

relaxdesign®
minipool

Preinstallation Manual

We recommend that you read this manual carefully and carry out all the instructions it contains.

Correct preparation of rooms and installations will ensure the efficiency of the product.

The Relax team is always at your disposal for any information or assistance you may require during the preparation work.

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PRE-INSTALLATION

pre-installation

Efficiency and safety of spas are ensured if the installation is correct and carried out in accordance with the regulations in force in the country of use. This pre-installation guide provides information on the correct preparation of the room and the water and electrical connections for a quick and safe installation.

The following are required for pre-installation figures:

- a structural engineer for the calculation of platform or slab bearing capacities;
- a qualified and registered company that prepares the installation site according to the instructions given in this guide, following the applicable work safety regulations;
- a qualified and licensed electrician to prepare electrical and plumbing installations in compliance with local and national standards for civil and industrial installations;

The user must promptly notify the company of any existing underground obstacles such as gas and water pipes and power or telephone cables.

At the end of the pre-installation, all these specialists must issue a declaration of conformity of the installations carried out. In the absence of such a document, the Constructor declines any liability for damage caused to installations or to the premises where the spa will be installed.



It is advisable to check with the relevant municipal offices whether there are any constraints preventing installation or whether there are any permits to apply for.



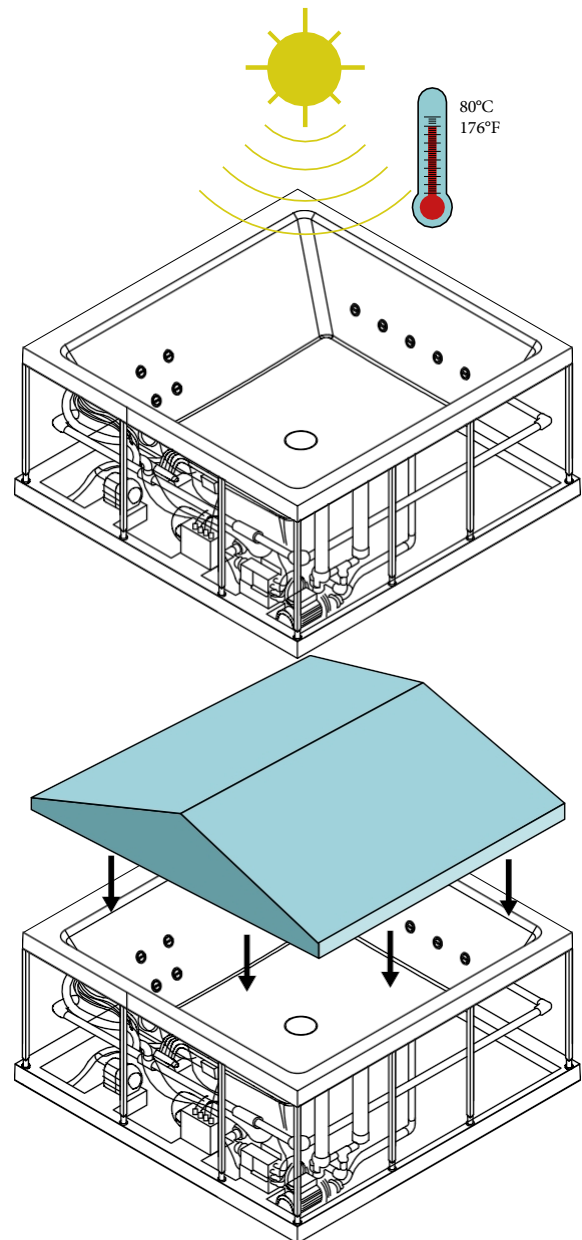
Incorrect pre-installation could lead to structural damage to the spa, invalidating its warranty.

TEMPORARY POSITIONING

Installation of the spa should be done immediately after receipt. However, once unpacked, if it is necessary to lay it temporarily on a surface while waiting for installation, it will be necessary to lay concrete slabs at least 5 cm thick under the entire bottom of the spa, which should be levelled.

Since the temporary base could be subject to shifting, it is recommended to leave the spa in that position for as short a time as possible. Do not leave the empty spa in 'direct sunlight'. The surface temperature could exceed 80°C and serious damage could result, including deformation and cavitation of the surface and components. Damage resulting from direct exposure to sunlight is not covered by the warranty.

In such conditions, provide coverage (fixed or mobile) to protect the spa.



