

ARGENTO H/V

Instructions for installation and use



M
design

PASSION FOR FIRE

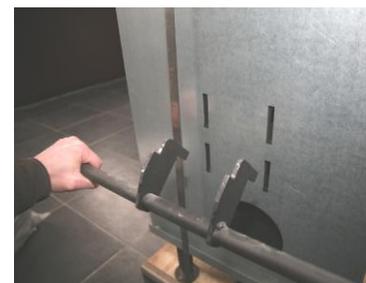
CAUTION: THE SUPPLIER TAKES NO RESPONSIBILITY FOR ANY POSSIBLE DAMAGE, POOR WORKING APPLIANCES AND ACCIDENT AS A RESULT OF INCORRECT INSTALLATION

1. GENERAL.....	- 2 -
1.1. TRANSPORT AND INSTALLATION	- 2 -
2. FUEL	- 3 -
2.1. RECOMMENDED FUEL	- 3 -
2.2. FORBIDDEN FUEL	- 3 -
2.3. STARTING THE FIRE	- 3 -
3. INSTALLATION.....	- 4 -
3.1. ACTIONS TO BE TAKEN UPON INSTALLATION	- 4 -
3.2. POSITIONING THE FIREPLACE	- 4 -
3.3. AIR SUPPLY FOR COMBUSTION	- 4 -
3.4. INSTALLATION OF FIREPLACE IN THE PLACE OF USE	- 5 -
4. INSULATION AND FINISHING	- 5 -
5. CONVECTION CURRENT.....	- 6 -
5.1. NATURAL CONVECTION AND HOT AIR DUCTS	- 6 -
5.2. FAN.....	- 6 -
5.3. CHIMNEY	- 8 -
5.4. AIR SUPPLY REGULATION.....	- 8 -
5.5. INSTALLATION AND REMOVAL OF LABYRINTH DEFLECTOR	- 8 -
6. GENERAL RECOMMENDATIONS.....	- 9 -
6.1. MAINTENANCE.....	- 9 -
6.2. CLEANING THE WINDOW	- 9 -
6.3. SUPPLIED ACCESSORIES.....	- 9 -
6.4. SPECIFICATIONS AND IDENTIFICATION BOARDS	- 10 -
7. TECHNICAL DRAWING	- 11 -
8. SPARE PARTS.....	- 17 -
9. GUARANTEE.....	- 18 -
9.1. TERMS AND ITEMS	- 18 -
9.2. PROVISIO.....	- 18 -
9.3. DISCLAIMER	- 18 -

1. GENERAL

1.1. TRANSPORT AND INSTALLATION

- Transport the Argento 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 Argento (see Pic.1)



Pic.1

- **How to unblock movement of the door:** Unscrew cover 1 and 2 (Pic.2). Under covers there are placed locks that are required to pull it toward you. After removing the locks it is necessary to screw the cover back to its original position.



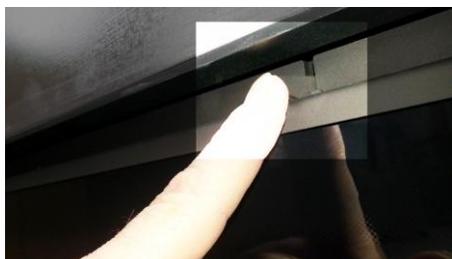
Pic.2

- Check to see that the lifting door functions properly before fitting the Argento (see Pic.3).



Pic.3

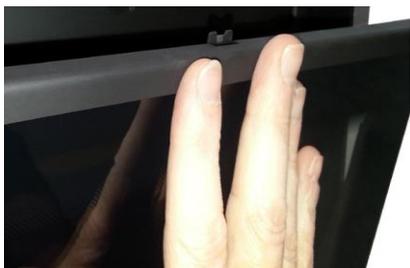
Opening the door for cleaning



Pic.4

Above the glass (below the upper frame) hooks are provided. Push them upwards with your fingers. The window can be now opened at an angle of to 45°.

Closing the door after cleaning



Pic.5

To close, push the door gently (but not too soft) against the hooks. Make sure that all hooks are hooked.

2. FUEL

2.1. RECOMMENDED FUEL

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.

You can also use briquettes, and it is best to use them in combination with wood because burning only briquettes makes the temperature too high.

Optimum fuel efficiency and optimal operation of the heater is achieved loading of about 3.5 kg wood per hour, horizontally placed on the grate in the middle of the combustion chamber.

Chimney draft should be 12 -15 Pa and regulator of air supply at maximum.

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.



2.3. STARTING THE FIRE

- Regulator of air supply at maximum (Pic.16).
- Open the lifting door (Pic.3).
- 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 open (+ 3 cm) to get a turbo stream of air that will make the some kindling catch fire.
- After the kindling have caught fire and burn well, the logs may be placed on the fire. After the logs have caught fire, the door 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 30 minutes. Make sure the room is ample ventilated.

CAUTION:

It is not necessary to overload the fireplace with wood. 1 kg dry wood gives a 4 kW power.

Example: a fireplace with an 80% return gives a power for about $4\text{kw} \times 80\% = +/- 3.2 \text{ kW}$ for 1 kg dry wood.

If you want a power of 6-7 kW, it is just enough to put 2 kg wood in the fireplace per hour. This is like one-two normal pieces of wood.

Be careful not to use pallet wood (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.

The outer surfaces of the device are hot during operation, what should be paid proper attention to avoid burn injury.

3. INSTALLATION

3.1. ACTIONS TO BE TAKEN UPON INSTALLATION

Your supplier is the specialist who chooses 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.

The device must be built on an area with adequate bearing capacity or slabs, which can spread the weight of the device. The device must be placed so as to meet all safety distance from combustible materials that could cause a fire.

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

- Refer to the terms and conditions of our contract of guarantee.
- Ask your supplier for advice.

3.2. POSITIONING THE FIREPLACE

Foundation under the fireplace insert must be of non-combustible material, flat and must withstand thermal stress. Also, the walls and ceiling material, with which the finishing fireplace insert, cannot be flammable or should be used with suitable insulation.

The floor must be guaranteed minimum load capacity 1000 kg m^{-2} in the place of installation of the fireplace insert.

The floor in front of fireplace insert must be from non-combustible material at least 100 cm in front of the front wall of the fireplace insert. The device must be installed so that the front of it remained free space on a minimum ground plan of about 1 x 1 m.

Place the appliance on a stable surface using the adjustable feet. Adjust the height of the appliance turning the bolt.

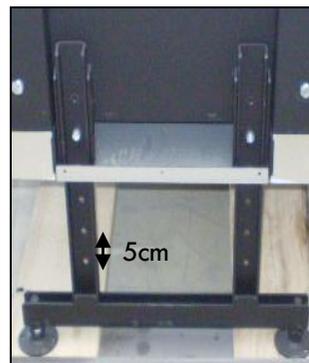
THE STOVE MAY NOT BE PLACED DIRECT ON THE FLOOR TO ALLOW NATURAL CONVECTION. THE APPERTURES FOR THE AIR SUPPLY (IN) IS SITUATED UNDERNEATH THE APPLIANCES.



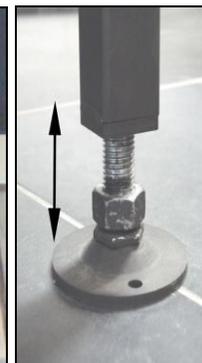
Regulating the height of the appliance:

This can be made in two ways.

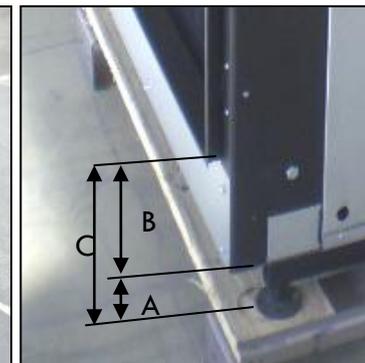
A regulation by 5 cm (Pic.6) and a fine regulation by screw (Pic.7).



Pic.6
6 x 5 cm



Pic.7



Pic.8
A min = 8 cm
B = 14,6 cm
C min = 22,6cm

The minimal height as from ground to the 4th side frame is 8 cm (A min).

The minimal height "C min" will be 22,6 cm, measured as from the ground to 4th side frame.

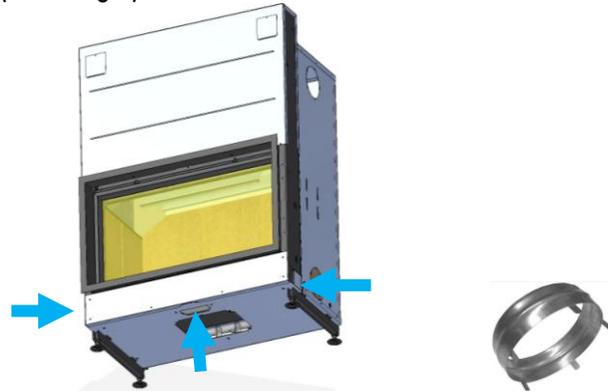
3.3. AIR SUPPLY FOR COMBUSTION

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 air supply with dia. 150mm coming from outside, or a ventilated place (garage, basement ...). This air inlet you have to connect to the Argento.

