

ENGLISH



ILD 12 ECO and ILD 13 ECO

EN 16510

Manual

VERSION NO. 5, 20.08.2025



Model ILD 12 ECO and ILD 13 ECO

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Ild is a range of safe, environmentally friendly and efficient high-quality stoves, which meet all requirements for a modern heating source. In order to get the best out of your stove, we recommend that you read this booklet carefully.

Technical Data Sheet

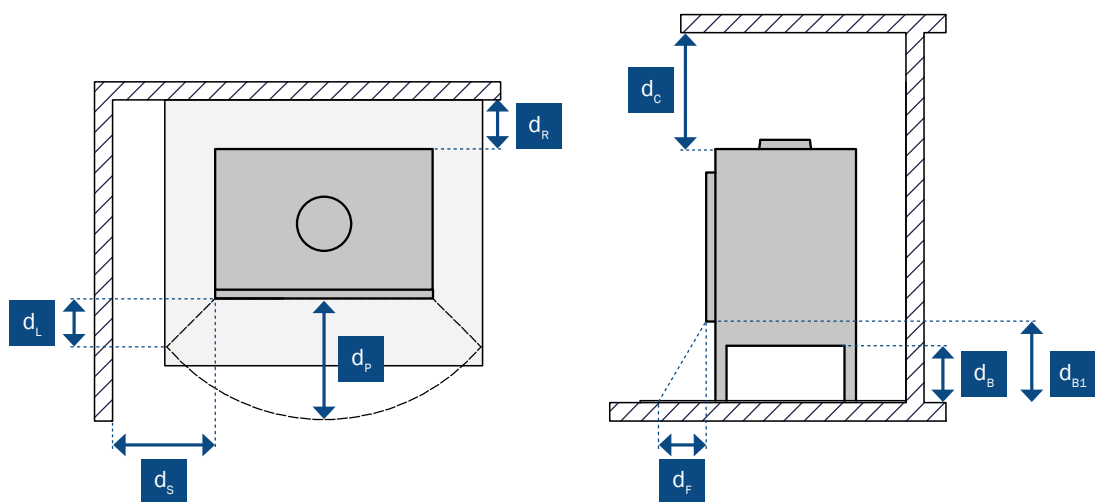
Test in compliance with EN 16510		
	Classification of appliance	Type BF
P_{nom}	Nominal heat output	8.5 kW
η_{nom}	Energy efficiency at nominal heat output	78 %
$\eta_{s nom}$	Seasonal space heating energy efficiency at nominal heat output	68 %
EEl	Energy efficiency index	103
	Energy efficiency class	A
	Fuel	Wood*
	Fuel length, maximum	100x500 mm
$M_{h nom}$	Fuel consumption at nominal heat output	2.6 kg/h
	Amount of fuel	2.2 kg
	Amount of fuel, maximum	4.0 kg
CO_{nom}	CO emission at 13% O ₂ at nominal heat output	0.056 % 705 mg/Nm ³
$NO_{x nom}$	NO _x emission at 13% O ₂ at nominal heat output	93 mg/Nm ³
OGC_{nom}	OGC emission at 13% O ₂ at nominal heat output	46 mg/Nm ³
PM_{nom}	Dust emission at 13% O ₂ at nominal heat output	25 mg/Nm ³
p_{nom}	Flue draught at nominal heat output	12 Pa
	Recommended sub-pressure in the connecting piece	18 Pa
	Required combustion air supply	20.2 m ³ /h
$T_{fg nom}$	Flue gas temperature at nominal heat output	310 °C
$T_{s nom}$	Temperature in the flue connecting piece at nominal heat output	378 °C
T class	Chimney designation	T400 G
$\dot{V}_{f.g nom}$	Flue gas mass flow at nominal heat output	7.0 g/sec
V_h	Standing air loss	0 m ³ /h
	Leakage before testing at a gauge pressure of 5 Pa	2.15 m ³ /h
	Leakage before testing at a gauge pressure of 10 Pa	5.19 m ³ /h
	Leakage before testing at a gauge pressure of 15 Pa	7.55 m ³ /h
CON/INT	Continuous operation (CON)/Intermittent operation (INT)	INT**
	Reaction to fire classification	A1

* Use only recommended fuels - designation I.

** Intermittent operation in this context means normal use of a wood-burning stove. In other words, you should let the fire die down until only the embers are left before refueling.

Basic technical data		
Materials	Stainless steel Cast iron Vermiculite Glass	
Surface treatment	Senotherm	
d_{out1}	Connecting piece ext. diameter for outside flue pipe	156 mm
d_{out2}	Connecting piece int. diameter for inside flue pipe	149 mm
	Fresh air connection piece external diameter	100 mm
L	Overall dimensions (length) - ILD 12 ECO/ILD 13 ECO	782/788 mm
H	Overall dimensions (height) - ILD 12 ECO/ILD 13 ECO	978/1018 mm
W	Overall dimensions (width) - ILD 12 ECO/ILD 13 ECO	518/524 mm
m	Mass	154 kg
m_{chim}	Maximum load of a chimney the stove may carry	120 kg

Minimum distances to combustible materials		
d_R	Back (uninsulated/insulated flue pipe)	250/150 mm
d_S	Sides (uninsulated/insulated flue pipe)	450 mm
$d_{S(C)}$	Sides corner distance (uninsulated/insulated flue pipe)	50/75 mm
d_C	Ceiling	750 mm
d_P	Front (uninsulated/insulated flue pipe)	1400 mm
d_F	Front to the bottom front radiation area	0 mm
d_L	Front to the side front radiation area	0 mm
d_B	Below the bottom (not regarding feet)	0 mm
d_{B1}	Bottom edge of door to floor	327 mm
d_{non}	Minimum distances to non-combustible walls	50 mm



This stove is produced in accordance with type approval for the product, which also covers the product's Assembly and Instruction Manual. Read and follow the user operating instructions carefully.