Please note

The manufacturer disclaims all liability and warranty claims in the event of:

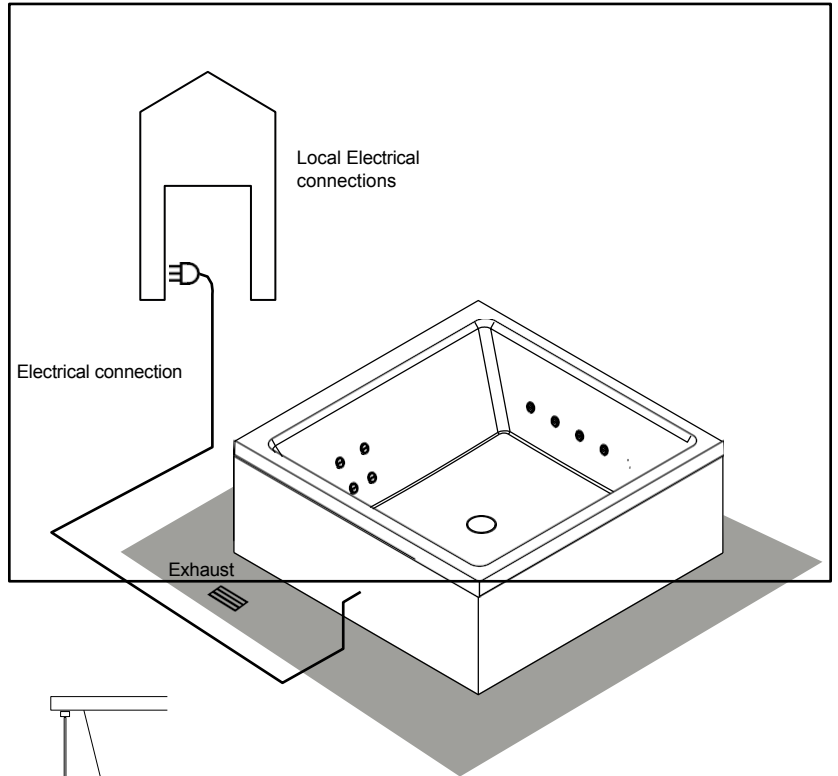
- non-compliant installations or connections or those made without following national regulations for civil and industrial installations;
- pre-installation and installation carried out by unqualified or non-compliant personnel the pre-installation and installation manuals;
- incorrect preparation of installation environments, including the supporting surface;
- accidents and damage due to improper installation or use of the pool;
- masonry works preventing the removal and handling of the spa or defective parts of it

WHAT NEEDS TO BE ARRANGED?

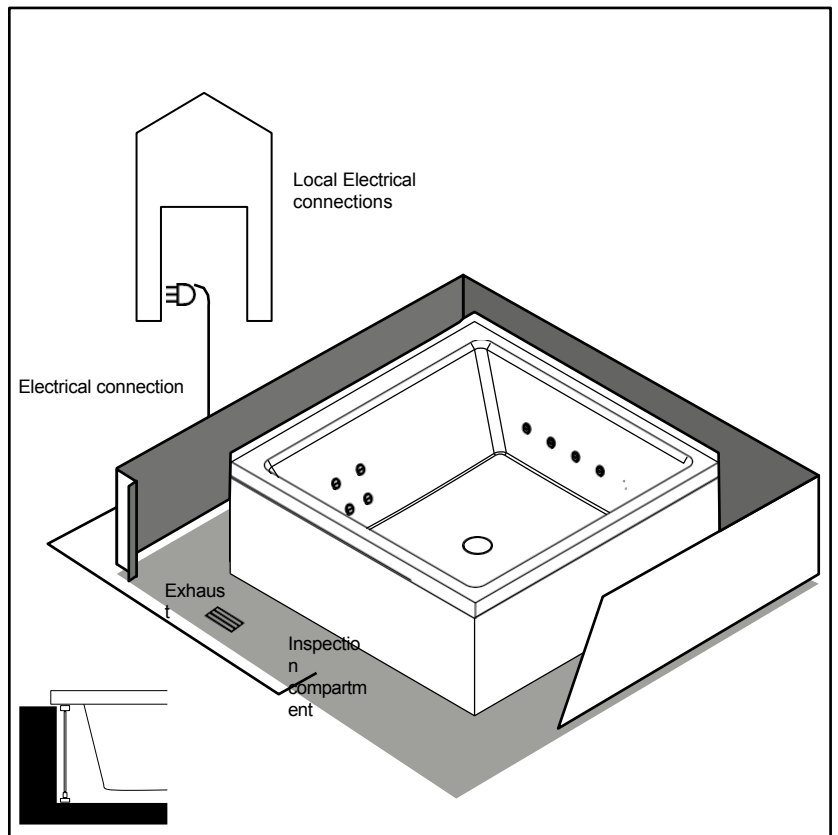
The spa, in order to be installed, requires:

- 1** identification of the installation site;
- 2** preparation of the installation site;
- 3** exhaust provision;
- 4** preparation of electrical installations;


The following pages will give detailed explanations on how to make these arrangements.




