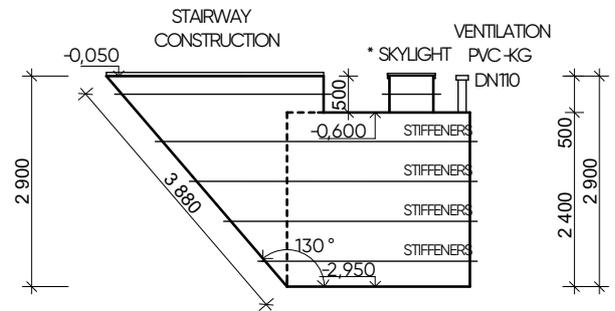
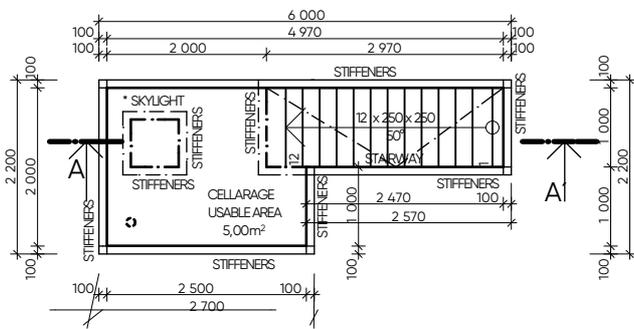
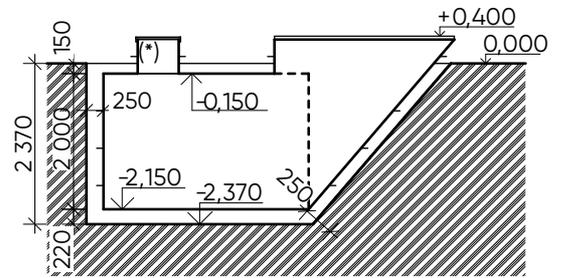
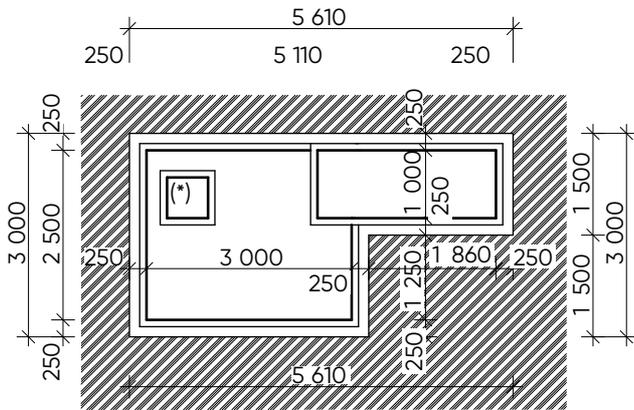




PLASTIC  
CELLARS.CO.UK



GUIDELINES FOR HANDLING AND OPERATION

plastic cellar

# TECHNICAL DESCRIPTION

## ROOT CELLAR

### UNDERGROUND STORAGE SPACE MADE FROM PLASTIC



#### GENERAL INFO

Plastic root cellars / underground storage spaces are 100% plastic products made from polypropylene, and they're used for storing various goods. Cellars/storage spaces are cylindrical (circular) or square, and they're made by welding together construction elements and panels from polypropylene (polyethylene) and their copolymers, either lightweight or extruded.



#### USAGE

Plastic root cellars / storage areas are manufactured by the ITMS company, solely from polypropylene (polyethylene and their copolymers, which were lightened or extruded), and they're suitable for storing various goods, as long as the chemical resistance of the cellar walls is respected.

Root cellars / storage spaces are suitable for contact with foodstuffs, it is therefore possible to store grocery products. In manufacturing of the cellars, only materials with attests for contact with foodstuffs and drinking water are being used.

In cellars made from polypropylene it's not possible to store flammable liquids and substances containing oxidizing agents (e.g. concentrated nitric acid).

## ASSORTMENT OF CELLARS BY TYPE AND METHOD OF STORAGE

Individual product lines vary in their construction – regarding the allowed method of storage, static proportioning and so on.

**With regards to storage, the cellars / storage spaces may be sorted into following categories:**

- Underground (designed to be installed underneath the level of terrain)
- Above-ground – free-standing (designed to be installed on the ground level)

**Based upon a static load, the cellars / storage spaces can be further sorted into:**

- Load-bearing
- Non-load-bearing

Based on their dimensions and safety concerns, the majority of plastic root cellars / storage areas are designed not to be stand-alone.

