INOA CONDITIONER: PRACTICAL GUIDE

Manufactured in one piece, Inoa is the quietest conditioner on market
Energy saving technology
An aesthetically pleasing conditioner which is easy to maintain

EUROCAVE

Exclusive advantages

to optimise the quality of your wine

Using its unique expertise in wine storage, acquired over the last 35 years, EuroCave is the only specialist who can now offer you a range of conditioners designed especially for wine offering state-of-the-art advantages:

1 Patented technology behind the EuroCave label

3 exclusive advantages that put this conditioner in a class of its own

1 – The quietest conditioner on the market

How?

Its system, which automatically adjusts speeds to ambient temperature conditions, combined with the use of particularly quiet fans, allows the conditioner to function very discretely.

The conditioner's housing is completely sound-proof (20 mm polyethylene foam) and the compressor and fans are fitted with silent blocks which absorb any residual vibration.

> The unique design of EuroCave conditioners guarantees a very low noise level. You will benefit from an acoustic pressure which is 8 dBA lower than standard conditioners on the market.

2 – The natural level of humidity is preserved

How?

By maintaining a constant evaporation temperature, above 0°C, the Inoa conditioner ensures that drying of the air in your cellar is kept to a minimum, unlike standard conditioners.

> The only conditioner on the market to manage a positive evaporation temperature, the EuroCave conditioner ensures peace of mind as it maintains an ideal humidity level…and requires no intervention from you.

3 – Energy-saving technology

How?

Because of EuroCave's unique patented technology, based on a positive evaporation temperature and automatic adjustment of fan speeds, the Inoa conditioner is energy efficient.

The insulation between the condenser and the evaporator minimises any exchange between the cold and hot sections of the appliance, which results in optimal performance.

> EuroCave conditioners are environmentally-friendly and allow you to store your wine without wasting energy.

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2 Temperature control in the heart of your cellar

Unique feature: accurate regulation via remote control

1 – Ideal uniformity of temperature

How?

EuroCave conditioners function according to the principle of fanned cold air, which consists of circulating the air continuously around the bottles in order the ensure uniformity of temperature. They ensure an ideal temperature for storing your wine (between 9° and 15°C), whatever the external temperature (between -5° and 35°C).

A heating function (650W) is fitted as standard, in addition to conditioning. The appliance automatically activates the appropriate function, depending on the external temperature.

> EuroCave conditioners automatically adapt to prevent any significant deviation in temperature. Your wines are well looked after without requiring any intervention by you.

2 – Temperature control as close as possible to your bottles

How?

Temperature regulation (measurement, setting and display) is ensured by wireless remote control which you place near to the bottles. This allows you to measure the temperature as accurately as possible (setting given to the nearest 0.5 degrees).

The remote control allows you to easily see and regulate the temperature of your cellar whatever the location of your conditioner. You also have the option of placing your remote control outside the cellar by using the wired sensor (available as an optional extra).

> EuroCave conditioners are the only cellar conditioners to have remote control for controlling the temperature inside your cellar.

3 An aesthetically pleasing conditioner which is easy to maintain

The only conditioner that respects blends with your interior design

1 – Aesthetic materials adapted to storing wine

How?

Designed to respect the appearance of your cellar, EuroCave conditioners are fitted with a very discrete front panel, in galvanised steel, to be placed inside or outside your cellar, according to your preference. Furthermore, the conditioner's housing with its refined lines is designed to ensure excellent resistance to corrosion. In this way, you are guaranteed that your conditioner will not deteriorate over time, even in damp environments.

> A conditioner that is built to last which respects the aesthetics of the room.