INDICATIVE EXAMPLES OF OUTDOOR SPA INSTALLATION/ INTERIOR.



IDENTIFICATION OF THE INSTALLATION SITE

 When choosing the location, please consider the local regulations and the prohibition of any electrical installations (e.g. plug sockets, switches, lamps, etc.) in the vicinity of the minipool at a distance of at least 60 cm and a height of 230 cm.

 When positioning the spa, the inspection side, where the electrical and hydraulic components are located, must always remain accessible for any maintenance inputs.

The recommended ambient temperature for the spa should be between -5°C +45°C, with a relative humidity of 20-80%.

OUTDOOR INSTALLATION

Trees or hedges, could lead to the intrusion of debris (e.g. leaves) that would cause damage to the equipment over time not covered by warranty, making maintenance more costly and frequent. Consider the best location to safeguard your privacy and the respect of others and the best panoramic or climatic position in accordance with local building and zoning regulations.


A sunny area with more exposure to the morning rays guarantees greater well-being for users!

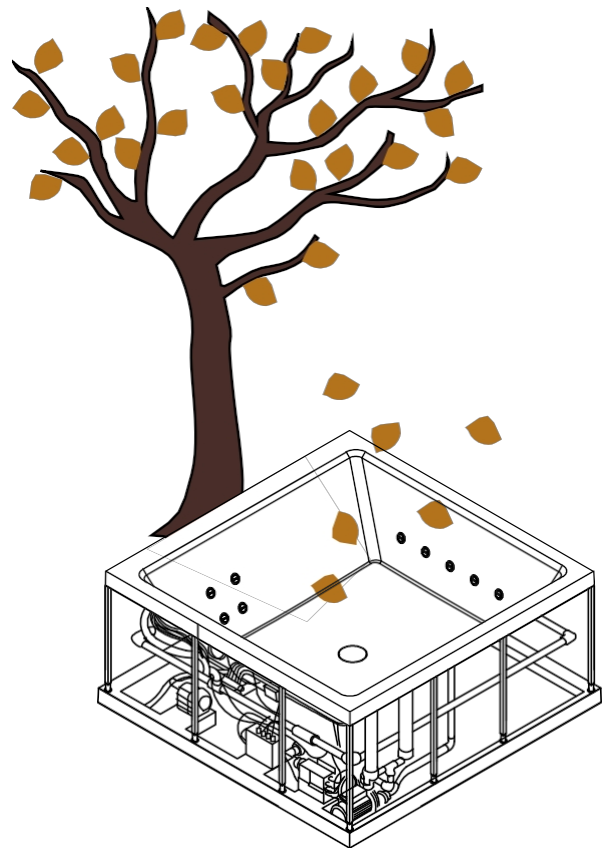
Take into account the geological composition of the ground on which the supporting platform will be built: soils that are very sandy, permeable or prone to flooding and could therefore compromise the durability of the spa supporting platform.

INDOOR INSTALLATION

Bear in mind that evaporation of the spa water at high indoor temperatures could generate very high humidity levels in the room.

To avoid this, choose rooms with good natural or forced ventilation. Alternatively, install a dehumidification system. Damage caused by humidity is not covered by the Manufacturer's Warranty.

 Consider the size of the spa: passages, doors, steps, can be an obstacle to its transportation to the desired place.



Relax Design spas are built to be placed outdoors. If you install the spa indoors, bear in mind that it must be easy to inspect or move for routine and extraordinary maintenance.

PREPARATION OF THE INSTALLATION SITE

Before making the support surface, please refer to the electrical connection sections to position the connections correctly.

ABOVE-GROUND INSTALLATIONS (FREESTANDING)

As a base, create a platform or reinforced concrete slab, at least 10 cm thick, perfectly flat and suitable for supporting the weight of the spa and its guests. The company recommends a minimum load of 425 kg/m².

