-FD-87h – 1790 mm

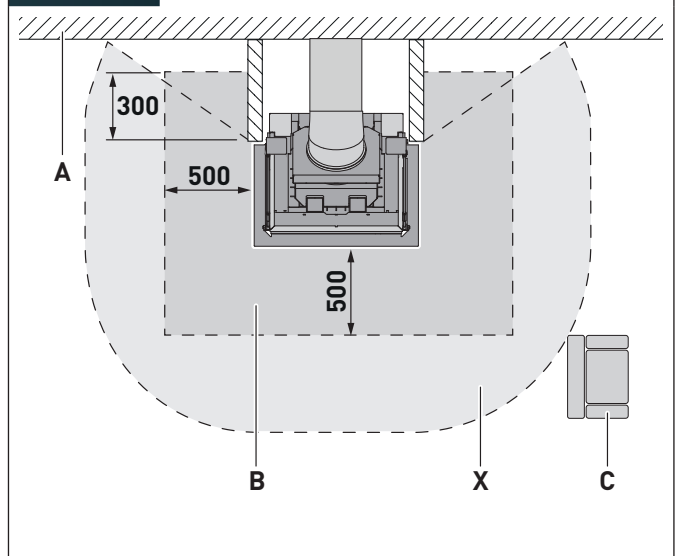
5.1 / 3



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

5.1 / 4



Radiation range (X):

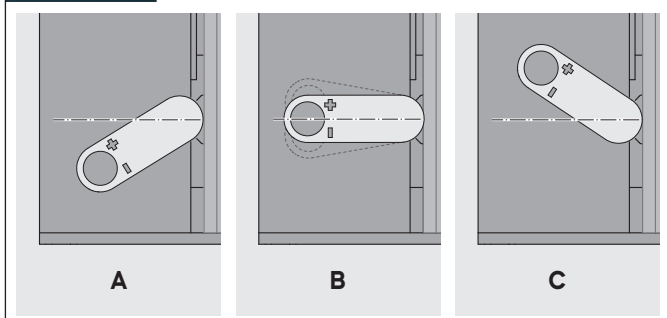
- Premium A-3RL-60h – 1180 mm front, 880 mm side
- Premium A-3RL-80h – 1440 mm front, 900 mm side
- Premium A-3RL-100h – 1200 mm front, 600 mm side
- Premium A-U-50h – 850 mm front, 1000 mm side
- Premium A-U-70h – 850 mm front, 1100 mm side
- Premium A-U-90h – 1200 mm front, 1200 mm side
- Lean 3RL-70h – 1000 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 and in flue gas connection.
- ▶ Ensure that the air openings (air grating) 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.
- ▶ Ensure that the chimney is not blocked (e.g. by a bird's nest).

5.2.1 / 1



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

➔ “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).

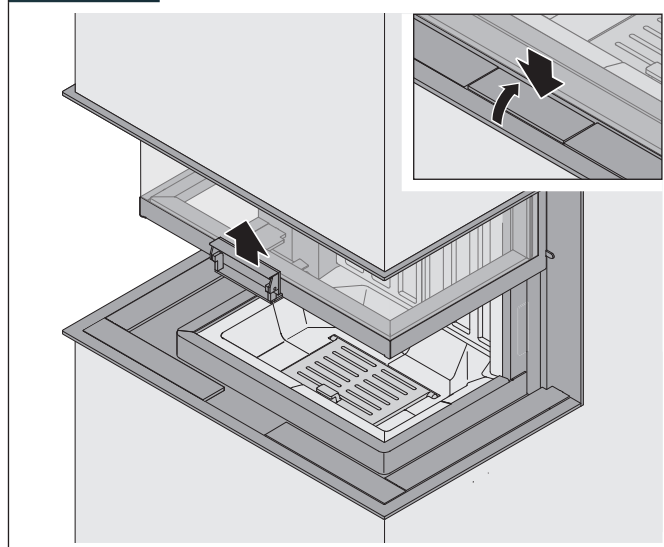
The primary air supply is closed. Secondary air flows against the ceramic glass pane via the window cleaning system.

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.

5.2.1 / 2



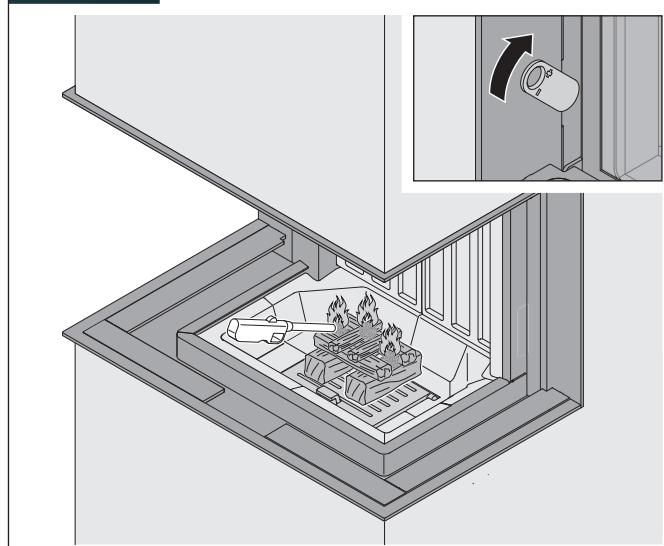
- ▶ Open the firebox door by pulling the door handle.

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 / filling level.

➔ “2.9 Technical data” (page 13).

5.2.2 Heating up the unit

5.2.2 / 1



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 emissions.
- 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 57).

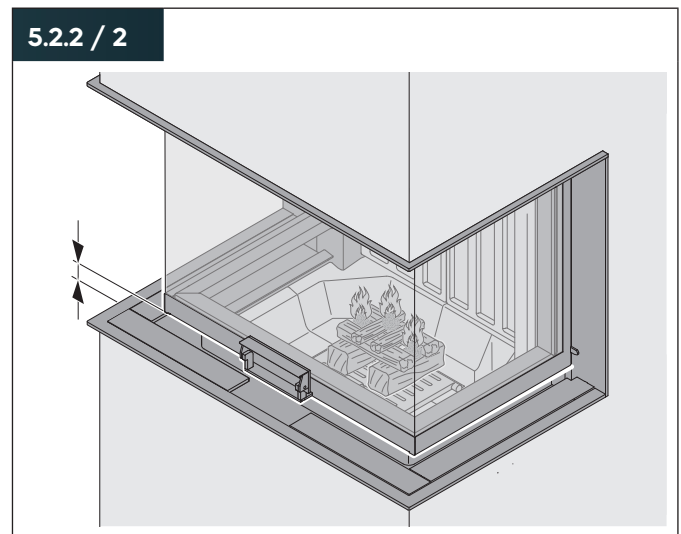
Under normal conditions, the operating temperature is reached after two burning processes and all fireclay surfaces should be free of dark discolourations.

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 58).
- ▶ Contact a specialised company to inspect the chimney.

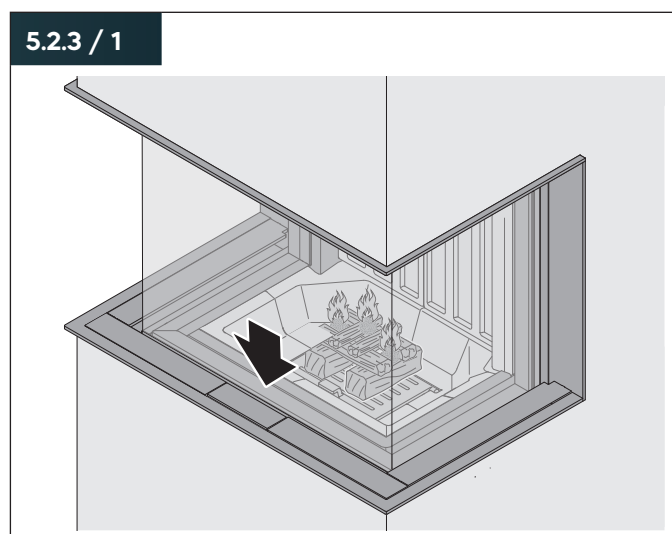
Only for room air dependent operation:



- ▶ 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.

For room air sealed operation, the firebox door must always be closed during heating operation.

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 output:

- ➔ “2.11 Nominal heat output” (page 27).

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 59).

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.

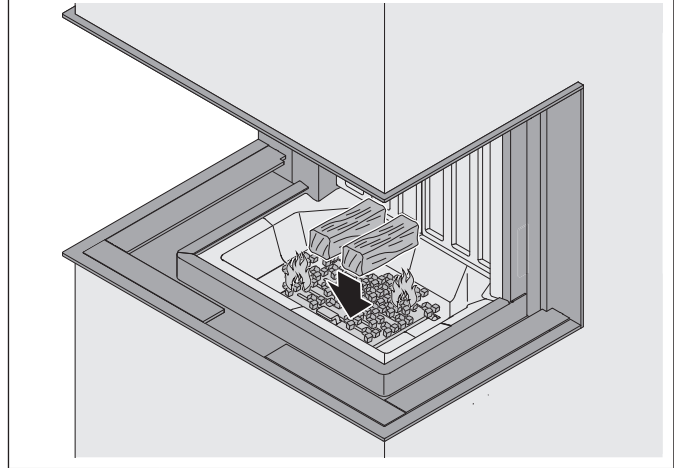
⚠ WARNING!

Risk of injury due to explosion!

If there is no flame when the unit is refilled with new fuel, the firebox may fill with smoke and flammable gases. These gases can ignite and cause an explosion. This can lead to severe injuries.

- ▶ When refuelling, ensure that there are sufficient embers.
- ▶ Stack logs so that oxygen can reach the wood.
- ▶ Monitor the fire. If only smoke and no flame develops, open the firebox door slightly. As soon as the smoke has dissipated and a flame is present, close the door again.

5.2.4 / 1

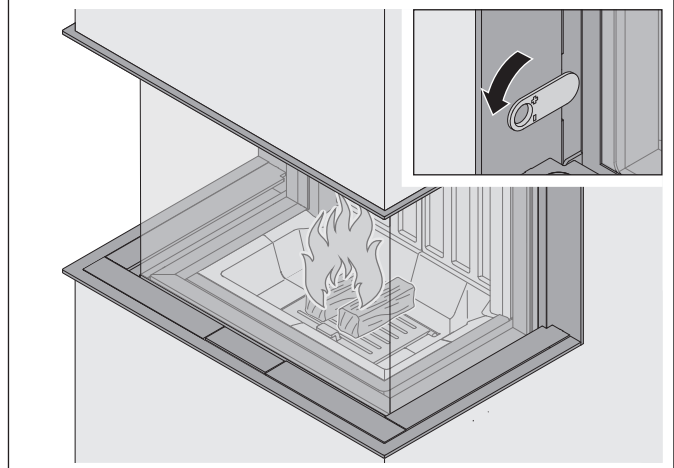


- ▶ Set the combustion air regulator to the highest position (C).
- ▶ Pull the door handle to slightly open the firebox door.
- ▶ Wait 2 – 3 seconds for pressure equalisation to take place.
- ▶ Only fully open the firebox door after this time.
- ▶ Place smaller logs (up to 250 mm) on the embers or place 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 / filling level.

- ▶ “2.9 Technical data” (page 13).

5.2.4 / 2



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 firebox.
 - ▶ Ensure that no smouldering, unburned wood remains in the firebox.
-

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 possible.

- ▶ 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 bottom-most position (**A**).
- ▶ If installed, open the shut-off devices in the combustion air pipe or in the flue gas connection.

6. Cleaning

6.1 Safety information for cleaning

⚠ ATTENTION!

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 54).

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 59).

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 times.

➔ "6.4 Annual cleaning" (page 61).

6.3 Simple cleaning

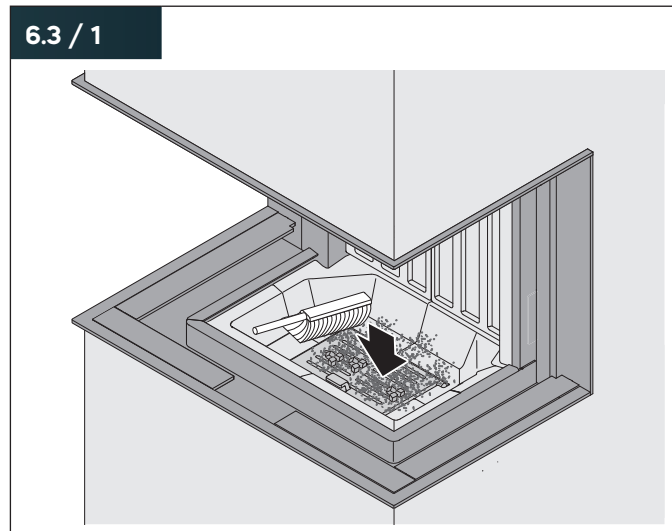
Surfaces

- ▶ 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.

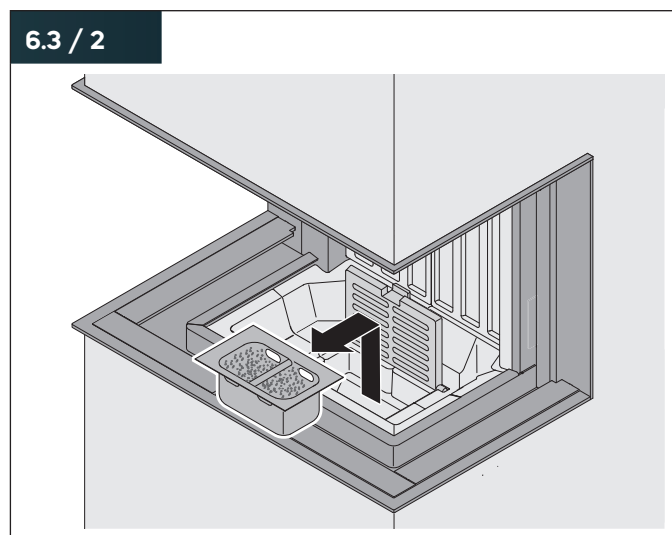
Cleaning

Firebox

- ▶ Push the firebox door up all the way.