The Declaration of Performance (DoP) is available from www.ildstoves.com.

Type plate

All ILD wood-burning stoves are fitted with a type plate that specifies the approval standards and the distance to flammable materials.

The type plate is located at the rear of the stove.

1	ILD 12 ECO			9
2	Standard: EN 16510-1:2022, EN 16510-2:1:2022			CE 20
3	Approved by: DTI • NB no. 1235			
4	Classification of appliance: Type BF			
5	Use only these recommended fuels: Wood logs			
6	Manufacturer: Scan A/S • DK • 5492 Vissenbjerg			
7	DOP: 99212600			
8	P_{nom}	8.5	kW	10 Residential solid fuel burning appliances The appliance can be used in a shared flue Read instruction manual for further information Only use recommended fuels - designation I 11
	D_{nom}	78	%	
	CO_{nom} (13 % O ₂)	705	mg/m ³	
	NO_{x, nom} (13 % O ₂)	93	mg/m ³	
	OGC_{nom} (13 % O ₂)	46	mg/m ³	
	PM_{nom} (13 % O ₂)	25	mg/m ³	
	p_{nom}	12	Pa	
	d_R	250	mm	
	d_S	450	mm	
	d_C	750	mm	
	d_F	1400	mm	
	d_F	0	mm	
	d_L	0	mm	
	d_B	0	mm	
12	Lot no: 000000 2025 Pin:000			

ILD 12 ECO type plate

TYPE PLATE EXPLANATION

- 1** Type and/or the model number or designation to enable the appliance to be identified
- 2** Applicable standards
- 3** Name of test centre/certification number
- 4** Classification of appliance
- 5** Recommended fuels
- 6** Manufacturer's name and address
- 7** DOP document number
- 8** Table of values:
 - P_{nom}** - nominal heat output
 - η_{nom}** - energy efficiency at nominal heat output
 - CO_{nom}** - CO emission at 13 % O₂ at nominal heat output
 - NO_{x, nom}** - NO_x emission at 13 % O₂ at nominal heat output
 - OGC_{nom}** - OGC emission at 13 % O₂ at nominal heat output
 - PM_{nom}** - dust emission at 13 % O₂ at nominal heat output
 - p_{nom}** - flue draught at nominal heat output
- Minimum distances to combustible material:**
 - d_R** - back
 - d_S** - sides
 - d_C** - ceiling
 - d_F** - front
 - d_F** - front to the bottom front radiation area
 - d_L** - front to the side front radiation area
 - d_B** - below the bottom (not regarding feet)
- 9** CE mark of conformity - The digits indicate the year of issue of the certificate
- 10** Product specifications and instructions
- 11** Type plate number
- 12** Product registration number

Product registration number

All ILD wood-burning stoves are provided with a product registration number. Please make a note of this number at the rear page of this manual; you will always need to quote it when contacting your dealer.

Before the Installation

All local regulations, including those referring to national and European Standards as well as the information provided in this assembly and instruction manual need to be complied with when installing the appliance.

The stove must be installed in rooms with a good ventilation. A good ventilation is vital for the efficient operation of your stove.

You should however assess whether furniture or other items might become excessively dry due to being too close to the stove. There is no guarantee that the present building materials can withstand the temperature in relation to visual changes.

Ensure that your Local registered installer can recommend wood stove installation.

Ensure that the area can support the stove and installation weight.

Ensure that there will be sufficient space and access to service.

Ensure that the heat output of the stove is suitable for the room.

Warning! Do not make any unauthorized changing on the stove.

Packing

The stove comes on a wooden pallet with a wood frame nailed down on vertical boards at the corners. Consult local regulations on the disposal of these materials; the wood has been treated to repel vermin and may **not** be burnt in the stove.

First Time Use

Before the stove is heated up for the first time, we advise you to open all the doors and windows in the room where the stove is installed, to ensure an optimal ventilation. When the stove has reached operating temperature, the surface treatment will harden and emit a strong odor for a short time.

Mounting

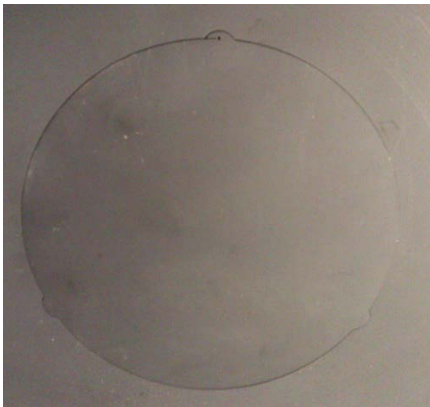
There must be a fire resistant floor or floor plate around the stove to protect the floor against damages from sparks. National and local regulations must always be respected.