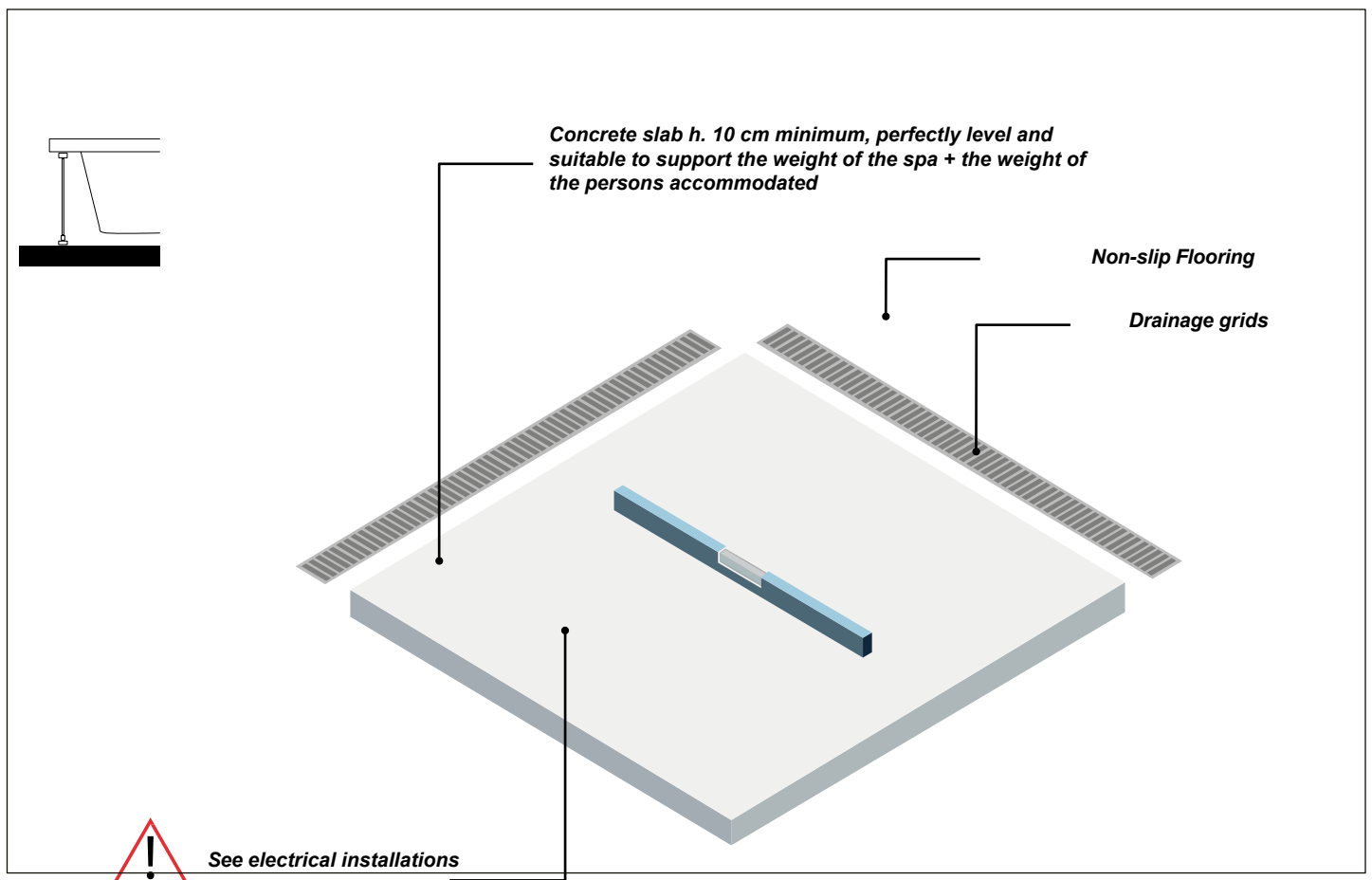
Always consult a qualified building engineer to calculate the appropriate flow rates for your situation. Do not insert wedges or shims underneath the spa to achieve leveling. Remember to ground the armature material in accordance with electrical regulations.

Provide:

- A perimeter drainage grates to facilitate water runoff and to help preserve equipment and structure (also for indoor installations);


- B non-slip flooring in the perimeter area of the spa.

For the preparation of electrical connections, see dedicated chapter on page . . .



RECESSED INSTALLATIONS

As a plinth, create an underground niche in reinforced concrete, at least 10 cm thick, perfectly flat and suitable for supporting the weight of the spa and its guests (the company recommends a minimum load of 425 kg/m²). In any case, consult a qualified building engineer to calculate the appropriate load-bearing capacity for your situation.