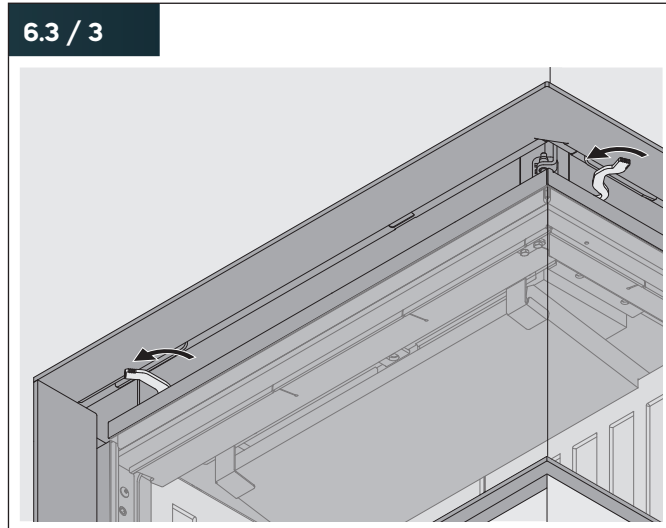
- ▶ Remove severe soiling (fuel residue and coarse dirt).
- ▶ Use a hand broom to clean the firebox lining and the ash grate.
- ▶ Clean the air openings.
- ▶ Clean all components of the firebox lining.
- ▶ Clean the ash grate.



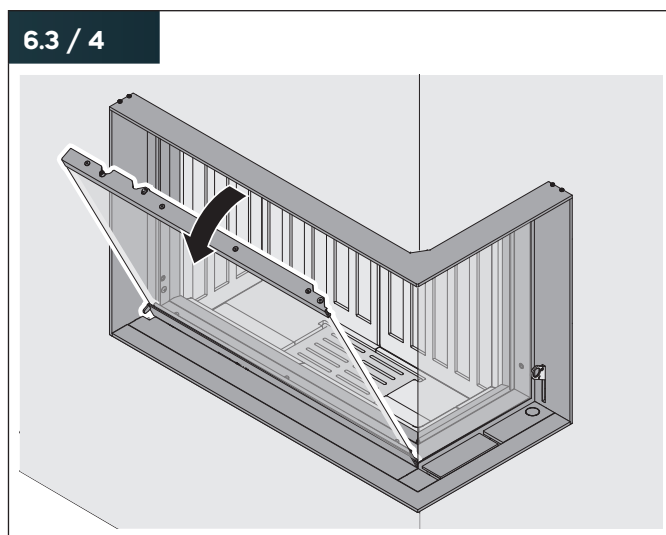
- ▶ Fold up the ash grate.
- ▶ Empty the ash pan.

Viewing window

Only for Premium A-3RL-100h, 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, Lean 3RL-70h:



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

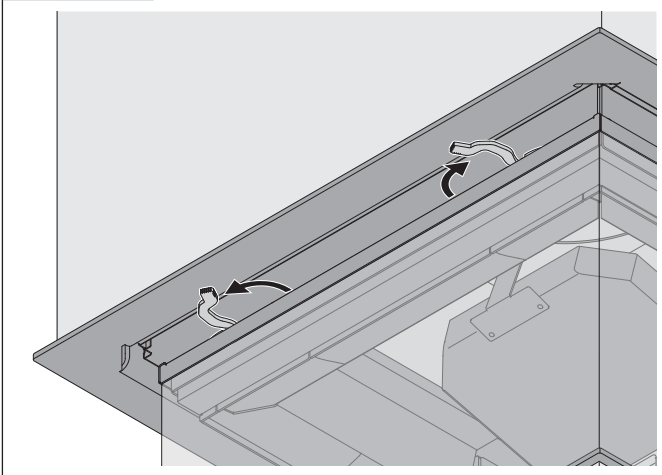


- ▶ Fold the front window forward.
- ▶ Clean minor soiling with a damp cloth.
- ▶ In the case of severe soiling, carefully apply glass cleaner with a cloth or a rag.
- ▶ Ensure that the cleaning agent does not make contact with seals or varnished surfaces.

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

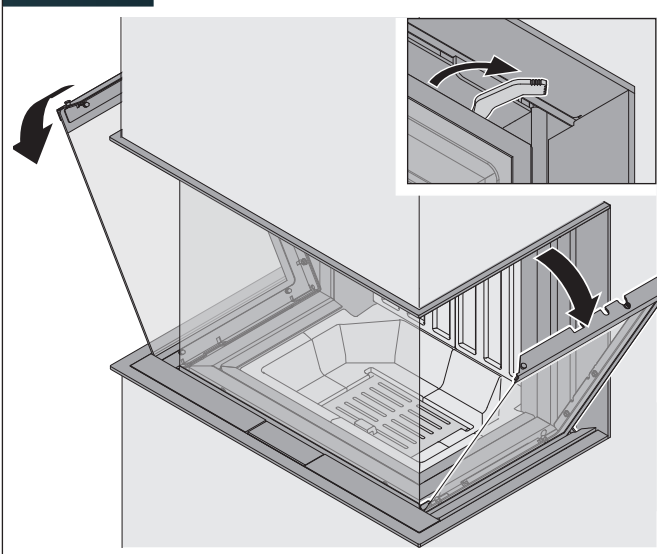
Only for Premium A-3RL-60h, Premium A-3RL-80h,
Premium A-U-50h, Premium A-U-70h, Premium A-U-70h:

6.3 / 5



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

6.3 / 6



- ▶ 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 59).

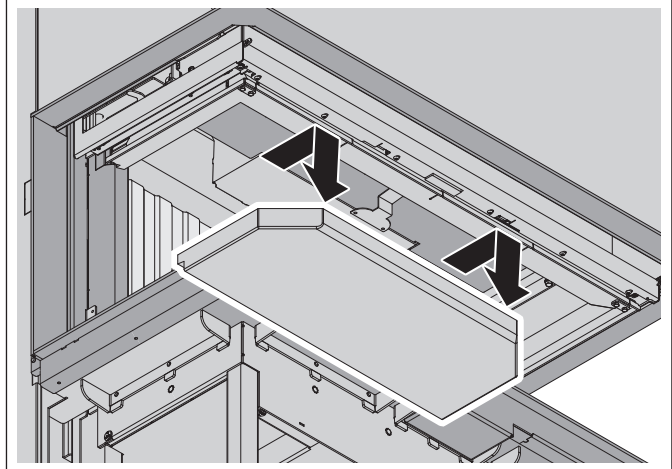
⚠ ATTENTION!

Risk of material damage caused by improper handling!

The size and weight of the baffle plate require strength and attention when removing or installing 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.

6.4.6 / 1

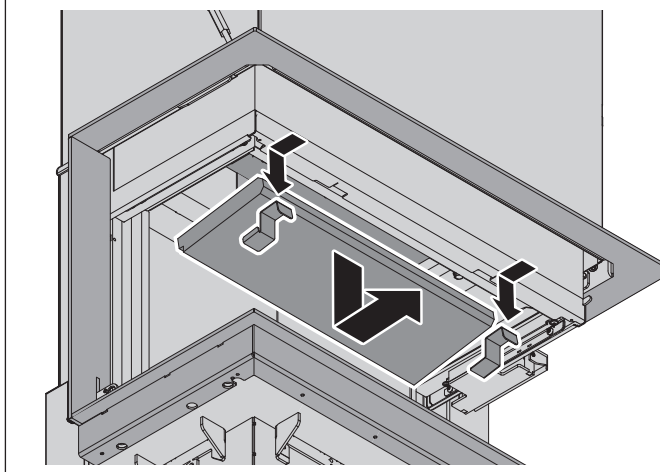


- ▶ Push the firebox door up all the way.
- ▶ Lift the deflector plate
- ▶ Carefully tilt the deflector plate slightly forwards.
- ▶ Remove the deflector plate by pulling it downwards.
- ▶ Clean the deflector plate with a hand brush.
- ▶ Clean the area above the combustion chamber with a hand brush.

Cleaning

Lean model series only:

6.4.6 / 2

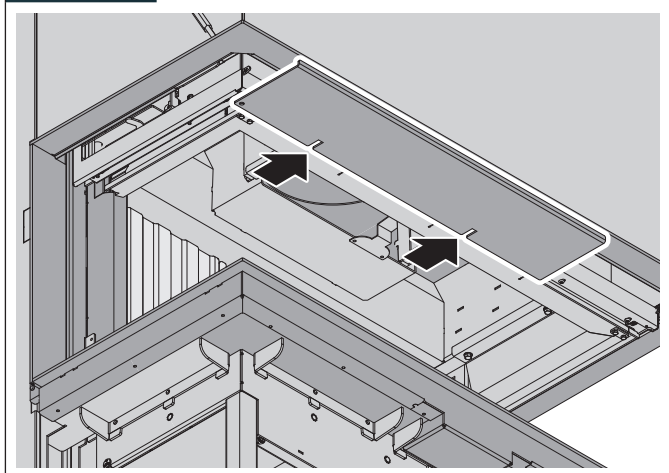


- ▶ Push the firebox door all the way up.
- ▶ Lift the baffle plate on the firebox ceiling slightly.
- ▶ Loosen the attached brackets.
- ▶ Carefully tilt the baffle plate slightly to the side.
- ▶ Remove the baffle plate from the bottom.
- ▶ Clean the baffle plate with a hand brush.
- ▶ Clean the area above the firebox with a hand brush.

Only for models with a deflector plate:

➔ “2.8.2 Baffle plate and deflector plate” (page 12).

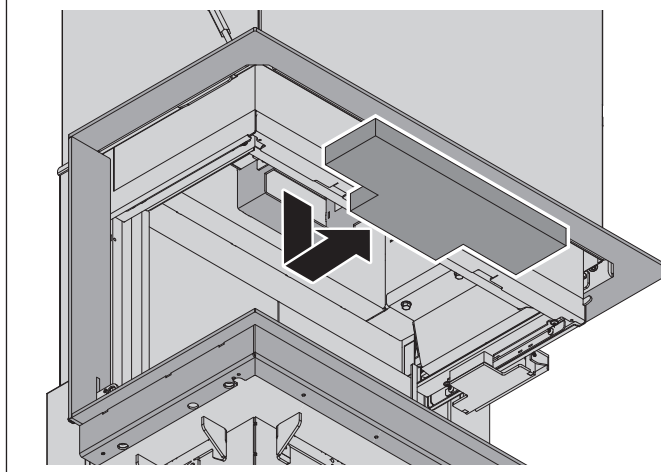
6.4.6 / 3



- ▶ Carefully press the deflector plate upwards at the front.
- ▶ Guide the deflector plate past the front brackets and tilt it downwards.
- ▶ Pull the deflector plate out of the rear bracket.
- ▶ Clean the deflector plate with a hand brush.
- ▶ Clean the area above the firebox with a hand brush.

Lean series only:

6.4.6 / 4



- ▶ Carefully push the deflector plate upwards at the front.
- ▶ Guide the deflector plate past the front brackets and tilt it downwards.
- ▶ Pull the deflector plate out of the rear U-shaped bracket.
- ▶ Clean the deflector plate with a hand brush.
- ▶ Clean the area above the firebox with a hand brush.

All models:

If a catalytic converter (optional) is used:

- ▶ Now clean the catalytic converter elements.
- 📄 Catalytic converter instructions

- ▶ Reinsert the deflector plate.
- ▶ 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 59).

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 54).

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.

7.3 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 7).
- ▶ Ensure that the necessary safety distances are observed.
 - ➔ "4.3.2 Safety distances" (page 32).

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 54).

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.

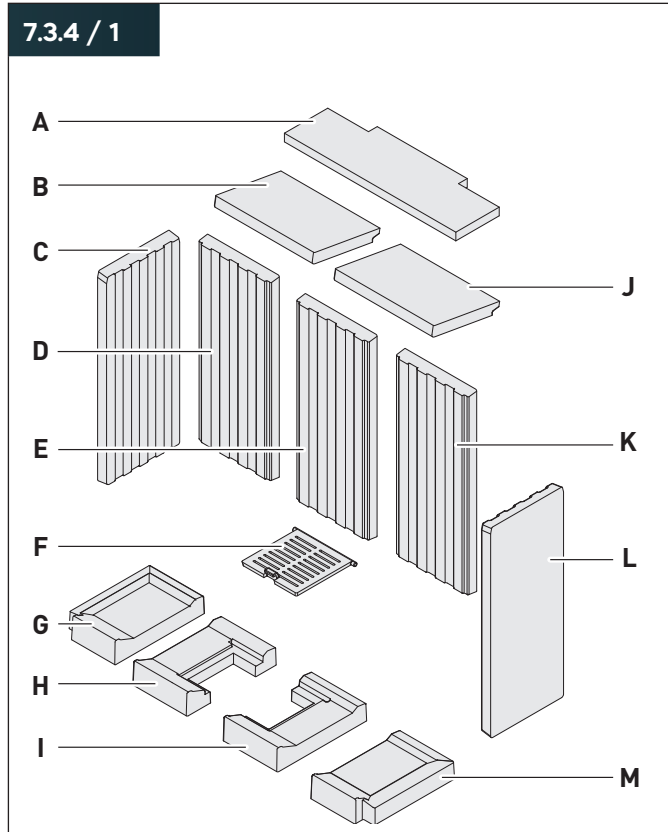
- 💡 We recommend replacing the door seal after no more than three heating periods.