Opening for the external air supply is located at the bottom and sides of the fireplace Argento (Pic.9). For the air supply from side is necessary to remove the side covers.

For connecting the air from outside is mounted from the bottom connection pieces (Pic. 9 right).



Pic.9

3.4. INSTALLATION OF FIREPLACE IN THE PLACE OF USE

When the Argento is installed there is possibility to choose distribution of hot air with ducts, where inlet temperature is 150 °C. In this case is Argento supplied with convection chamber - premium version (Pic.10). If hot air ducts are not in demand, hot air needs to be provided flow out of the surround. Air circulation must be ensured. There is also possibility to place Argento to the accumulation surrounds then you can install the device without convection chamber (Pic.11).



Pic.10



Pic.11

4. INSULATION AND FINISHING

Please, follow this instruction. The appliance can overheat if you do not apply these instructions.



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 fitted too narrow 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 front side and 4cm on others sides of the appliance. The masonry must not lean against the furnace.

THE APPLIANCE MUST BE SET FREE.

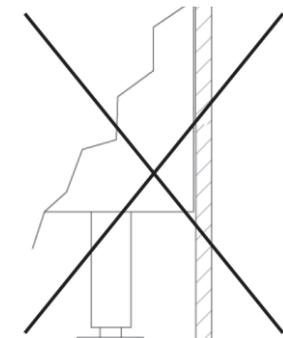
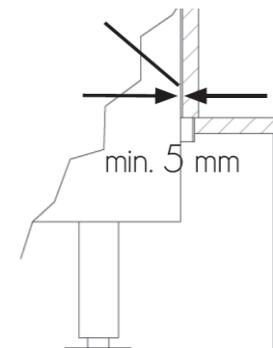
Please pay attention to leave approx. 2 mm inbetween the finishing frame and masonry (mounting a 3-sided frame).

This dilatation space is used to compensate thermal expansion of the fireplace and its individual parts when is heated and cooled.



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

It is necessary that air can move freely around the device. Air gap allows air circulation in the surrounding appliance, through natural convection.



Pic.12

5. CONVECTION CURRENT

5.1. NATURAL CONVECTION AND HOT AIR DUCTS

Please follow the installation guide. The appliance can overheat if you not apply those instructions.



It is compulsory to open hot air vents at the top of the appliance (Pic.13/1). The entrances for the air supply convection are situated on the bottom side of the Argento (Pic.13/2) and also through the opening that is provided for the fan.



Pic.13

The device 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.

The enclosure of the appliance must be provided with ventilation grills or openings allowing for the elimination of heat by convection. It is possible to have a convection kit fitted with the appliance. This system directs the heat inside the room by means of flexible tubes (dia. 150 mm).

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 upwards 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.

Place all the fittings that you use at the same lengths and angles if possible, otherwise some grids could 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.

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.

M-design has developed its ideal hot air grids which have many advantages (Pic. next page) and for the elimination of hot air and the entry of warm air we advise you to use these Design grills made by M-Design. To simplify the mounting of the grids you can use the corner profile which is furnished with the grid. This profile can be mounted on the side of the grid (two little wholes and screws are provided).

ATTENTION: A house is never completely 100 % dustfree, heating appliances and warmth circulation creates dust particles. During the periods where you are not using the fireplace, dust is accumulated in the flexible pipe and the grills. This could cause a problem with a smell, so we would certainly advise you to clear the flexible and air inlets and outlets using a vacuum cleaner regularly. The smell caused by these dust particles will disappear after you have used the fireplace again a few times. This phenomenon is very common and can be compared to the gray traces appearing above your radiators. Optionally you can order design metal lids to cover the inlets and outlets during the summertime.

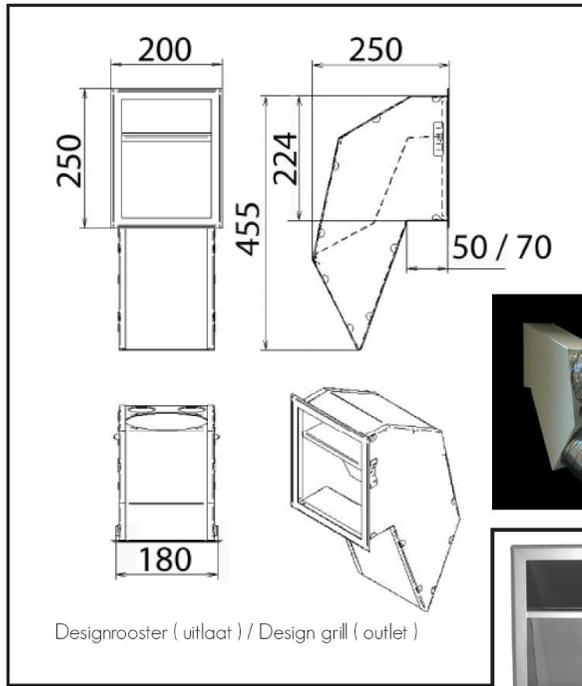
5.2. FAN

Installation:

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

Fan dimmer:

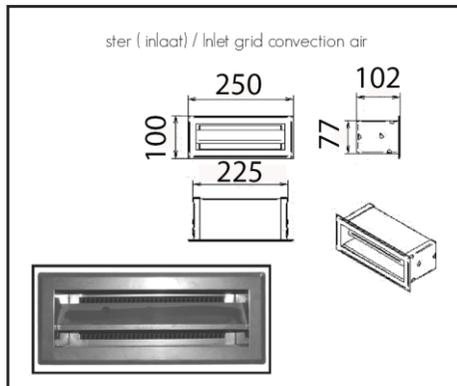
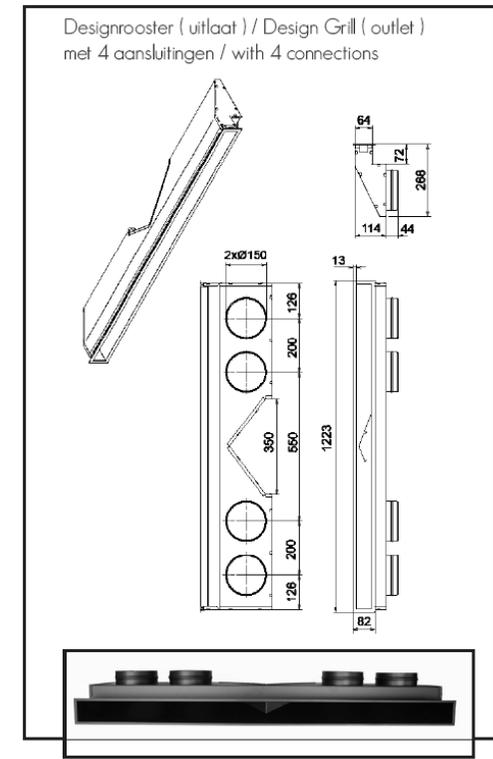
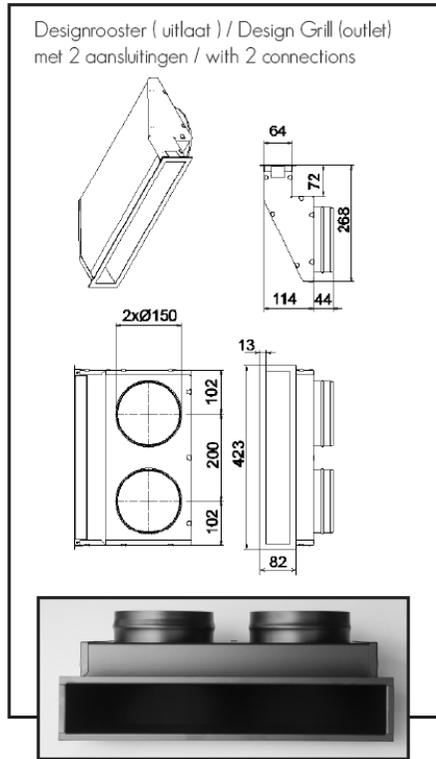
- Leave the adjustment of the fan speed closed.
- Fuse 1.5A (Take the knob off, unscrew the little plate, take it out if it is needed to be replaced.)
- The adjustment screw for the minimum speed is under the knob. (M-design has developed a new induction dimmer which lets the fan run noiselessly and 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.