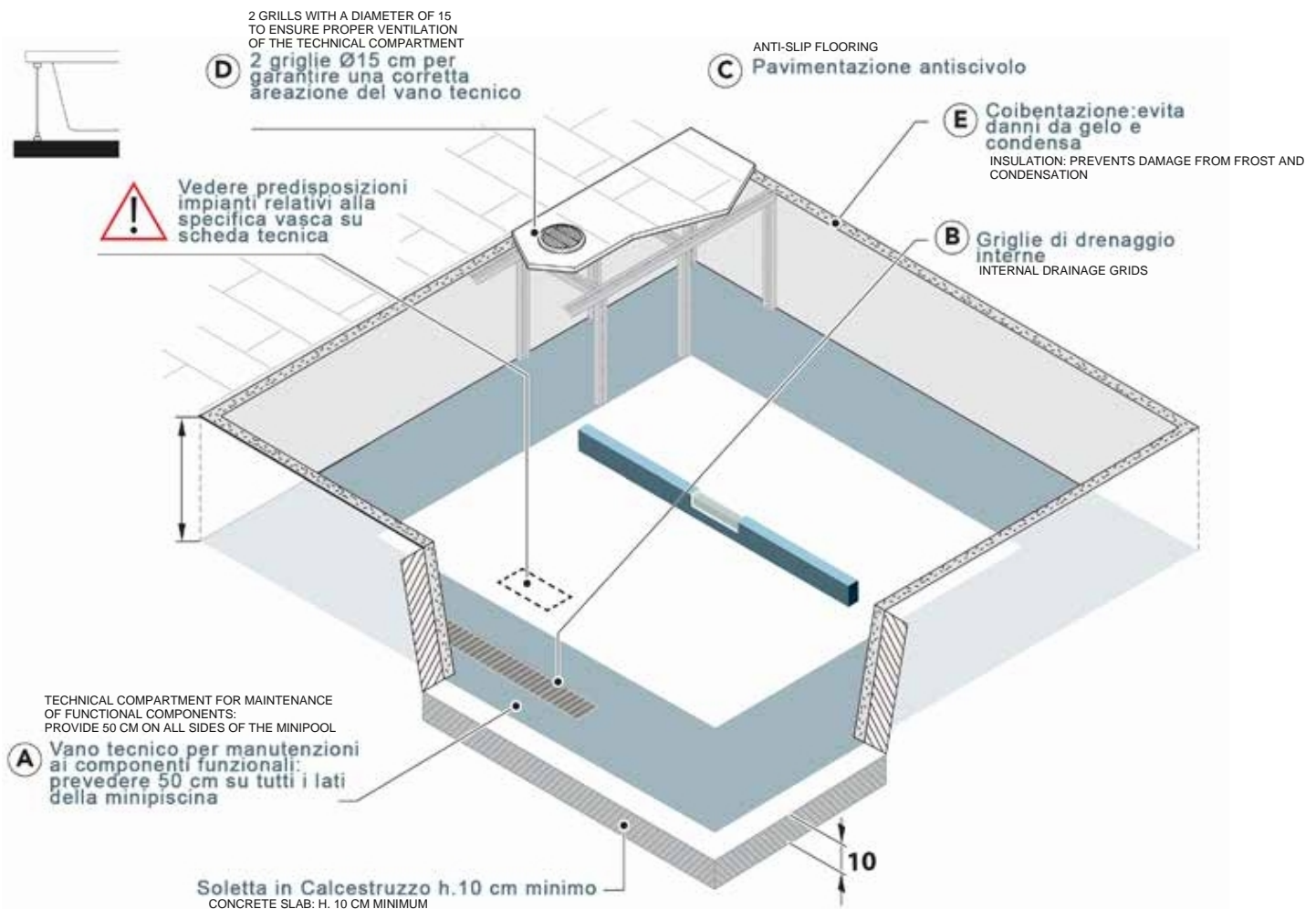
 No wedges or shims may be inserted underneath the spa to achieve levelling. Remember to earth the armature material in accordance with electrical regulations.

Provide:

- A technical inspection compartment* at least 50 cm wide on all sides of the spa will make future maintenance or repairs easier;

- B drainage grates around the perimeter and inside the recess to facilitate water drainage and to help preserve the equipment and structure (also for indoor installations);
- C non-slip flooring in the perimeter area of the spa.
- D two Ø15 cm grids to ensure proper ventilation and extraction of heat and moisture in the technical compartment.

IN OUTDOOR RECESSED INSTALLATIONS, for to avoid possible damage due to frost, we recommend insulation E of the spa compartment. This prevents excessive condensation, which over time would cause odours and damage to all the main internal components. The choice of materials and thickness should be made according to the minimum temperatures reached in the country of installation.



FILLING WATER CHARACTERISTICS

AQUEDUCT WATER AND WELL WATER

To ensure maximum hygienic safety and longevity of the spa, it is essential to pay close attention to the quality of the water that will be used to fill the pool. It is important that the water used is drinkable. The use of well water is always discouraged because it could be very calcareous, rich in metals such as iron and manganese, and have bacterial loads. The use of aqueduct water is preferable. In the case of very calcareous or ferrous water, it is always recommended to install upstream descaling and iron removal systems. The company declines all responsibility for problems related to the use of non-drinking water or failure to install the aforementioned systems.