Service work

7.3.4 Firebox lining

Premium V-1V-87h:

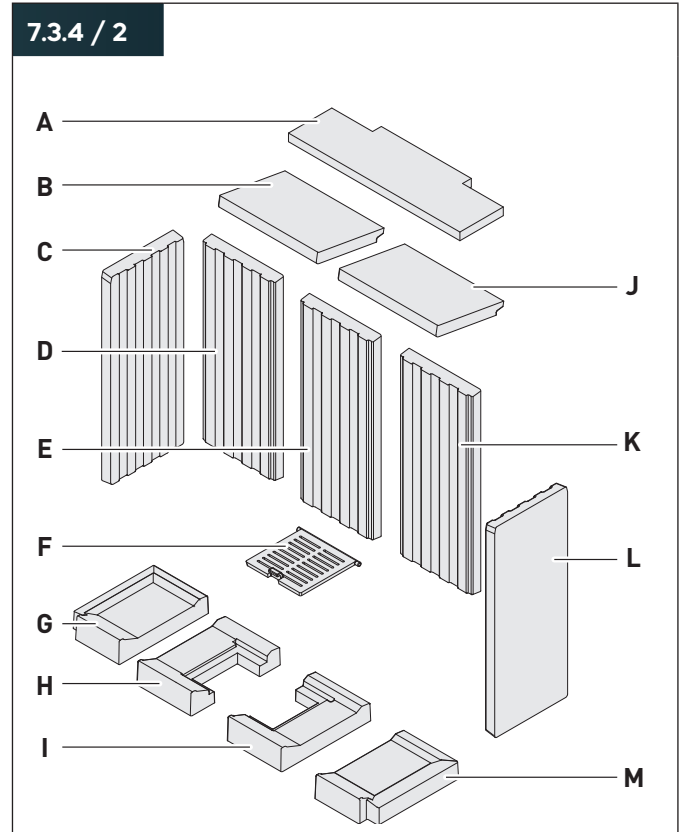
7.3.4 / 1



- A** Deflector plate
- B** Baffle plate, left
- C** Side wall brick, left
- D** Back wall brick, left
- E** Back wall brick, centre
- F** Ash grate
- G** Base brick, left outer
- H** Base brick, left inner
- I** Base brick, right inner
- J** Baffle plate, right
- K** Back wall brick, right
- L** Side wall brick, right
- M** Base brick, right outer

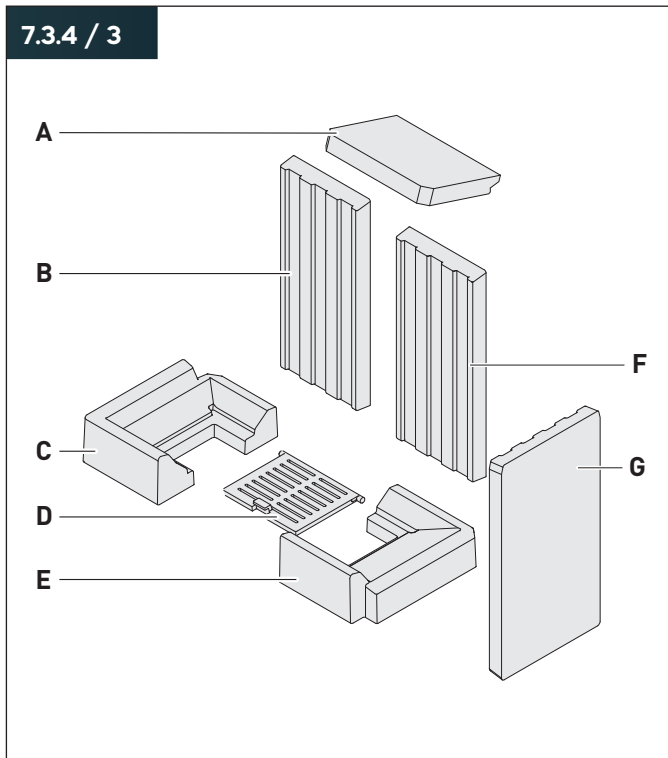
Premium V-FD-87h:

7.3.4 / 2



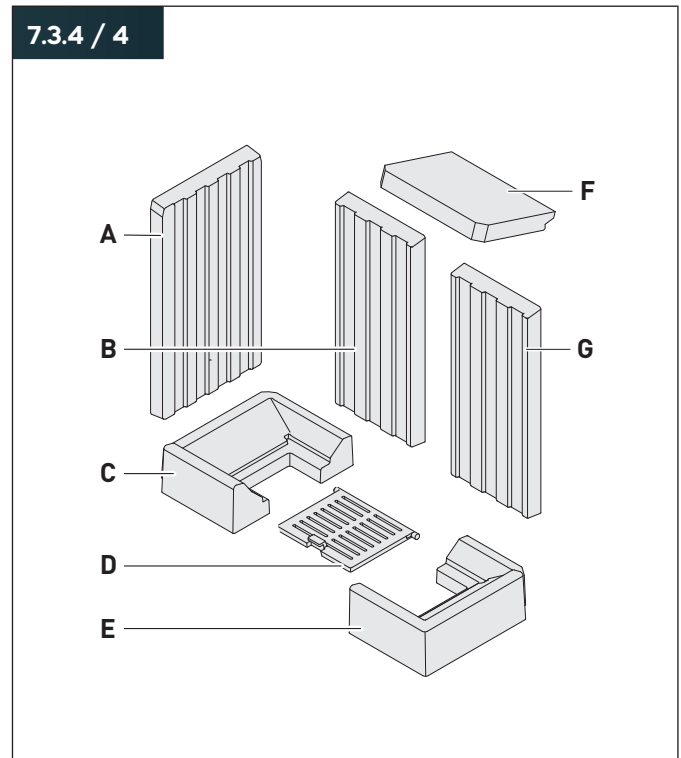
- A** Deflector plate
- B** Baffle plate, left
- C** Side wall brick, left
- D** Back wall brick, left
- E** Back wall brick, centre
- F** Ash grate
- G** Base brick, left outer
- H** Base brick, left inner
- I** Base brick, right inner
- J** Baffle plate, right
- K** Back wall brick, right
- L** Side wall brick, right
- M** Base brick, right outer

Premium V-2L-55h:



- A** Baffle plate
- B** Left rear wall brick
- C** Left base brick
- D** Ashtray grate
- E** Right base brick
- F** Right rear wall brick
- G** Right side wall brick

Premium V-2R-55h:

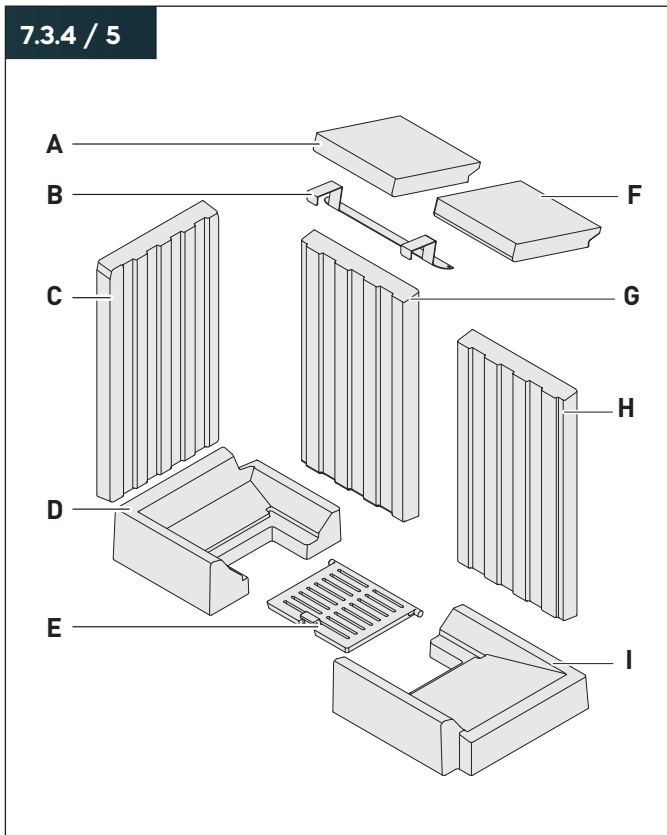


- A** Left side wall brick
- B** Left rear wall brick
- C** Left base brick
- D** Ash grate
- E** Right base brick
- F** Baffle plate
- G** Right rear wall brick

Service work

Premium V-2L-68h:

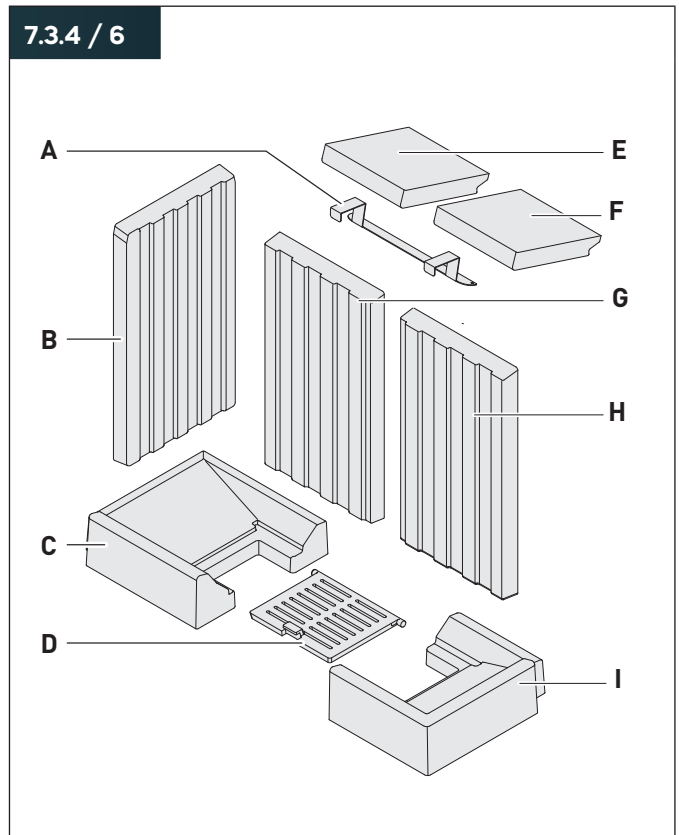
7.3.4 / 5



- A** Left baffle plate
- B** Baffle plate bracket
- C** Left side wall brick
- D** Left base brick
- E** Ash grate
- F** Right baffle plate
- G** Left rear wall brick
- H** Right rear wall brick
- I** Right base brick

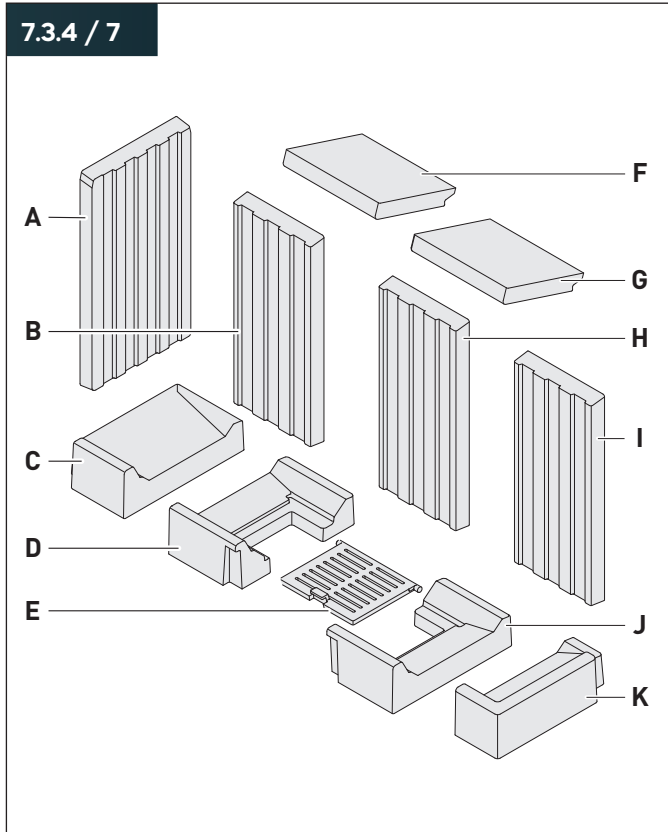
Premium V-2R-68h:

7.3.4 / 6



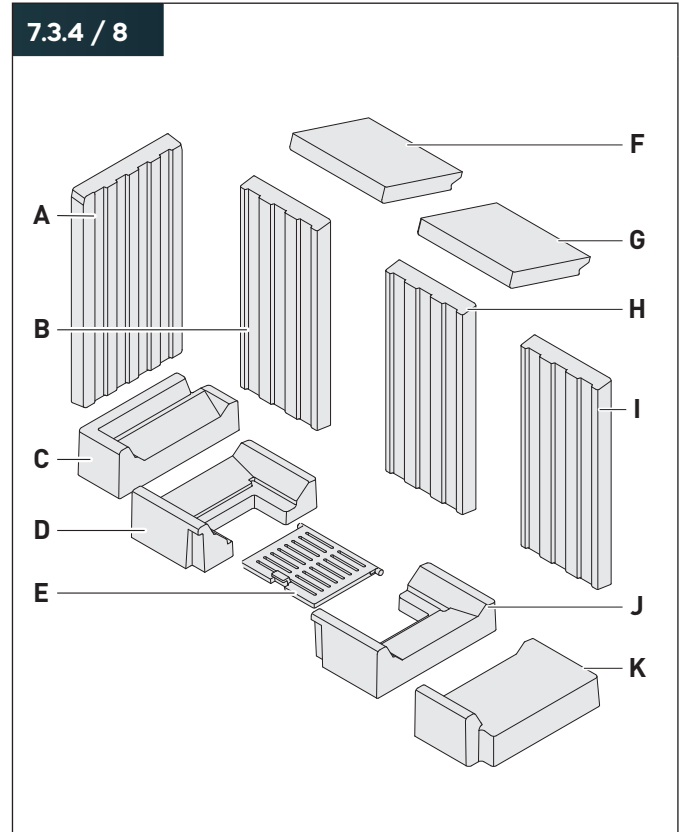
- A** Baffle plate bracket
- B** Left side wall brick
- C** Left base brick
- D** Ash grate
- E** Left baffle plate
- F** Right baffle plate
- G** Left rear wall brick
- H** Right rear wall brick
- I** Right base brick

Premium V-2L-80h:



- A** Left side wall brick
- B** Left rear wall brick
- C** Left outer base brick
- D** Left inner base brick
- E** Ash grate
- F** Left baffle plate
- G** Right baffle plate
- H** Centre rear wall brick
- I** Right rear wall brick
- J** Right inner base brick
- K** Right outer base brick

