

INSTALLATION GUIDE LUNA DIAMOND PLUS



collection

DIAMOND

The victory of fire

The supplier takes no responsibility for any possible damage, poor working appliances and accident as a result of incorrect installation

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1. General

1.1 Transport und Installation

- Transport the Luna in an upright position, or, in encumbering circumstances, at an angle of 45°.
- The handles for transportation purposes have been attached inside the slots provided on the sides of the Luna (see Pic.1)
- A set of rubber straps that can be turned and a set of fixed rubber straps are available as an option. This is to facilitate transport on-site and on the stairs.
- Check to see that the lifting door functions properly before fitting the Luna.

1.2 Fuel

1.2.1 Wood

The quality of the wood is extremely important for the optimal functioning of the stove (output, clear glass, etc.).

Good quality wood is wood that has been dried under an aerated shelter for at least 2 years (+18% moisture content). Damp wood gives off less heat and dirties the stove and the chimney less. You can also use briquettes (the effect is comparable with that of wood), and it is best to use them in combination with wood because burning only briquettes makes the temperature too high.

Never fill the stove with wood because when the chimney draws too much, it can make the temperature too high. Damage as a result of excessive temperature is not under guarantee. 3 wooden logs are equal to 12 kW.

1.2.2 Forbidden fuel

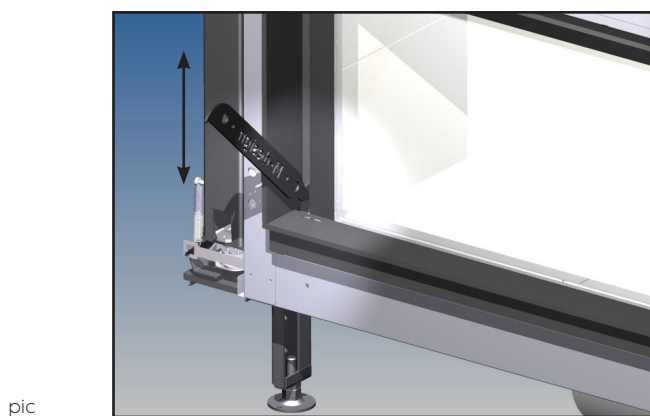
The use of treated wood (painted, etc.) and all types of household waste, which can disperse hazardous gases, is FORBIDDEN and CANCELS OUT ANY CLAIM ON THE GUARANTEE. The use of fluid fuel (petrol, etc.) is also forbidden.



Pic.

1.3 Starting the fire

- Open the window (pic.).
- Put a bed of tinder (paper or firelighters) with a little kindling (small twigs or pieces of wood) in the stove and light the tinder.
- Leave the door slightly ajar (+ 3 cm) to get a turbo stream of air that will make the kindling catch fire.
- After the kindling has caught fire and burns well, the logs may be placed on the fire. After the logs have caught fire, the window may be shut.



NOTE: When a fire is made for the first time, the paint will harden and that give off smoke and a smell, which starts after the fire has burned for about 10 minutes and lasts for about 15 minutes. See to it that there is ample ventilation in the room.



CAUTION :

It is not necessary to overload the fireplace with wood. 1 kg dry wood gives a 4 kW power. Example : a fireplace with a 78% return gives a power for about $4\text{kw} \times 78\% = \pm 3\text{ kW}$ for 1 kg dry wood.

If you want a power of $\pm 12\text{ kW}$, it is just enough to put 4 kg wood in the fireplace. This is like two normal pieces of wood.

Be carefull not to use palletwood (this gives an enormous heat) for continuous heating. This can lead to fire hazard. We are not responsible for the bad use of the fireplaces and any consequence for not following this guideline.

2. Installation

Before starting the installation, first check the fireplace

2.1 Actions to be taken upon installation

Your supplier is the specialist who chose to represent M-design in your area. For your own safety and satisfaction, we advise you to entrust him with the installation.

The appliance has to be installed according to certain prescribed rules and local regulations. In the absence of the correct regulations in Belgium, the French regulations in respect of installation will be (D.T.U. 24.2.2) applicable.

However, if you decide to carry out the work on your own, we advise you to do the following:

2.2 Positioning the fireplace:

Place the fireplace on a stable surface using the adjustable feet. Adjust the height of the fireplace by turning the bolt (pic 1)

The stove may not be placed direct ont the floor to allow natural convection. The apertures for the air supply (IN) is situated underneath the appliances.

Regulating the height of the appliance :

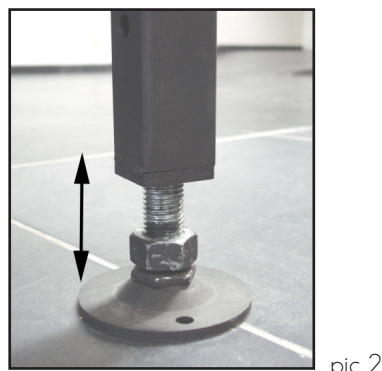
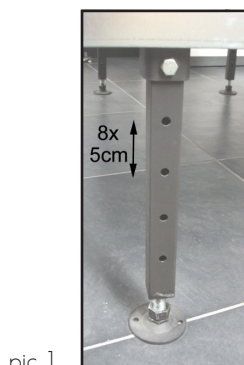
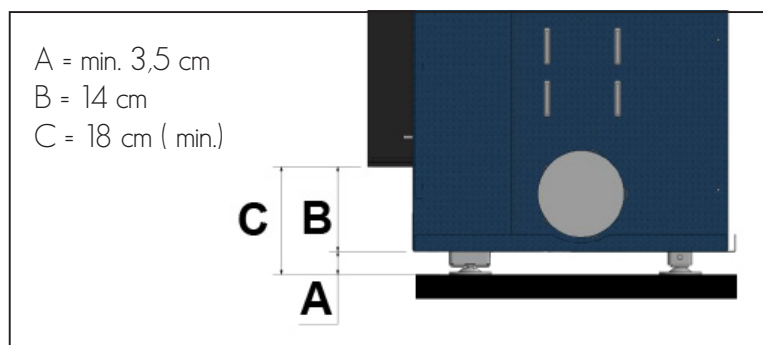
This can be made in two ways.

A regulation by 8 times 5 cm (pic. 1) and a fine regulation by screw (pic.2).

The minimal height as from ground to the 4th side frame is 3,5 cm (A min).

The minimal height "C min" will be 18 cm, measured as from the ground to 4th side frame.

The maximal height as from the ground to the 4th side frame is 45 cm.



2.3 Insulation and finishing

Once installation is complete, the appliance can be fitted. Once you have checked everything, you can perform the final insulating and finishing operations.

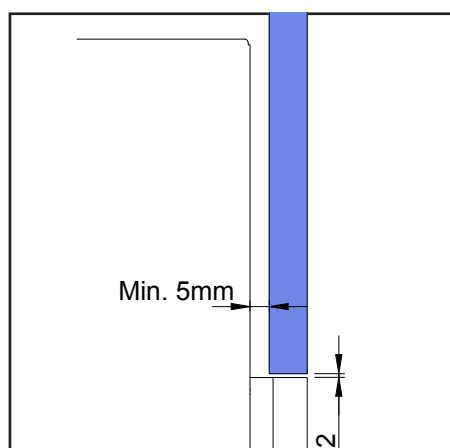
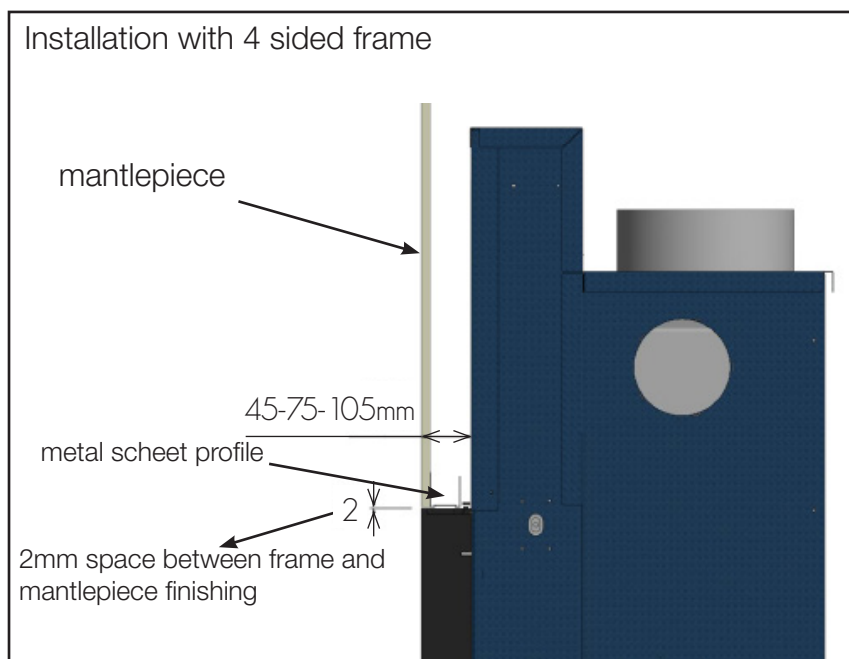
The built-in part of the furnace tends to be very warm. Please check that the furnace is not too narrowly fitted and that there is adequate space for the elimination of hot air. For insulation of the furnace, we advise you to use M Design insulating plates. You are advised against using any other insulation product. Inflammable materials as well may not be used for the finishing.

The masonry must be raised around the furnace. Because of the expansion of the furnace during combustion, an interstice of at least 5 mm must be provided on each side of the appliance. The masonry must not lean against the furnace.

THE APPLIANCE MUST BE SET FREE .

Please pay attention to leave approx. 2 mm inbetween the finishing frame and maconry

A very essential point when setting up the Luna Diamond is that the distance has to be respected inbetween fireplace and the finishing material for the mantelpiece such as marble, gypsum,...



2.4 Air supply for combustion

Every form of combustion uses air. In the case of a thermally sealed room supplementary air supply is essential. One must at all times avoid creating under-pressure in the room. If a cooking hood appears to be absolutely essential in the adjoining room, sufficient air supply will have to be provided to avoid every form of under-pressure.

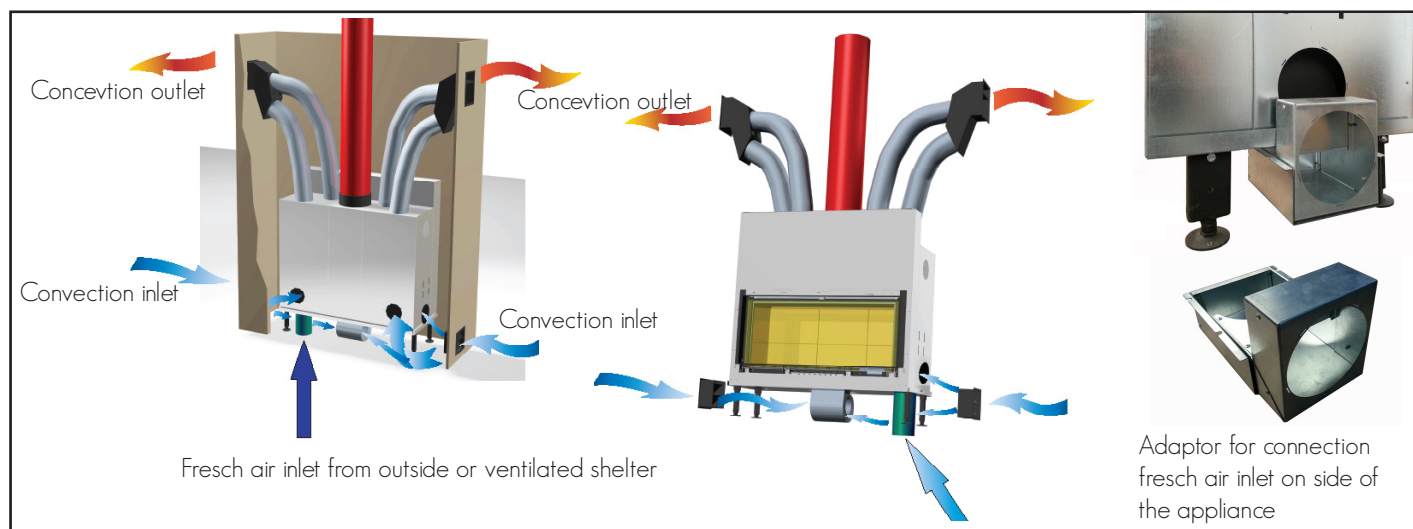
You need an airlet with dia. 150mm coming from outside, or a ventilated shelter.