It remains the plumber's responsibility to choose and type the components to be used and to check that they comply with the purity parameters and potability of incoming water

WATER HARDNESS

Water hardness (TH) is determined by the total content of calcium and magnesium in the water from their soluble salts.

Water classification:

.....up to 7°f = very soft waters

7°f to 14°f = Freshwater

14°f to 22°f = Medium hard water 22°f to

32°f = Fairly hard water 32°f to 54°f = Hard water

.....over 54°f = very hard water

(1°f = 10 mg of calcium carbonate per litre of water)

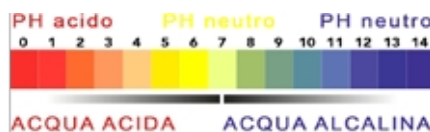
WATER ALKALINITY

Alkalinity (TAC) represents the concentration of bicarbonate ions in water. It is expressed as mg/L of calcium carbonate or in French degrees (°F). Ideal alkalinity values are between 80 mg/L and 125 mg/L (8°F-12.5°F). Values outside this range are more likely to cause changes in pH values. An alkalinity within the range, on the other hand, allows the pH value to 'buffer', allowing it to fluctuate less abruptly.

WATER PH

What does pH indicate?

pH is a chemical parameter that gives an idea of the acidity or basicity of water. It can take values between 0 and 14. By definition, a water is defined as neutral if it has a pH value of 7. It is defined as acidic if the pH value is less than 7 and basic if the pH value is greater than 7. In the case of heated water treated with bromine products, it is advisable to keep the pH value in the range 7.4-7.8, using chemical correctors if the pH should become higher or lower, in order to bring the pH value back into the recommended ideal range.



PARAMETER	OPTIMAL VALUES	POSSIBLE CONSEQUENCES OF SUB-OPTIMAL VALUES
POTABILITY	refer to local regulations	lack of user safety or well-being
INLET PRESSURE		maximum: 300,000 PA (3.bar) minimum: 150,000 PA (1.5 bar)
HARDNESS (TH)	between 10°F and 25°F (100 mg/l-250 mg/l)	..cause incrustations that over time can cause damage to the spa walls, pipes, filter system, as well as heating units and pumps. Limescale incrustations can also hide bacterial loads that are difficult to reach by disinfectant products. Obligatory installation. It is mandatory to install a cationic resin decalcifier (softener), choosing the model according to water hardness.
pH	for bromine treatments it is recommended to maintain the pH in the range 7.4-7.8	..give irritation problems to the eyes and skin of bathers, have water with poor sanitising power, excessive consumption of chemicals, shorten the lifespan of the spa components.
ALKALINITY (TAC)	80 and 125 mg/l (8-12.5°F)	..have more easily uncontrollable pH changes

ELECTRICAL PREPARATIONS

All Relax Design spas comply with European laws (EN 60 335-2-60) and are tested during production to ensure the safety of the installer and user. Electrical installations must be carried out by a qualified and licensed electrician.



Before carrying out any electrical preparation work, make sure that the building's electrical power is disconnected.

The electrical connection must be:

- executed in a fixed and permanent manner, without intermediate joints, in accordance with the regulations of the country of installation;
- suitable for the current absorption of the tank (see technical specifications);
- equipped with an effective standardised grounding socket;
- protected against splashing water, then placed in a dedicated, closed room protected from the weather;

- controlled by an omnipolar switch with opening of the contacts of at least 3mm and a breaking capacity of 60A (or in any case adequate to the absorption of the tank);

- controlled by a residual current circuit breaker not exceeding 30mA.

The power cable to the control unit must be of the type H05 three-conductor (single-phase 230V) whose cross-sections are adequate for the power consumption of the spa (see pre-installation board): its dimensions depend on the current drawn and the distance of the spa from the main switchboard.