Premium V-2R-80h:

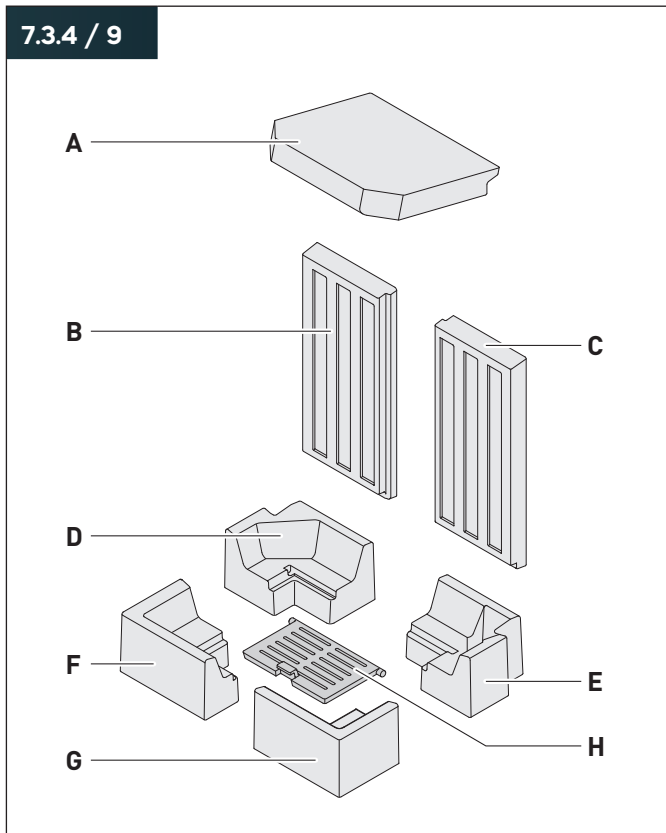


- A** Left side wall brick
- B** Left rear wall brick
- C** Left outer base brick
- D** Left inner base brick
- E** Ash grate
- F** Left baffle plate
- G** Right baffle plate
- H** Centre rear wall brick
- I** Right rear wall brick
- J** Right inner base brick
- K** Right outer base brick

Service work

Premium A-3RL-60h:

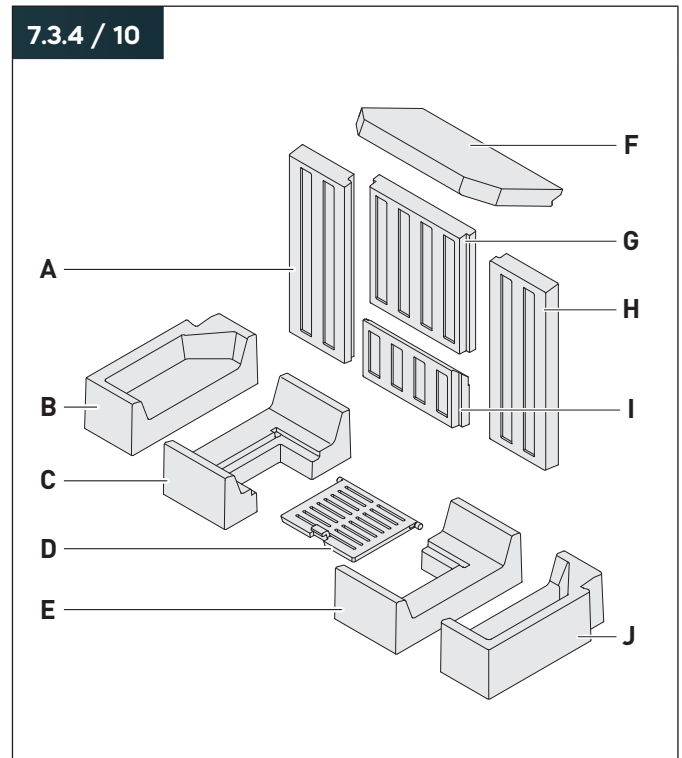
7.3.4 / 9



- A** Baffle plate
- B** Left rear wall brick
- C** Right rear wall brick
- D** Rear left base brick
- E** Rear right base brick
- F** Front left base brick
- G** Front right base brick
- H** Ash grate

Premium A-3RL-80h:

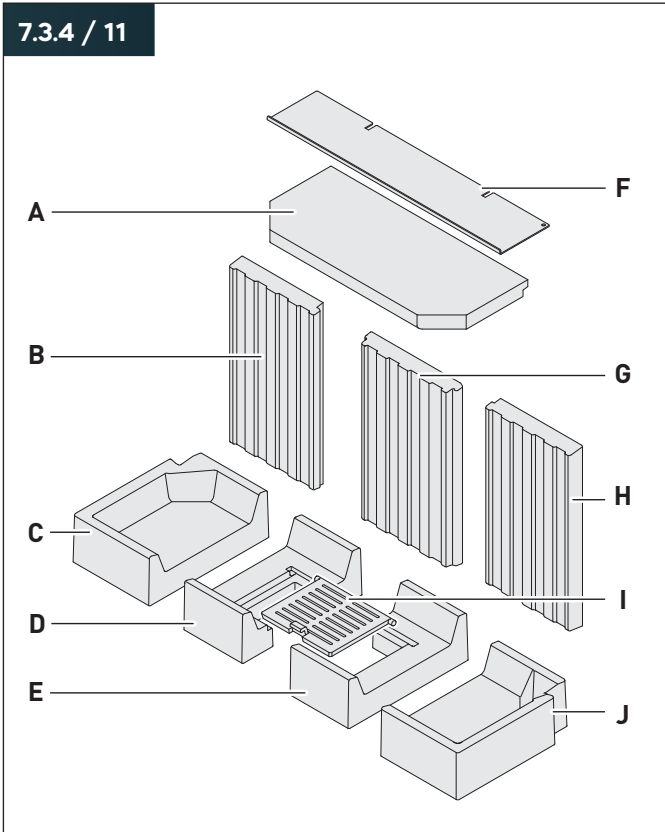
7.3.4 / 10



- A** Left rear wall brick
- B** Left outer base brick
- C** Left inner base brick
- D** Ash grate
- E** Right inner base brick
- F** Baffle plate
- G** Centre rear wall brick, top
- H** Right rear wall brick
- I** Centre rear wall brick, bottom
- J** Right outer base brick

Premium A-3RL-100h:

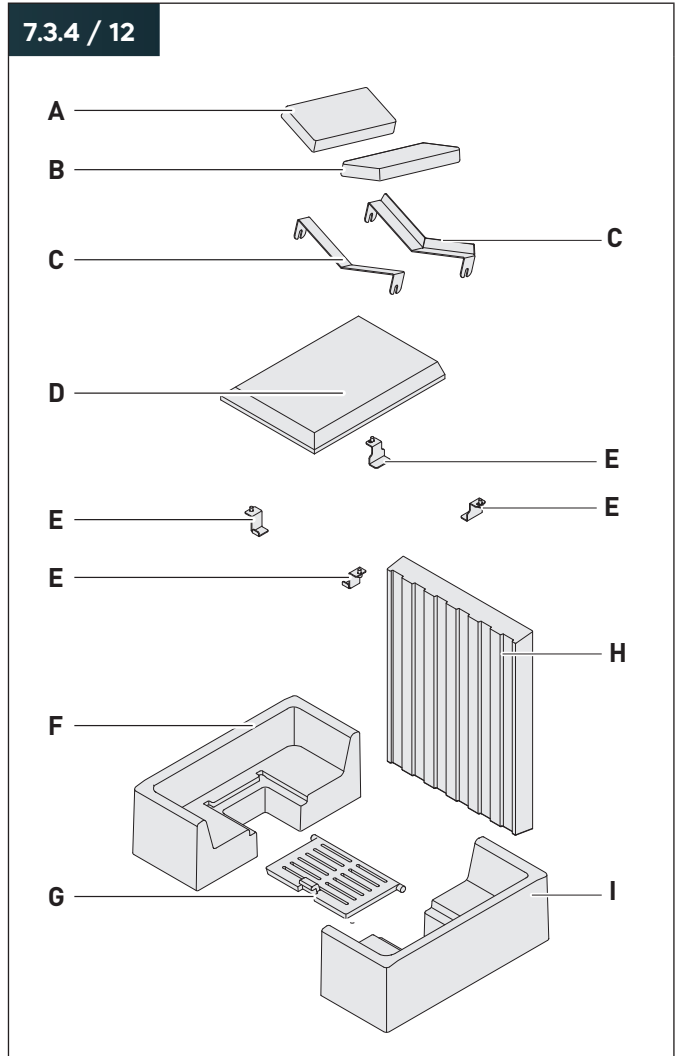
7.3.4 / 11



- A** Baffle plate
- B** Left rear wall brick
- C** Left outer base brick
- D** Left inner base brick
- E** Right inner base brick
- F** Deflector plate
- G** Centre rear wall brick
- H** Right rear wall brick
- I** Ash grate
- J** Right outer base brick

Premium A-U-50h:

7.3.4 / 12

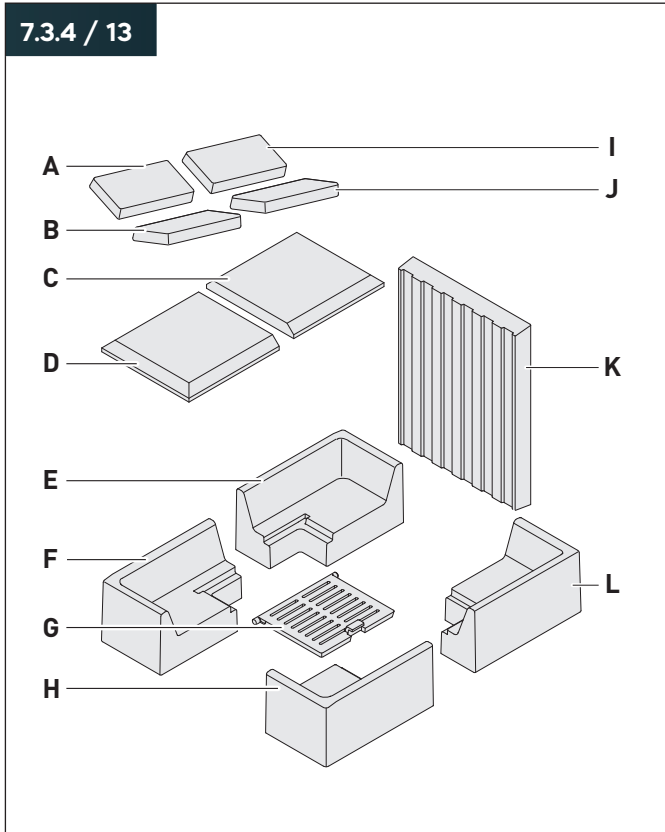


- A** Deflector plate left
- B** Deflector plate right
- C** Deflector plate bracket
- D** Baffle plate
- E** Baffle plate bracket
- F** Left base brick
- G** Ash grate
- H** Rear wall brick
- I** Right base brick

Service work

Premium A-U-70h:

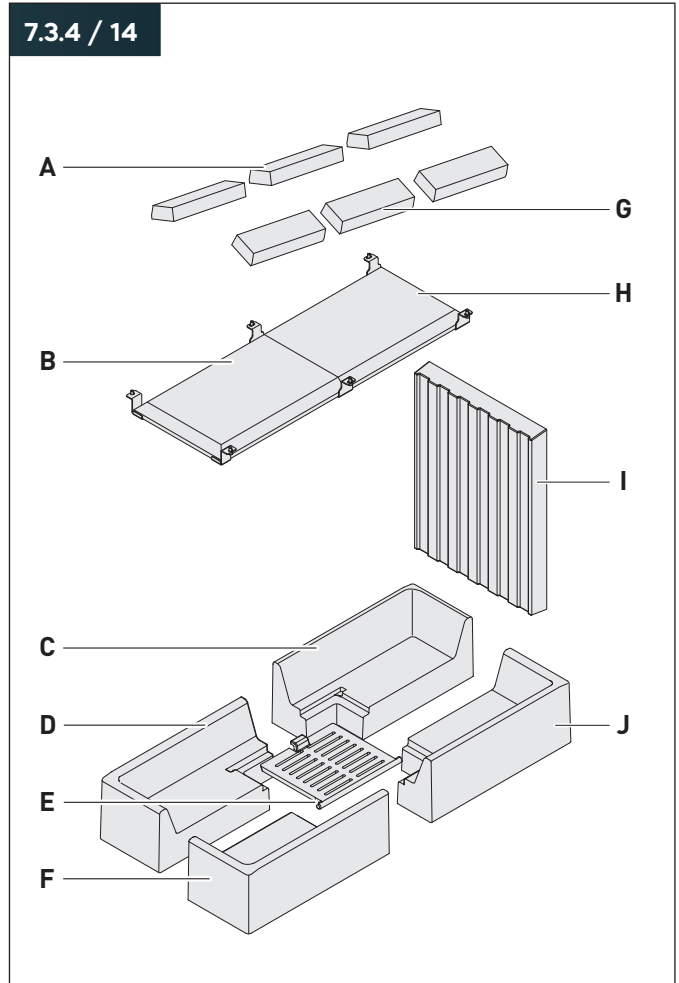
7.3.4 / 13



- A** Deflector plate front left
- B** Deflector plate front right
- C** Rear baffle plate
- D** Front baffle plate
- E** Rear left base brick
- F** Front left base brick
- G** Ash grate
- H** Front right base brick
- I** Rear left deflector plate
- J** Rear right deflector plate
- K** Rear wall brick
- L** Rear right base brick