This air inlet you have to connect to the Luna Diamond

With the Luna Diamond, the fresh air for combustion is supplied directly from outside through a flexible (dia. 150mm) that is connected to one of the 4 entrances that are provided on the left, right or lower side of the fireplace. Use for this purpose one of five connection pieces.

Thanks to this new system, the air that is required for combustion is completely separated from the convection air stream in the room .

The appliance is always delivered with an open air inlet at the left side. If you want to change, you can remove the plate on the side you wish to connect and replace the plate on the side that was open before.



ø 150 Needed inlets for combustion air	
Each Luna Diamond H, 550V, 850V	1 x ø 150
Each Luna Diamond DH, DV, 1000V en 1150V	2 x ø 150



Connection piece air inlet (dia. 150mm)

2.5 Convection current

2.5.1 Natural convection

It is compulsory to open 2 or 4 hot air vents at the top of the appliance. The entrance for the air supply convection are situated at the lower backside of the Luna Diamond and also through the opening that is provided for the fan. These have been constructed in such a way that no air can be blown out along here, not even with a fan. The stove is placed at least 20 mm above the floor (if placed on the floor) to allow for natural convection.

A clearance of at least 4 dm³ , excluding the measurements of a dust filter, or at least 6 dm³ , including the measurements of a filter, must be provided for in the masonry. (Note: Remember to take the measurements of the clearance of the grids into account.)

2.5.2 Convection by means of a fan (optional)

It is compulsory to open at least 2 hot air vents. It is essential to separate the air supply ducts and the air vents correctly in the masonry. Some insulation material gets damaged in time, and it is essential to separate it from the ventilation air supply, otherwise one runs the risk that it is sucked in and spread in the house. It is therefore also advisable to use fixed insulation plates (Promatec, HT-platen or promatec). The fan may be mounted either on the out-side or on the inside, which even makes it possible to install a fan afterwards.

2.5.3 Hot air ducts

Thermally insulated ducts are essential for the optimal functioning of the appliance (these cause 'draught' in the convection air current). By using the maximum number of ducts (at least 2), the output is improved and the noise (that is caused by the displacement) is reduced.

For the purposes of the installation of these ducts it is best to go vertically up-wards first for at least 1m and then to change direction, making a rather wide bend and avoid using a flue terminal grid with a small clearance because the speed loss that this causes reduces the efficiency of the hot air vents.

2.5.4 Design Lüftungsgitter M-Design

Design Grid (Outlet) with 2 connections

or

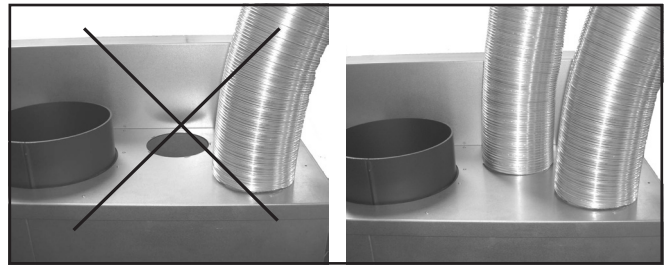
Design Grid (Outlet) with 2 connections

DRL 2 (420 X 82)

or

Design Grid (Outlet) with 4 connections

EACH APERTURE YOU MAKE, MUST BE CONNECTED WITH FLEXIBLE



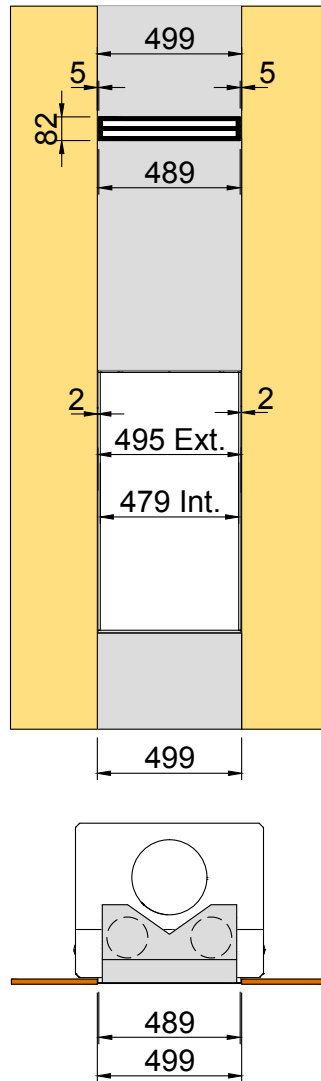
2 dm²

Inlet grid convection air

4 dm²

Inlet grid convection air

Measurements installation design grid with 2 connections in combination with decorative glass for 550V



IMPORTANT: After a long heating pause, we recommend removing the attached dust from your appliance. Clean hot air ducts, grilles, all surfaces and the panel (also inside) in and around your unit. Dust residues can be avoided Initial heating after the heating pause of the unit to odor nuisance and visible residues on the panel and the room ceilings.

Note: a circulation of hot air requires that no under-pressure be created in the room. A grid that is near the floor sees to it that cold air can be drawn in. Don't connect those with a flexible. Air will find the way to get at the right place. Place all the fittings that you use at the same lengths and angles if possible, otherwise it is possible that some grids give off more heat than others and, seeing that a hot air pipe functions in a manner similar to a chimney, the one that is hot first has the most draught and therefore becomes hot even more quickly.

2.6 Fan

2.6.1 Installation

- Remove the Chamotflex plates, the bottom plates and the opening to the fan. See pic.8.
- Now slide the fan downwards to just under the stove.
- Make the necessary electrical connections..

2.6.2 Fan with dimmer

- Leave the adjustment of the fan speed closed.
- Fuse 1.5A (Take the knob off, unscrew the little plate, take it out if it is to be replaced.)
- The adjustment screw for the minimum speed is under the knob.(M-design has developed a new induction dimmer which lets the fan run noiselessly and which may be bought as an option.)
- The fan (optional) may be started after the fire has burned for 15 minutes.
- Let the fan turn at the maximum speed for 12 hours the first time to let it run in

2.7 Flue

2.7.1 Flue

The construction of chimney must comply with strict conditions:

All the Luna Diamond stoves have a standard flue opening of 300,250,200 or 180mm in diameter. Certain chimney configurations may require different standard diameters. In that case, look at table for the height of the flue and the possibility of reducing the diameter with the help of a reduction piece. Note : per 45° change of direction, one must keep to within 1m of this table.

The flue must be themally insulated

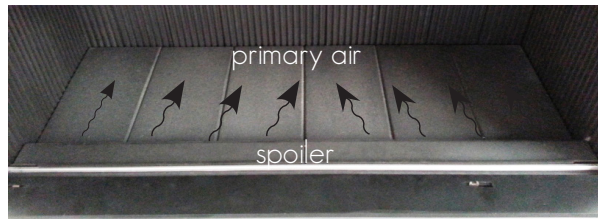
Do not connect more than one stove to chimney flue?

Table: MINIMUM HEIGHT OF THE FLUE IN TERMS OF ITS REDUCTION.

Luna Diamond (Plus)	Ø300	Ø250	Ø200	Ø180	Ø150	
Luna 700 H +			>4m	>7m		1 Ø150
Luna 850 H +		≥4m	>4m	>7m		1 Ø150
Luna 1000 H +		≥4m	>5m			1 Ø150
Luna 1150 H +		≥4m	>6m			1 Ø150
Luna 1300 H +		≥5m	>8m			1 Ø150
Luna 550 V +		≥4m	>5m	>7m		1 Ø150
Luna 850 V +		≥5m	>7m			1 Ø150
Luna 1000 V +		≥6m	>8m			2 Ø150
Luna 1150 V +		≥7m	>9m			2 Ø150
Luna 850 DH +	≥5m	≥7m				2 Ø150
Luna 1150 DH +	≥6m	≥8m				2 Ø150
Luna 850 DV +	≥6m	≥8m				2 Ø150
Luna 1000 DV +	≥7m	≥9m				2 Ø150
Luna 800 DC			>6m			1 Ø150
Luna 1000 DC		≥5m	>9m			1 Ø150
Luna 900 CL/CR +		≥5m	>7m			1 Ø150
Luna 1100 CL/CR		≥6m	>9m			1 Ø150
Luna 750 RD		≥5m				1 Ø180
Luna 1000 RD		≥6m				1 Ø180

3. Operation & control of combustion air

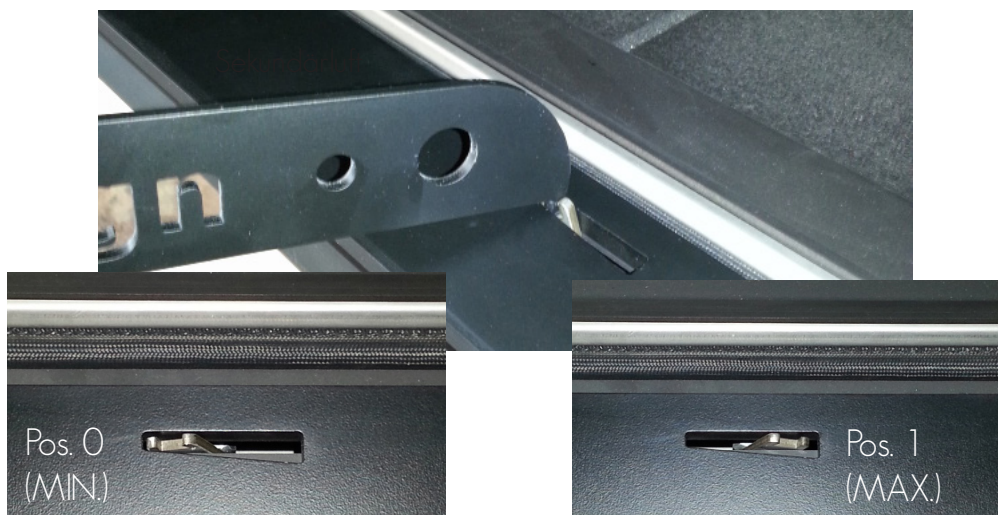
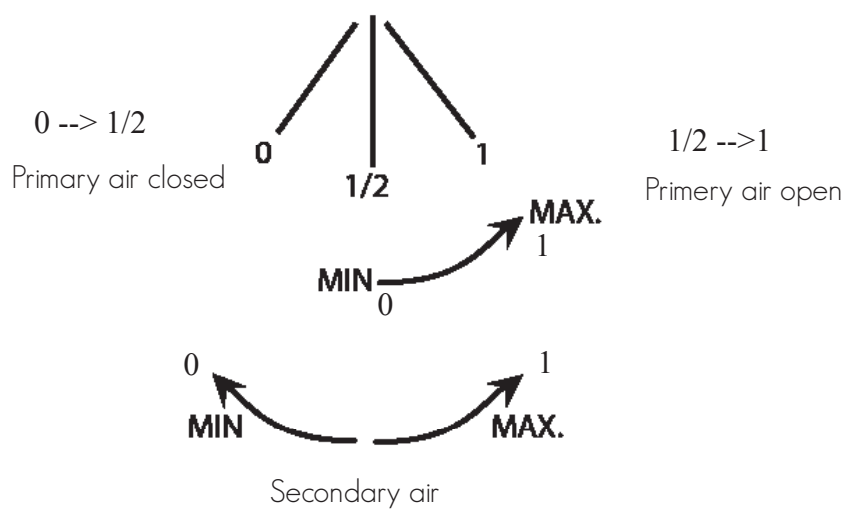
The air is fed to the fire under the spoiler over the entire width. It is therefore important to regularly remove the ash under the spoiler.



The control of the combustion air supply is controlled manually. Use the cold hand to move the slider to the right to increase airflow and slide to the left to decrease airflow. With an open door, the regulation will have no effect on the fire.

