Technical Specification Sheet

for the Cellar 200x330

Natural Fridge®

Manufacturer BPR-PLASTECH LIMITED LIABILITY COMPANY, Poland, Tax Number PL9662114813

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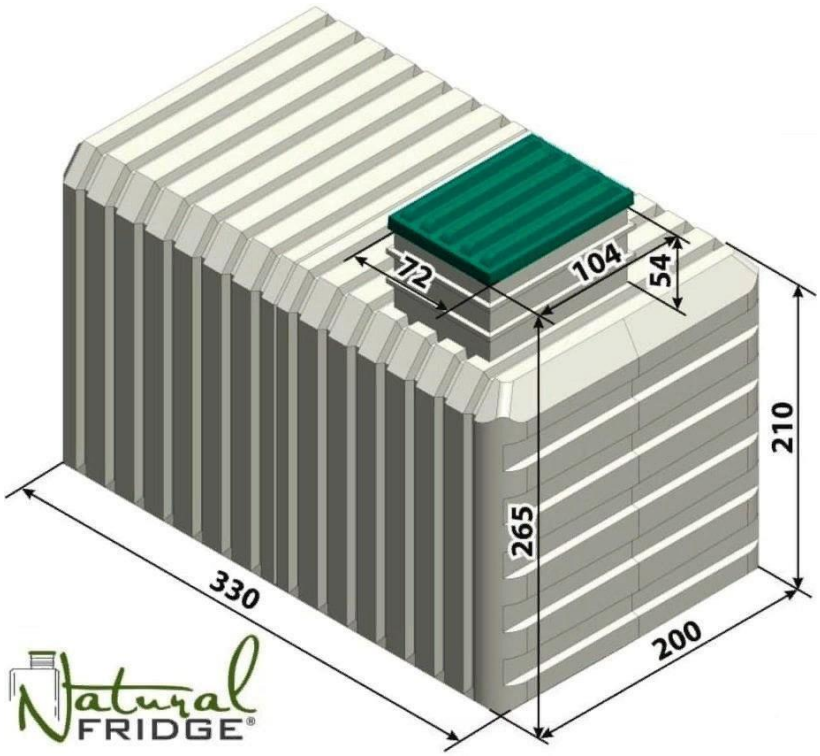
This card contains a description of the basic technical characteristics of the Cellar 200x330 Natural Fridge made of plastic with a top entrance, as well as the method of installation and use.

Plastic cellars are intended for storing vegetables, fruits, liquids, beverages, and various types of packaged food. The cellar is delivered ready to be embedded in the ground. The cellar is made of food-grade polyethylene as a monolithic structure in rotomoulding technology. It does not require additional sealing.

ATTENTION!

Installation of the 200x330 cellar is only allowed at a low groundwater level.

(not higher than 1.7 m from the ground surface).