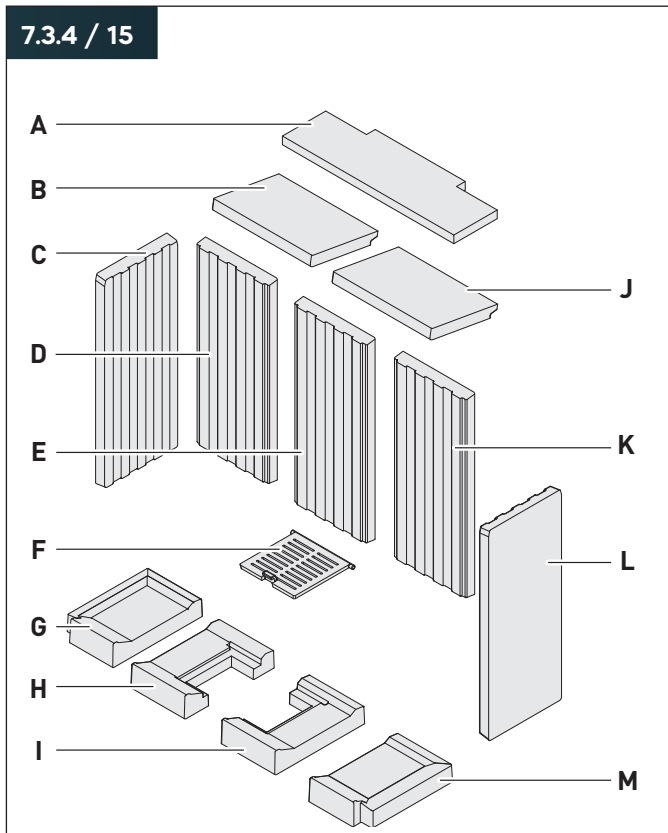
Premium A-U-90h:

7.3.4 / 14



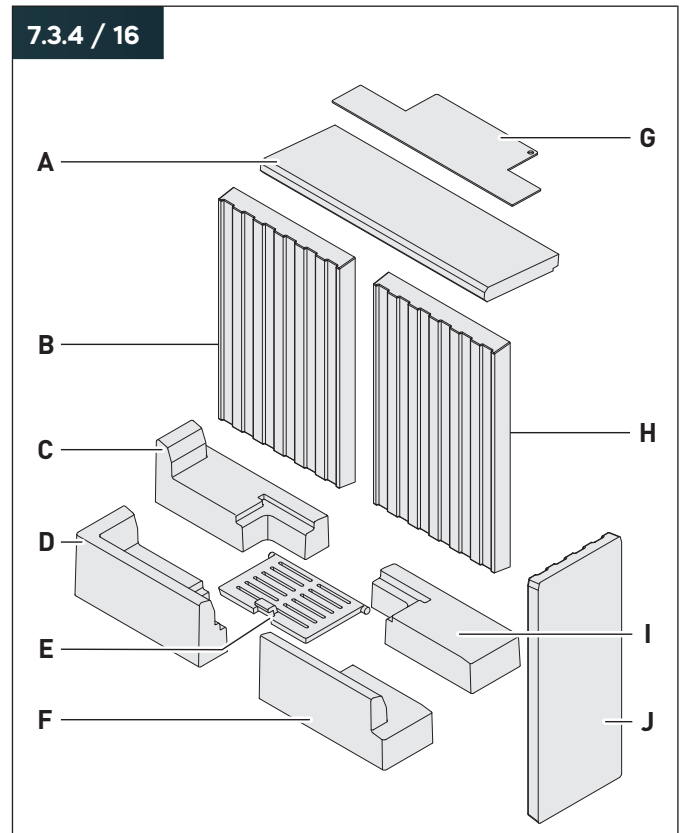
- A** Deflector plate, left (three-piece)
- B** Baffle plate, front
- C** Rear left base brick
- D** Ash grate
- E** Front left base brick
- F** Front right base brick
- G** Deflector plate, right (three-piece)
- H** Rear baffle plate
- I** Rear wall brick
- J** Rear right base brick, right

Premium A-1V-87h:



- A** Deflector plate
- B** Left baffle plate
- C** Left side wall brick
- D** Left rear wall brick
- E** Centre rear wall brick
- F** Ash grate
- G** Left outer base brick
- H** Left inner base brick
- I** Right inner base brick
- J** Right baffle plate
- K** Right rear wall brick
- L** Right side wall brick
- M** Right outer base brick

Lean 2L-70h:

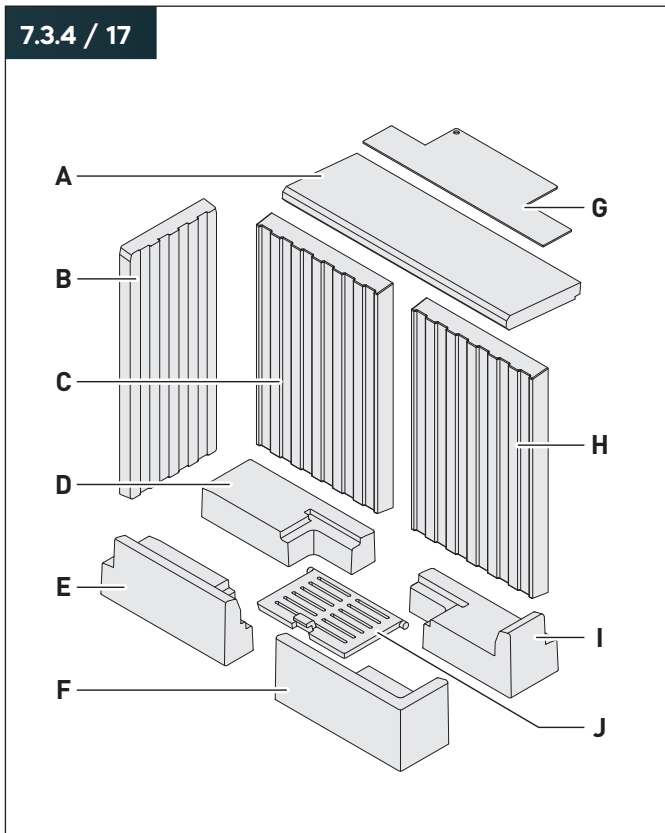


- A** Baffle plate
- B** Left rear wall brick
- C** Rear left base brick
- D** Front left base brick
- E** Ash grate
- F** Front right base brick
- G** Deflector plate
- H** Right rear wall brick
- I** Rear right base brick
- J** Right side wall brick

Service work

Lean 2R-70h:

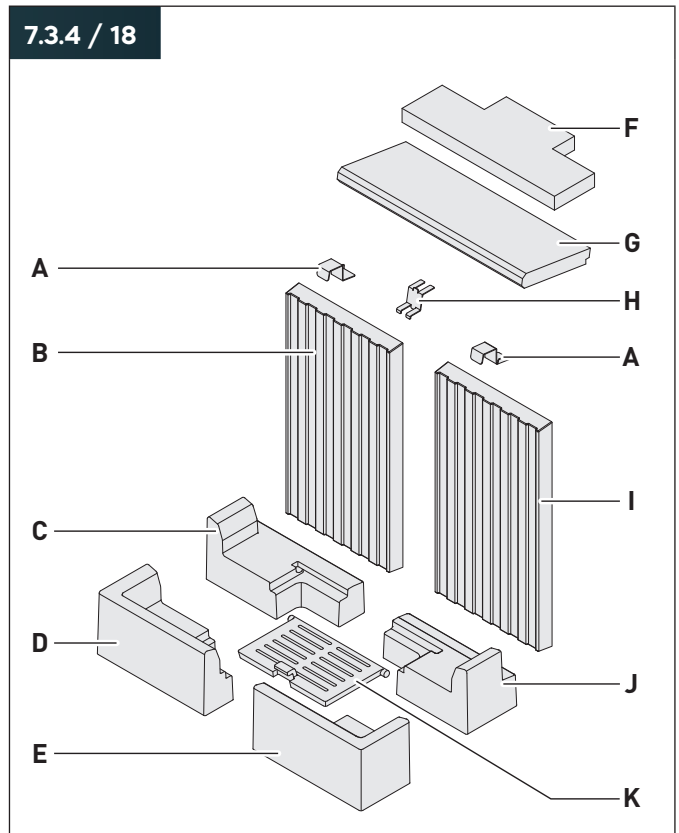
7.3.4 / 17



- A Baffle plate
- B Side wall brick
- C Rear wall brick, left
- D Rear left base brick
- E Front left base brick
- F Front right base brick
- G Deflector plate
- H Rear wall brick, right
- I Rear right base brick
- J Ash grate

Lean 3RL-70h:

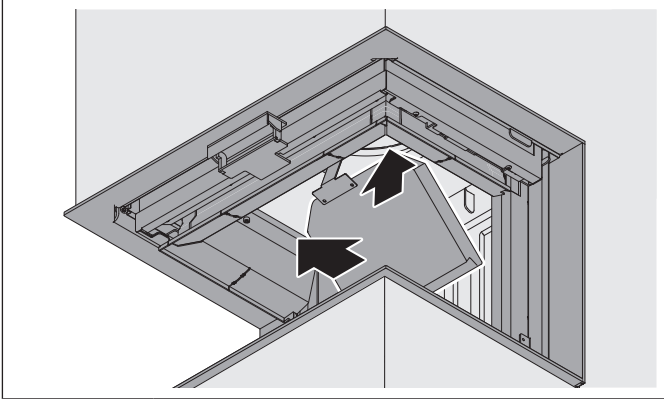
7.3.4 / 18



- A Baffle plate holder
- B Rear wall brick, left
- C Base brick, rear left
- D Base brick, front left
- E Base brick, front right
- F Deflector plate
- G Baffle plate
- H Deflector plate holder
- I Rear wall brick, right
- J Base brick, rear right
- K Ash grate

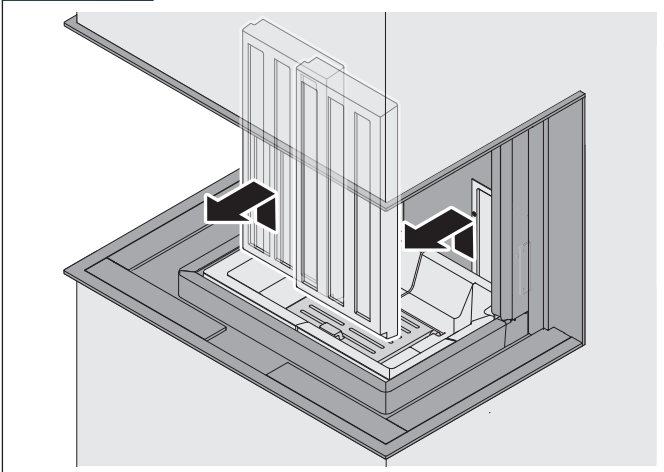
- ▶ Push the firebox door up all the way.

7.3.4 / 19



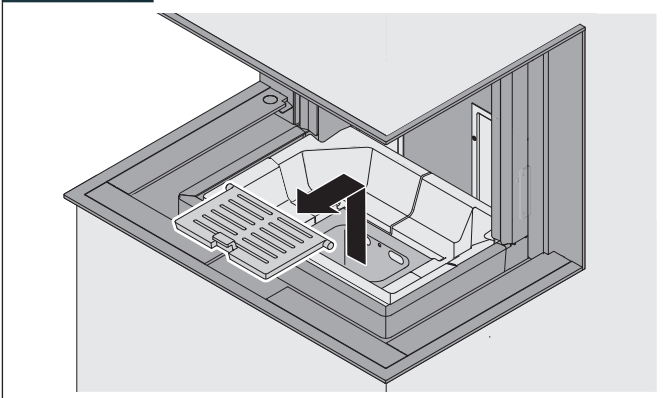
- ▶ Remove the baffle plate.

7.3.4 / 20



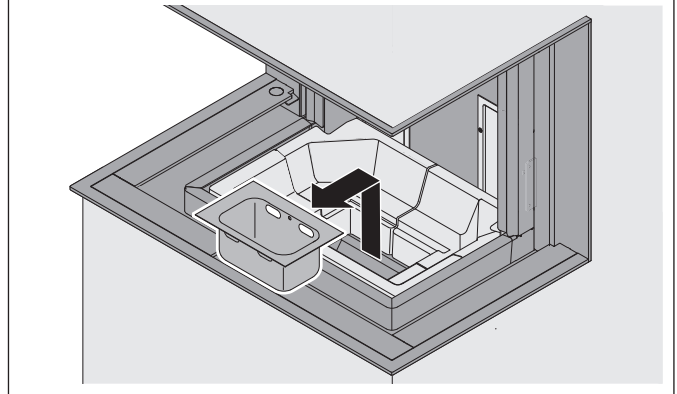
- ▶ Remove the rear wall bricks.

7.3.4 / 21



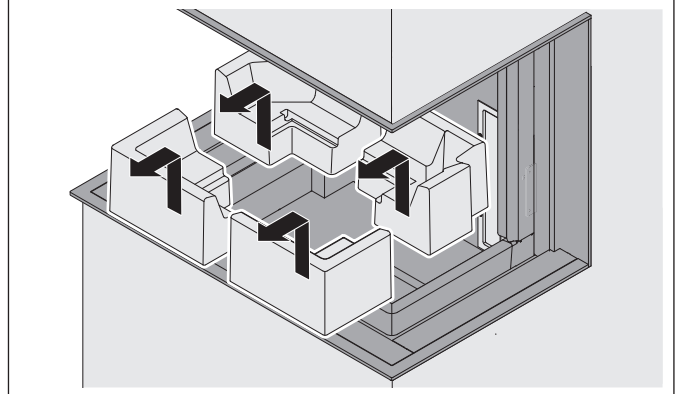
- ▶ Remove the ash grate.

7.3.4 / 22



- ▶ Remove the ash pan.

7.3.4 / 23



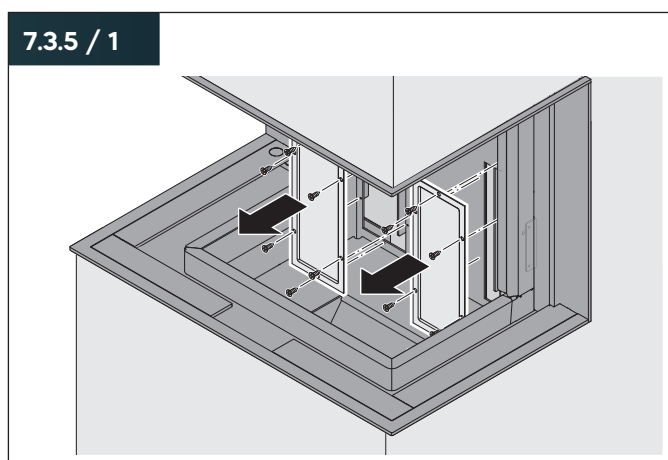
- ▶ Remove the base bricks.
- ▶ Remove dirt and soot from the components.
- ▶ Correctly reinsert the components after cleaning.
- ▶ Check the proper condition of the firebox lining:
 - All components are in the correct position.
 - There is no gap between the components.