If it is necessary to connect an elbow pipe, a curved rather than a sharp elbow pipe is recommended as this causes the least possible reduction in the chimney draught. See more under general directions and chimney.

The appliance can be installed in a shared flue.

Flue Connection Pipe Top/Rear

1. For a top flue outlet, remove the cover plate and mount the flue connecting piece with two pcs. bolts. (pic. 1/4)
2. For a rear outlet, remove the cover plate by cutting the "treads" with a nipper. (pic. 2)
3. Then do the same with the inside cover plate. (pic 3).
4. Finally you can mount the flue connecting piece in the rear outlet (pic. 4)
(remember to move the inside bolted cover plate to the top outlet and mount it here). (pic. 5)



Picture 1



Picture 2



Picture 3



Picture 4



Picture 5

Wearing Parts

When replacing or cleaning the combustion chamber's insulation (vermiculite), first remove the baffle plate.

Gently lift the plate and remove the pins in the side plates holding the plate in place. Push the front of the deflector plate upwards and turn it carefully making it possible to remove the plate from the burn chamber. Then remove the top deflector plate.

Now remove the ceramic stones placed on each side of the cast iron grate in the bottom of the stove. The side plates and finally the back plate can now be removed. Do this gently in order not to damage the plates.



Floor plate

If you are placing the stove on a flammable floor, you must comply with the national and local regulations on the size of any non-flammable subsurface required to cover the floor around the stove.

Your local dealer can advise you on regulations concerning protection of flammable materials in the vicinity of your stove.

The floor plate's function is to protect the floor and flammable material against any sparks that may occur. A floor plate can be made of steel or glass, but the stove can also be erected on clinker concrete, natural stone or similar materials.

The stove has adjustment screws under the stove. Use the adjustment screws to get the stove to stand straight and level. If the floor plate is used, the stove must be adjusted so that the plate can be placed under the front of the stove.

NOTICE: It is very important that the stove is level to allow an optimal function of the door. Please note that once mounted the stove can no longer be adjusted!

Closed Combustion System

In well-insulated houses, the air used up by the burning process has to be replaced. For this purpose you can mount the delivered fresh air connection piece (Ø 100 mm) at the bottom or at the rear of the stove and connect it to the outside.

The installation must have a maximum length of 6 m and consist of maximum 3 bends as well as a single inlet grate. The total counter pressure must not exceed 2 Pa., at a minimum chimney draught of 18 Pa, measured at the stove's connecting piece.

Special weather and geographical conditions mean that the installation must always be carried out and approved by a ventilation specialist.

We recommend the mounting of a valve, so that it is possible to close for the ventilation system. If the stove is not in use for a longer period, this valve can be closed to prevent draft.

Chimney & Flue Connecting Piece

The chimney must have a minimum draught of 18 Pa. measured at the stove's connecting piece. If you are not sure of the stove's draught, a chimney sweep can measure it.

The chimney sweep will also ensure that the chimney is airtight, safe and equipped with a cleanout door. If there are any other connections to the chimney, the chimney sweep should also be asked for advice before installation.

Upon delivery, the flue pipe connecting piece is located inside the stove, for transport. The connecting piece can be connected directly to the stove's top outlet.

If a rear connection is required, move the cover plate to the top outlet and the connection piece from the top to the rear outlet. You will find more about this under installation.

Remember always to ensure that the gasket between the stove and flue connecting piece is intact and airtight.

The local building and housing authorities must always approve the installation.

The connecting pipe must be CE marked.

The requirements to the chimney and the flue pipe in terms of safety distances must be met. The chimney shall be proven according to EN 13384-2:2015+A1:2019 depending on the individual situation on site.

It is important that stove, flue pipe and chimney are situated with enough space for cleaning sweeping and emptying.

Stoking and Overloading

The stove is approved as an intermitted heater which means that you must stoke the stove with a suitable amount of fuel (see data) which then burns down into embers before you stoke it the next time.

The maximum amount of fuel specified in this manual should not be exceeded, overloading can cause excess smoke.

Any part of the fuel must not be placed at a higher level than the lower part of the metal piece in the backside of the burn chamber. Be careful not to overload the stove as this causes wear and tear to the stove and may, in serious cases, destroy the stove. The maximum amount of fuel specified, (see data) should not be exceeded, as overloading can cause excessive smoke. The recommended frequency for firing is 45 min.

Fuel

Any dry and seasoned woods can be used. There are however major differences in density, tendency to spark, processing, time of seasoning and burning time.

It is absolutely prohibited to fire with painted, pressure impregnated or glued wood, or sea driftwood. Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, ethyl alcohol or similar liquids to start or "reignite" a fire in the stove.

Keep all such liquids well away from the stove while it is in use.

Nor should you ever burn chipboard, plastics, waste or treated paper. These contain substances that are hazardous to human health, to the environment, your stove, and your chimney.

Use wood fuel only!

Type of wood	Dry wood Kg/m ³	Compared to beech %
Hornbeam	640	110
Beech	580	100
Ash	570	98
Oak	570	98
Maple	570	98
Birch	540	88
Mountain pine	490	83
Spruce	370	65
Poplar	370	65

It is recommended to buy a moisture content meter. Make it a habit to check that your wood has less than 18% moisture content, preferably 16 %.

General notes

Parts of the wood-burning stove, especially the outer surfaces, become hot during use. Due care should be exercised.