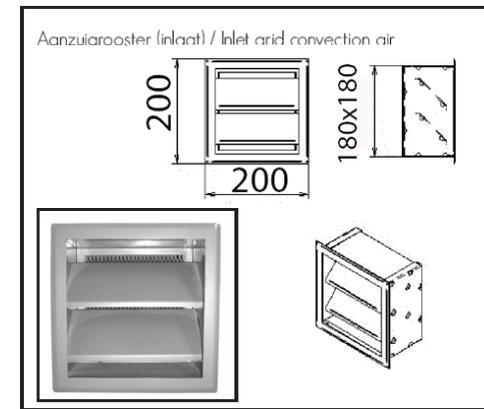
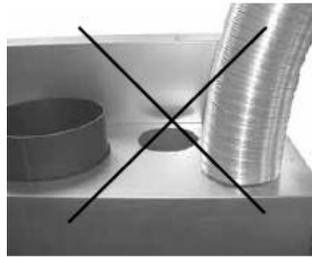
Designrooster (uitlaat) / Design grill (outlet)



of/ou



EACH APPERTURE YOU MAKE, MUST BE CONNECTED WITH FLEXIBLE



5.3. CHIMNEY

The construction of chimney must comply with strict conditions:

- The flue must be thermally insulated. The opening into the flue and its position are very important.
- One individual flue does not have more than two changes of direction. The angle of the corner of these changes of direction may not be greater than 45° with the perpendicular.
- The existing obstacles in the vicinity of the opening into the flue must be taken into account.
- Do not connect more than one stove to a chimney.

All the Argento stoves have a standard flue opening of 200mm or 250 mm. 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. Chimney connection is situated on the top of device.



Pic.14

When the door is closed there is slow directed flue flow to the chimney in combustion chamber. Valve for short cut is opened and closed according door movements. It is automatically opened when the window is slid open, so that no smoke escapes into the living room.

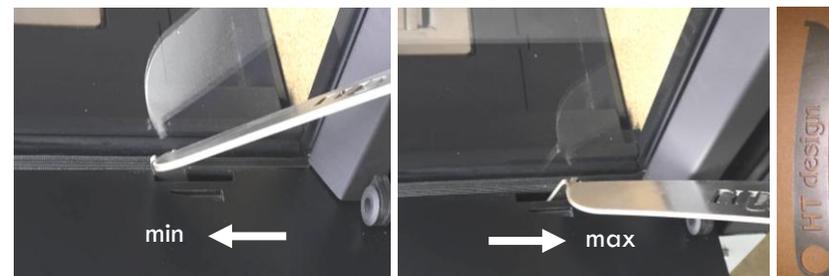
Note: per 45° change of direction, one must keep to within 1m of this table.

Minimum height of the chimney in terms of its reduction

	Ø250	Ø200	Ø180
Argento 750 H		>4m	>7m
Argento 900 H	≥4m	>4m	>7m
Argento 1050 H	≥4m	>5m	
Argento 1200 H	≥4m	>6m	
Argento 1350 H	≥5m	>8m	
Argento 900 V	≥4m	>7m	
Argento 1050 V	≥4m	>8m	

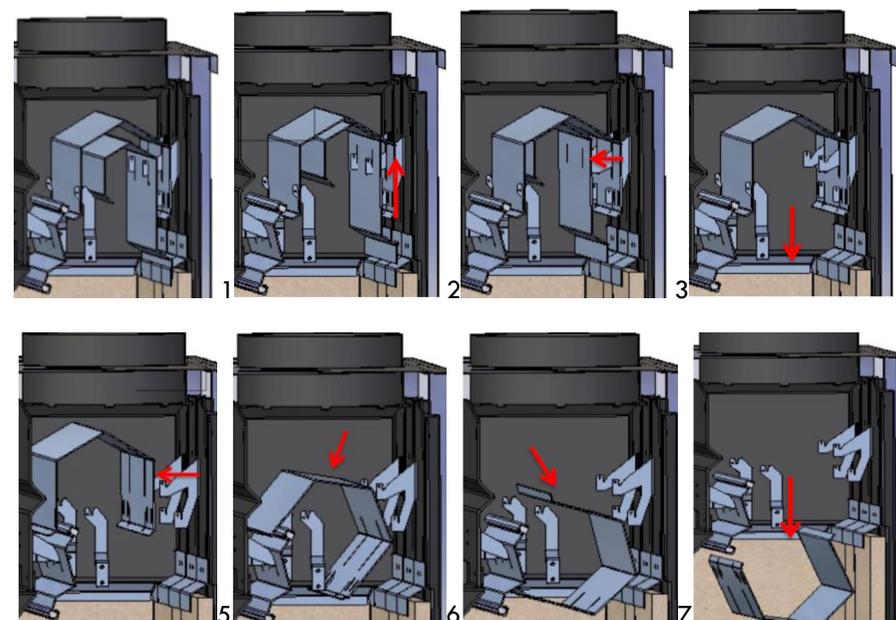
5.4. AIR SUPPLY REGULATION

The air supply to the Argento can be regulated manually. Use the key (Pic.15) to slide the regulator to the left to close primary and secondary air and on the right for opening primary and secondary air. When door is open this regulation will not have an effect on the fire.



Pic.15

5.5. INSTALLATION AND REMOVAL OF LABYRINTH DEFLECTOR



6. GENERAL RECOMMENDATIONS

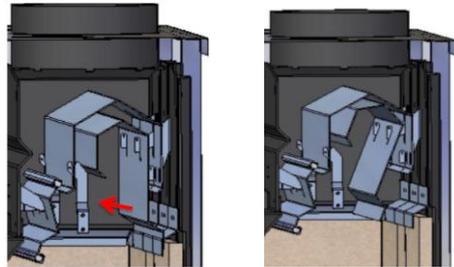
The appliance must be connected to the chimney and tested before the material is cemented in. In order to ensure that the appliance functions optimally do not put any inflammable materials in the immediate vicinity of the stove. Insulating materials: it is preferable to use "high temperature" materials. 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 biggest enemies of the Chamotflex in the appliance because it can swell and burst after the fire has been lit.

Note: If you leave the door open, little burning pieces of wood may be projected onto the floor.

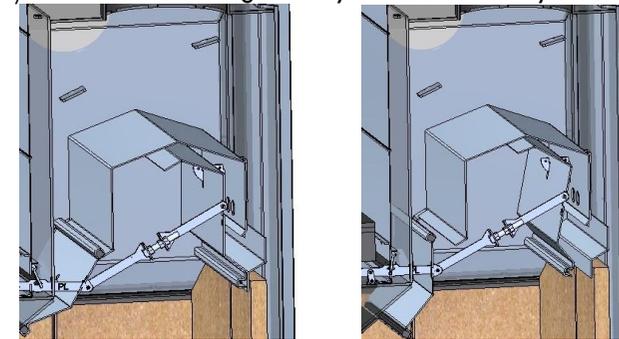
6.1. MAINTENANCE

- Besides regularly cleaning the window, you must have your chimney swept at least once a year for optimal functioning of the Argento. (Not only is this a legal requirement, but it is also meant for your own safety.).
- 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 the remainder of the ash in time, take the ash pan and remove a great part of the ashes from the Argento. Note: Never remove all the ashes because a fire always burns better with its own ashes.
- Cleaning of labyrinth deflector:

Before 11/2015: Fold out the deflector 1 toward (soot will fell down). This cleaning is necessary to do once a month during winter heating season. In case if you don't clean it the labyrinth deflector can obstruct and it can caused bad combustion and excessive smoke.



After 11/2015: self-cleaning of labyrinth deflector by door opening.



Closed door

Opened door

- It is necessary to grease the convection mechanism with heat-resistant silicone oil if you use the stove frequently. DO NOT USE ANY OTHER type of grease or oil. This Teflon-based grease is also available from the M-design dealers. The mechanism could otherwise dry out and the window could be blocked when the temperature is constantly high.

6.2. CLEANING THE WINDOW

- Close the window.
- Open the window to 45°.
- Once you have done this, you can slide it up and down to clean it.
- We advise you to use M-design's "Bio-Clean" to clean the window, which is available from your supplier. It is one of the few products that do not harm the lacquer.