7.3.5 Self-closing firebox door

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.

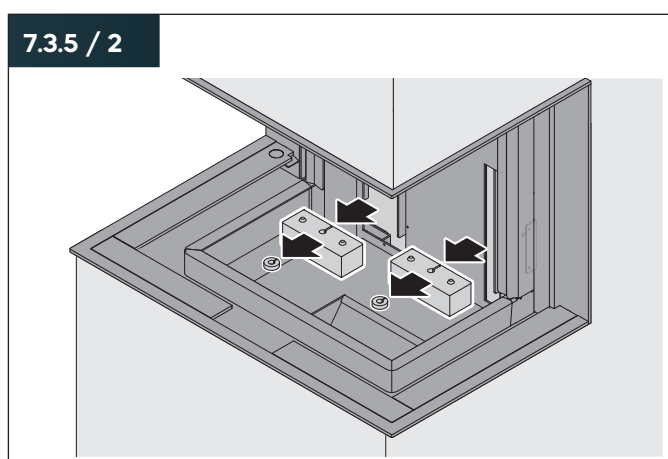
Prerequisites for conversion:

- Use of the self-closing door function is clear.
 - ➔ “2.4 Protective devices” (page 7).
- The unit is fully cooled down and cleaned.
- The firebox lining has been removed.
 - ➔ “7.3.4 Firebox lining” (page 64).



- ▶ 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.

Smoke emanates from the unit, there is an odour of varnish.

- The protective paint of the unit is drying out. The previously achieved maximum temperature of the body (e.g. during initial commissioning) was exceeded.
 - ▶ 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. The previously achieved maximum temperature of the body (e.g. during initial commissioning) was exceeded.
 - ▶ Ensure sufficient ventilation of the installation space with fresh air.
 - ▶ Reduce the fuel volume.
 - ▶ Do not overheat the unit.

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.

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 30).
- Back-up of flue gases in the chimney or insufficient delivery pressure.
 - ▶ 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 30).
- 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.
 - ➔ “2.9 Technical data” (page 13).
 - ➔ “3.5 Size of the fuel pieces” (page 30).
- 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 ignition agents” (page 30).
 - ▶ 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 company.
- 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 chimney is clogged (e.g. by a bird nest).
 - ▶ Have the chimney checked by a specialised company.

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 30).
- The wood is extremely dry.
 - ▶ Use wood with a residual moisture of 15 – 18 %.
 - ➔ “3.2 Permissible types of fuel” (page 30).
- 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 30).
- 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.
 - ➔ "2.9 Technical data" (page 13).
 - ➔ "3.5 Size of the fuel pieces" (page 30).
- 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 chimney is cold, the delivery pressure is too low.
 - ▶ Light a "pilot fire" in the firebox using suitable ignition agents.
 - ➔ "3.3 Permissible ignition agents" (page 30).
 - ▶ 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 company.
- 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 30).
- Incorrect handling during refuelling.
 - ▶ Ensure that you position fuel carefully – do not throw it in.
 - ▶ 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.

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 requirements:

- The unit and other parts that you may come in contact with have cooled down for a sufficient period (e.g. several days).
- 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 59).

8.2 Dismantling the unit

- ▶ Remove all connections between the stove system and the chimney.
- ▶ 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 of the unit!

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

- ▶ Dispose of the unit according to the legal regulations through a specialised disposal company or your local disposal facilities.



10. Appendix

10.1 Accessories

- Combustion control S-Thermatik NEO.
- S-USI negative pressure monitor.
- Electric door lift SESAM III (for opening and closing the firebox door).
- S-ELA electronic exhaust flap.
- Catalytic converter (only Premium A-3RL-100h, Premium A-U-90h, Lean 2L-70h, Lean 2R-70h, Lean 3RI-70h).

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. BImSchV**: 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 16510**: Residential solid fuel burning appliances.
- **DIN 18896**: Fireplaces fired by solid fuel. Technical specifications for installation and operation.
- **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.
- **DIN EN 15287**: Chimneys – Design, installation and commissioning
- **DIN EN 13384**: Chimneys – Thermal and fluid dynamic calculation methods

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.

The following documents are available on the manufacturer's website:

- Declaration of Conformity
 - Declaration of performance according to EU 305/2011
 - Declaration according to ecodesign directive
 - "Technical drawing", including fire protection drawing
-  www.spartherm.com

10.5 Fire protection drawings

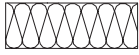
Please note:

- Reference insulation material (rock wool according to AGI-Q 132) specified + 100 mm brick lining.
- Insulation only applies to components with a U value (heat transmission coefficient) $> 0,118 \frac{W}{m^2K}$. With a U value $< 0,118 \frac{W}{m^2K}$ adhere to the country-specific requirements.
- Distances and insulation are min. specifications referring to test conditions / test results. Refer to and adhere to the professional rules of TROL (German stove building regulations).
- Prior to starting construction, discuss the installation situation with the competent chimney sweep.
- Adhere to the assembly and operating manual.
- KE = Fireplace insert, NSHF = Ancillary heating surface.

Legend:



Wall



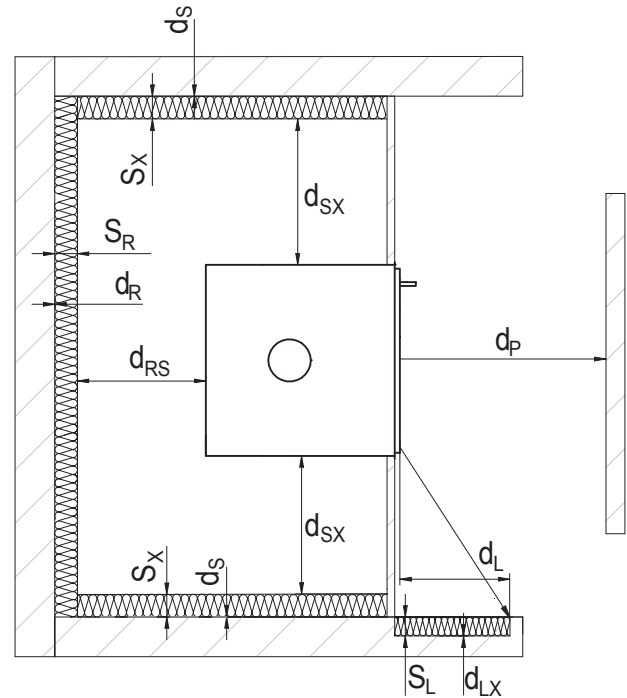
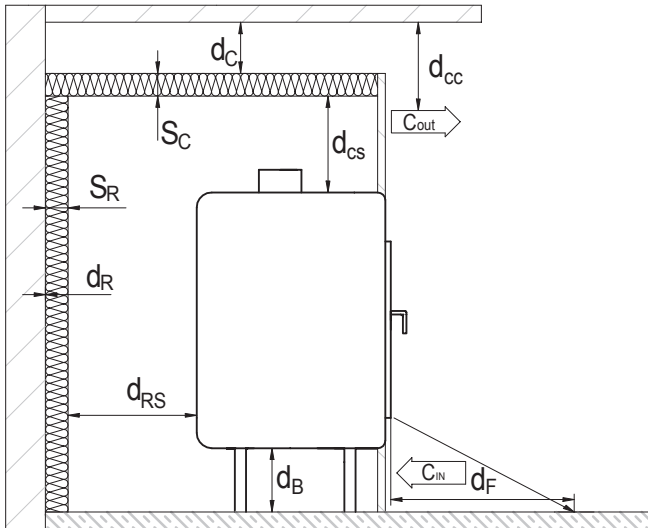
Insulation



Floor

Appendix

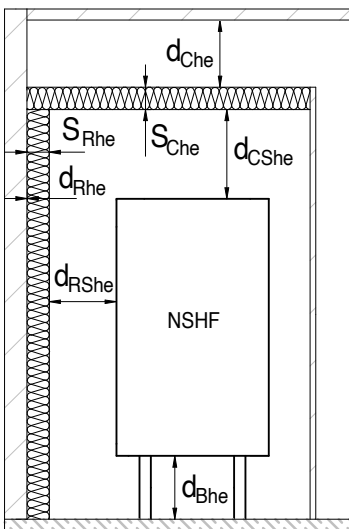
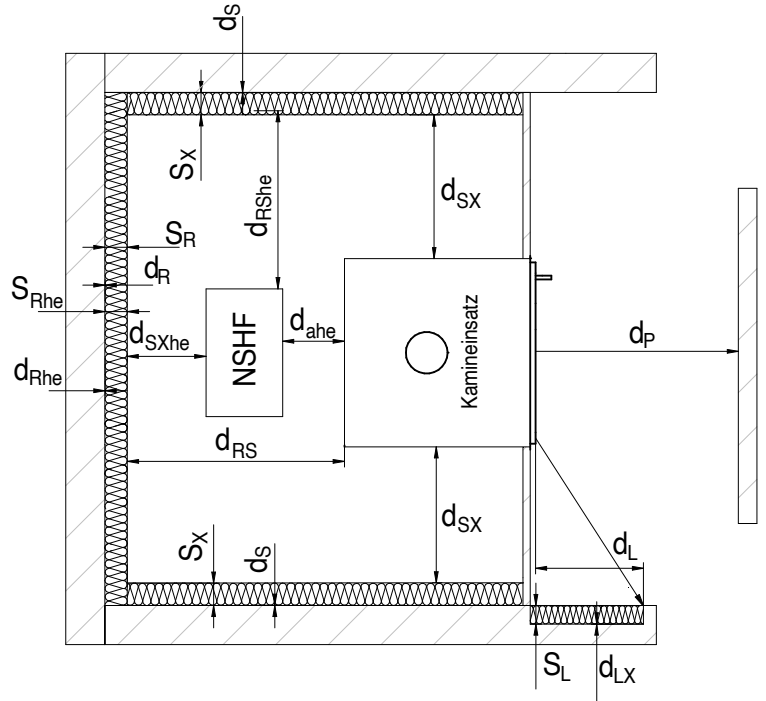
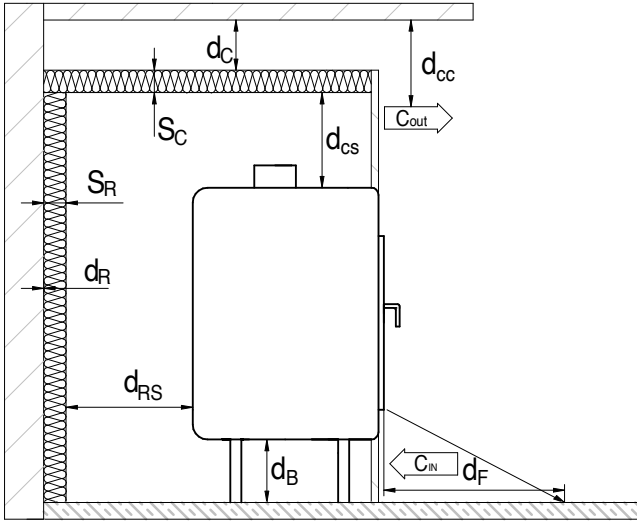
Premium A-1V-87h, Premium V-1V-87h:



Designation	Abbreviation	Unit	Premium A-1V-87h	Premium V-1V-87h
Distance from protective components, front panse (radiation area)	d _P	mm	1700	2300
Distance from the front side to protective components on the sidewall	d _L	mm	1250	1350
Distance from the side to protective components on the sidewall	d _{LX}	mm	–	–
Distance from protective components on the floor going forward	d _F	mm	950	1300
Distance between insulation and ceiling	d _C	mm	750	750
Distance between convection air outlet and ceiling	d _{CC}	mm	–	–
Distance between stove and insulation to ceiling	d _{CS}	mm	–	350
Distance between insulation and side wall	d _S	mm	0	0
Distance between stove and side insulation	d _{SX}	mm	140	120
Distance between insulation and rear wall	d _R	mm	0	0
Distance between stove and insulation near wall	d _{RS}	mm	100	120
Distance between stove and floor	d _B	mm	60	265
Insulation layer thickness on side wall in front radiation area	s _L	mm	–	–
Insulation thickness on the side wall	s _X	mm	120	120
Insulation thickness on the side wall	s _C	mm	–	40
Insulation layer thickness on rear wall	s _R	mm	120	170
Convection air outlet opening min.	C _{IN}	cm ²	1200	1280
Convection air inlet opening min.	C _{OUT}	cm ²	1500	1300