Position 0 -> 1/2 : the primary air is closed and the fire is only provided by the secondary air

Position 1/2 -> 1 : the primary air is open and the fire is additionally provided by the secondary air

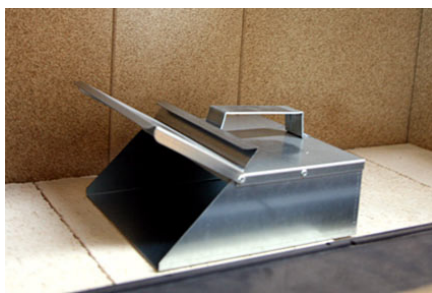


4. General recommendations

The appliance must be connected to the flue pipe and tested before the material is cemented in. In order to ensure that the appliance functions optimally, one must insulate the hot air ducts completely, comply with the minimum of the diameter measurements for the hot air ducts and hot air vents and the chimney must be adjusted. Do not put any inflammable materials in the immediate vicinity of the stove. Note: If you leave the door open, little burning pieces of wood may be projected onto the floor. Insulating materials: it is preferable to use “high temperature” materials. It is strongly advisable to position the chimney and to connect the stove in such a way that no humidity or water can enter the stove. Humidity and water are the greatest enemies of the Chamot-flex in the appliance because it can swell and burst after the fire has been lit.

4.1 Maintenance

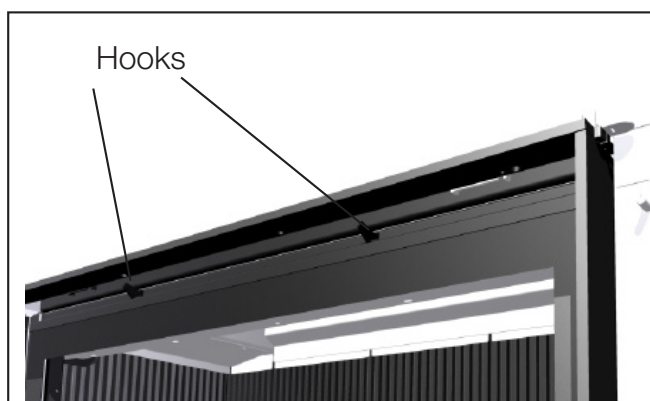
- Besides regularly cleaning the window, you must have your chimney swept at least once a year
- A fire brick (Chamotte) can still work perfectly, even if it is cracked, but if pieces are missing the brick must be replaced to effectively protect the combustion chamber.
- Remove regularly excessive ash. Note: never remove the entire ash, because a wood fire is best burned on a bed of its own ash.
- For regular use, the high-temperature mechanism should be oiled with a temperature-resistant silicone oil. (Do not use any other lubricant). This silicone oil, based on Teflon, is available from the supplier of M-design. At repeated high temperatures, the mechanism could dry out and block the disc.



Ash pan

4.1.1 Reinigung der Suchtscheibe

- Move the window all the way down.
- Under the top bar, there are two or more hooks that will take you with your finger up to press. The window will now open at an angle of 45 °. To close, press the window back until it snaps back into the hooks.
- Now you have the possibility to move the viewing window up and down and clean it.
- For cleaning the window, we recommend “Bio-Clean” from M-design. This Cleaning agent does not attack the surface and is available from your supplier.



5. Garantie

5.1 Terms and items covered

- 8 years' guarantee on the general structure.
- 2 years' guarantee on the parts and on the baffle plate
- 1 year's guarantee on the fans and the speed variator.
- No guarantee on glass, seals or Chamotflex plates

5.2 Provisio

This contract ceases to be valid if the instructions and guidelines of these operating instructions were not followed. Indemnification during the guarantee period will take place only through the supplier's mediation upon presentation of the invoice of purchase. Parts will be delivered only in replacement of defect parts.

5.3 Disclaimer

Damage, loss and malfunctions linked to:

- Incorrect installation of incorrect connection.
- Chimney draught that has not been adjusted.
- Transport and installation.
- Incorrect usage.
- Insufficient maintenance.
- Unsuitable, hazardous and damp fuel.
- Every internal adjustment to or reconstruction of the stove.
- Burning at extremely high temperature, more than 12 kw.
- Costs for packaging and transport.
- All costs not pre-arranged with M-design.
- Costs linked to the misuse and/or abuse of the appliance.



Tilt the window (see cleaning).
Lift these upwards until you get the slots
(See picture).
At the top left, read the serial number.

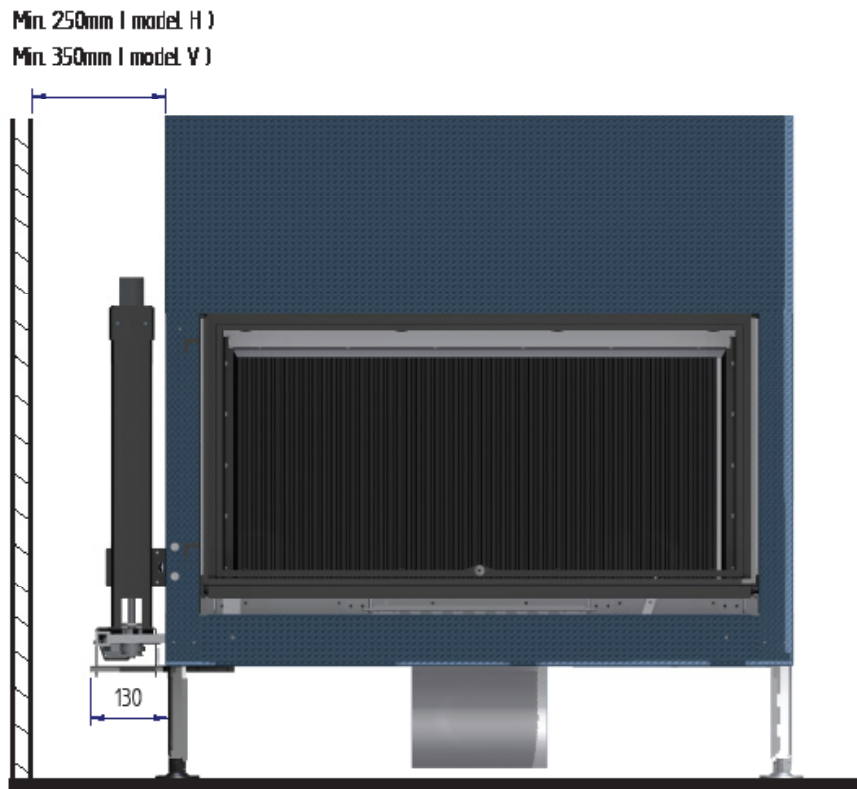


6. Diamond technology

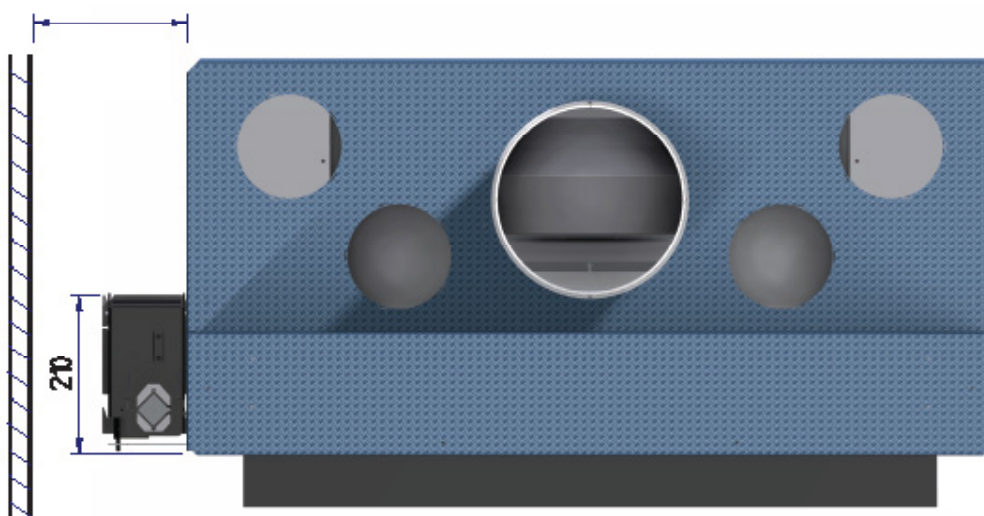
Automatic window with remote control (accessory):

In order to remove the system completely from the device in the installed state, the following must be observed.

Keep the distance between the oven and the panel at least 25cm (for horizontal units) and 35cm (for vertical models).



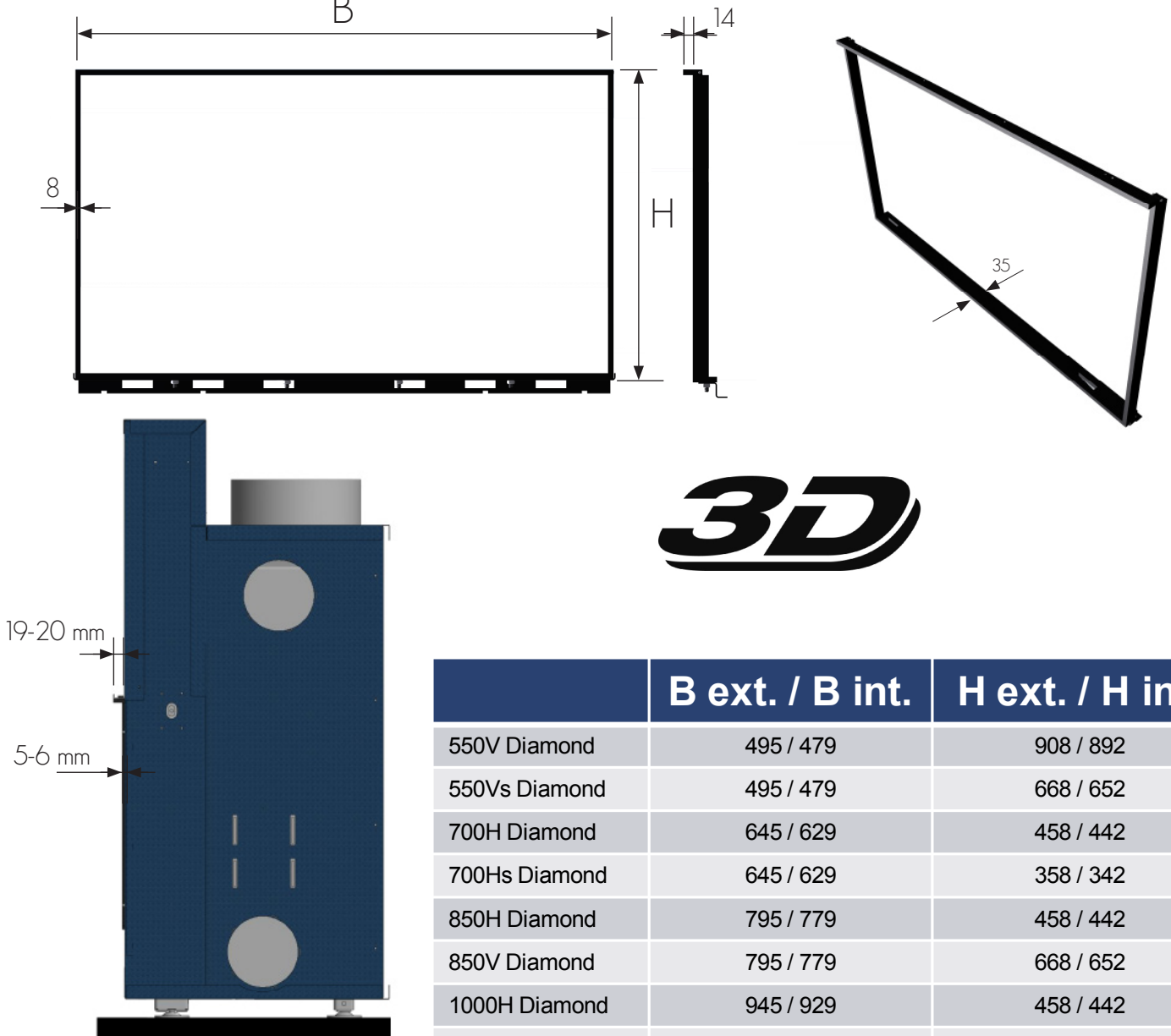
Min. 250mm (model H)
Min. 350mm (model V)