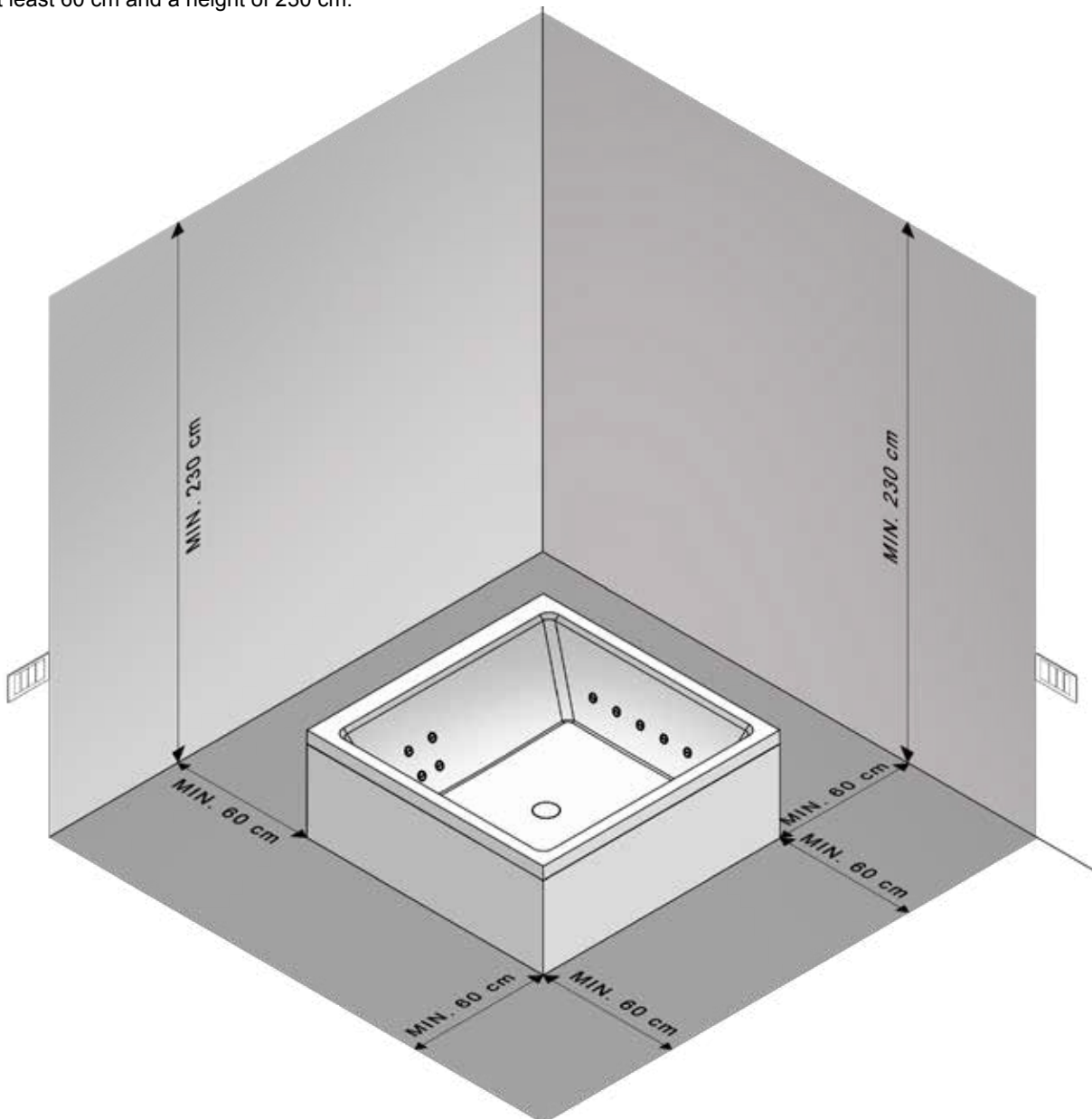
Furthermore, if the spa is installed outdoors, the power cable from the general switchboard to the spa must be run in an underground cable duct, adequately protected from frost by insulation.



The manufacturer is not liable for connections made in non-compliant manner, to what is specified in this pre-installation sheet or in case tampering with any electrical component of the spa.



Regulations prohibit any electrical installation (plug sockets, switches, lamps, etc.) in the area surrounding the spa for a distance of at least 60 cm and a height of 230 cm.



Stage

220 x 200 x 85

ELECTRICAL CHARACTERISTICS

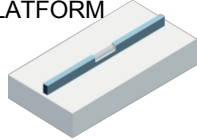
ELECTRICAL FEATURES

Voltage		Amperage		HYDROMASSAGE motor power	2.5 hp +
<i>Voltage</i>	<i>220 /380</i>	<i>Amperage</i>	<i>25 A (220 volts) / 3x16 A (380 volts)</i>	<i>WHIRPOOL motor power</i>	
<i>Volts</i>					
Tension		Temperature stabilisation		Power consumption	1.8 Watt
<i>Tension</i>	<i>50</i>	<i>Temperature stabilise</i>	<i>3 KW</i>	HYDROMASSAGE	
<i>H z</i>				<i>WHIRPOOL absorbed power</i>	