Wear a glove when handling the stove.

Never empty ashes into a flammable container. Ashes can contain glowing embers long after you finish operating the stove.

Keep the combustion chamber closed except during ignition, refuelling and removal of residue material to prevent fume spillage.

Keep the air intake and output holes free from any accidental blokage while the stove is in use.

When the stove is not in use you can close the dampers to avoid a draught through the stove.

If the stove has not been used for some time, you should check the flue passageways for potential blockages before relighting.

We advise you strongly not to use the stove over night. The stove is not suited for this purpose

Note! Never place flammable material in the radiation zone of the stove.

Refueling on to a Low Fire Bed

If there is insufficient burning material in the fire bed to ignite a new fuel charge, excessive smoke emission can occur. Refueling must be carried out onto a sufficient quantity of glowing embers and ashes that the new fuel charge will ignite within a reasonable period. If there are too few embers in the fire bed, add suitable kindling to prevent excessive smoke.

As a result of the heating and due to the ensuing change in temperature, the stove may produce sounds which can be loud and varied.

Environmental Use

It is important to us that our environment is protected in best possible way - first of all, it is an advantage to all, and as a bonus the fuel is exploited much better.

The air supply for the combustion is added through 2 valves controlled by 2 control handles.

The **left control handle is the primary air**, which is used for lighting the cold stove and when firing dense wood. Maximum air is added, when the control is in the furthest left position; when fire is established, gently close the primary control by sliding it towards the right.

The **right air control (secondary air)** is to be used when the stove is warm to control the fire. It is open when pushed to the right, and restricted when pushed to the left. The fire should be run efficiently, and the best indication of this is the color of the firebricks inside the firebox. If they are soothed up, then the fire is burning too cold, and this should be corrected.

Please also notice that the logs must be max. 50 cm long and no more than 10 cm in diameter; the moisture percentage must be lower than 18%.

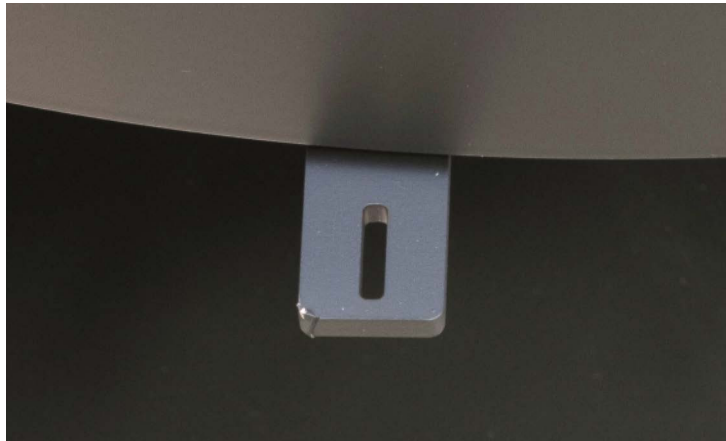
Using Your Stove under Various Weather Conditions

Wind blowing on the chimney can have a great effect on how your stove reacts; you may need to adjust the airflow to achieve good burning results. Fitting a damper in the flue pipe may also help, as it will give you the ability to regulate the draught in changing wind conditions.

Fog can also have a great influence on how well a chimney draws; you may again need to adjust the airflow settings to achieve good burning results.

Primary Air Control

During normal heating, the primary air control is typically open between 0 and 50%. 0% may be used for burning soft wood and 50% for hard wood. In unusual weather conditions causing poor draught, it may be necessary to start up the stove with full primary air open. As the stove heats up slowly, decrease the primary lever towards the right. See also passage for lighting the stove.



Far left: fully open primary air. Far right: closed primary air

Secondary Air Control

During normal heating, the secondary air control is typically open between 50 and 100%. The secondary air control determines the performance of the stove. In addition to participating in the combustion, the secondary air will also prevent formation of soot on the glass.



Far left: closed secondary air. Far right: open secondary air

Ash Drawer and Bottom Grate

Ash residues can occur from time to time, and it is recommended that the ash drawer area is periodically inspected and cleaned out using a suitable vacuum cleaner.

Make it a routine to check that the door gasket is firm and intact each time stove is cleaned.



Cutting Out Ash Residues

At the front of the burn chamber there is a channel, which is designed to collect loose ashes when the stove is being used.

When cleaning the stove, use a suitable vacuum cleaner.

IMPORTANT!! Make sure that all ashes are cold, as there may still be embers present a long time after the fire has burned out.

Dampers Left Open

Operation with the air controls open can cause excess smoke. The appliance must not be operated with air controls or door left open except as directed in the instructions.

General Rules

There should always be at least 50 mm distance between the product and a fire wall, see Installation examples.

Report the installation to local building authorities and the chimney sweep.

Wood or other combustibles are not to be stored in the room under the burn chamber.

Lighting the Stove Using a "Top-Down"-Lighting

"Top-Down"-Lighting provides an environmentally friendly lighting and helps keep the glass area optimally clean.

- 4 pieces of wood approx. 25-30 cm long with a weight of approx. 0.5-0.6 kg per piece.
- 6-10 thin pieces of firewood of about 25-30 cm in length, with a total weight of approx. 0.6-0.8 kg.
- 3 fire lighters in bag or block form

Place the pieces of wood, firewood and fire lighters in the combustion chamber as shown below.