Dimensions 200x330 cm,

Height 265 cm

Volume 12.1 m³

Weight 1250 kg

Entrance dimensions 70 x 100 cm,

Shelf width 18-35 cm,

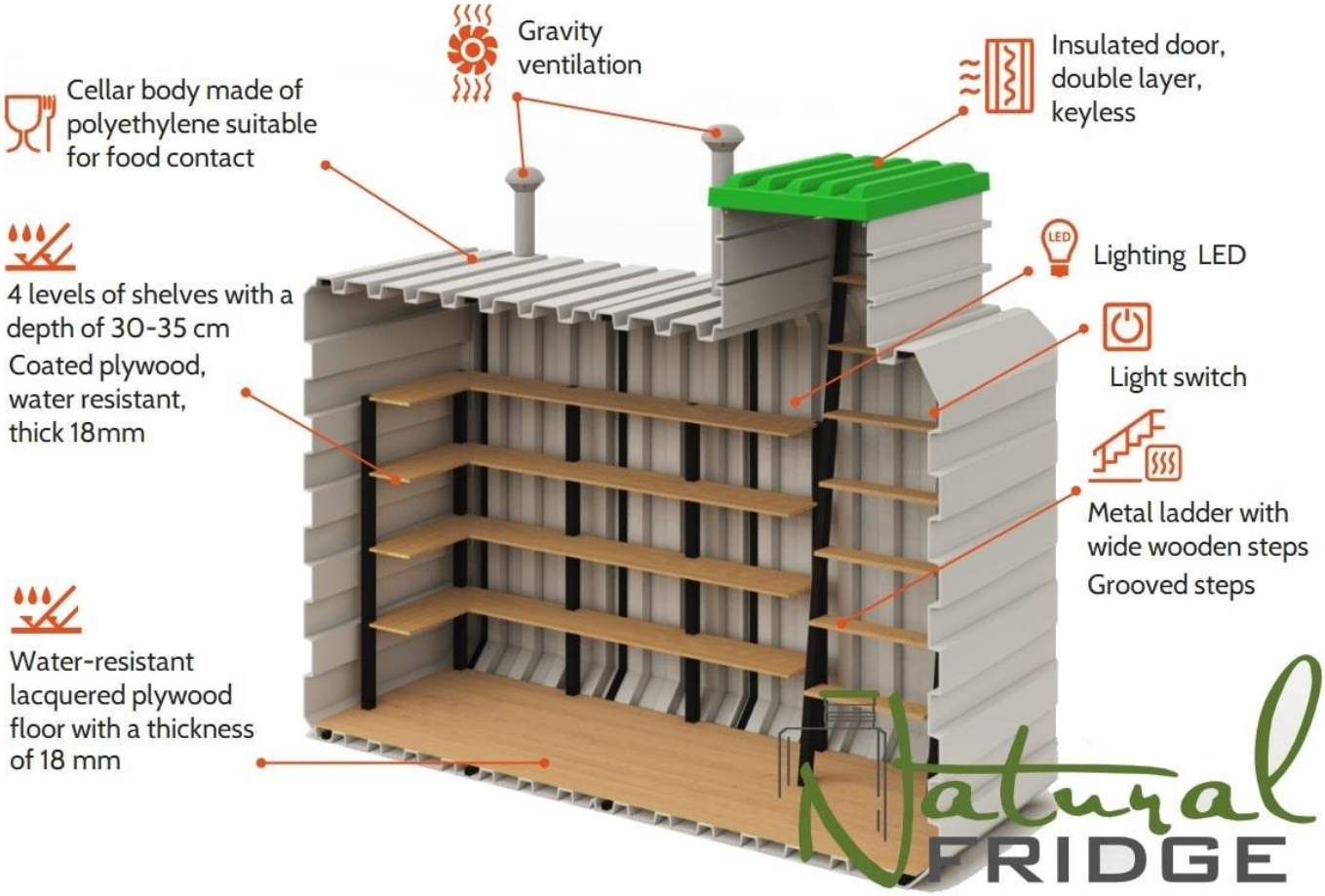
Shelf area 9.8 m²

Dimensions may vary by ±3% due to different shrinkage of polyethylene.

Equipment

Interior Equipment:

1. Shelves made of waterproof plywood - 4 rows
2. Floor made of waterproof plywood
3. Stairs - 1 pc
4. Supply ventilation - 1 pc
5. Exhaust ventilation - 1 pc
6. Double cover (lid) - 1 pc
7. LED lighting - 1 pc,
8. Weather station - 1 pc.



Assembly and operation manual

The cellar body is made of food-grade polyethylene reinforced with ribbing. Inside the cellar, a strong steel frame is installed, which also serves as reinforcing ribbing. The object does not require additional sealing and protection against corrosion.

The lower part of the cellar should be buried at a depth of about 250 cm below the ground surface. At such depth, very large soil pressure forces act on the cellar body. These forces can be even higher at a high groundwater level or in the case of clay soils, which may move during freezing. Therefore, the cellar installation must be carried out in accordance with these instructions. Thanks to this, the aesthetic and practical cellar will serve for many years.

Before starting the installation of the cellar, it is necessary to determine the groundwater level and the type of soil on site.

Required materials

Materials needed for the installation/assembly of the 200 x 330 cellar:

- Semi-dry (dry) ready-mix concrete B15-B25, 6 m^3
- Reinforcement bars 10-12 mm, 70 linear meters
- Styrofoam for foundation insulation, 5 cm thick - 30 sheets
- Underground cable 2x2.5mm^2 or 2x4mm^2 - from the underground cellar to the 220V network connection point.
- The use of a 20mm polyethylene pipe for the underground cable is recommended.
- Synthetic straps with a permissible load of 4t and a length of 7 m - 2 pieces or steel cables with a polymer coating of at least 10 mm in diameter and a minimum length of 7 m - 2 pieces.