6.2 Standard frame

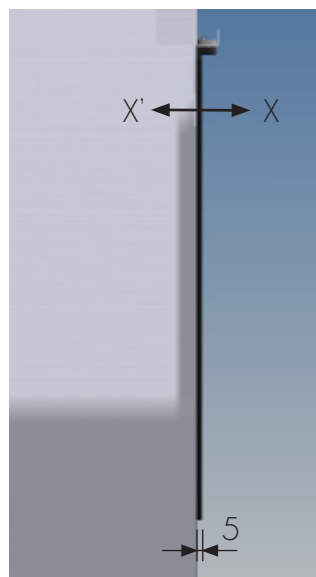
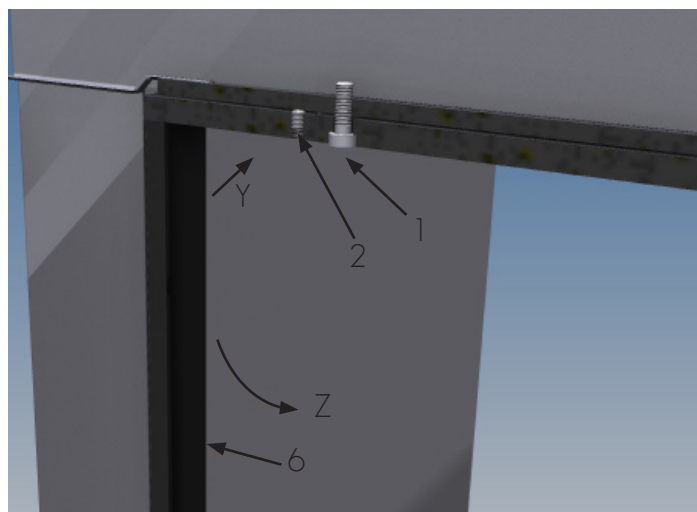
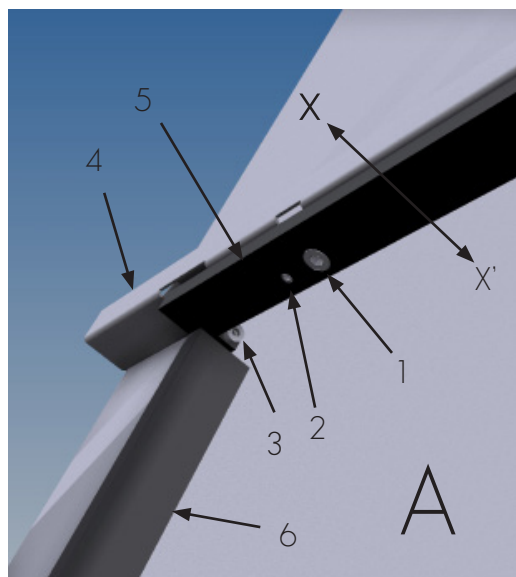
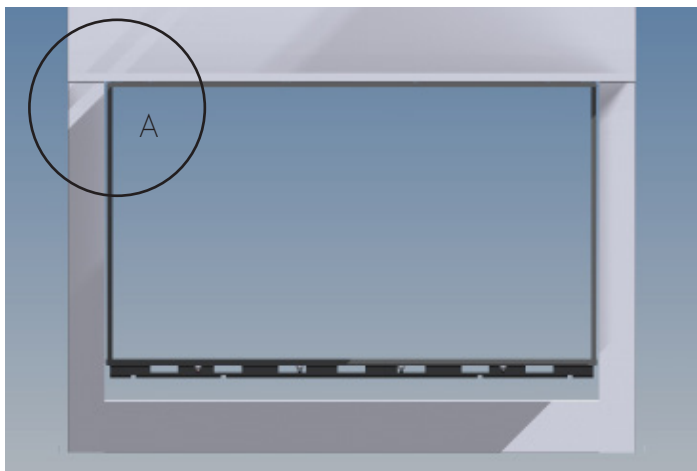
The device is supplied with the mounting frame "0" as standard. There are 3 further versions of the mounting frame (page 21). Please specify and order the frame with the device.

6.2.1 Standard frame "0"

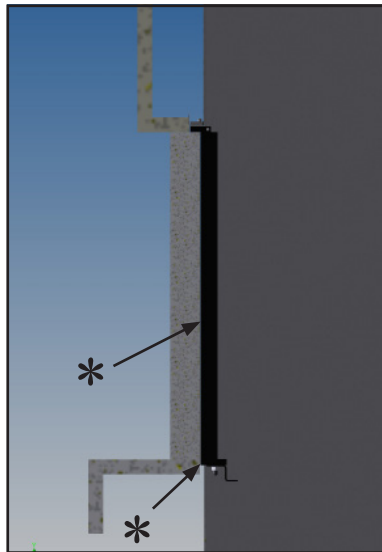
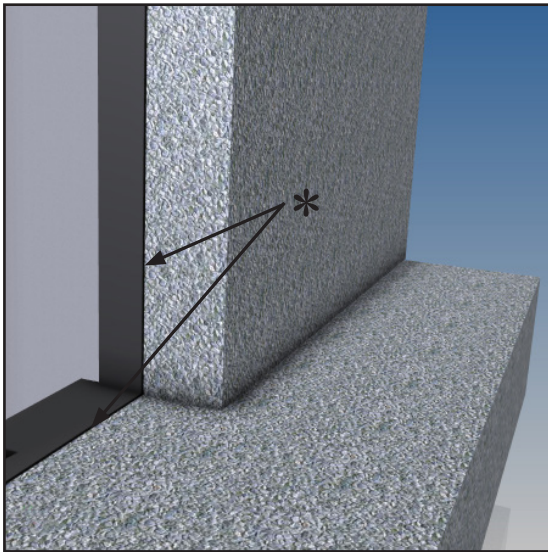


	B ext. / B int.	H ext. / H int.
550V Diamond	495 / 479	908 / 892
550Vs Diamond	495 / 479	668 / 652
700H Diamond	645 / 629	458 / 442
700Hs Diamond	645 / 629	358 / 342
850H Diamond	795 / 779	458 / 442
850V Diamond	795 / 779	668 / 652
1000H Diamond	945 / 929	458 / 442
1000V Diamond	945 / 929	708 / 692
1150H Diamond	1095 / 1079	458 / 442
1150V Diamond	1095 / 1079	708 / 692
1300H Diamond	1245 / 1229	458 / 442
850DH Diamond	795 / 779	458 / 442
850DV Diamond	795 / 779	668 / 652
1000DV Diamond	945 / 92	708 / 692
1150DH Diamond	1095 / 1079	458 / 442

Removing and adjusting the standard frame "0"

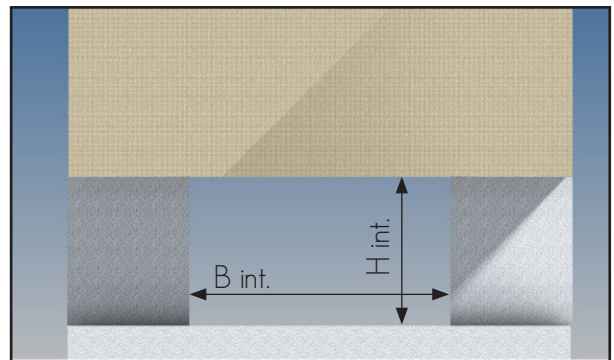
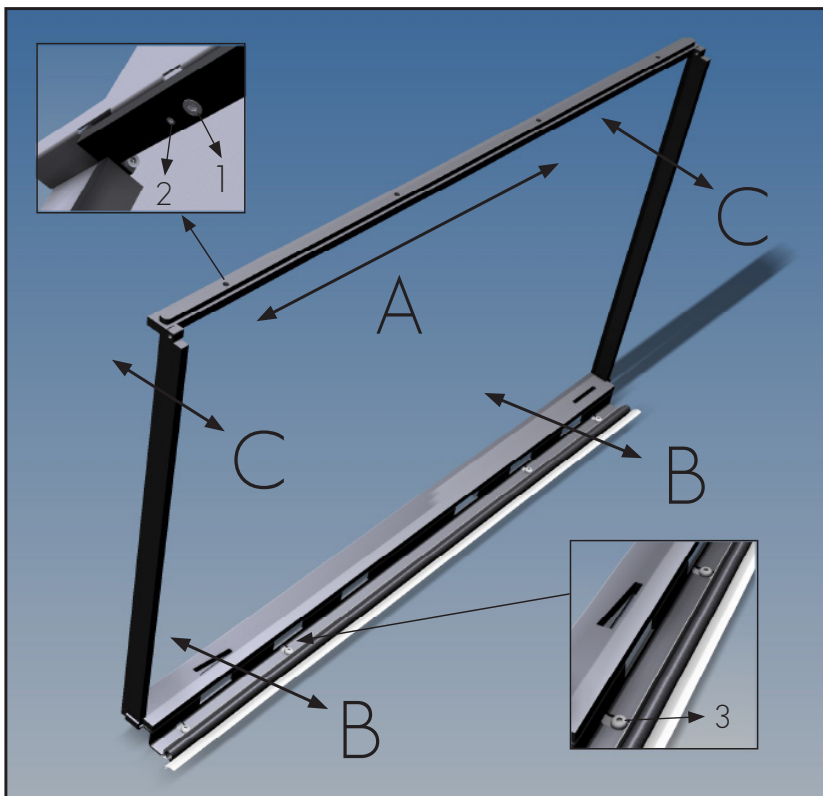


To move the side part (6) of the frame remove, the screw (3) and loosely loosen the screws (1 & 2).
Now press the frame slightly towards (Y)
And then take it in the direction (Z).



The standard mounting frame "0" is used when you are using your own panel at the sides (mantel-piece)
Please leave an expansion joint of 1 mm (*) between the frame and the fairing.

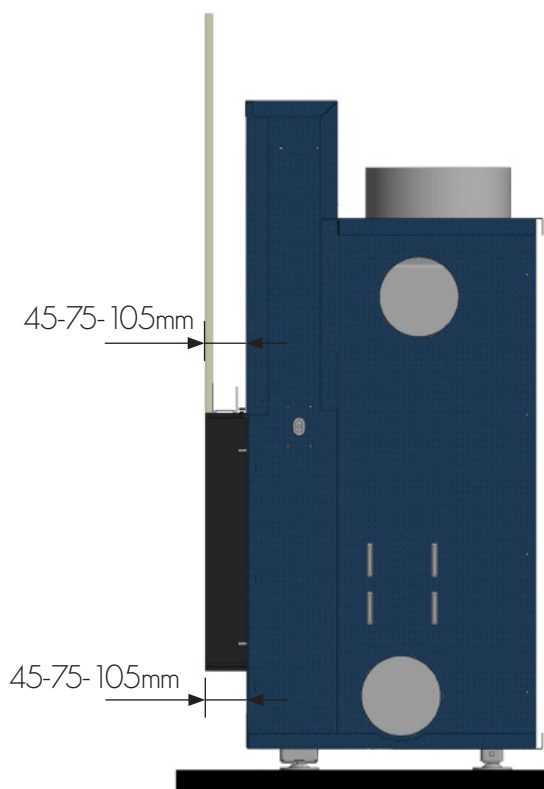
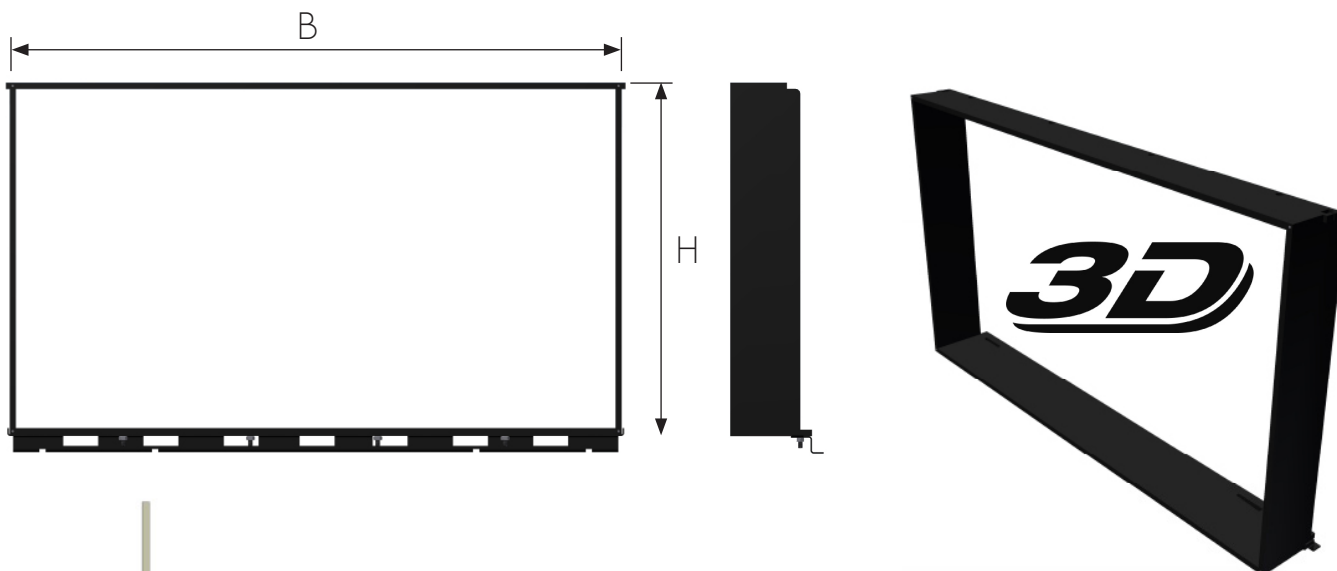
B Int. (See the table on page 19)