Set the primary and secondary air controls to maximum in the lighting phase. If the fire is too strong, you may throttle down the primary air damper.

NOTE: The wood must never be placed higher than the tertiary holes at the rear of the burn chamber (this does not apply at a cold start)!

Warning! All exposed surfaces of this stove will reach high temperatures. Remember always to use the glove provided during the operation.

After the lighting procedure, please see passage regarding primary and secondary air control for intermittent use. Do not use the stove with the door open. Unless you are refueling the fire, the door should be closed.

It is recommended to stoke no less than 2 pieces of wood at each refueling.

At the EN 16510-test the stove was fired as shown on the picture:

With 2 pieces of beech each 250 mm

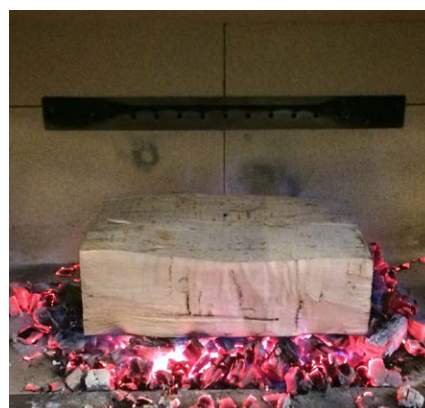
- with a total weight of 2.2 kg.

Primary air damper 38 % open

Secondary air damper 65 % open

Refuelling interval: 50 min

The criterion for the end of test cycle: 4-4,5 % CO²



Cleaning and Maintenance

The stove can be wiped with a dry and lint-free cloth. The ceramic glass can also be wiped with a dry cloth, or you can buy a special glass cleaner at your authorized dealer's. The glass cleaner must be used as directed. Never use cleaning agents with abrasive properties.

The combustion chamber lining is a wearing part that must be protected against knocks and shocks. The lining may be used in spite of small cracks, but if it begins to crumble, it must be replaced.

Prior to any required sweeping, the smoke deflector plates must be removed by gently lifting the plates and removing the pins.

With daily use, make sure that the seals are intact and ensure that they are replaced before they allow leakage.

Always remember to ventilate the room after repairs to painted surfaces and the use of care products.

If the stove is fitted with soapstone, it is recommended that the stove is washed with clean water and PH neutral soap.

Once a year, or more, according to national and local rules, stove should be cleaned properly, in order to make sure that dust and ashes are cleaned out from the convection area. This service which must be undertaken by a qualified specialist, should include sweeping, leak test and service of the flue liner. If the stove has been out of use for longer periods, always perform this service.

Please also see passage: Ash drawer and bottom grate for regular service routine.

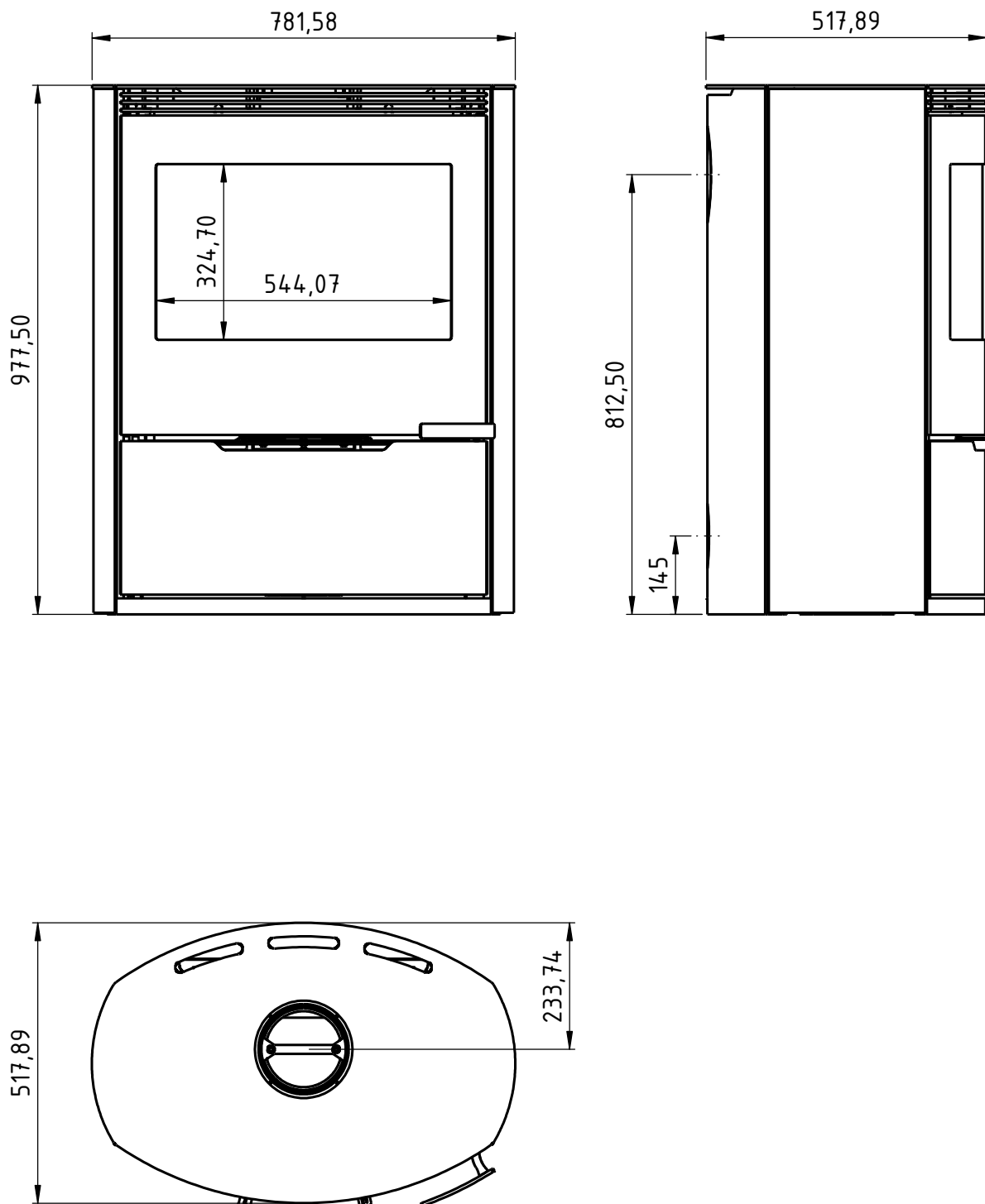
Don't ever use any spare parts not recommended by an authorised dealer.