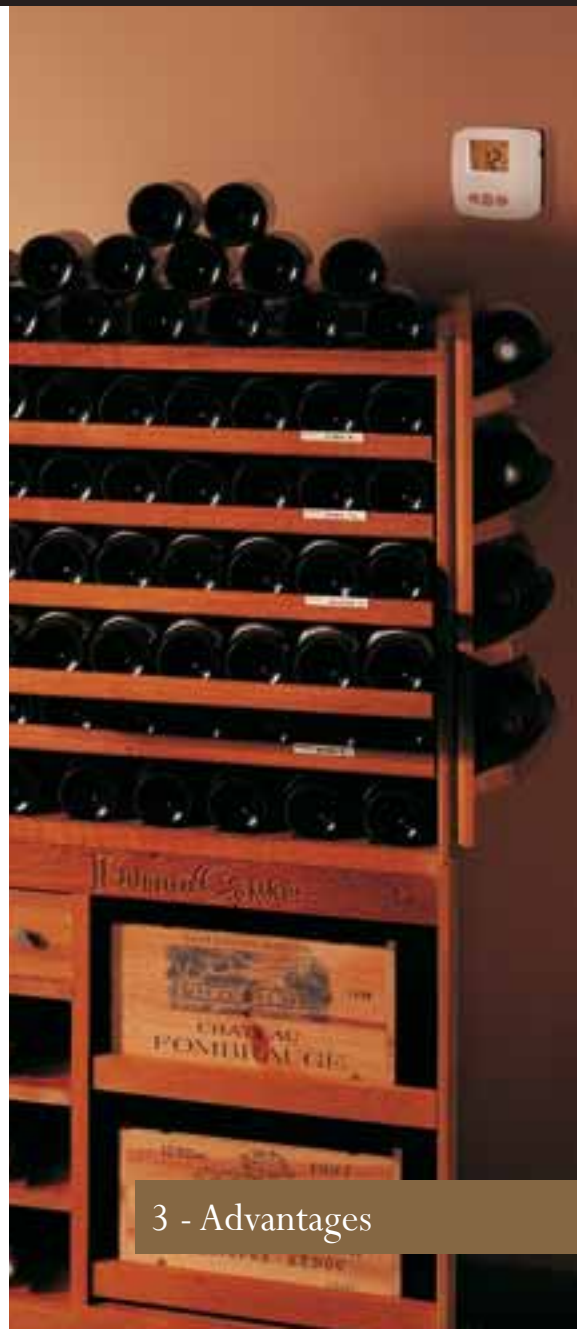
2 – Easy and fast maintenance

To ensure optimal functioning of your conditioner, carefully vacuum the air entry and exit grids once a year.*

Please contact your EuroCave distributor if you require a full inspection of your appliance.

> A conditioner designed to facilitate maintenance.

*In a clean environment



Exclusive advantages

to optimise the quality of your wine

4 - Advantages

An incomparable choice of installation options

A conditioner that adapts to all cellar layouts

1 – A modular design to adapt to your constraints of space

How?

You can install your Inoa conditioner in many ways: you have the choice of placing it outside or inside your cellar, placing it near or above ground level. Furthermore, the hot air outlet can be positioned at different angles (to be defined when ordering): to the front, the right or the left. You also have the option of expelling hot air from your room with extractor piping*.

Finally, you can choose to install the conditioner on a door. In this case, have your fitter check that the door can support a weight of 46 kg and that it does not produce vibration.

**Standard piping, 160 mm in diameter (not supplied).*

2 – Easy to fit

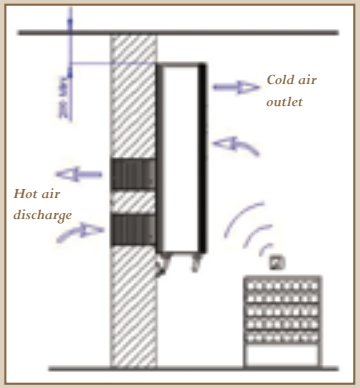
How?

Your Inoa conditioner comes supplied with a metallic mounting frame which simplifies the process of drilling air entry and exit holes. Your conditioner is also fitted with extendable ducting to be cut to length (75 cm each) in order to install the conditioner whatever the thickness of the wall.