Pic.16

6.3. SUPPLIED ACCESSORIES

- 1 Key for door opening
- 5 Connection pieces
- Instructions for installation and use with guarantee card

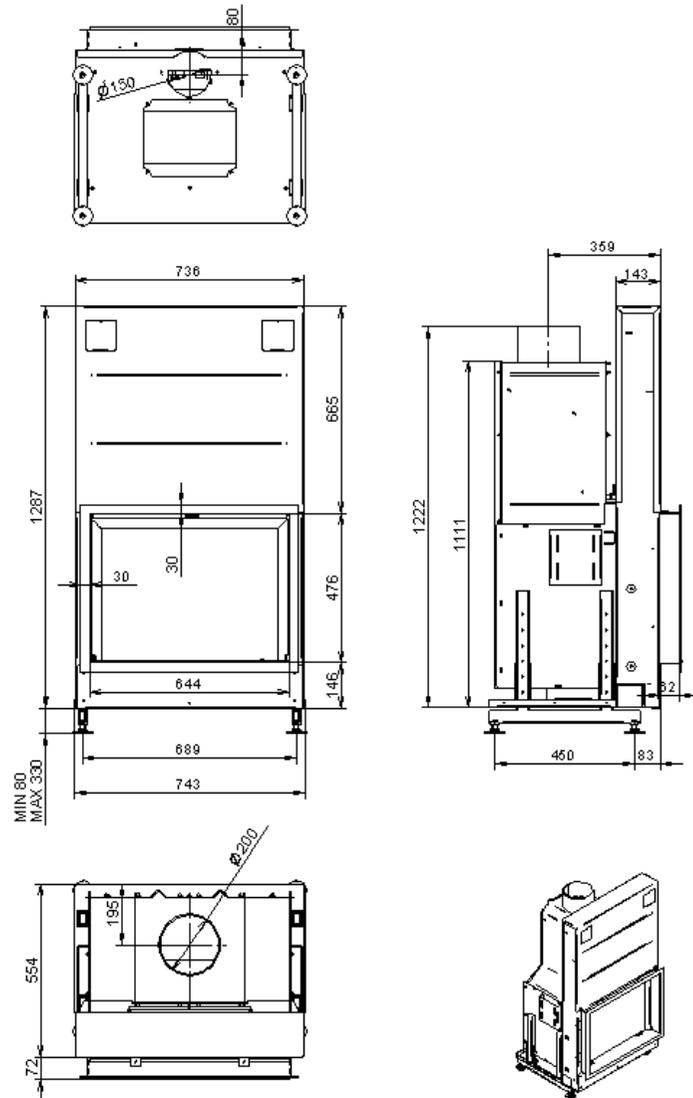
6.4. SPECIFICATIONS AND IDENTIFICATION BOARDS

TYP- ARGENTO	750 H	900 H,V	1150 H,V	1200H	1350H
Nominal heat output (kW)	9	10	11	12	13
The average efficiency (%)	78	78	78	78	78
Heat flow to the space (kW)	9	10	11	12	13
Output range (kW)	3 - 11	3,5 - 12	4 - 13	5-13	6-14
Flue gas temperature by nominal output (°C)	190	190	195	195	195
Average concentration of CO counted on 13% O ₂ (%)	0,12	0,12	0,12	0,12	0,12
Average volume concentration of CO counted on 13% O ₂ (mg.m ⁻³)	1540	1540	1540	1540	1540
Minimum chimney draft (Pa)	12	12	12	12	12
Weight (kg)	240	260	280	300	320
Minimum distance from flammable materials from the side and from the back (mm)	300	300	300	300	300
Minimum distance from flammable materials from the glass side (mm)	1000	1000	1000	1000	1000
Fuel supply interval (hour)	1	1	1	1	1
Recommended fuel - dry wood	beech, oak, spruce				
Consumption of wood at nominal output (kg/h)	3,2	3,5	3,7	3,9	4,1

EN 13229		CE
Serie N°		
MODEL - MODELLE	ARGENTO / BRILANT	
TYP:	750H, 900H, 900V, 1050H, 1050V, 1200H, 1350H	
BRANDSTOF - COMBUSTIBLE - BRENNSTOFF - PALIVO	HOUD - BOIS - DREVO - WOOD - SCHEITHOLZ	
NOMINAAL VERMOGEN - PUISSANCE NOMINALE - NOMINAL CAPACITY NENNWARMLEISTUNG - MENOVIKY VÝKON	10 kW	
MINIMALE AFSTAND TOT BRANDBARE MATERIALEN - MINIMUM DISTANTE TO FLAMMABLE MATERIALS DISTANCE MINIMALE AUX MATERIAUX BRULANTS - MINIMUM ABSTAND ZU BRENNBAREN MATERIALEN MINIMÁLNÁ VZDIALENOSŤ OD HORLAVÝCH MATERIÁLOV	20 cm	
ACHTER HET TOESTEL - DERRIERE L'APPAREIL BEHIND STOVE - HINTEN DEM KAMINOFEN ZADNÁ STRANA	20 cm	
NAAST HET TOESTEL - A COTE DA L'APPAREIL BESIDE THE STOVE - SEITLICH DES KAMINOFENS BOČNÁ STRANA	20 cm	
RENDEMENT - OUTPUT - WIRKUNGSGRAD - ÚČINNOSŤ	78,0%	
CO (13% O ₂)	0,12%	
ROOKGASTEMPERATUUR - TEMPERATURE DE LA FUMEE SMOKE TEMPERATURE - ABGASTEMPERATUR - TEPLOTA SPALÍN	195 °C	
VERWARMINGSCAPACITEIT, HEATING CAPACITY, DÉBIT CALORIFIQUE WÄRMELEISTUNG, TEPELNÝ VÝKON	4 - 13 kW	
De installatievoorschriften van de fabrikant ten allen tijde opvolgen en enkel de aanbevolen brandstoffen gebruiken. Toujours respecter les instructions d'installation du fabricant et utiliser les combustibles recommandés. Always respect the installation instructions of the producer and use the recommended combustibles. Die Bedienungsanleitung des Herstellers beachten und nur anbefohlene Brennstoffe verwenden. Dodržujte návod na obsluhu a používajte len doporučené palivo.		
PRODUCENT-FABRICANT-MANUFACTURER-HERSTELLER-VÝROBCA HT-design, s.r.o. Priemyselna časť 1975 023 02 Krásno nad Kysucou Slovensko		