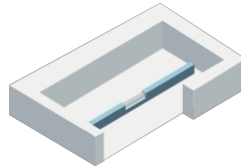


PACKAGING

PLATFORM



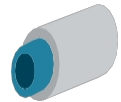
FREESTANDING



BUILT-IN

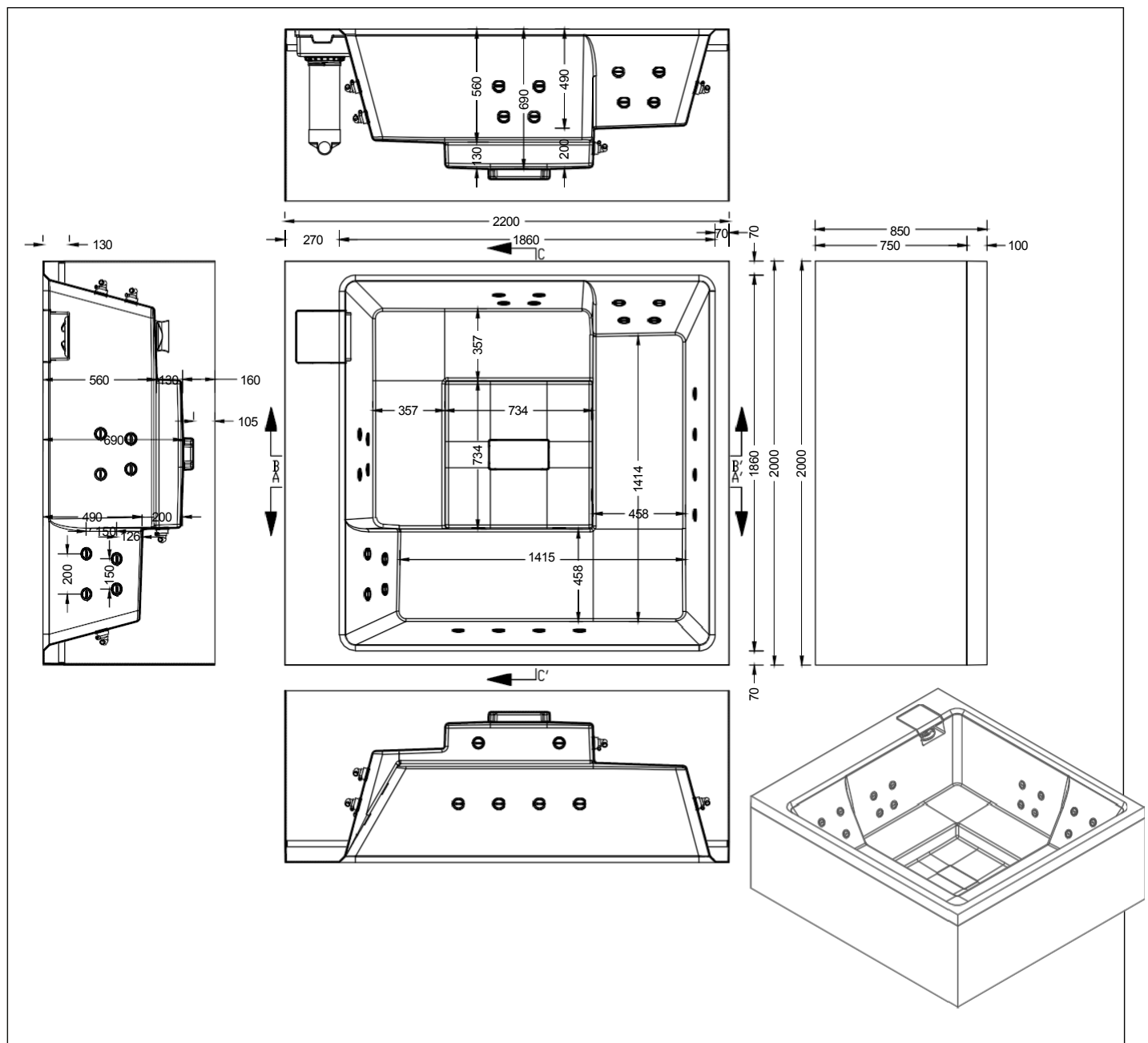


PIPE INSULATION



DISCHARGE

DIMENSIONAL CHARACTERISTICS



Nozzles	Water content⁽¹⁾ lt	Net tank weight	Full tank weight	Shipping volume <i>Delivery Volume</i> m3
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Dimensions in centimetres Dimensional tolerances ± 5mm. The Manufacturer reserves the right to make improvements to the equipment at any time without prior notice. Partial reproduction is forbidden without the Manufacturer's consent. The measurements given are approximate and not binding. The original language used is Italian: the Manufacturer declines all responsibility for any translation/interpretation errors.

28
litres

1200

300 kg

1500 kg

4