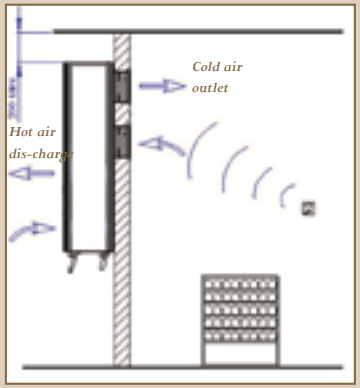
In order to adapt to all room layouts, you can fit your conditioner on the wall and thus optimise your storage space or put it near the ground, fixed to the wall.

We recommend, however, that you fit the conditioning unit at a height, which improves air convection.

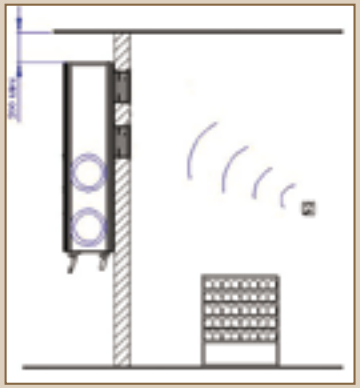
> EuroCave conditioners are the only conditioners to have such a wide range of installation options.



Conditioner housed inside the cellar with extraction facing forwards / aesthetic front panel on the outside



Conditioner housed outside the cellar with extraction facing forwards / aesthetic front panel on the inside



Conditioner housed on the outside of the cellar with extraction on the left side /aesthetic front panel on the inside.

Conditioner housed inside the cellar, fitted onto an adapted door.

Exclusive advantages

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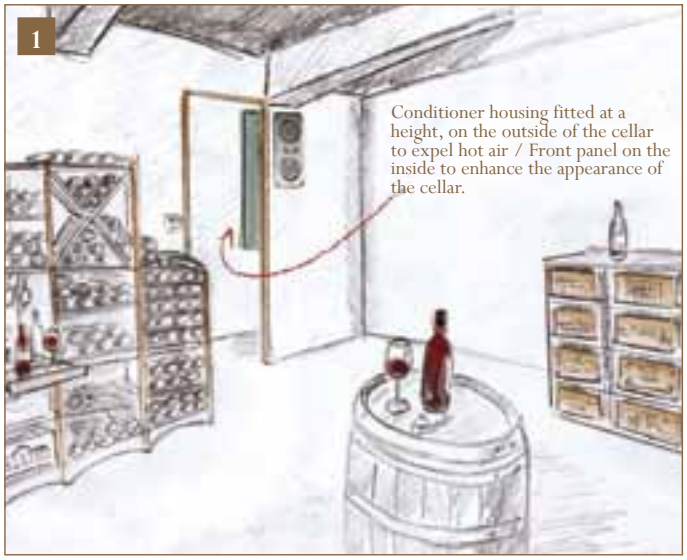
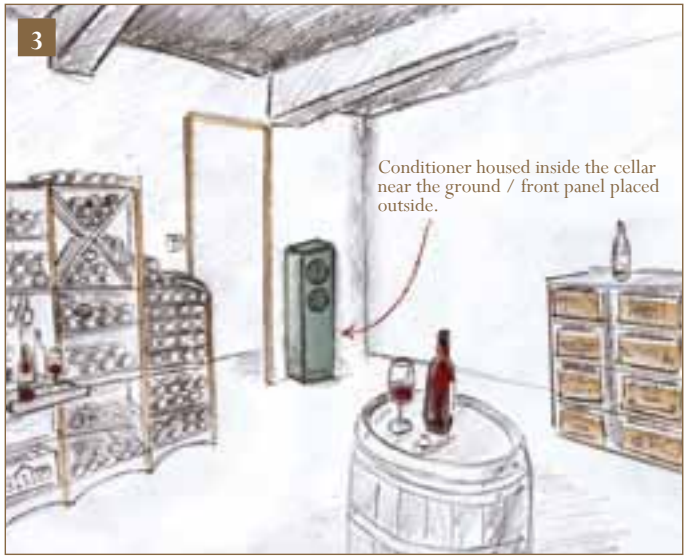
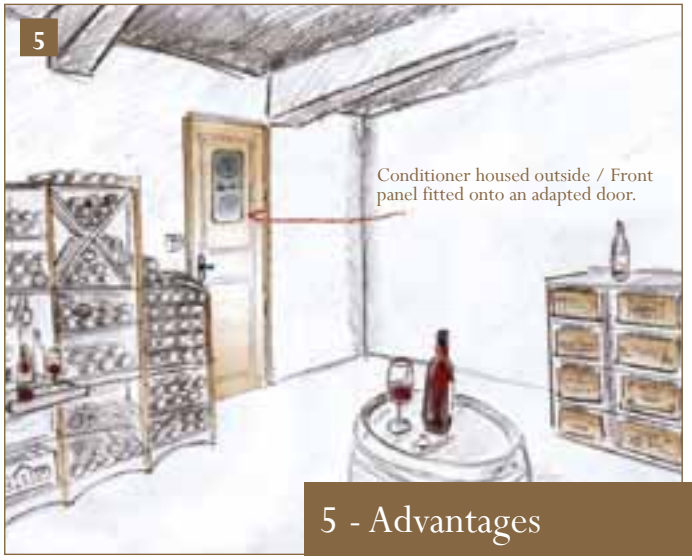
Examples of the different methods of installation that are possible for the conditioner, for the same cellar layout:

1- Housed on the outside, fitted at a height,
2- Housed on the inside, fitted at a height,
3- Housed on the inside, placed near the ground,
4- Housed on the outside, extraction on the side,
5- Housed on the outside, fitted onto a door.







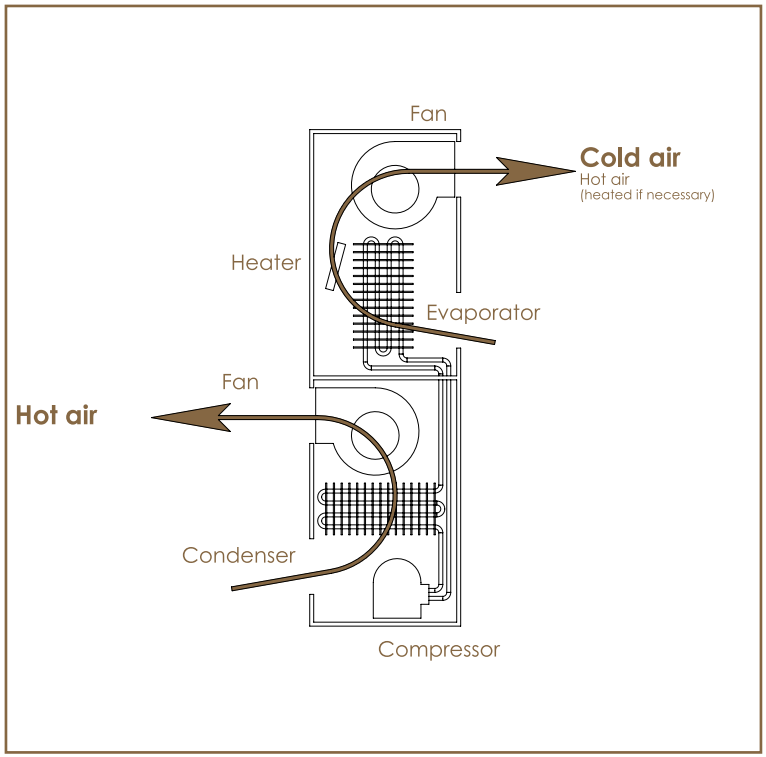
The inpa range of conditioners

Two models conditioning 25 and 50m^3

Manufactured in one piece: a product that is easy to install

EuroCave conditioners are cast in one piece: they include the evaporator and the condenser in the same unit. In this way, they do not need to be charged with gas or soldered. A wall socket is all you need!