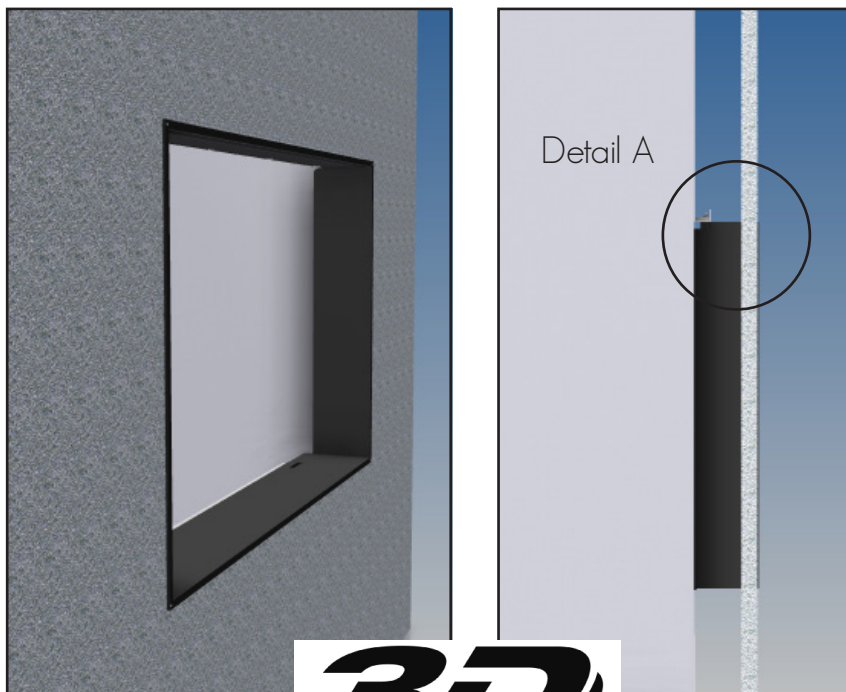
3D

The mounting frame can be easily adapted to the panel. By loosening the screws 1, 2 and 3, the mounting frame can be adjusted in the directions A, B and C. So you can get it perfect aligned. Leave 1mm * space between the mounting frame and the panel.

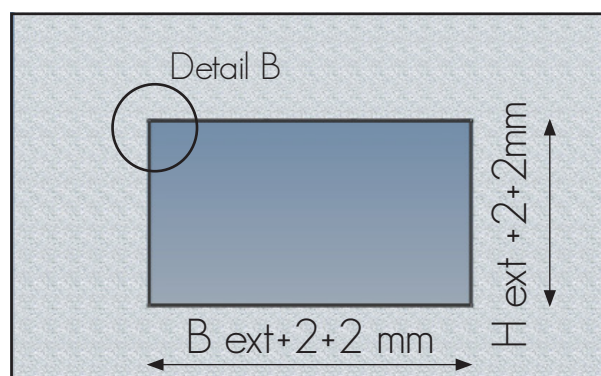
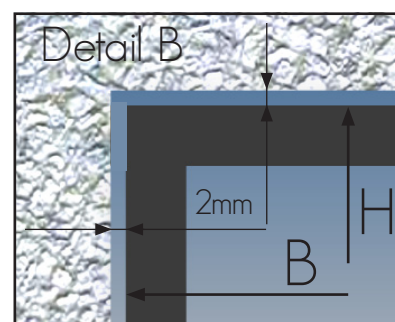
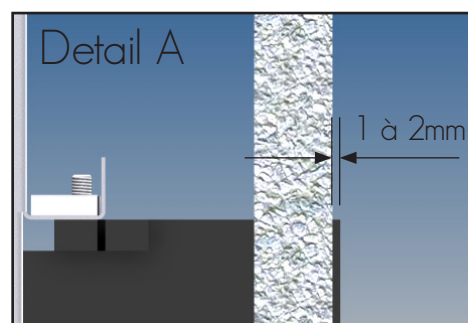
6.2.2 4-sided frame



	B ext. / B int.	H ext. / H int.
550V Diamond	495 / 479	908 / 892
550Vs Diamond	495 / 479	668 / 652
700H Diamond	645 / 629	458 / 442
700Hs Diamond	645 / 629	358 / 342
850H Diamond	795 / 779	458 / 442
850V Diamond	795 / 779	668 / 652
1000H Diamond	945 / 929	458 / 442
1000V Diamond	945 / 929	708 / 692
1150H Diamond	1095 / 1079	458 / 442
1150V Diamond	1095 / 1079	708 / 692
1300H Diamond	1245 / 1229	458 / 442
850DH Diamond	795 / 779	458 / 442
850DV Diamond	795 / 779	668 / 652
1000DV Diamond	945 / 92	708 / 692
1150DH Diamond	1095 / 1079	458 / 442



3D

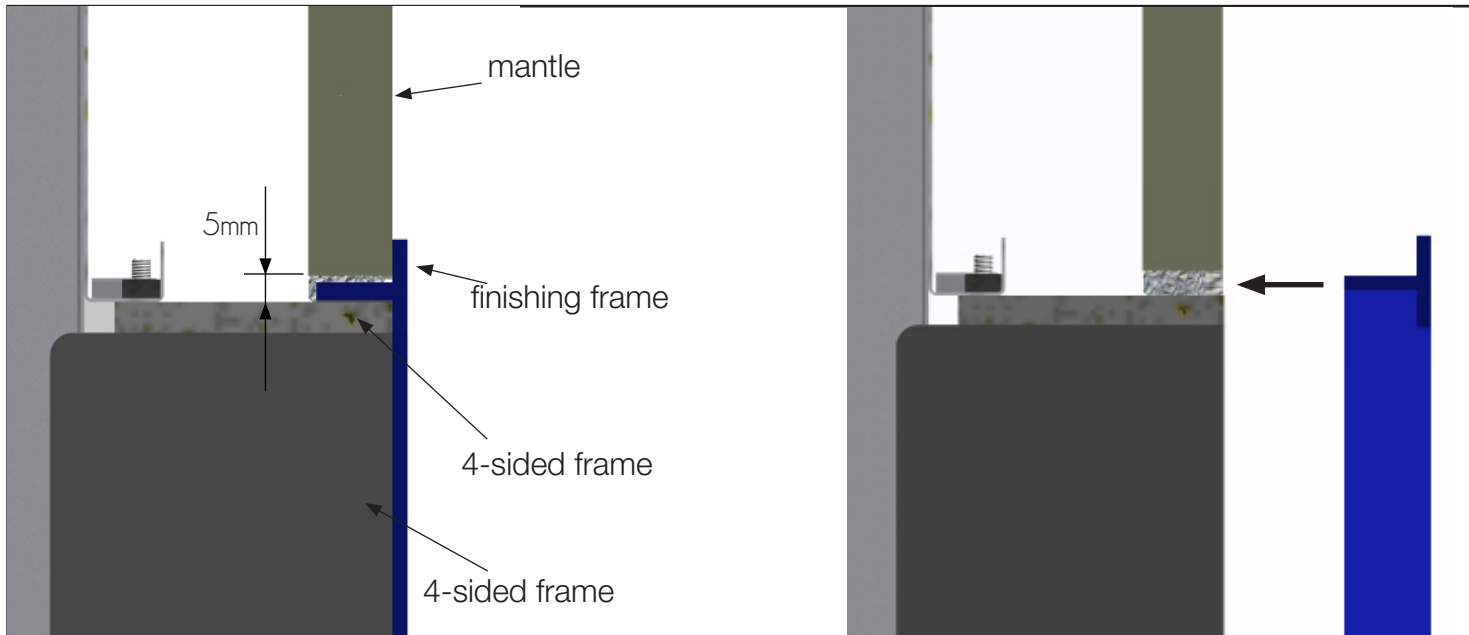


The mounting frames are also used when the panel is around the frame. Leave the frame 2 mm of air (detail B) around the frame and let it protrude 1-2 mm from the panel.

Detail A : $B \text{ ext.} + 2 + 2\text{mm}$ and $H \text{ ext.} + 2 + 2\text{mm}$ (see table)

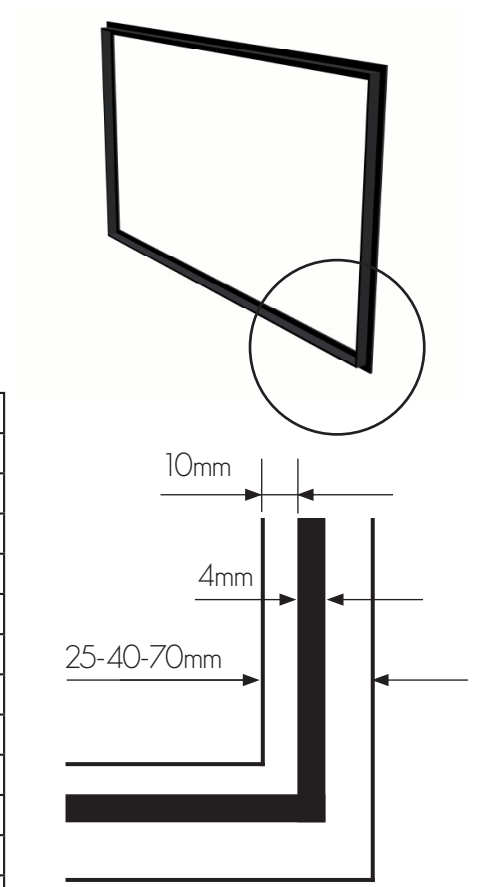
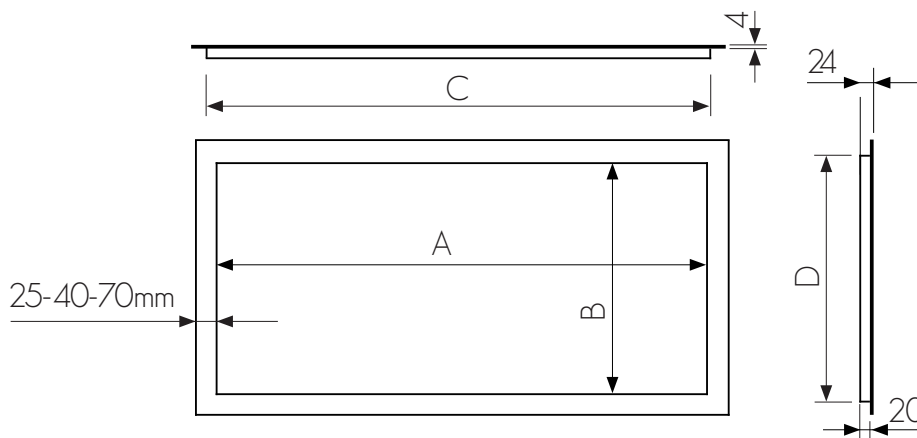
All sizes and depths of the mounting frames can be adjusted in the same way.