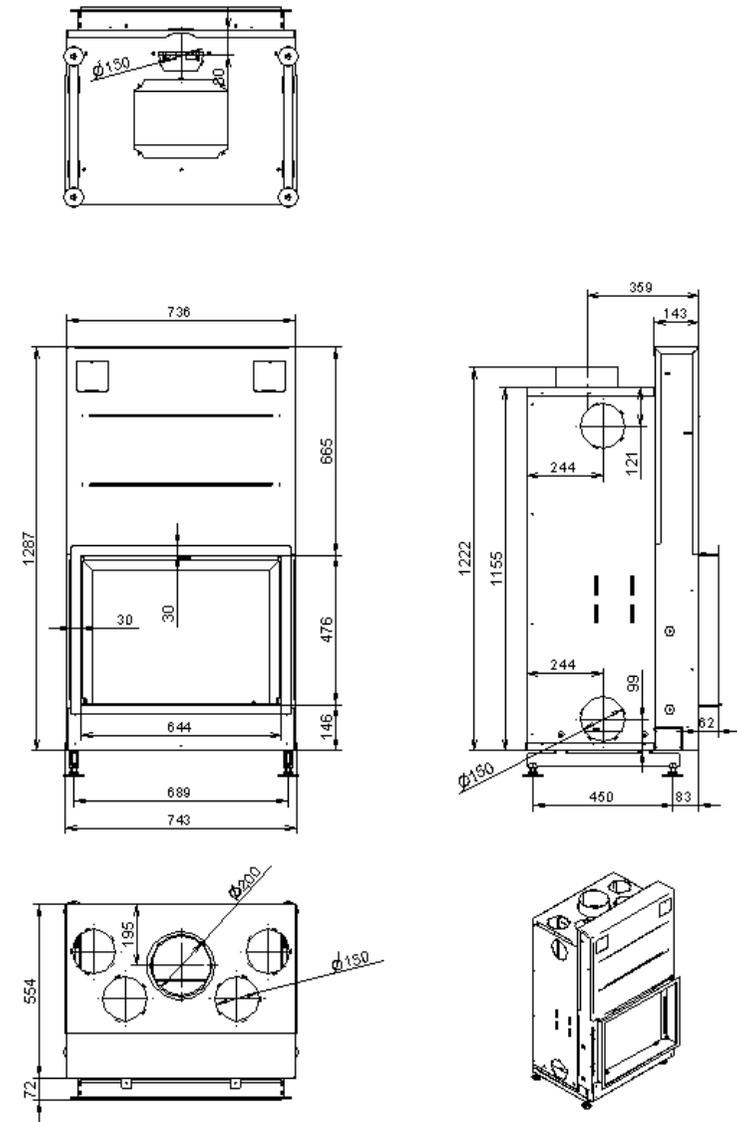
7. TECHNICAL DRAWING

Without convection chamber



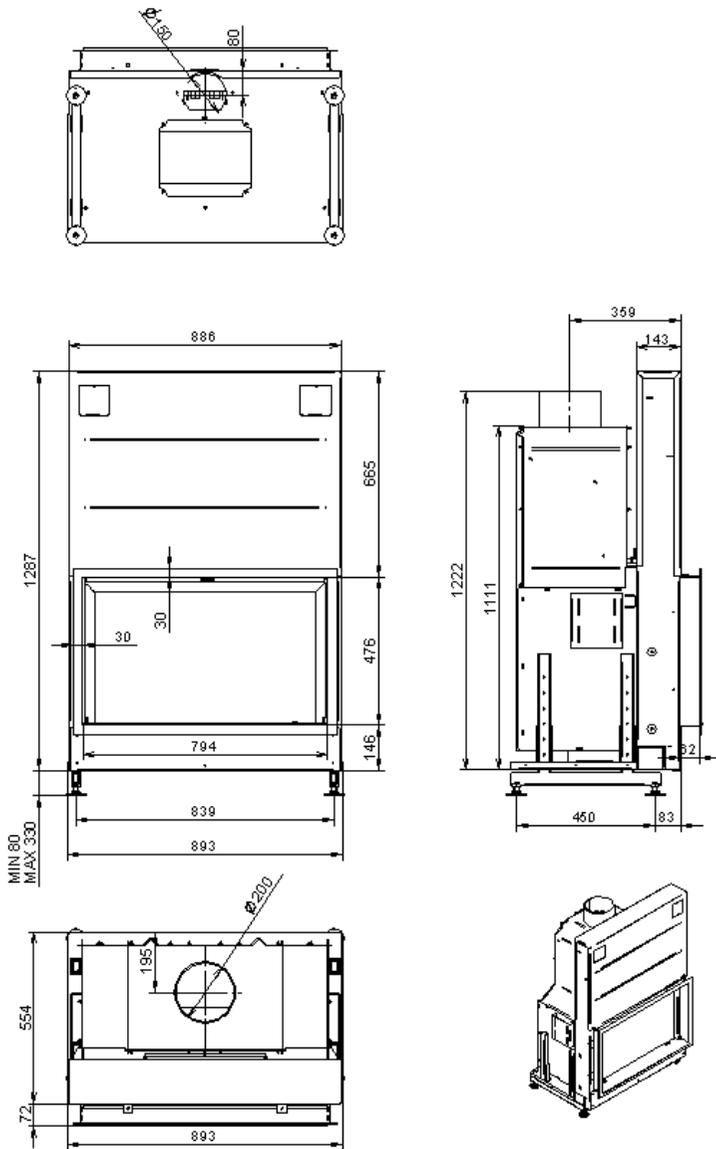
ARGENTO 750 H BASIC 210 kg

With convection chamber



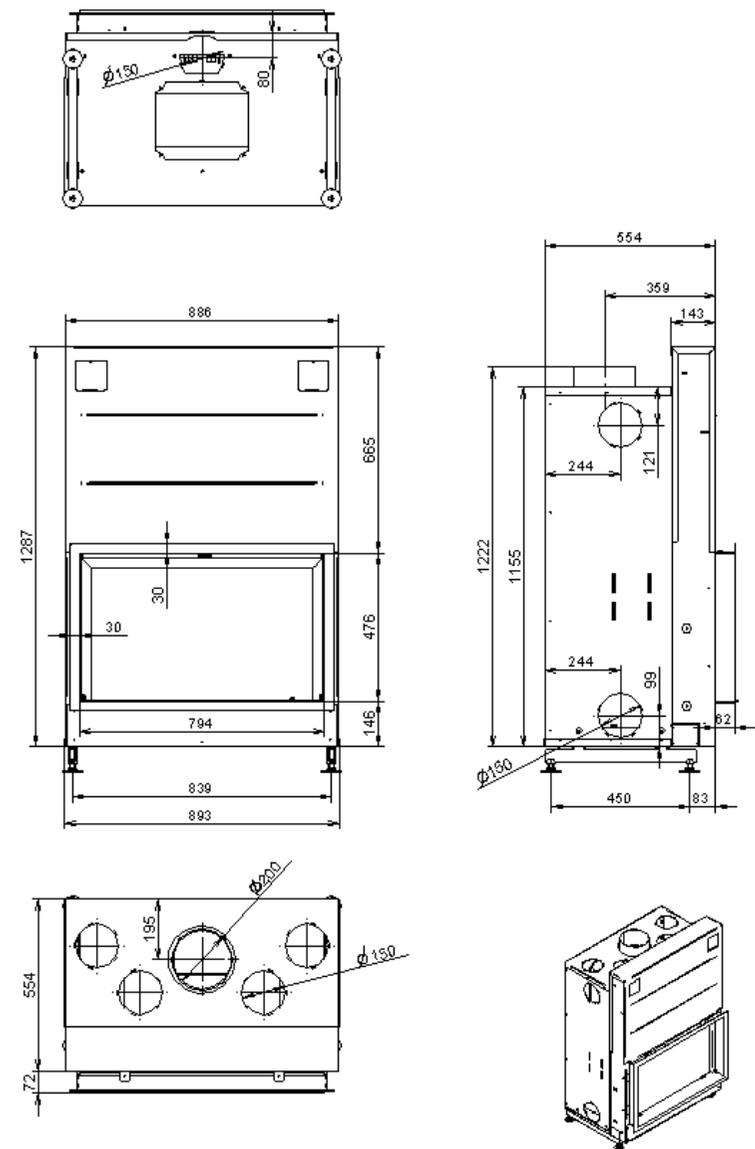
ARGENTO 750 H PREMIUM 225 kg

Without convection chamber



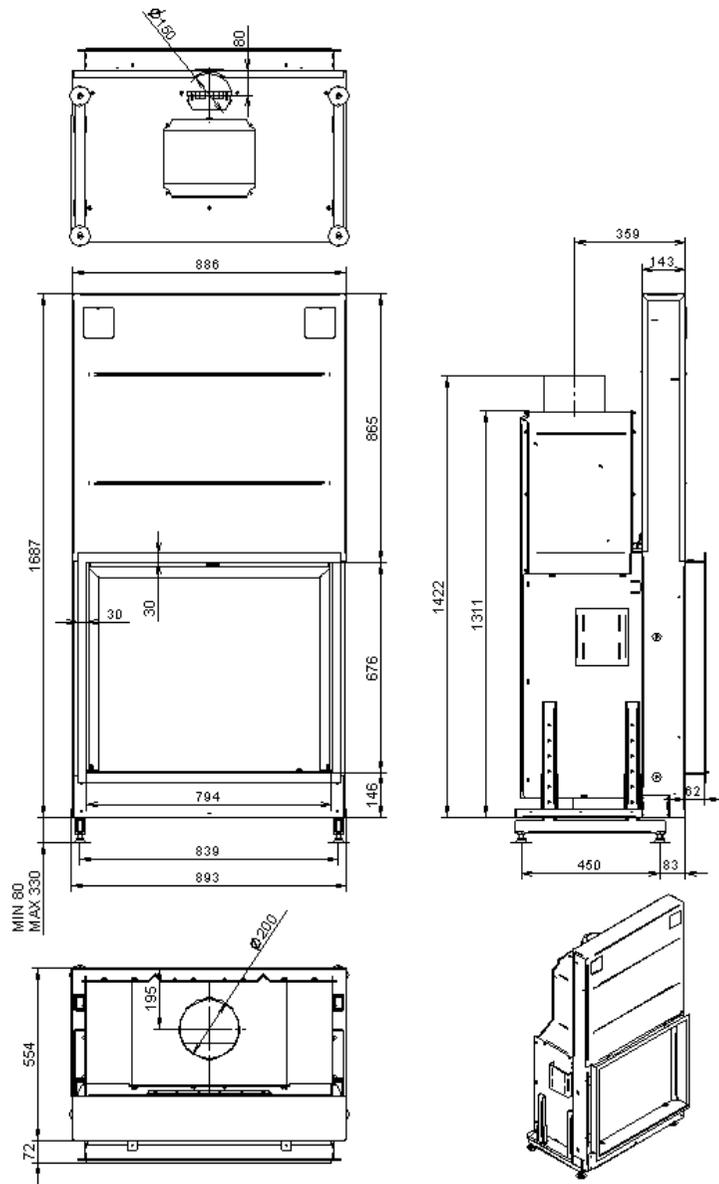
ARGENTO 900 H BASIC 230 kg

With convection chamber



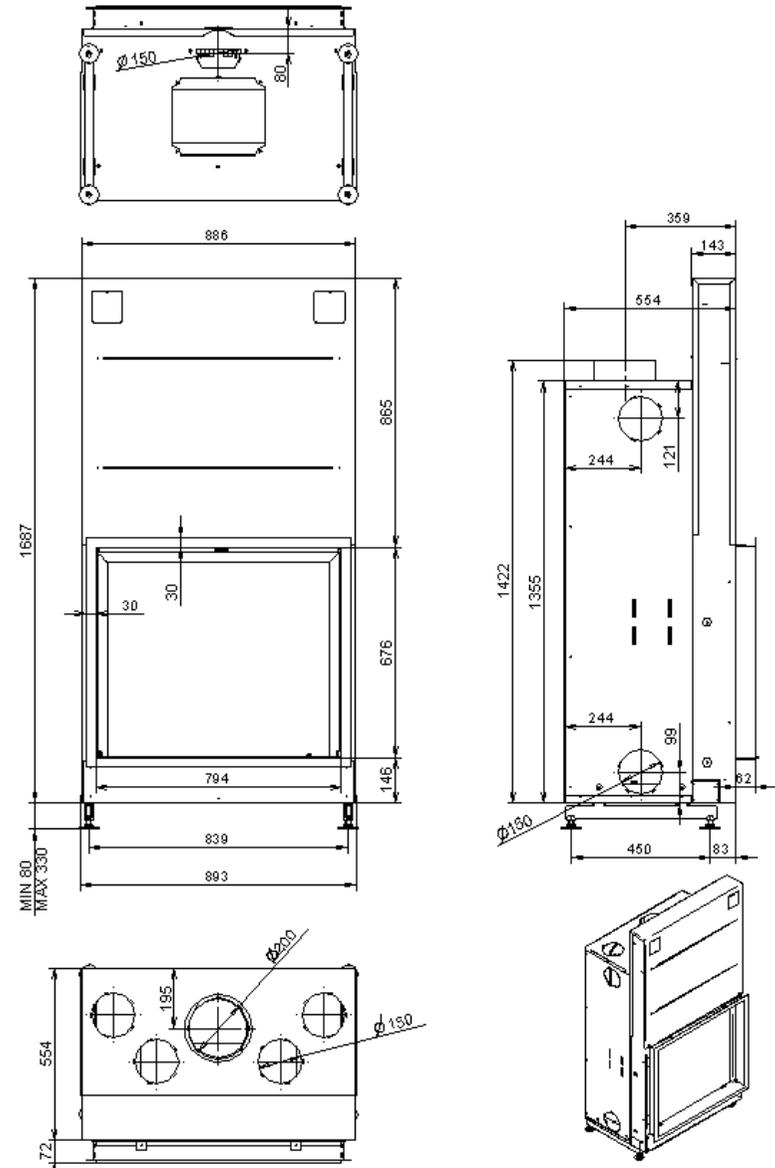
ARGENTO 900 H PREMIUM 260 kg

Without convection chamber



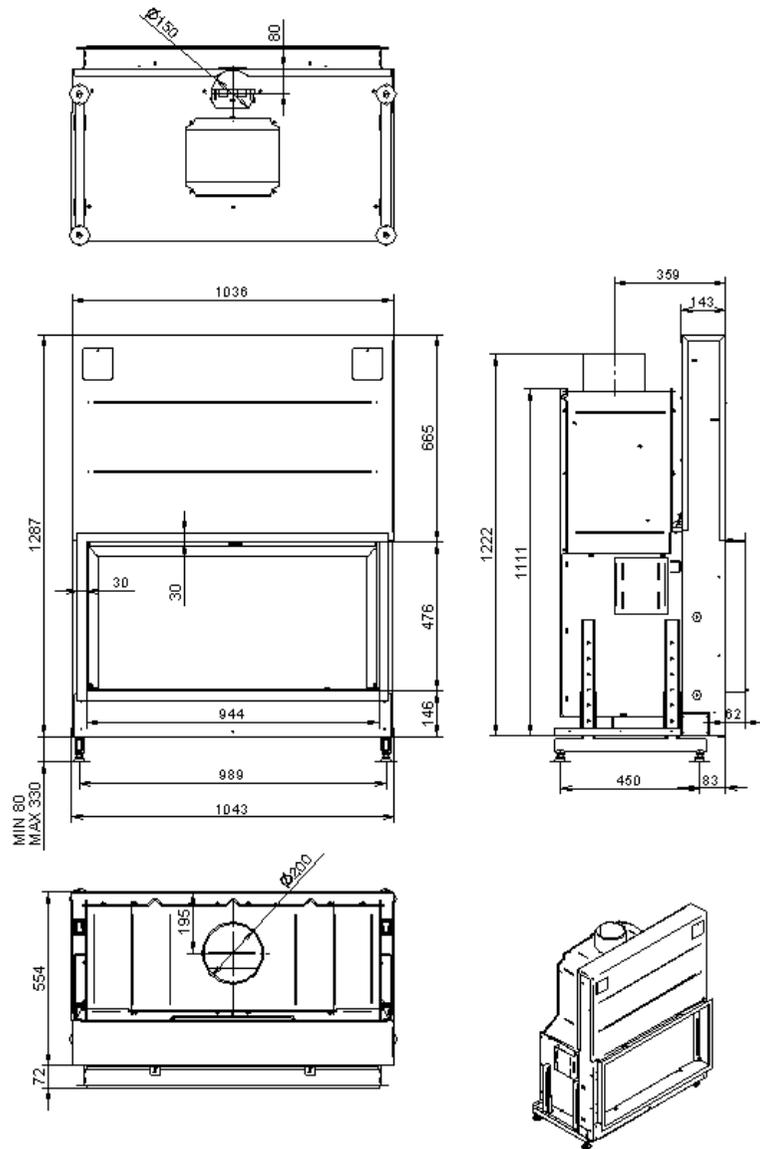
ARGENTO 900 V BASIC 260 kg

With convection chamber



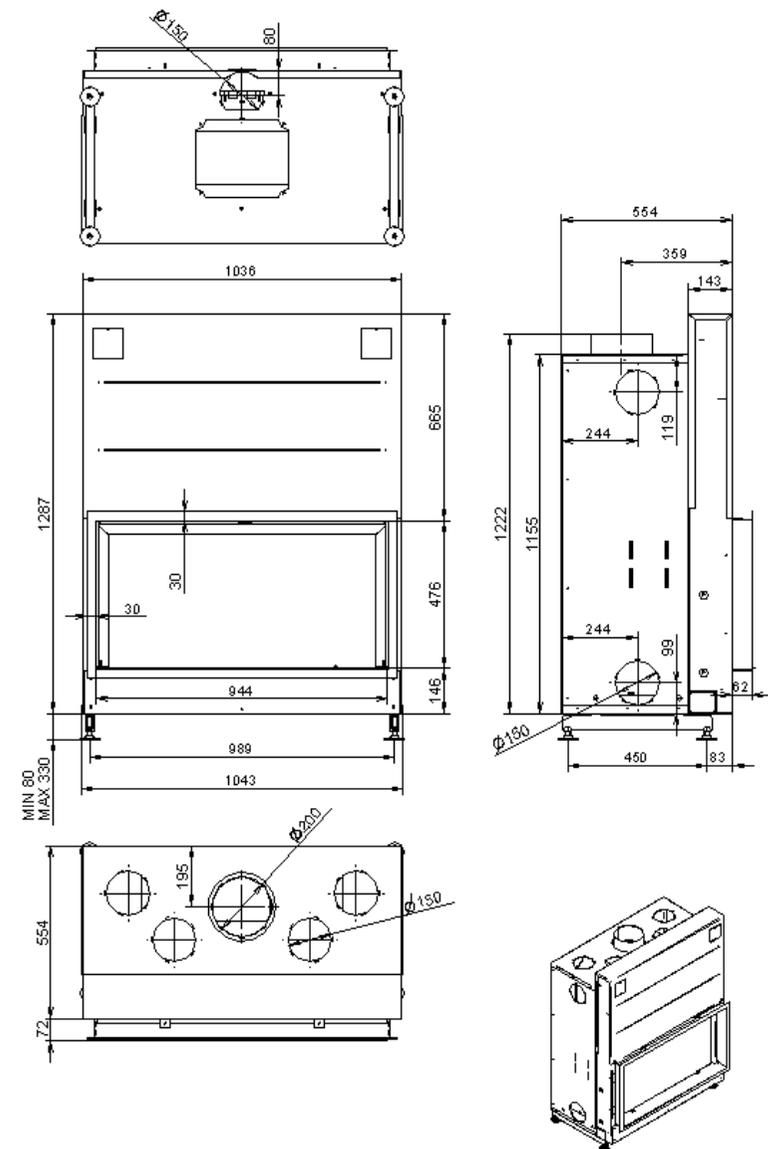
ARGENTO 900 V PREMIUM 290 kg

Without convection chamber



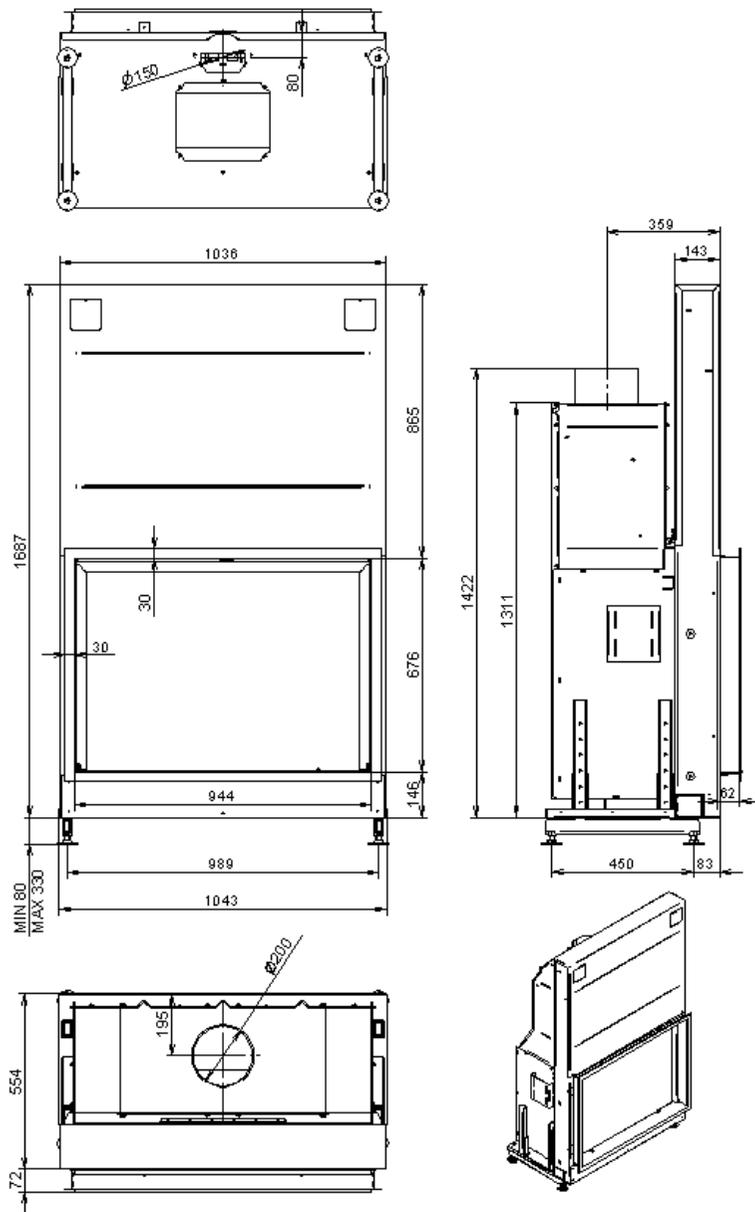
ARGENTO 1050 H BASIC 260 kg

With convection chamber