Easy operation



Similar to wine cabinets, the EuroCave conditioner is fitted with a refrigerating unit:

- an evaporator forces cold air inside the room,
- a condenser expels the hot air outside.

Given the volume to be conditioned, the evaporator and condenser are fan-driven. The evaporator fan operates continuously to ensure that the air is constantly mixed and that temperatures are as uniform as possible, in accordance with speeds automatically adjusted according to requirements.

The inoa range of conditioners

Two models conditioning 25 and 50m^3

2 models: the solution to your needs

25 or 50 m3 conditioner
Hot air extraction side

25 or 50 m3 conditioner
Cold air extraction side

Option to be specified when ordering

Extraction of hot air on right or left

Radio remote control with wired sensor

(Wired probe provided for remote controls installed outside the cellar)

Aesthetic front panel in galvanised steel with extendable ducting

Technical Specifications

Ref.	Volume	Dimensions in mm	Power supply	Example volume m3	Cooling capacity W	Weight Kg	Electrical power W	Heating resistance W	Refrigerant	External temperatures
inoa25	25 m^3	L385 x P322 x H1250	220 – 240 V /50 Hz	Up to 25 m^3 *	600 W**	43 Kg	550 W**	650 W	R134a (without CFCs)	-5°C to 35°C
inoa50	50 m^3	L385 x P322 x H1250	220 – 240 V /50 Hz	Up to 50 m^3 *	1200 W**	46 Kg	800 W**	650 W	R134a (without CFC)	-5°C to 35°C

** in a very well insulated room (please refer to p. 8) - **for an internal temperature of 12° C and an external temperature of 32° C*

Insulation is essential

to ensure optimum performance

8 - Insulation

Warning! Failure to insulate increases the power required to condition your room by 3 fold.

Traditional building materials such as stone, concrete and brick are very poor insulators and only underground sections represent any real insulation. It is therefore essential, in the majority of cases, to insulate the entire room to be conditioned.

Insulate – yes but how?

We recommend you use extruded polystyrene, currently the most efficient product on the market. It is the least flammable and the most durable material. It also has the advantage of not being attacked by rodents. Furthermore, extruded polystyrene boards can be layered and therefore prevent thermal bridges. To increase your conditioner's lifespan and reduce electricity consumption, we advise you to use **extruded polystyrene which is at least 80 mm thick.**

Finally, please be aware that in very warm weather "poor insulation" means that your conditioner will operate continuously in order to reach the set temperature. It is then likely to wear out more quickly.

8 cm of extruded polystyrene provides the same amount of insulation as a 5m thick stone wall.

The insulation must be completely continuous (no gaps).

To allow air to be renewed in your cellar, it is recommended that you create an opening (of approximately 3 x 10 cm) in the room and leave a 2 cm air gap under the door. As in natural cellars, this "breather effect" will ensure a constant and gradual renewal of air.

Comments:

1- There must be no windows or bay windows in the area to be conditioned.
2- No heat source must pass through the area to be conditioned (e.g. under-floor heating).
3- The exterior of the conditioner must not be located in an area subject to extreme weather.
4- No heat-producing appliance must be located in the area to be conditioned (e.g. refrigerator, radiator, boiler).
5- Do not install the conditioner opposite the door of the area to be conditioned.
6- Do not place the exterior of the conditioner above a source of heat.
7- Do not obstruct the air outlets.

Insulation is essential

to ensure optimum performance

Insulation boards: different methods of fitting are possible

How can you determine whether or not a material is a good insulator? The insulation performance of a material is established by its R thermal resistance (m2.°C/W). It determines the material's ability to conduct heat.

$R = e / \lambda$ - The greater the R coefficient, the better the insulation is.

There are 3 types of insulation boards:

Insulator only, complex (with plaster cover) or sandwich (plaster both sides)

Depending on the type of insulator chosen, several methods of fitting are possible:

• Against the walls

- Standard extruded polystyrene board: pre-cut to the dimensions of the area to be conditioned, they are fitted using high-bond mortar. For a more acceptable finish, it is possible to fix rails onto which you screw plaster board panels over the polystyrene.
- Sandwich or complex boards: the polystyrene is already integrated into the plaster board.