6.3 finishing frame



In order to mount the frame / outer frame, 5 mm air must be left to the trim around the 4-side frame. The glare frame consists of a circumferential T-profile.

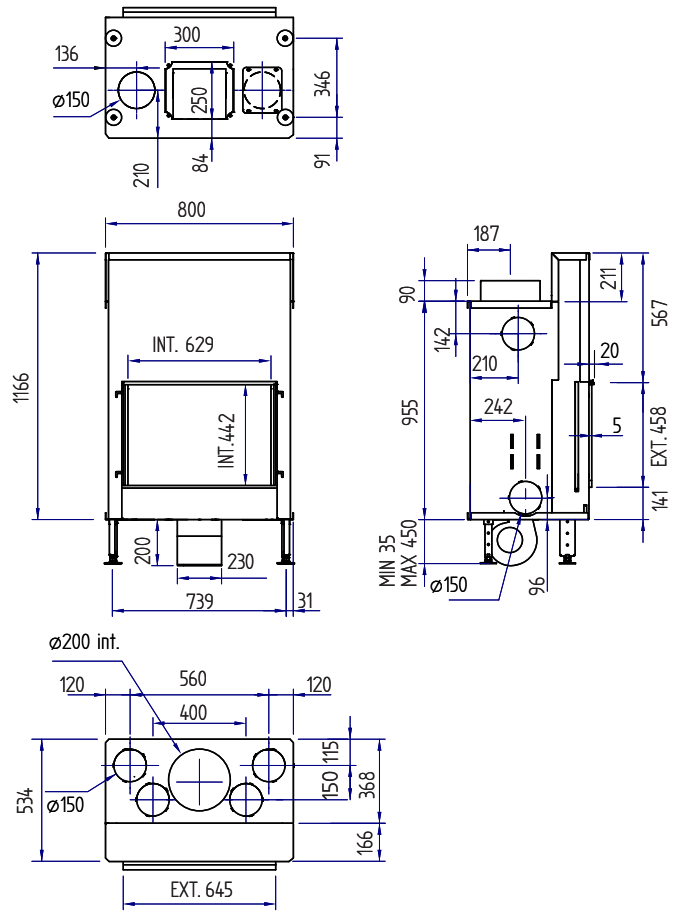
Size of opening: $B + 2 \times 5\text{mm}$ and $H + 2 \times 5\text{mm}$. (siehe Table)



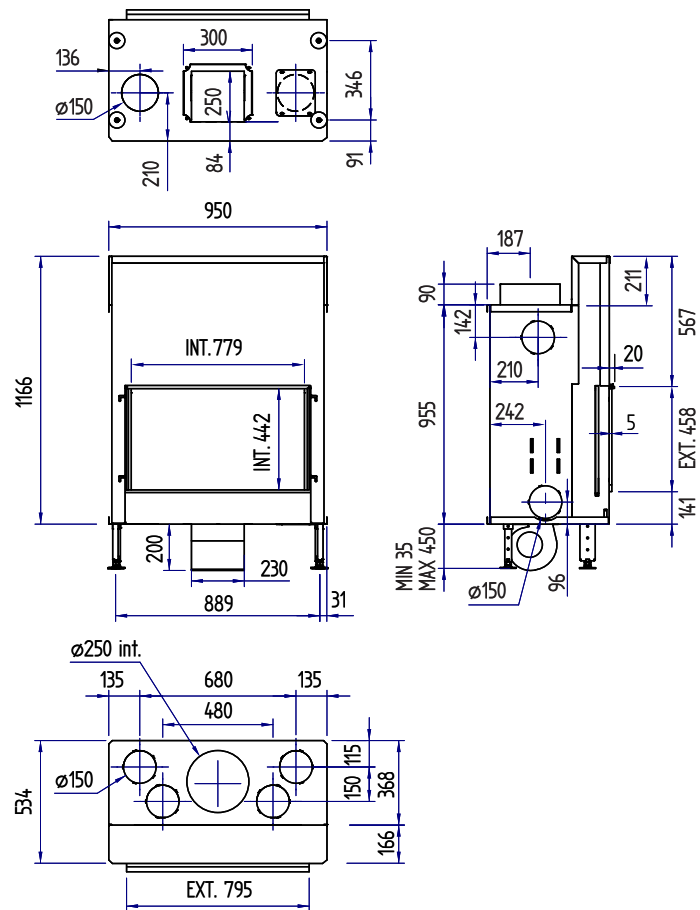
Model	A (mm)	B (mm)	C (mm)	D (mm)
550V Diamond	477	890	505	918
550Vs Diamond	477	650	505	678
700H Diamond	627	440	655	468
700Hs Diamond	627	340	655	368
850H Diamond	777	440	805	468
850V Diamond	777	650	805	678
1000H Diamond	927	440	955	468
1000V Diamond	927	690	955	718
1150H Diamond	1077	440	1105	468
1150V Diamond	1077	690	1105	718
1300H Diamond	1227	440	1255	468
850DH Diamond	777	440	805	468
850DV Diamond	777	650	805	678
1000DV Diamond	927	690	955	718
1150DH Diamond	1077	440	1105	468