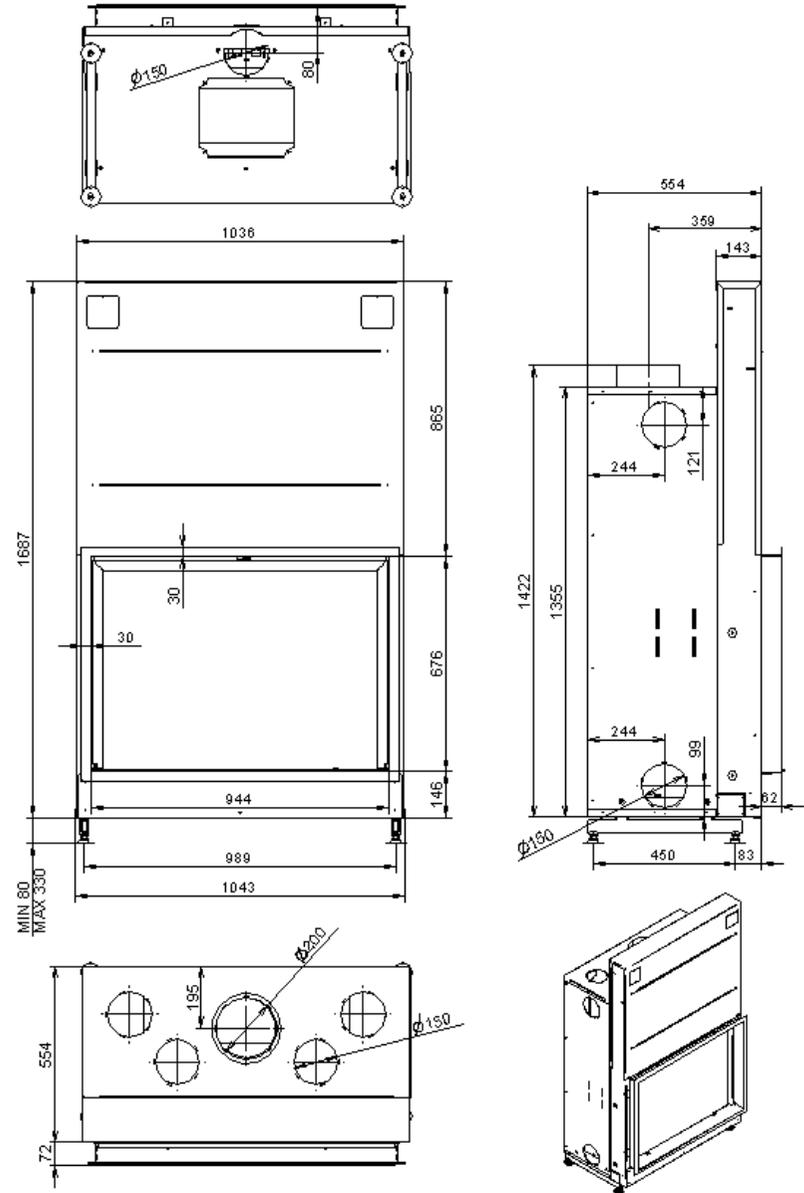
ARGENTO 1050 H PREMIUM 290 kg

Without convection chamber



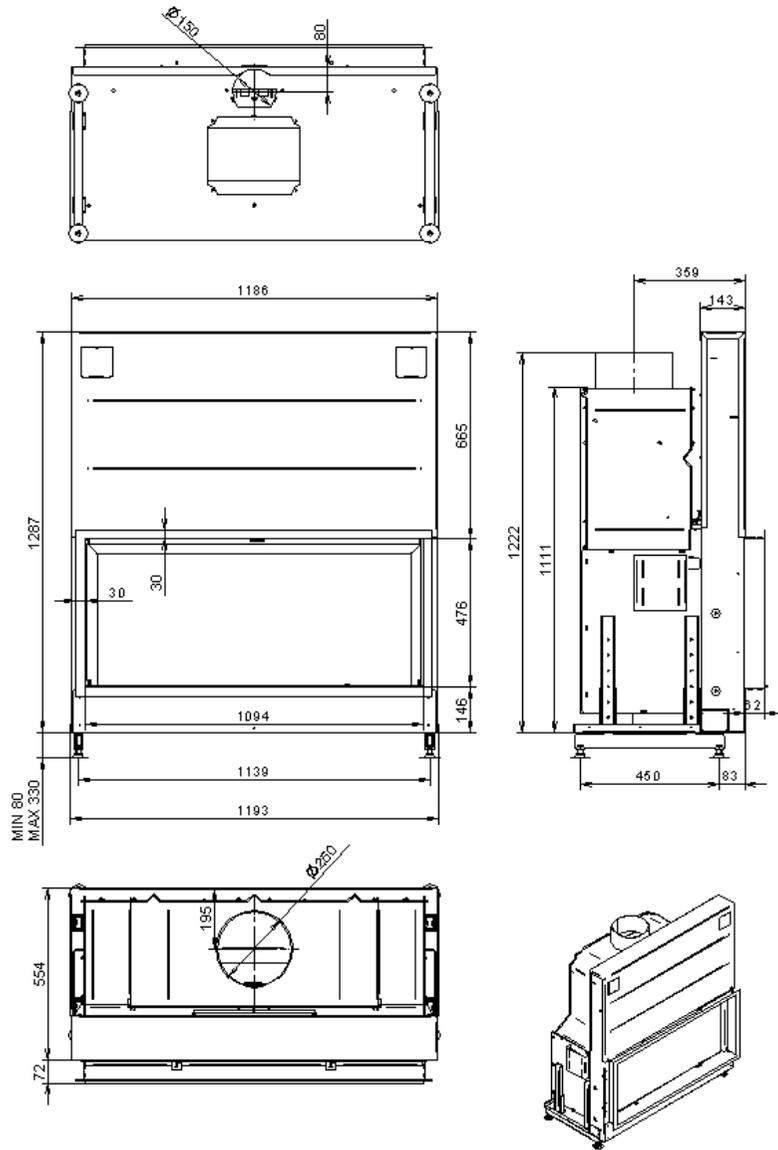
ARGENTO 1050 V BASIC 310 kg

With convection chamber



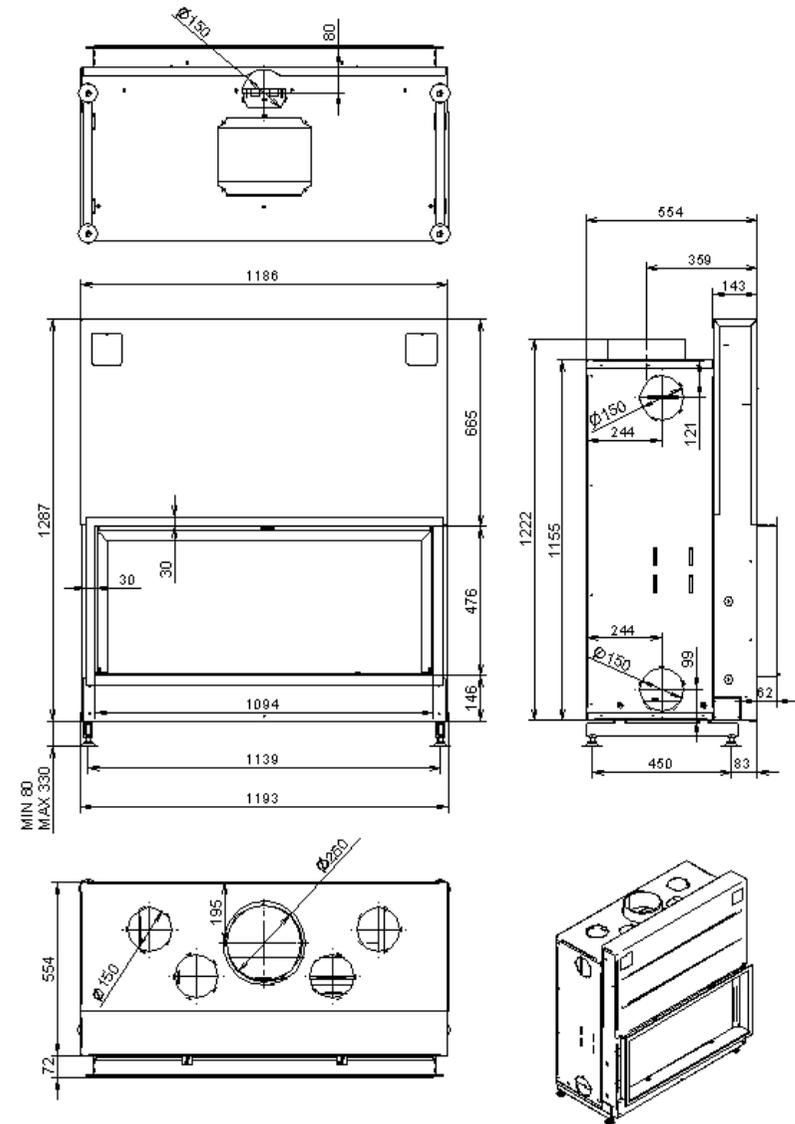
ARGENTO 1050 V PREMIUM 340 kg

Without convection chamber



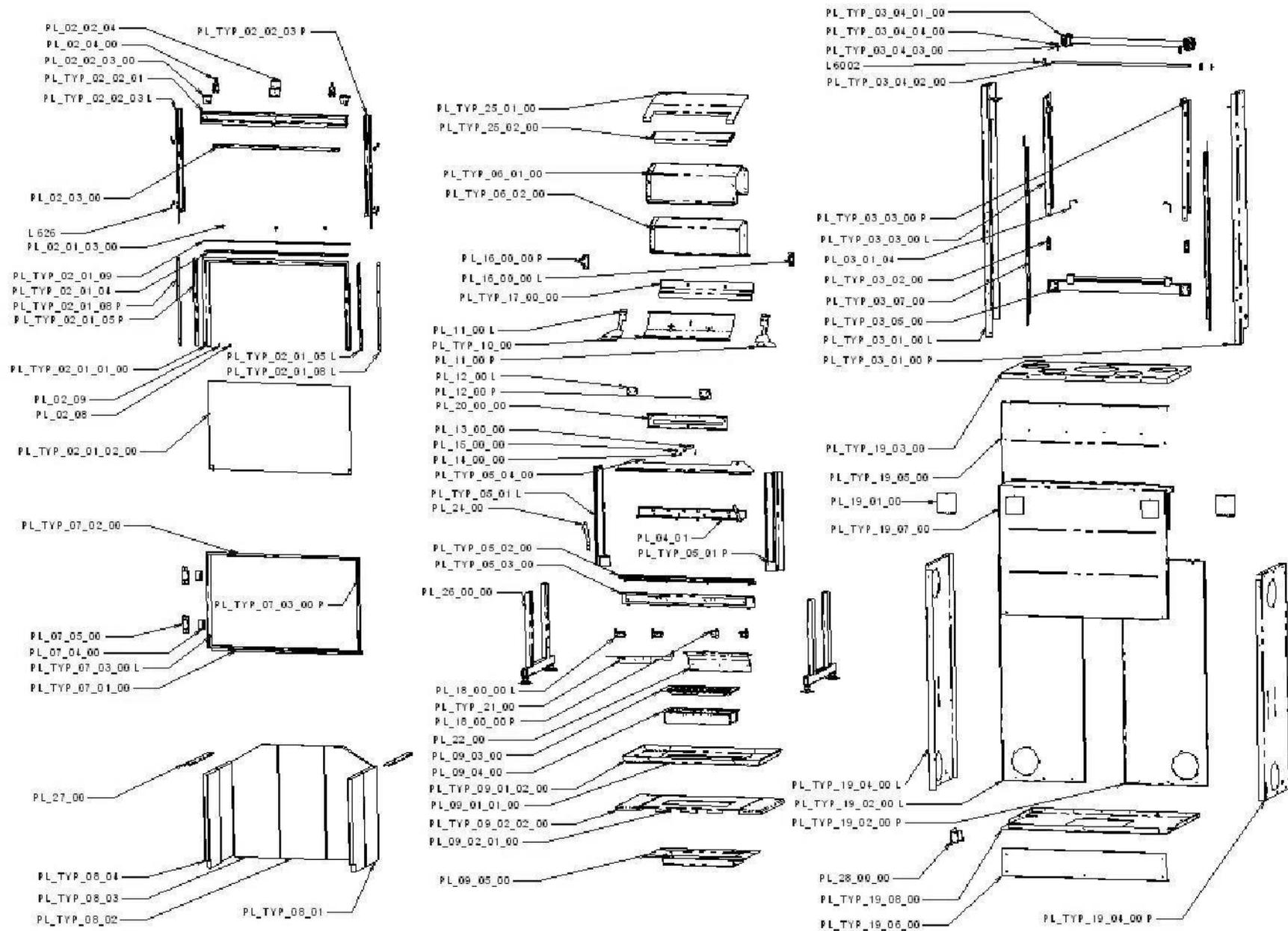
ARGENTO 1200 H BASIC 290 kg

With convection chamber



ARGENTO 1200 H PREMIUM 320 kg

8. SPARE PARTS



9. GUARANTEE

This page is your warranty card.

The guarantee is only valid for faults caused by construction defects or defects in the parts used to build the appliance.

9.1. TERMS AND ITEMS

7 years' guarantee on the general structure

2 years' guarantee on the removable parts and components

1 year guarantee on: fans and speed variator.