Disposal of stove parts

Steel/cast iron	Send for recycling
Glass	Dispose of as ceramic waste
Combustion chamber lining	Vermiculite is not recyclable. Dispose of as waste
Baffle plate	Vermiculite is not recyclable. Dispose of as waste
Gaskets	Dispose of as waste

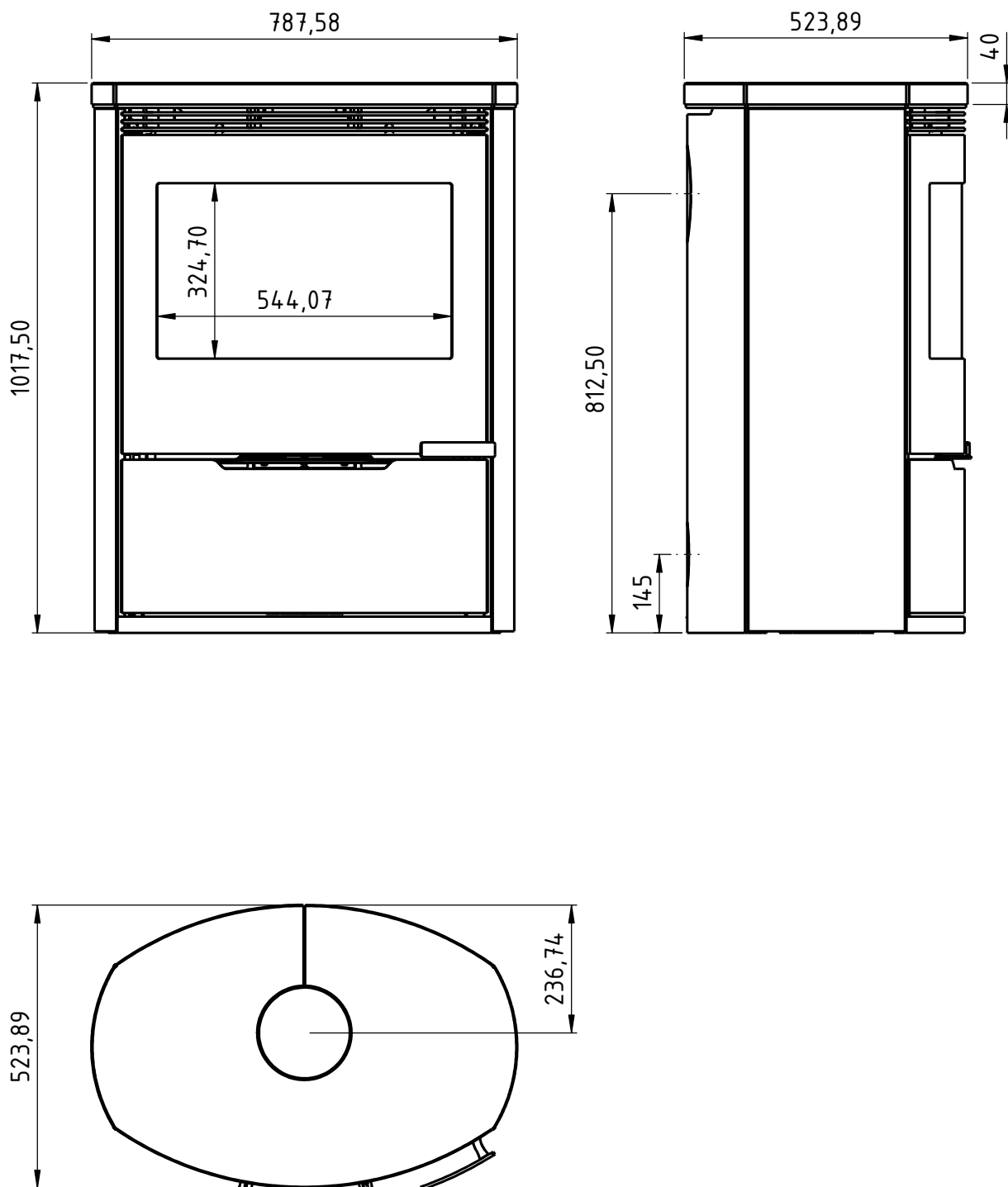
Measurements

Ild 12 ECO



Measurements

Ild 13 ECO



Safety Distance

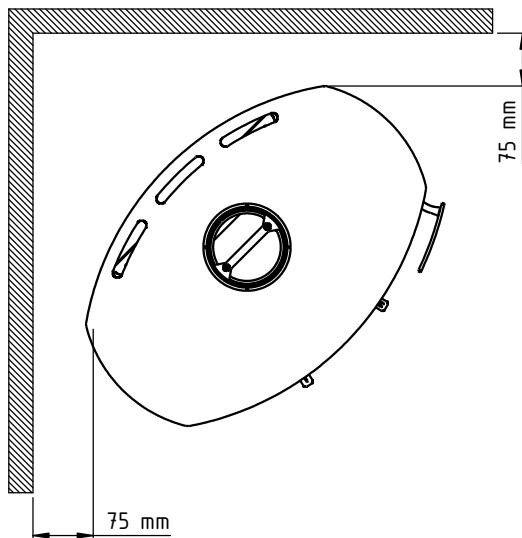
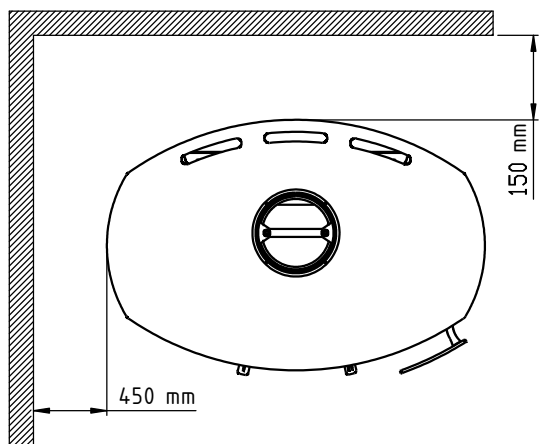
European, national and local regulations concerning safety distances for wood-burning stoves must be complied with.