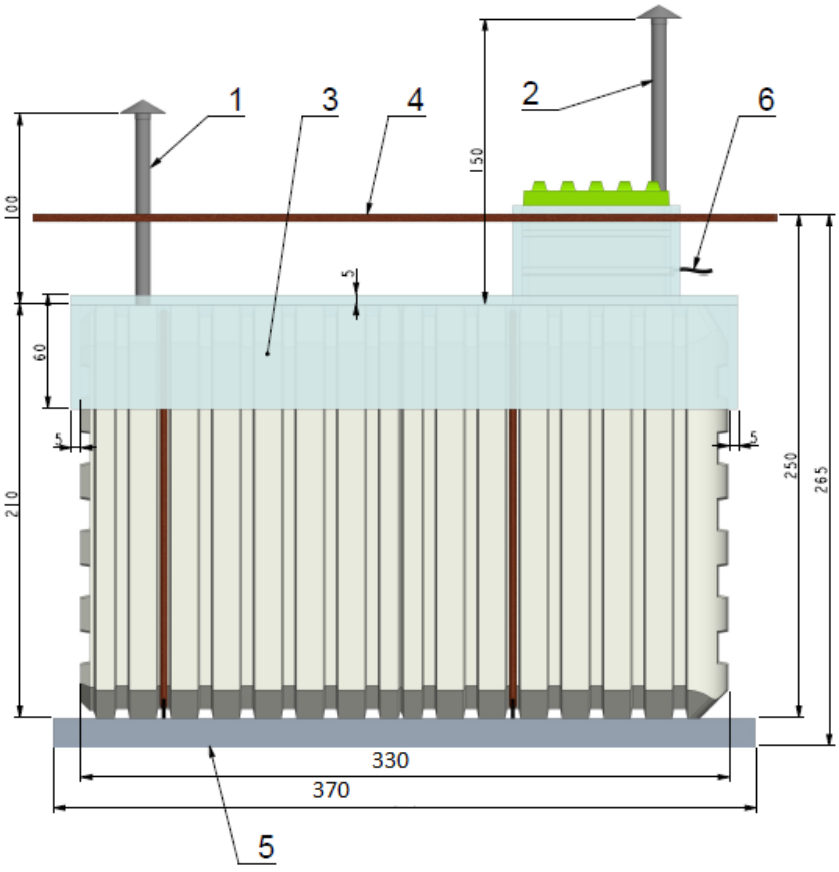
Excavation dimensions

The dimensions of the excavation for the cellar installation should be 20 cm larger than its width and length around the entire perimeter - at least 240 x 370 cm at the bottom.

The depth of the excavation should be 265-270 cm, so that after placing the cellar on a concrete slab or dry concrete base, the lower edge of the hatch cover is 5-10 cm above the ground level. This is to prevent rainwater or meltwater from getting into the cellar. The walls of the excavation should be vertical and maintain the correct dimensions throughout their height. This will greatly facilitate the construction of cellar walls with dry concrete.

Installation

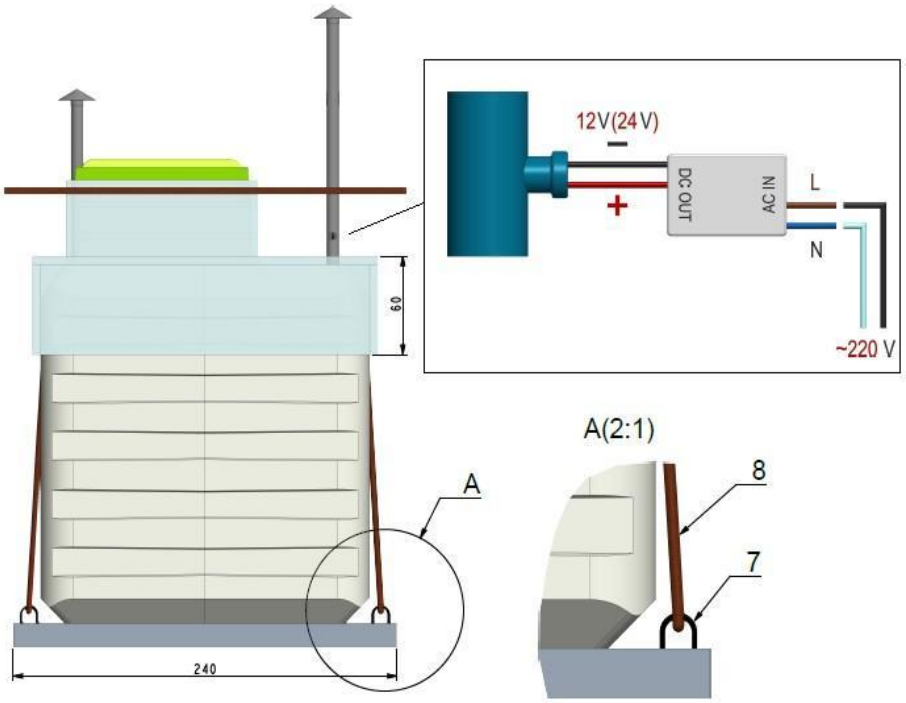
ATTENTION! During the installation of the Natural Fridge cellar with a vertical entrance, it is necessary to provide drainage around the cellar in the excavation to prevent deformation or displacement by groundwater. For drainage, it is best to use drainage pipes laid on a layer of coarse sand, gravel, or small stones. The installed drainage pipes should be connected to an inspection chamber. The bottom part of the inspection chamber should be installed no higher than the bottom part of the cellar. An automatic submersible pump should be installed in the inspection chamber, which will continuously remove water.