7. Technische Zeichnungen

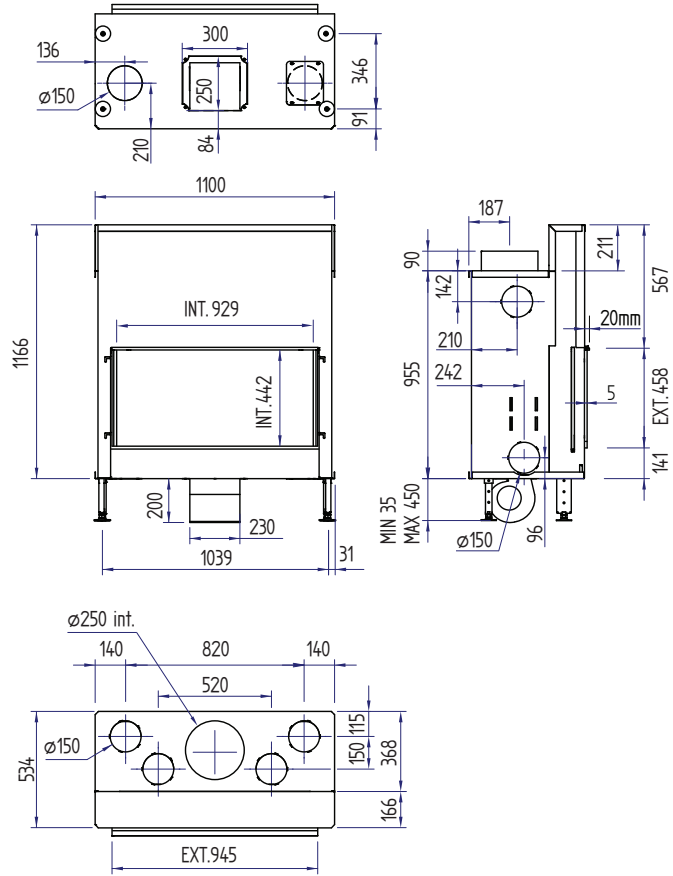
700H Diamond



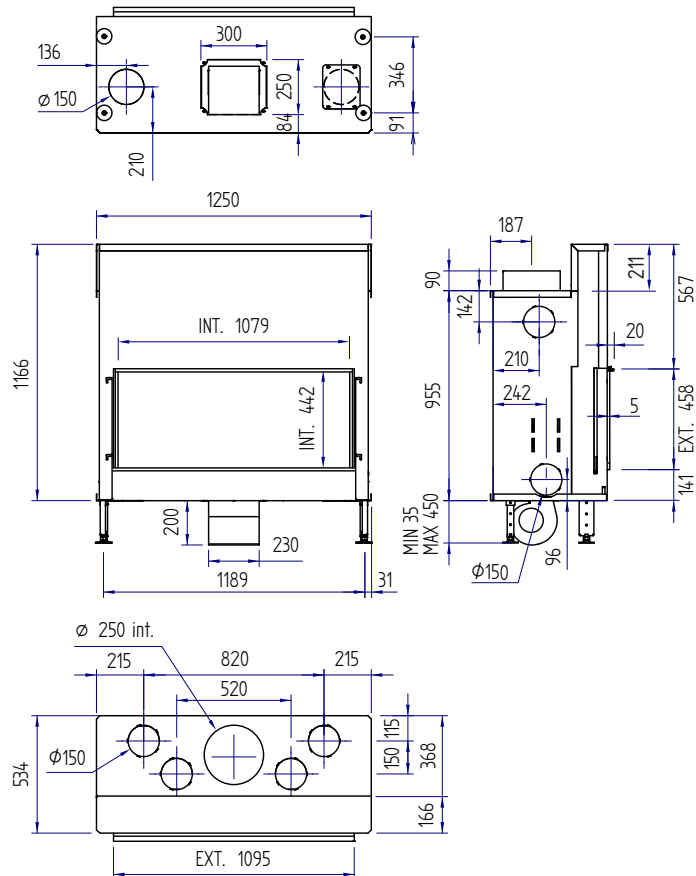
850H Diamond



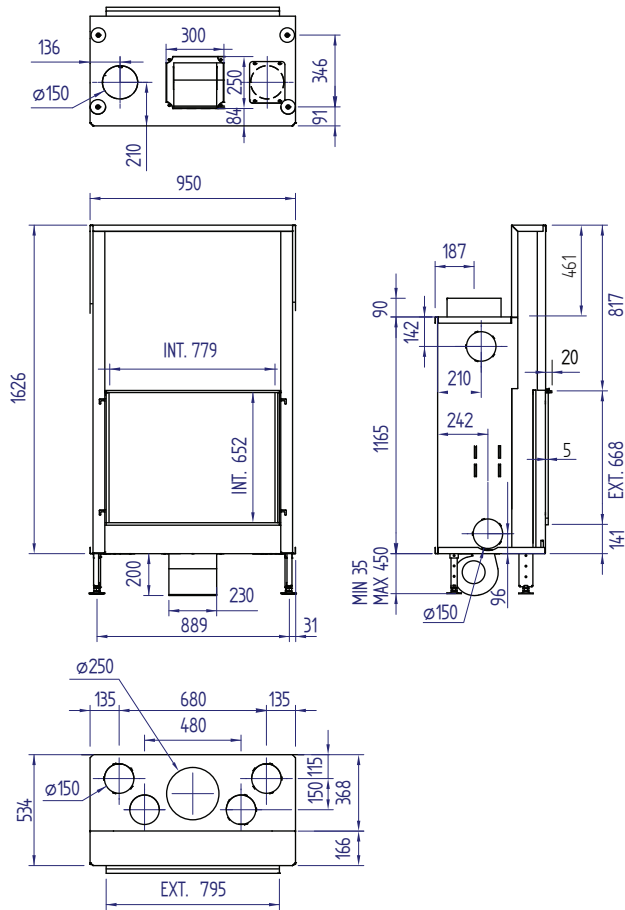
1000H Diamond



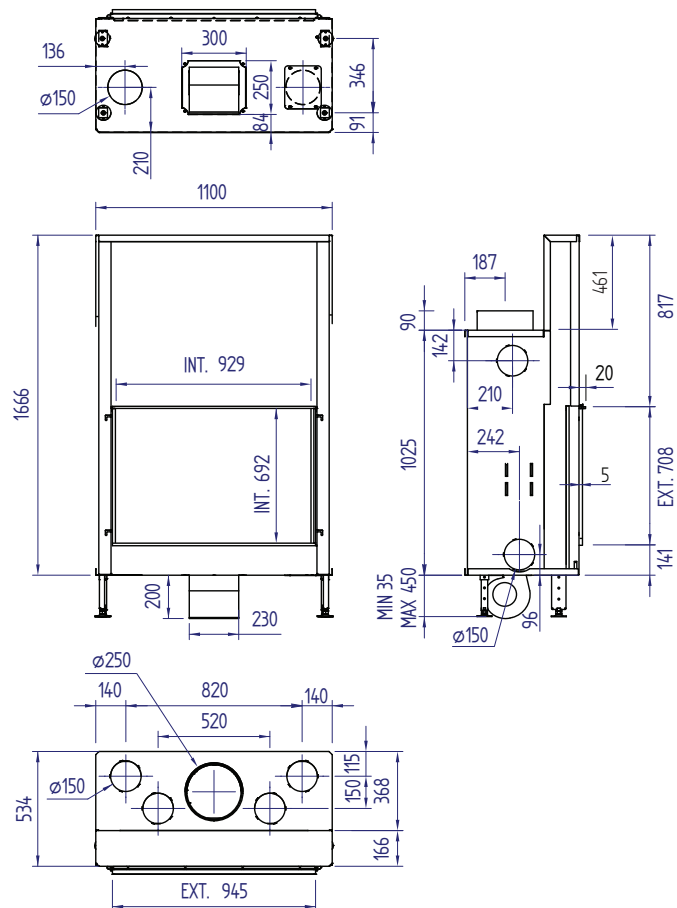
1150H Diamond



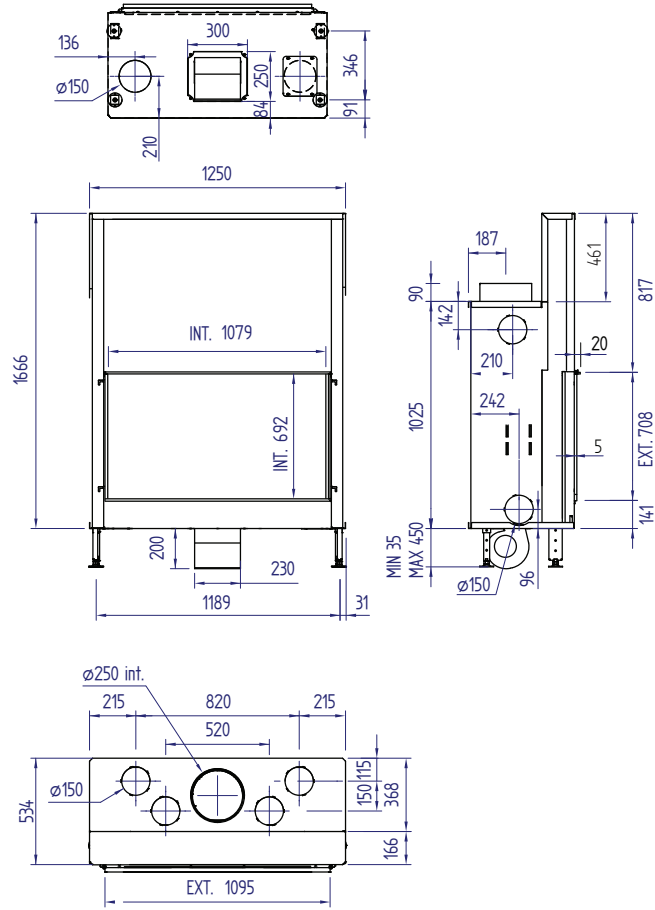
850V Diamond



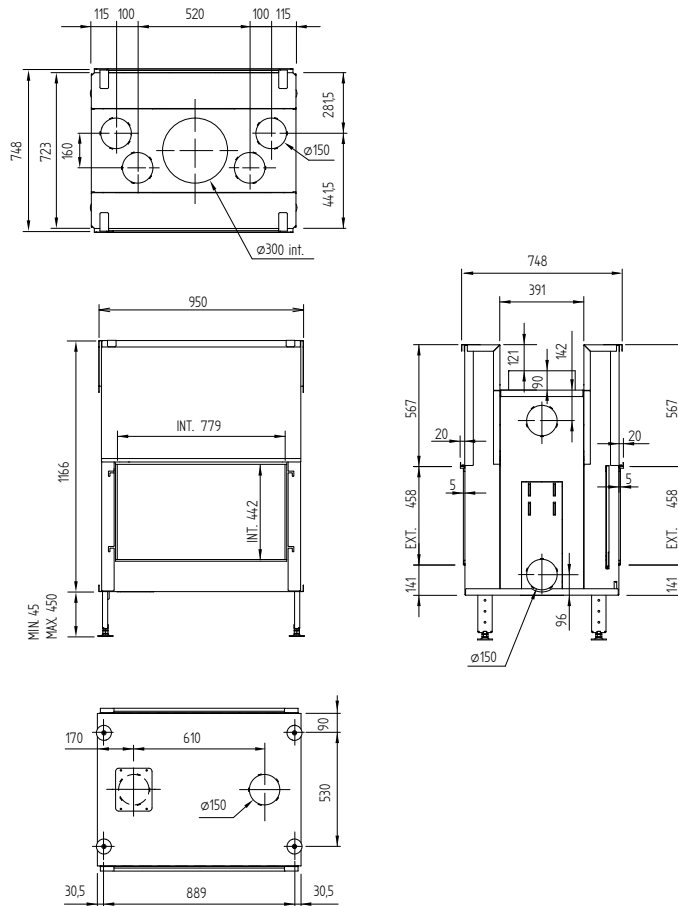
1000V Diamond



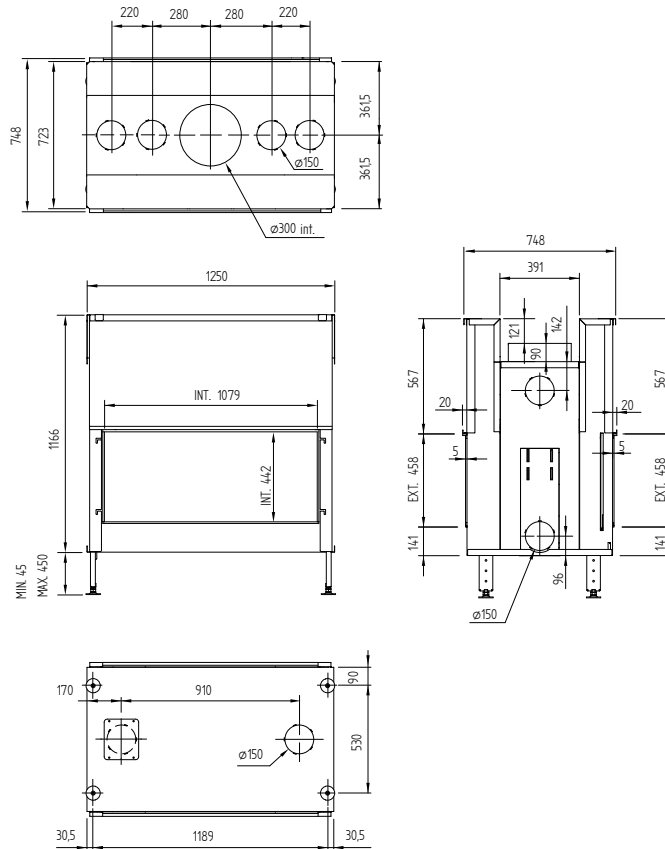
1150V Diamond