Appendix

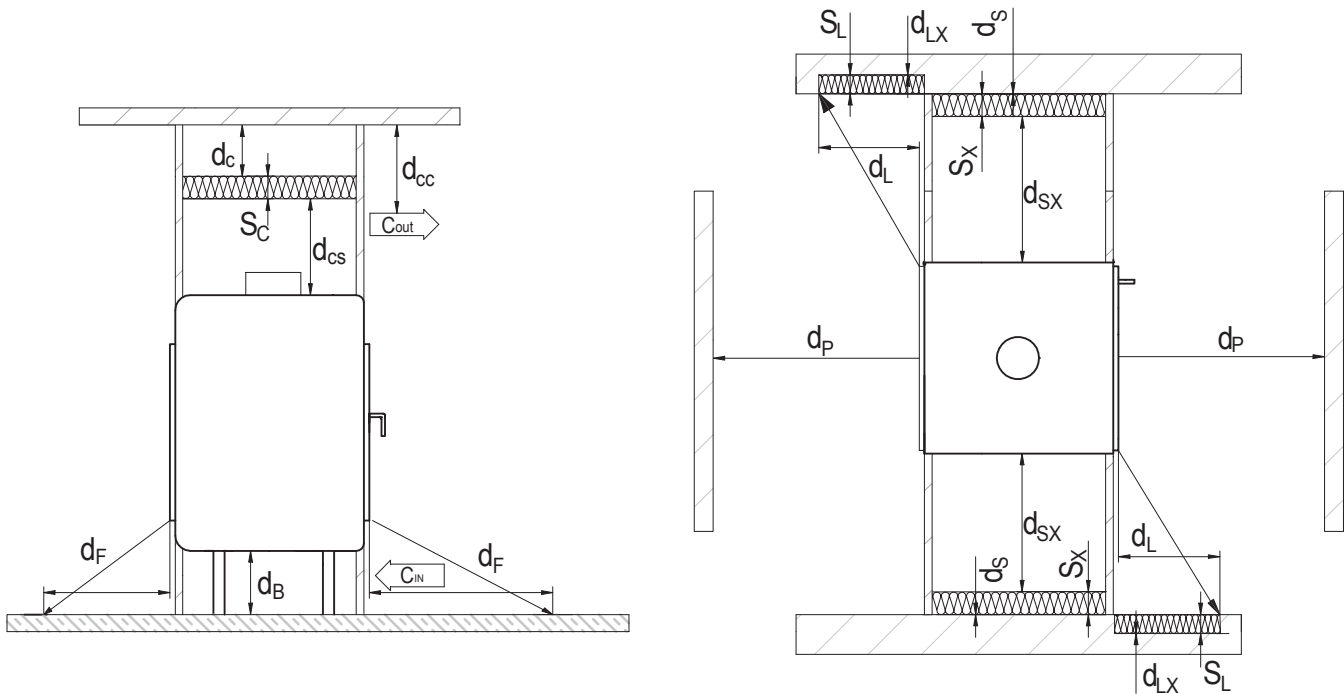
Premium V-1V-87h with secondary heating surface (NSHF):



Designation	Abbreviation	Unit	Premium V-1V-87h
Distance between stove and NSHF	d_{ahe}	mm	–
Distance from protective components, front panse (radiation area)	d_{P}	mm	2200
Distance from the front side to protective components on the sidewall	d_{L}	mm	1150
Distance between insulation and wall	d_{LX}	mm	–
Distance from protective components on the floor going forward	d_{F}	mm	1130
Distance between insulation and ceiling	d_{C}	mm	750
Distance between insulation and ceiling (NSHF)	d_{Che}	mm	–
Distance between convection air outlet and ceiling	d_{CC}	mm	–
Distance between stove and insulation to ceiling	d_{CS}	mm	350
Distance between NSHF and insulation	d_{CShe}	mm	–
Distance between insulation and side wall	d_{S}	mm	0
Distance between insulation and side wall (NSHF)	d_{She}	mm	–
Distance between stove and side insulation	d_{SX}	mm	110
Distance between NSHF and insulation side	d_{SXhe}	mm	–
Wall distance between insulation and rear wall	d_{R}	mm	0
Wall distance between fireplace and insulation at the rear	d_{RS}	mm	110
Distance between insulation and wall	d_{Rhe}	mm	–
Distance between NSHF and insulation	d_{RShe}	mm	0
Distance between stove and base	d_{B}	mm	–
Distance between NSHF and base	d_{Bhe}	mm	–
Insulation layer thickness on side wall in front radiation area	S_{L}	mm	–
Insulation thickness on the side wall	S_{X}	mm	120
Insulation layer thickness on side wall	S_{Xhe}	mm	–
Insulation layer thickness on the ceiling	S_{C}	mm	40
Insulation layer thickness on the ceiling (NSHF)	S_{Che}	mm	–
Insulation layer thickness on rear wall	S_{R}	mm	120
Insulation layer thickness on rear wall (NSHF)	S_{Rhe}	mm	–
Convection air outlet opening min.	C_{IN}	cm ²	1280
Convection air inlet opening min.	C_{OUT}	cm ²	1300

Appendix

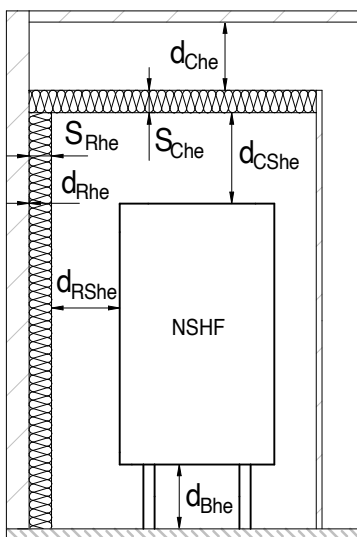
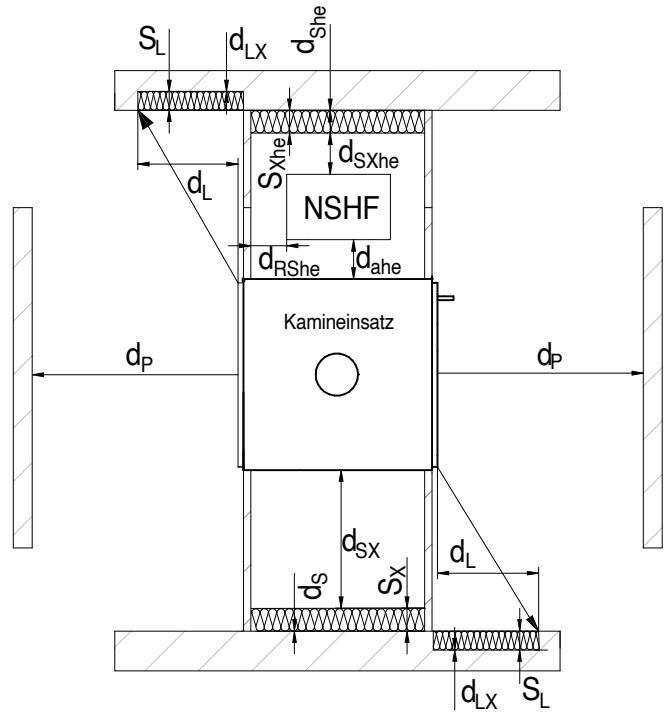
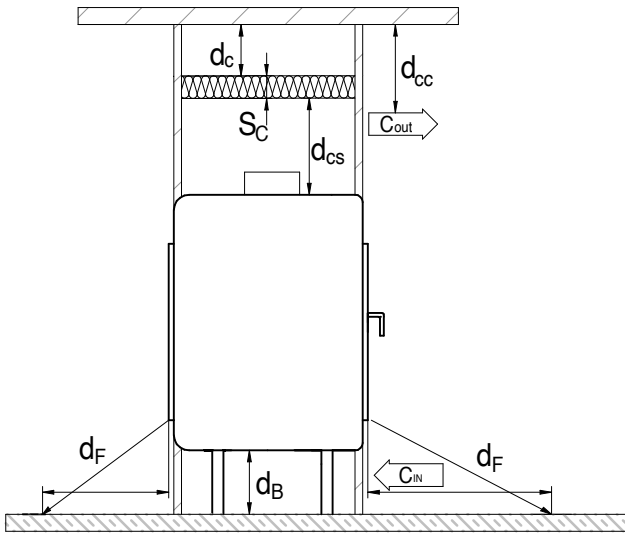
Premium V-FD-87h:



Designation	Abbreviation	Unit	Premium V-FD-87h
Distance from protective components, front panse (radiation area)	d _P	mm	1790
Distance from the front side to protective components on the sidewall	d _L	mm	840
Distance between insulation and wall	d _{LX}	mm	–
Distance from protective components on the floor going forward	d _F	mm	930
Distance between insulation and ceiling	d _C	mm	750
Distance between convection air outlet and ceiling	d _{CC}	mm	600
Distance between stove and insulation to ceiling	d _{CS}	mm	400
Distance between insulation and side wall	d _S	mm	0
Distance between stove and side insulation	d _{SX}	mm	80
Distance between NSHF and insulation	d _B	mm	210
Insulation layer thickness on side wall in front radiation area	s _L	mm	–
Insulation thickness on the side wall	s _X	mm	120
Insulation layer thickness on the ceiling	s _C	mm	–
Convection air outlet opening min.	C _{IN}	cm ²	1020
Convection air inlet opening min.	C _{OUT}	cm ²	1220

Appendix

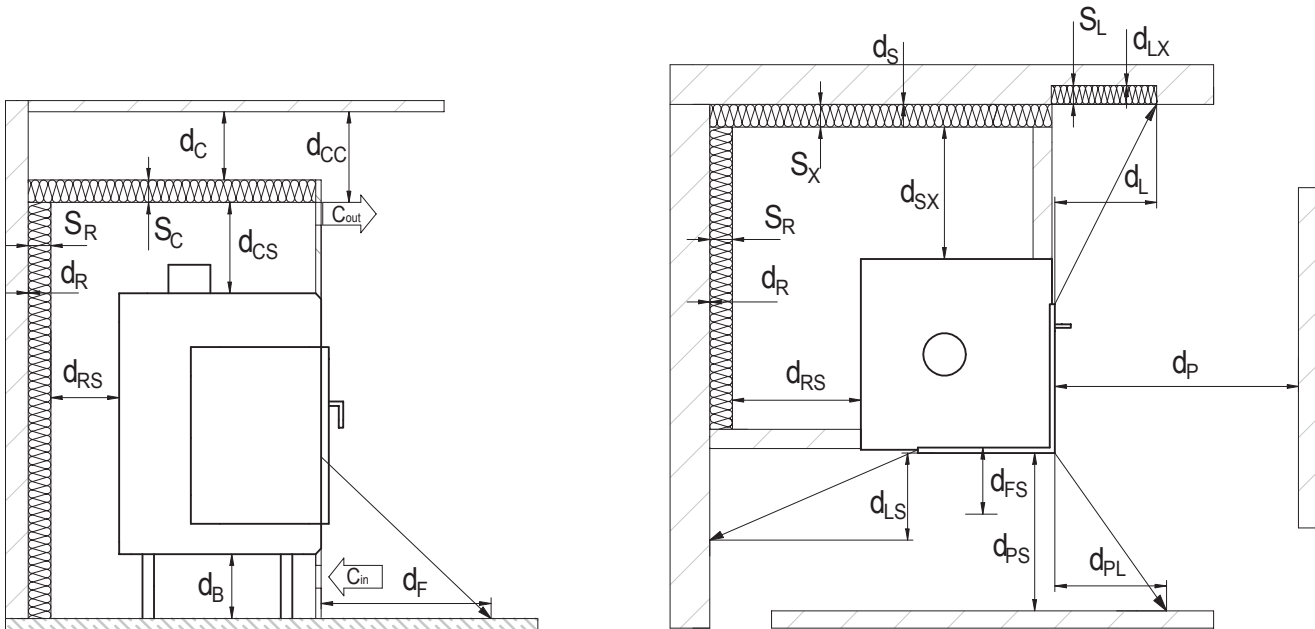
Premium V-FD-87h with secondary heating surface (NSHF):



Designation	Abbreviation	Unit	Premium VFD-87h
Distance between stove and NSHF	d_{ahe}	mm	–
Distance from protective components, front panse (radiation area)	d_{p}	mm	1780
Distance from the front side to protective components on the sidewall	d_{L}	mm	850
Distance between insulation and wall	d_{Lx}	mm	–
Distance from protective components on the floor going forward	d_{F}	mm	960
Distance between insulation and ceiling	d_{C}	mm	400
Distance between insulation and ceiling (NSHF)	d_{Che}	mm	–
Distance between convection air outlet and ceiling	d_{CC}	mm	600
Distance between stove and insulation to ceiling	d_{CS}	mm	400
Distance between NSHF and insulation	d_{CShe}	mm	–
Distance between insulation and side wall	d_{S}	mm	0
Distance between insulation and side wall (NSHF)	d_{She}	mm	–
Distance between stove and side insulation	d_{SX}	mm	80
Distance between NSHF and insulation side	d_{SXhe}	mm	–
Distance between insulation and wall	d_{Rhe}	mm	–
Distance between NSHF and insulation	d_{RShe}	mm	–
Distance between stove and base	d_{B}	mm	210
Distance between NSHF and base	d_{Bhe}	mm	–
Insulation layer thickness on side wall in front radiation area	s_{L}	mm	–
Insulation thickness on the side wall	s_{X}	mm	120
Insulation thickness on the side wall (NSHF)	s_{Xhe}	mm	–
Insulation layer thickness on the ceiling	s_{C}	mm	–
Insulation layer thickness on the ceiling (NSHF)	s_{Che}	mm	–
Insulation layer thickness on rear wall (NSHF)	s_{Rhe}	mm	–
Convection air outlet opening min.	C_{IN}	cm ²	1020
Convection air inlet opening min.	C_{OUT}	cm ²	1220