The load-bearing design does not require any further structural support (if no other static load is expected).

Non-load-bearing cellars/ storage units need to be structurally supported right after the installation (by adequate concrete reinforcement).

The detailed information about individual types of cellar constructions is to be found on the manufacturer's website.

Basic technical parameters of standardly produced plastic root cellars / storage units, are listed on the website of ITMS company, the manufacturer.

Plastic root cellars / storage areas may, depending on the specific model, be equipped with shelves, racks, floor tiles, floating floor and other accessories, or even some additional inlets and vents, for bringing in more instance light or air. Irregular shapes or dimensions can be made to a special order, where the blueprint for manufacturing of the cellar is the project documentation provided by the customer.

## PLASTIC CELLAR

### STORAGE AREA MANIPULATION

Before you begin to manipulate the plastic cellar / storage space, the overall state of the product must be checked. It is necessary to make sure, that the product does not contain foreign elements and liquids, e.g. rainwater. If the cellar/unit contains water or other medium, it must be removed, e.g. pumped out.

The only allowed method to manipulate the plastic root cellar / storage area, is by the tethers or handles on the outside of the cellar, because the material is less resistant to dynamic load. Because the product is made from 100% plastic, extra caution must be carried out and all unnecessary impacts must be avoided. Because of the weight, the placing itself can also be done by an excavator or a crane, depending on the local conditions. The manner of handling derives from the possibilities of the excavator/crane (on its cargo capacity), dimensions and shape of the plastic cellar /storage space, bearing in mind of course, the maximum safety whilst handling.

Comply with the safety and health-protection regulations all the time! In winter, with temperature under 5°C, it's forbidden to handle the product in any way (in freezing temperatures the product becomes brittle, and there's a risk of damaging the product).

## TRANSPORT AND STORAGE OF THE PLASTIC CELLAR

Plastic root cellars / storage areas are usually delivered (in regards to the choice of accessories) as a prefabricated unit.

Placing the cellar in the desired place in the terrain can be done either by the customer or by a hired construction company. As for the transport, we highly recommend using the manufacturer themselves, ITMS PLAST LTD., because the company guarantees secure transportation, abides of all the road regulations and also bears the responsibility for the product during transportation.

If the customer handles the transport on their own, the responsibility lies on their shoulders. If the root cellar / underground storage space is to be stored for longer periods of time (more than 2 months), the product must be protected from direct sunlight.



## HANDING OVER TO THE CUSTOMER

Handing over is done directly to the customer or the shipping company, by signing the Handover Protocol.

### **THE SUPPLIER ALSO HANDS OVER THE ACCOMPANYING TECHNICAL DOCUMENTATION, NAMELY:**

Invoice / tax receipt  
certificate of warranty  
thecertificate of waterproof testing  
installation manual.



## SERVICE, MAINTENANCE AND SAFETY INSTRUCTIONS

Plastic root cellars / underground storage areas do not require any service or maintenance. Instructions for use and maintenance, including those for entering the cellar / storage area, must be devised according to the manner of use of the product (filling function of the cellar / storage area).

The same applies to safety signs and regulations.

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## INSTRUCTIONS FOR STAFFING AND INSTALLATION

Instructions for storing the plastic root cellar / underground storage are given by the appropriate installation manual, supplied by the manufacturer/supplier of the plastic root cellar / underground storage area, according to the chosen product type and the method of placing the product below the terrain level.

If there's a presumption of an additional load to be placed on the product, e.g placing the product into a bigger depth, near to building foundations, close to a storage area etc., or if the cellar floor is to get more than 5 meters underground, additional structural support must be provided.

The additional support must be consulted with a structural designer and user is bound to adhere to his recommendations. Medium weight vehicles may run on the ground above the cellar, provided that the cellar is protected against pressure applied to the cellar's ceiling and the hatch.

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## OCCURRENCE OF GROUNDWATER AND CLAY SOIL

In case, the setup location contains groundwater / clay soil, that means it's the floodplain and therefore it's necessary to protect the plastic root cellar / underground storage area by an adequate layer of concrete.

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## CONSTRUCTION READINESS

Construction readiness must be carried out according to the approved project by an authorized individual, who requests the papers from the supplier.

Plastic root cellars /underground storage areas can be planted into the terrain in several ways. It is important to adhere to the given Installation Manual to the specific product type.

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We hope you are highly satisfied with our plastic root cellar/ storage area.



NEC Birmingham Homebuilding show