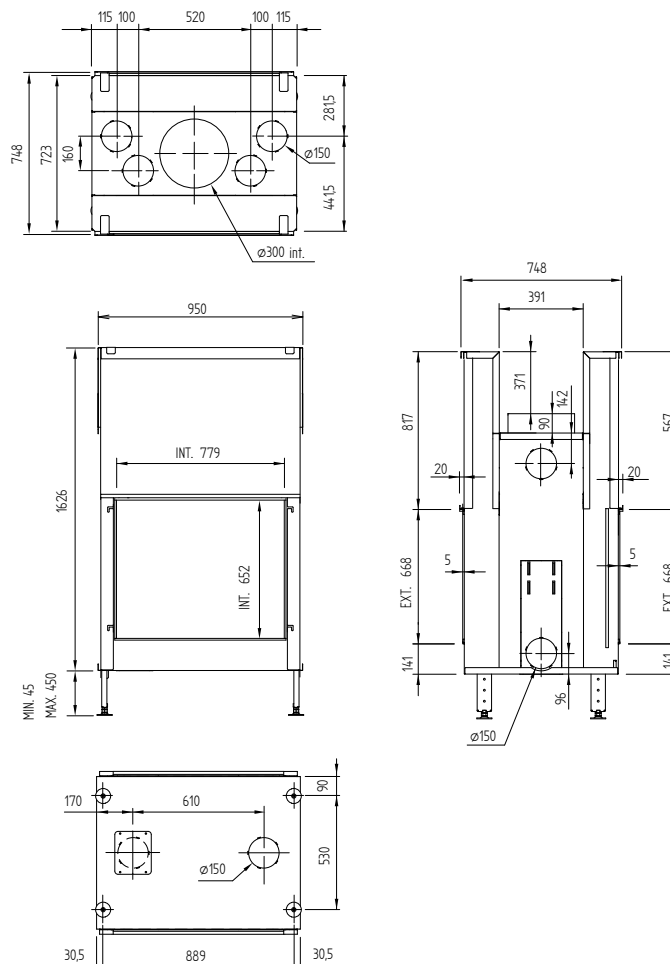
850DH Diamond



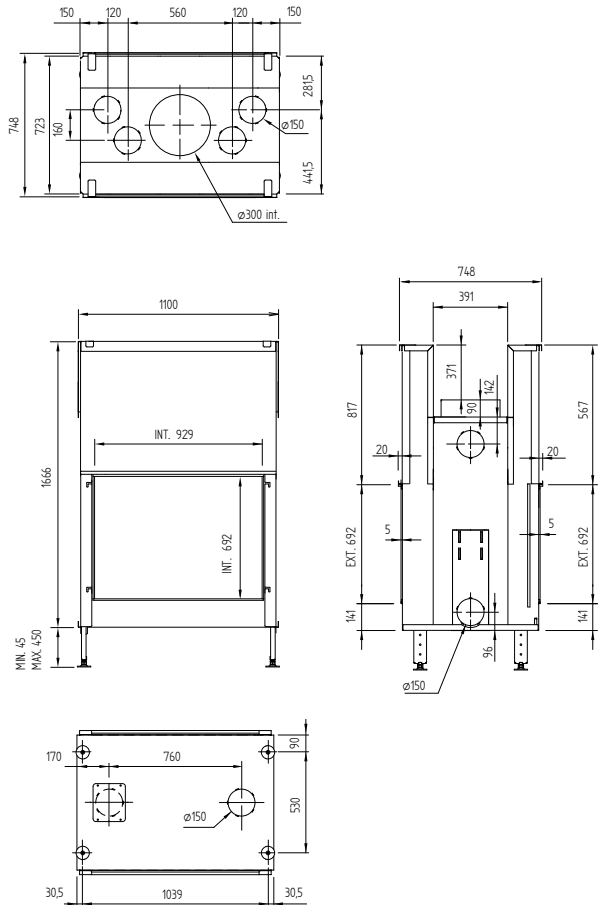
1150DH Diamond



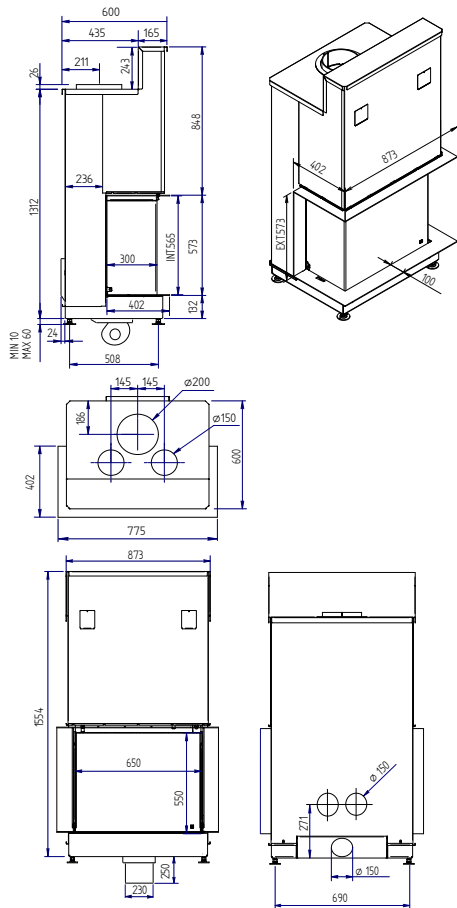
850DV Diamond



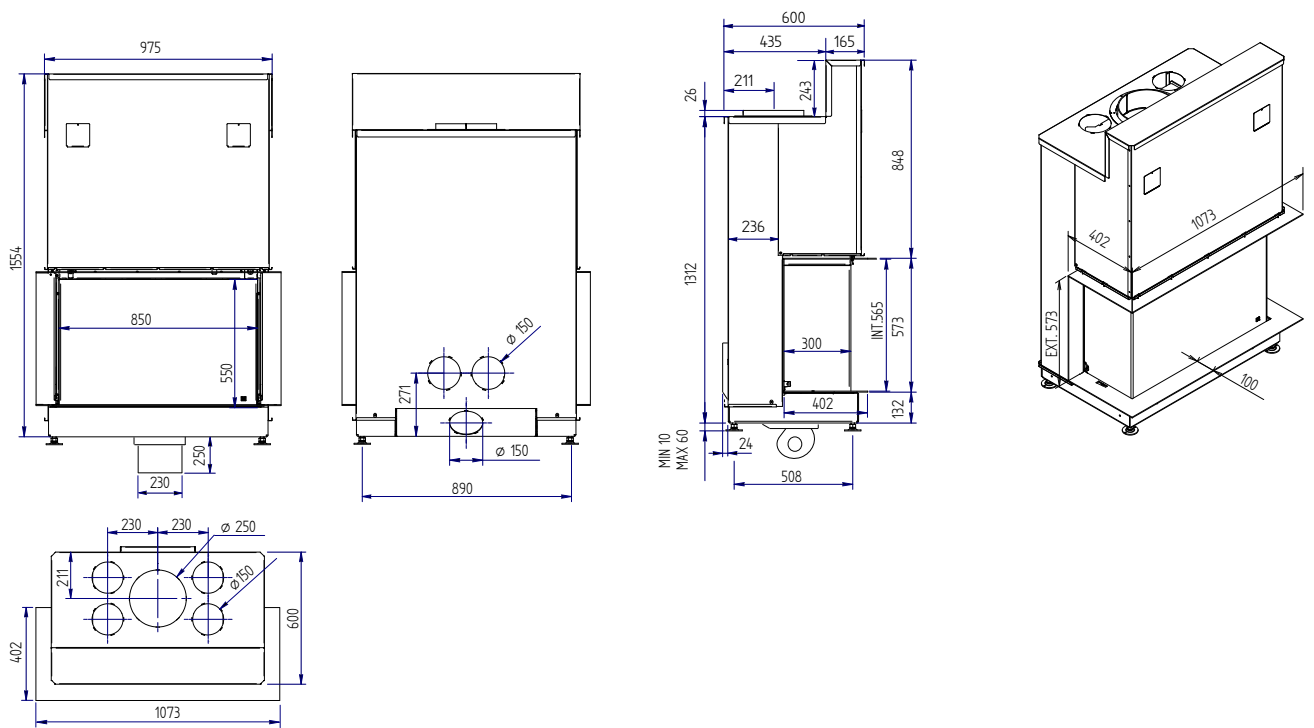
1000DV Diamond



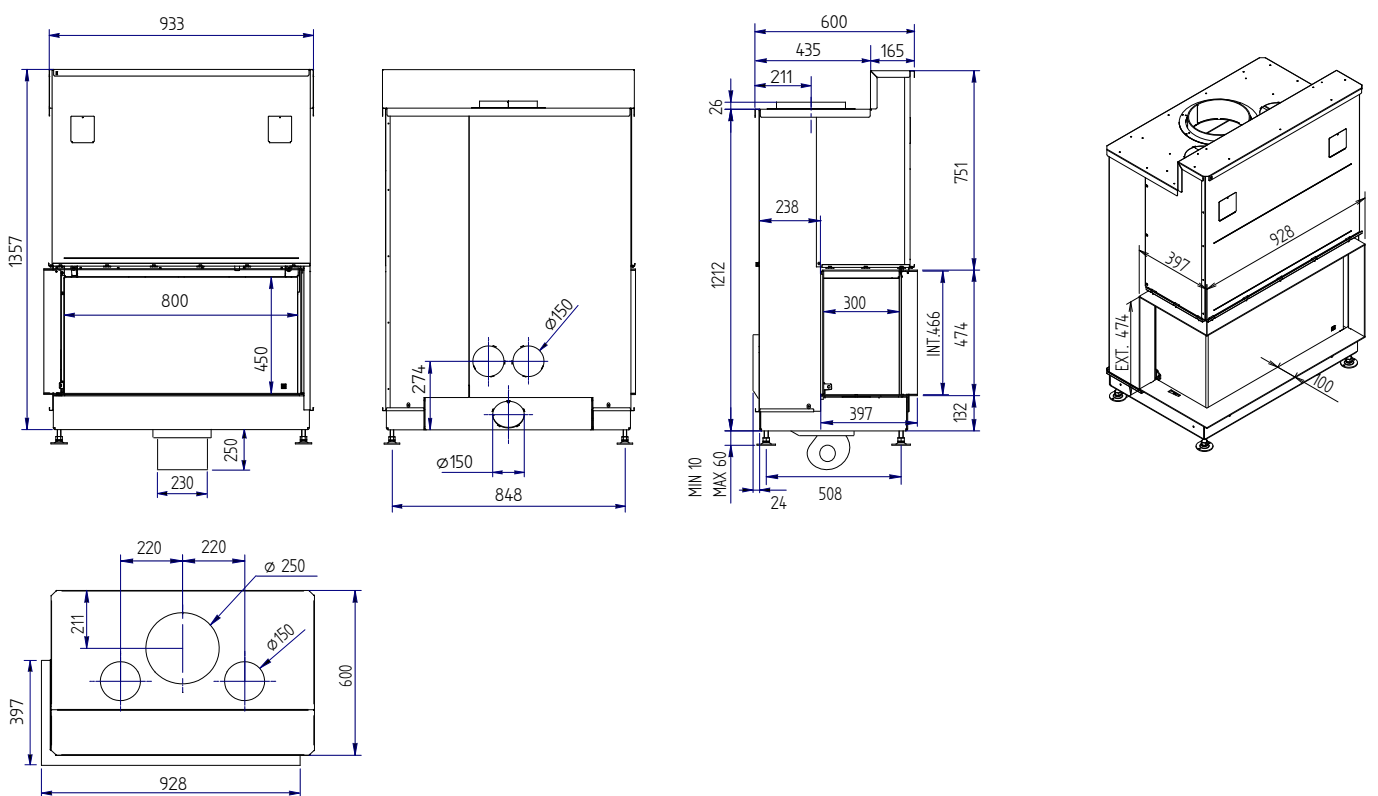
800DC Diamond



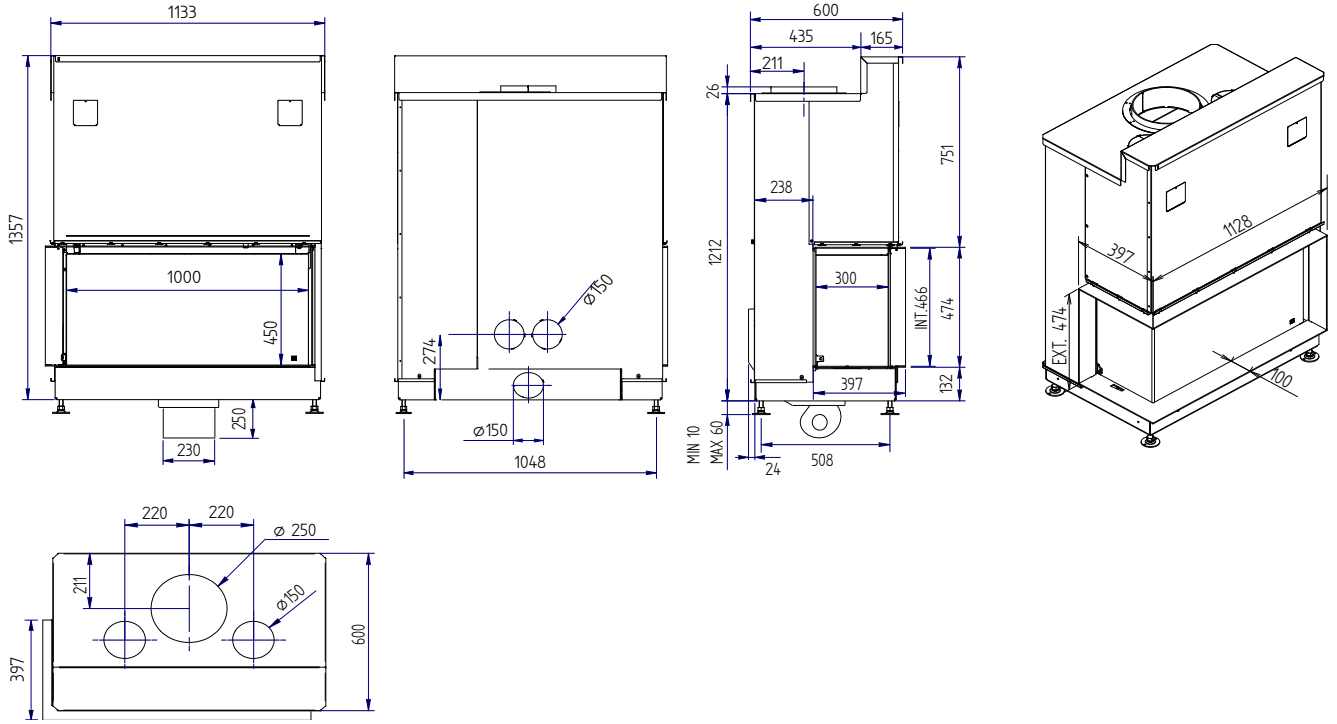
1000DC Diamond



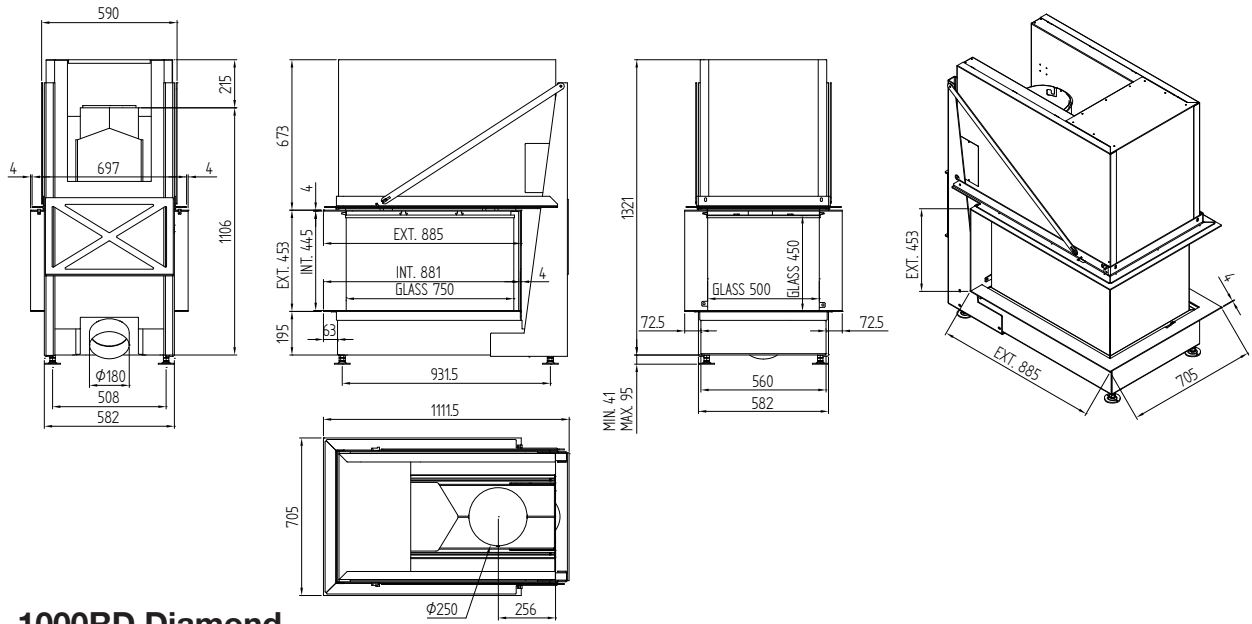
900CL/CR Diamond



1000CL/CR Diamond



750RD Diamond



1000RD Diamond