In sandy soils and at a low groundwater level (at least 2.5 m below the surface), it is allowed to install the cellar on a layer of dry concrete 10-15 cm high with reinforcement. In clay soils or at a high groundwater level, a reinforced concrete slab should be made at the bottom of the excavation, with a minimum size of 240 x 370 cm and a thickness of 15 cm, containing handles for straps.

We place the cellar on the previously poured concrete slab at the bottom of the excavation and secure it with straps (not included in the equipment). The cellar should be centered on the concrete slab. Then we attach it to the slab with straps or rope and surround it with dry concrete on all sides. Each layer, 30-40 cm high, should be moistened with water so that the dry concrete hardens faster. The body of the cellar should be surrounded by dry concrete to a height of 1 m from the bottom. Then the cellar is covered with sand.

The thickness of dry concrete around each cellar wall should be at least 20 cm.



Diagram

1. Inlet pipe
2. Outletpipe
3. Styrofoam insulation
4. Ground level
5. Concrete slab
6. LED power cable
7. Strapholders
8. Straps

Top part assembly

To reduce temperature fluctuations inside the cellar, it is recommended to use thermal insulation material (extruded polystyrene - foam board) with a thickness of 5-10 cm (Styrofoam or similar) on the top part of the cellar (side surfaces of the vertical entrance and the top surface of the cellar body), as well as around the chimney and side surfaces of the cellar body to a depth of 60 cm from the top plane of the cellar body. Thermal insulation should be covered with geotextile.

Ventilation pipes must be extended by 50 cm above ground level for the inlet air (which supplies air to the lower part of the cellar) and 100-150 cm for the exhaust

air pipe (removes air from the upper part of the cellar) and equipped with ventilation caps (they are included in the cellar set).

In winter, at very low temperatures (below -20 ºC) and in summer during heat waves (above +30 ºC), it is necessary to limit the flow of cold and hot air (close the air supply). It is also recommended to insulate the exhaust pipe (to avoid condensation in the pipe).

Attention

During the backfilling of the cellar body with soil, it is not allowed to use construction machinery within a distance of less than 1 m from the body. Vehicle movement within a distance of less than 1 m from the cellar along its entire perimeter is prohibited.

Within a few weeks after installation, the polyethylene walls of the cellar will be pressed against the frame and shelves of the cellar by the pressure of the soil, and at greater distances between the frame elements, the walls may slightly bend inward. In case of large temperature differences, some condensation may appear on the entrance doors or walls. The condensation evaporates after some time and does not need to be specifically removed. At very low temperatures, frost may appear on the inside of the entrance flap. If this phenomenon occurs frequently, it is recommended to insulate the door from the inside with insulating foam.

Warranty Conditions

During the warranty period, the purchaser has the right to free repair of the product in case of defects resulting from manufacturing errors.

The warranty covers the functionality of the equipment, the quality of the food material, floors and shelves, mechanical and welded connections.

The manufacturer's warranty is limited exclusively to manufacturing defects and does not cover the following cases:

- Normal wear and tear of all parts and components, natural aging, as well as damage to paint and surfaces caused by normal use and environmental influences, including aggressive substances such as

atmospheric conditions, industrial pollution, chemicals, plant juices, stones, salt, etc.

- Minor geometric deviations that do not affect the quality of plastic cellars or their components (e.g., slight deviation from the structural dimensions specified in this product passport, due to the characteristics of the rotational molding process).
- Damage caused by natural disasters, fires, household factors, and other force majeure.
- Damage caused by third parties, including during delivery or installation of the product, which violated the assembly instructions for the plastic cellar.
- Damage and deformations of products caused by changes in geometric dimensions, which occur after the completion of installation works, as well as due to the design of the product.
- In case of corrosion caused by scratches and paint chips on frames as well as various parts and connections.

The warranty becomes void if the product has been repaired or attempted to be repaired by persons (companies) without prior consultation with the manufacturer.

Warranty period: 24 months.

Warranty for individual components (weather station, LED lighting) is 1 year.

Expected lifespan: at least 50 years.

Product Manufacturer

BPR-PLASTECH LIMITED LIABILITY COMPANY

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