Installations Examples

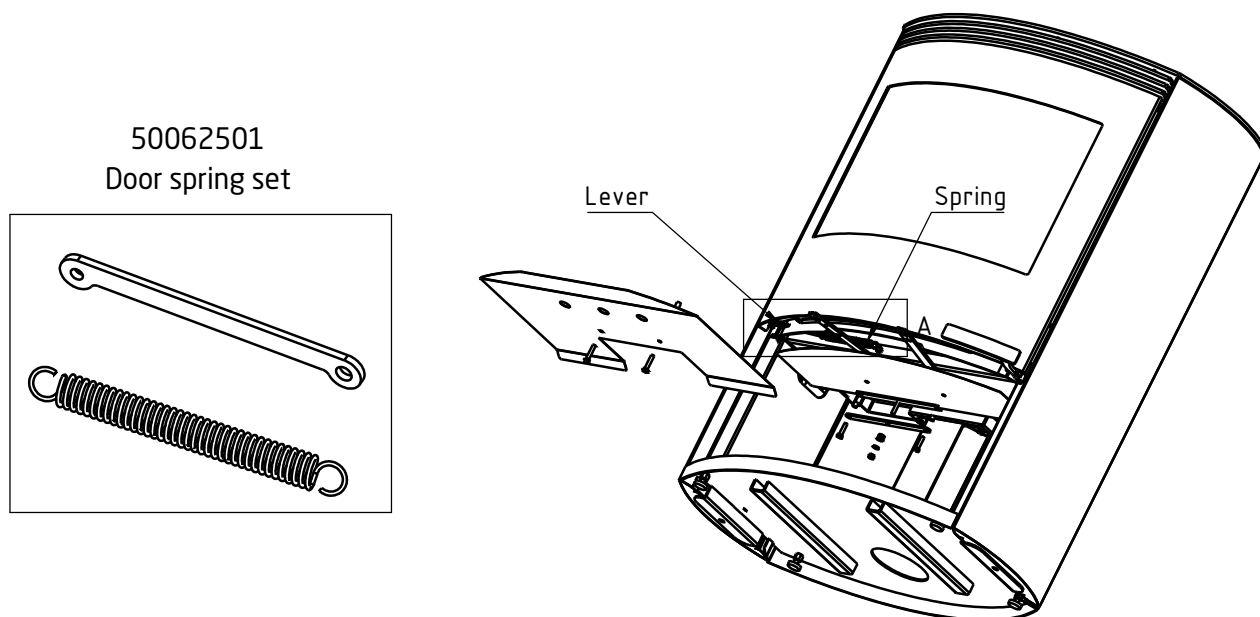
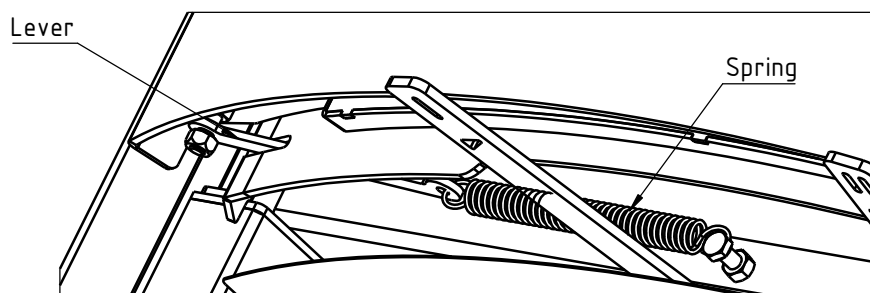
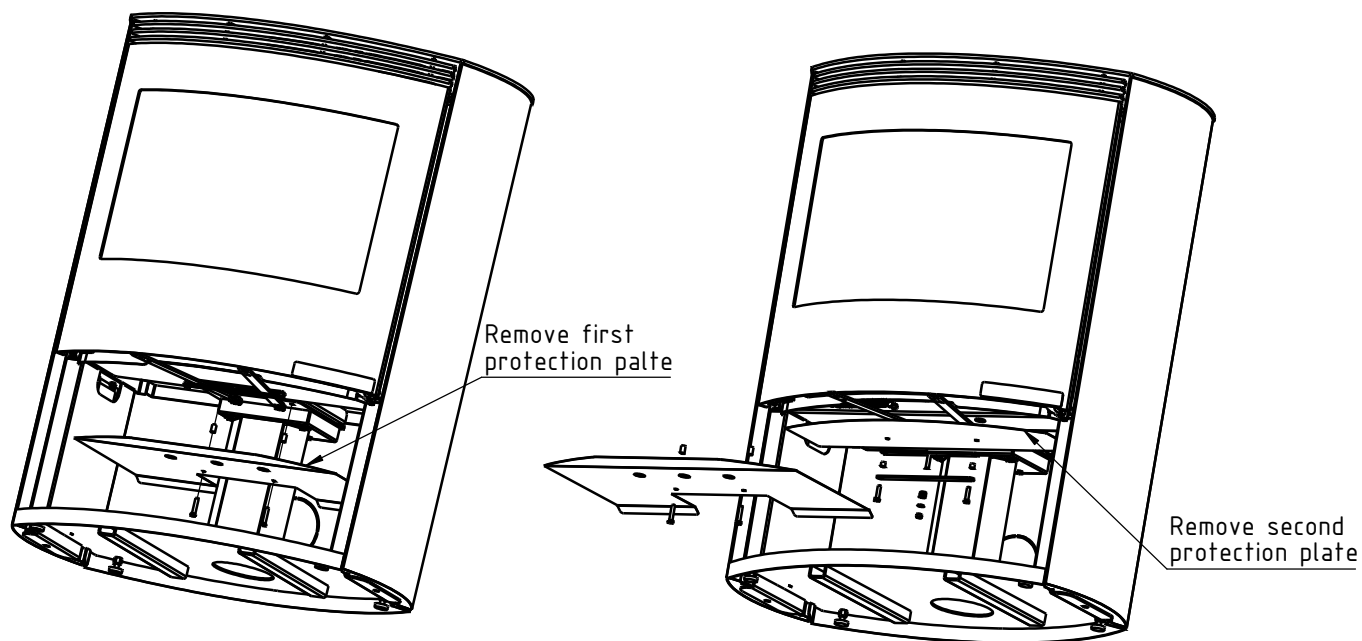


ILD 12 ECO and ILD 13 ECO
Distance to furniture: 1400 mm

Distance to Flammable Materials, with Insulated Flue Pipe



Mounting of the Self-closing Door Spring



Troubleshooting

Problem	Cause	Manual passage reference
Smoke escapes to the room	Fuel too wet	See: Fuel
	Closed air controls	See: Primary/secondary control
	Chimney draft insufficient, dimensions, height diameter or blockages	See: The chimney effect and cleaning
	Vacuum in room	See: Closed combustion
Wood burning too quickly	The air valves are set incorrectly	See: Primary/secondary control
	The baffle plates are incorrectly mounted or missing	See: Installation
	Improper firewood (waste wood, pallets etc.)	See: Fuel
	Chimney too large	See: The chimney effect and cleaning
Soot build-up on glass	Incorrect secondary airflow setting	
	Excessive primary air	
	Fuel too wet	See: Fuel
	Wood pieces too large	
	Improper firewood (waste wood, pallets etc.)	See: Fuel
	Chimney draft insufficient, dimensions, height diameter or blockages	See: The chimney effect and cleaning
	Vacuum in room	See: Closed combustion
Excessive soot build-up in chimney	Fuel too wet	See: Fuel
	The air valves are set incorrectly	See: Primary Secondary control
The surface of the stove is turning grey	Overheating	See: Environment and Primary/secondary control
Poor heating performance of stove	Insufficient air flow	See: Installation and cleaning
	Incorrect fuel	See: Fuel
	Baffle plate position	See: Installation
Odour or noise from stove	Paint hardening	See: First use
	Material distressing	See: First use

Warranty

Our warranty does not cover repair or replacement of parts that are subject to normal wear and tear during the warranty period or to items that may require replacement in connection with normal maintenance.

These items include (but are not limited to) burn plates, fire grates, firebricks, concrete, flue baffles, gaskets and similar items, ceramic insulation blankets, glass (ceramic glass is warranted against thermal breakage only), glass clips and seals for doors, lids and glass, brazier, ash drawer and ash drawer seals.

Any unauthorized modification of the stove may not be carried out.



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