Appendix

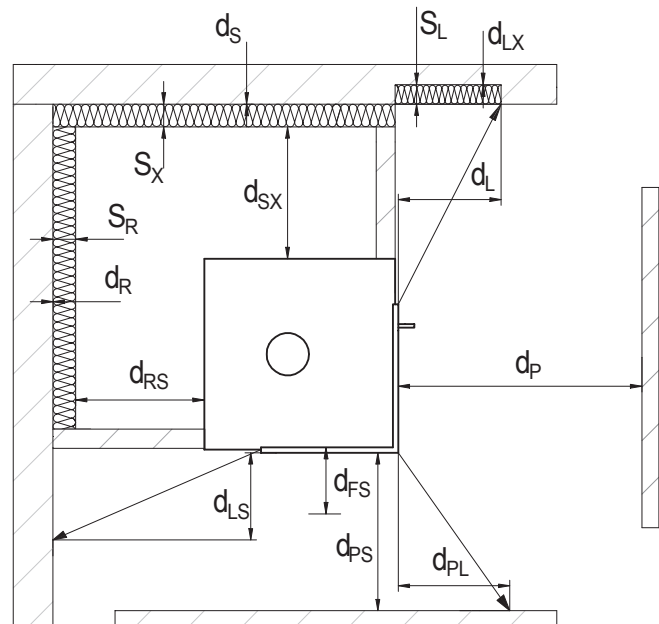
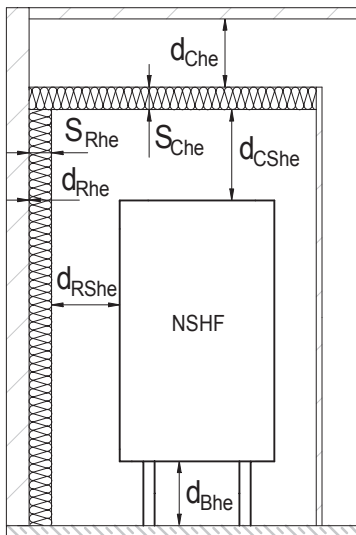
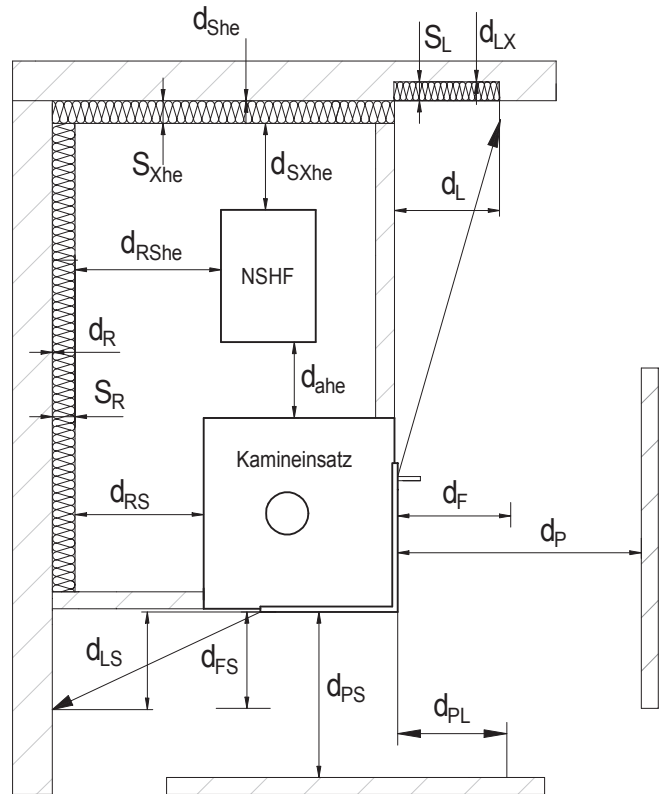
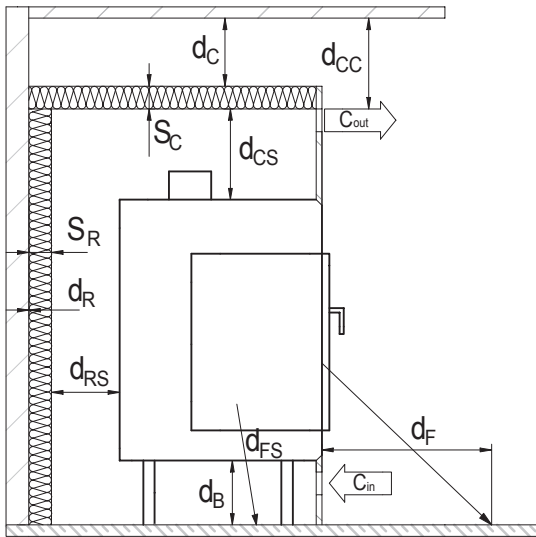
Premium V-2L-55h, Premium V-2R-55h, Premium V-2L-68h, Premium V-2R-68h, Premium V-2L-80h, Premium V-2R-80h, Lean 2R-70h, Lean 2L-70h:



Designation	Abbreviation	Unit	Premium V-2L / R-55h	Premium V-2L / R-68h	Premium V-2L / R-80h	Lean 2L / R-70h
Distance from protective components, front panse (radiation area)	d _p	mm	1200	1400	2100	1100
Distance to components to be protected, Side viewing window (radiation area)	d _{PS}	mm	1000	1200	1300	800
Distance to components to be protected, Side viewing window	d _{PL}	mm	–	–	–	0
Distance from the front side to protective components on the sidewall	d _L	mm	0	700	920	320
Distance from the side to components requiring protection on the sidewall	d _{LS}	mm	0	0	0	0
Wall distance between insulation and wall in the front area on the side	d _{LX}	mm	–	–	–	–
Distance from protective components on the floor going forward	d _F	mm	0	700	870	0
Distance to protected components on the floor to the side	d _{FS}	mm	0	0	0	0
Distance between insulation and ceiling	d _C	mm	473	440	460	620
Distance between convection air outlet and ceiling	d _{CC}	mm	500	500	500	680
Distance between stove and insulation to ceiling	d _{CS}	mm	530	300	–	255
Distance between insulation and side wall	d _S	mm	0	0	0	0
Distance between stove and side insulation	d _{SX}	mm	100	80	80	20
Wall distance between insulation and rear wall	d _R	mm	0	0	0	0
Wall distance between fireplace and insulation at the rear	d _{RS}	mm	100	80	80	20
Distance between stove and base	d _B	mm	210	200	200	200
Insulation layer thickness on side wall in front radiation area	s _L	mm	–	–	–	30
Insulation thickness on the side wall	s _X	mm	120	70	70	70
Insulation layer thickness on the ceiling	s _C	mm	30	70	40	70
Insulation layer thickness on rear wall	s _R	mm	120	70	70	70
Convection air outlet opening min.	C _{IN}	cm ²	650	890	1360	740
Convection air inlet opening min.	C _{OUT}	cm ²	780	1070	1625	850

Appendix

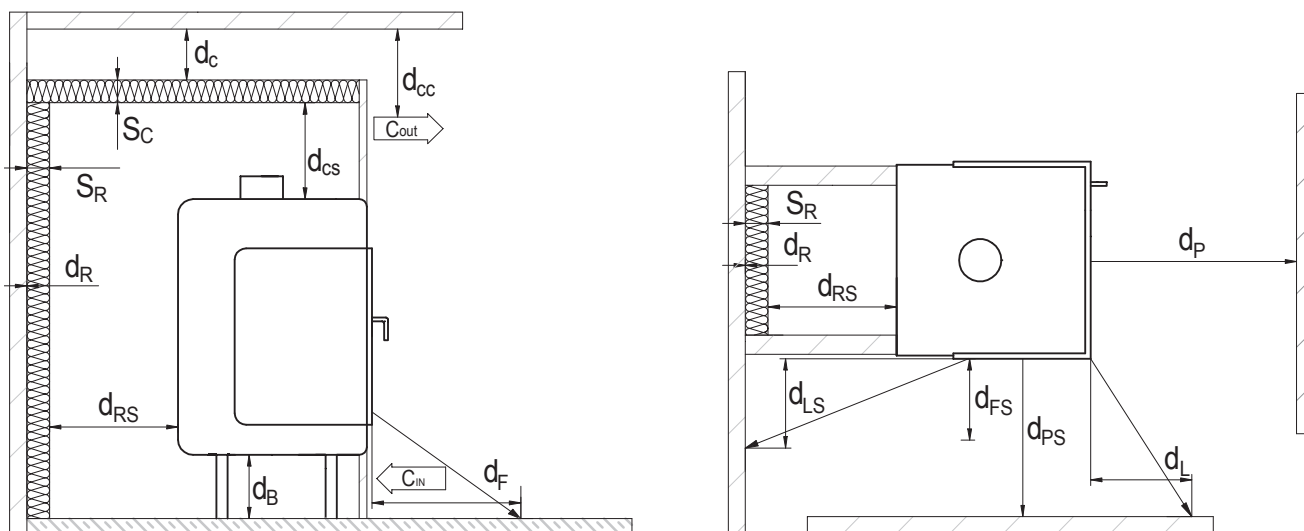
Premium V-2L-55h, Premium V-2R-55h, Premium V-2L-68h, Premium V-2R-68h with secondary heating surface (NSHF):



Designation	Abbreviation	Unit	Premium V-2L / R-55h	Premium V-2L / R-68h
Distance between stove and NSHF	d_{ane}	mm	100	–
Distance from protective components, front panse (radiation area)	d_P	mm	1300	1500
Distance to components to be protected, Side viewing window (radiation area)	d_{PS}	mm	1100	1200
Distance to components to be protected, Side viewing window	d_{PL}	mm	–	–
Distance from the front side to protective components on the sidewall	d_L	mm	0	700
Distance from the side to components requiring protection on the sidewall	d_{LS}	mm	0	0
Wall distance between insulation and wall in the front area on the side	d_{LX}	mm	–	–
Distance from protective components on the floor going forward	d_F	mm	0	700
Distance to protected components on the floor to the side	d_{FS}	mm	0	0
Distance between insulation and ceiling (KE)	d_C	mm	470	440
Distance between insulation and ceiling (NSHF)	d_{Che}	mm	470	300
Distance between convection air outlet and ceiling	d_{CC}	mm	500	500
Distance between stove and insulation to ceiling	d_{CS}	mm	300	300
Distance between NSHF and insulation	d_{CShe}	mm	470	300
Distance between insulation and side wall (KE)	d_S	mm	0	0
Distance between insulation and side wall (NSHF)	d_{She}	mm	0	0
Distance between stove and side insulation	d_{SX}	mm	100	80
Distance between NSHF and insulation side	d_{SXhe}	mm	200	120
Wall distance between insulation and rear wall	d_R	mm	0	0
Distance between insulation and wall	d_{Rhe}	mm	–	–
Wall distance between fireplace and insulation at the rear	d_{RS}	mm	100	80
Distance between NSHF and insulation	d_{RShe}	mm	0	120
Distance between stove and base	d_B	mm	215	200
Distance between NSHF and base	d_{Bhe}	mm	405	0
Insulation layer thickness on side wall in front radiation area	s_L	mm	–	–
Insulation thickness on the side wall (KE)	s_X	mm	120	70
Insulation thickness on the side wall (NSHF)	s_{Xhe}	mm	–	–
Insulation layer thickness on the ceiling (KE)	s_C	mm	30	70
Insulation layer thickness on the ceiling (NSHF)	s_{Che}	mm	–	–
Insulation layer thickness to installation base NSHF	s_{ane}	mm	–	–
Insulation layer thickness on rear wall (KE)	s_R	mm	120	70
Insulation layer thickness on rear wall (NSHF)	s_{Rhe}	mm	–	–
Convection air outlet opening min.	C_{IN}	cm ²	950	890
Convection air inlet opening min.	C_{OUT}	cm ²	1140	1070

Appendix

Premium A-3RL-60h, Premium A-3RL-80h, Premium A-3RL-100h, Premium A-U-50h, Premium A-U-70h, Premium A-U-70h, Lean 3RL-70h:

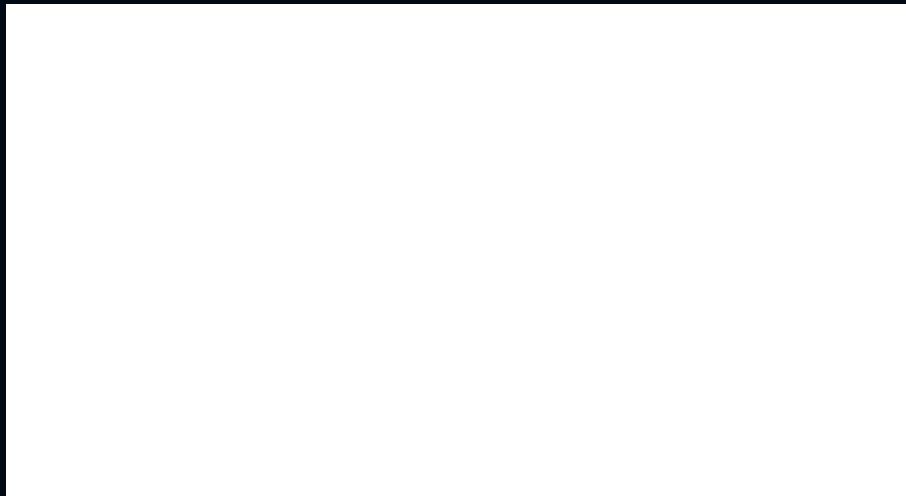





Designation	Abbreviation	Unit	Premium A-3RL-60h	Premium A-3RL-80h	Premium A-3RL-100h	Premium A-U-50h	Premium A-U-70h	Premium A-U-90h	Lean 3RL-70h
Distance from protective components, front pane (radiation area)	d_p	mm	1180	1440	1200	850	850	1200	1000
Distance to components to be protected, Side viewing window (radiation area)	d_{ps}	mm	880	900	600	1000	1100	1200	800
Distance from the front side to protective components on the sidewall	d_l	mm	0	0	0	0	0	0	0
Distance from the side to components requiring protection on the sidewall	d_{ls}	mm	0	0	0	0	0	0	0
Distance from protective components on the floor going forward	d_f	mm	0	0	0	0	0	0	0
Distance to protected components on the floor to the side	d_{fs}	mm	0	0	0	0	0	0	0
Distance between insulation and ceiling	d_c	mm	420	440	550	460	460	750	620
Distance between convection air outlet and ceiling	d_{cc}	mm	500	500	500	500	500	–	680
Distance between stove and insulation to ceiling	d_{cs}	mm	–	–	250	–	–	–	255
Wall distance between fireplace and insulation at the rear	d_{rs}	mm	80	80	100	60	80	100	20
Wall distance between insulation and rear wall	d_r	mm	0	0	–	0	0	0	0
Distance between stove and base	d_b	mm	221	190	195	35	35	0	191
Insulation layer thickness on the ceiling	s_c	mm	50	70	120	40	40	–	70
Insulation layer thickness on rear wall	s_r	mm	70	90	90	70	70	40	70
Convection air outlet opening min.	C_{in}	cm ²	650	830	1090	560	650	1060	540
Convection air inlet opening min.	C_{out}	cm ²	860	990	1310	680	1200	1140	650

Appendix



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