No guarantee on glass, seals or Chamoflex plates

9.2. 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.

9.3. DISCLAIMER

Caution: The following items are always excluded from the guarantee: :

Damage, loss and malfunctions which occur are fully or partially a consequence of:

1. Incorrect installation of incorrect connection.
2. Non respect of the order, installation and maintenance instructions
3. Chimney draught that has not been adjusted.
4. Transport and installation.
5. Incorrect usage.
6. Insufficient maintenance.
7. Unsuitable, hazardous and damp fuel. Every internal adjustment to or reconstruction of the stove by third-party, including the buyer.
8. Burning at extremely high temperature, more than 12 kW.
9. Costs for packaging and transport.
10. All costs not pre-arranged with M-design.

11. Costs linked to the misuse and/or abuse of the appliance

12. In cases where the buyer cannot show his/her warranty card with the purchase invoice.

Likewise where the guarantee and/or the invoice show(s) signs of tampering or forgery (crossed out date, illegible, modifications).

In the case you would like to make use of the manufacturer's warranty, you should contact your reseller it the first instance. Please take good care of your purchase invoice and warranty card and store them in a safe place.

WHERE TO FIND SERIAL NUMBER?

Open the lifting door as fuel is supplied. You'll see an engraved number in the left or right upper corner.



WHERE TO FIND IDENTIFICATION BOARD?

Identification board is situated on side under bottom rail



Your serial number