Whatever the method used, all kinds of decorative finishes are possible to obtain an attractive wall.

If you only want to condition a section of your room, install a plaster board dividing wall then insulate the side of the room to be conditioned.

• On the ceiling and the door

The process for insulating the ceiling and door is identical to that of the walls. We recommend that you use extruded polystyrene.

• On the floor (insulation optional)

- Original clay floor: not insulating favours the passage of humidity, which is good for the wine.

- Concrete floor (for example):
Concrete is a very poor insulator. A few centimetres of fine gravel can, in some cases, improve insulation.

Warning! It is essential that you insulate the floor with a material having sufficient resistance to compression and which can support the weight of wine racks.

• Before being insulated, walls must be clean. If they are too damp, clean them with a wire brush then with a high pressure water jet and whitewash them with lime.

• Tools required:
handsaw, tape measure, bricklayer's ruler, trestles, screwdriver or screw gun, drill, hammer, level, plumb line, wood mallet, spatula, precision knife…

Installation example

Layout with housing outside the cellar

Important facts

• Minimum distance between the ceiling and the conditioner: 200 mm (to allow the appliance to be fitted onto its base).
• Minimum distance between the ground and the conditioner : 80 mm (to allow the appliance to be fitted onto its base)
• No wall thickness constraint.
• Option of making 2 holes, 210 mm in diameter corresponding to the size of the ducting or a rectangle smaller than the aesthetic front panel.
• For installation in a narrow room, the appliance must be positioned so that there is a space of 1500 mm between the air outlet and the wall.

Installation time: 2 steps

• Drilling the wall or dividing wall: the time taken varies by a few minutes for plaster board to 1 hour or more for a stone wall.

• Fitting the conditioner: 1 hour.

Comments:

• The room in which the conditioner expels hot air must be ventilated (add, if necessary, a heat extractor of 550 m3/hr output capacity for the 50 m3 conditioner, 430 m3/hr for the 25m3).

• To optimise the performance of your conditioner, install it, where possible, along the length of your room.

Installing a EuroCave conditioner

1

Determine the position of the conditioner housing (inside /outside).
Position the wall bracket in relation to the ceiling (distance of 200 mm).

6

Fit the aesthetic front panel onto the opposite side of the wall divide. Place the ducts on the flanges and ensure that they are securely fixed in the supports.

7

On the conditioner housing, on the side intended to be fixed to the wall, unscrew the 2 grids of the conditioner (Allen wrench supplied).

Installation example

Layout with housing outside the cellar

2

Draw 2 drill holes. Drill the wall (the hole must be bigger than the line drawn, between 210 mm min. and 280 max. in diameter).

3

Fix the extendable ducting onto the wall bracket using the metal ring.

4

Fit the wall bracket by passing the flexible ducting into the drilled holes.
Screw it onto the wall (2 screws above and 2 screws below).

5

Pull the 2 ducts (fixed to the wall bracket) outside the wall. Extend the ducts to their maximum in order to make them as smooth as possible. Cut flush with the wall (using a precision knife for the fabric and pliers for the metal wire).

8

Screw the 2 grids onto the aesthetic front panel (6 screws per grid).

9

Unscrew the 2 screws on the top of the conditioner (Allen wrench supplied), on the side intended to be fixed against the wall.

10

Fix the conditioner housing onto the wall bracket, ensuring that you press firmly onto the foam.

11

Screw down the conditioner housing (2 screws below and 2 screws above).

11 - Installation

Specialist in storing, displaying and serving wine, EuroCave has been offering solutions to suit everyone's needs for 35 years.
Cellar layouts, wine cabinets, cigar humidors, Sowine; with us you can always find unique solutions.

Ask for our brochures.

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www.eurocave.com