Joniec

INSTRUCTION OF USING | PLANTERS

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Each construction should be built in accordance with the best building practices and provisions of building regulations. Information included in hereby guidebook are general guidelines and recommendations. Investor and contractor, who has to obtain required qualification and authorizations, are responsible for the overall work.

I. VARIANTS

Planters are known for ages as the perfect material for construction and adjustment of garden slopes. They diversify landscape architecture and at the same time provide a solid barrier to the land. This is an alternative to laborious and expensive stone fortifications. Depending on the landform, the planters can be used to overlap the slope by dividing it into several layers (in the case of a larger area) or to build one retaining wall (when there is no large slope).

Planters are also used in the construction of walls, which serve as a fence or a sound-absorbing wall. Building a border of a plot in the form of a wall will create a peaceful place in our garden. Such a wall can be roofed or planted with, for example, ivy, which rattles on the rough walls of the planter to become an effective natural green decoration. The wall of the planter is hard to hit so it is a fence with a high level of security. If the wall cannot be planted with greenery, then the variation can be a way of arranging with taking into consideration insets, windows or the mix of colours of planters.

One of the advantages of slopes made of planters is the ability to arrange them as a rock garden. It happens that the construction of the slope is an offset from the planters, which form a wall imitating the slope, then in each layer of planters can be plants. When the wall of the planters is vertical and does not assume any shifts, then in the last layer of the planter bushes, ivies or perennials will mark the green boundary of the slope. While planting the planters, which are part of the retaining walls or slope, we must remember to fill them with a soil that guarantees the survival of plants in variable weather conditions. We usually fill 1/3 of the planter with expanded clay or grits and the remaining 2/3 fill with the soil.

Planters are an excellent alternative to unstable and non-resistant to frost flowerpots. The best are plants that will survive both sunny summer and frozen winter and are resistant to temperature fluctuations are e.g. blooming flowers, green plants, perennial plants and herbs.

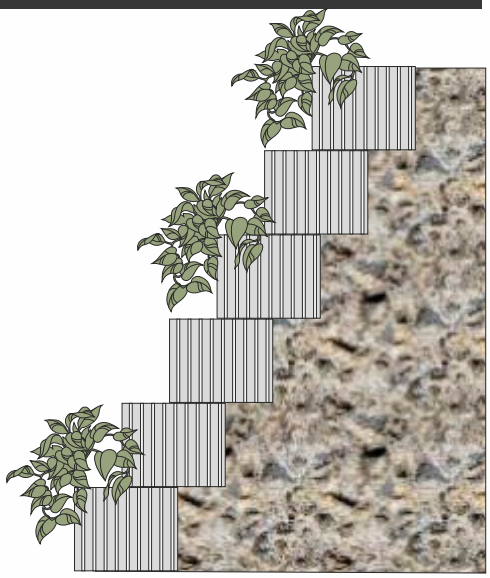
Planters of rectangular and half-moon shape are available. Rectangular planters thanks to special “teeth” wedge and in this way additionally reinforces each construction. The half-moon shape of the planter allows for great freedom in building flowery curbs for alleyways, driveways, squares. Planters are the perfect material for creating pyramidal compositions in the garden. Such constructions should be planned in advance and scaffolding should be placed within the pyramid so that it will not collapse.

II. THE WAYS OF USING PLANTERS

ARRANGEMENT OF PLANTERS ON THE SLOPE
CONSTRUCTION OF RETAILING WALL
CONSTRUCTION OF VERTICAL WALLS
FLOWERPOTS

1. ARRANGEMENT OF PLANTERS ON THE SLOPE

In the case of planters set on the slope it is not necessary to make a full foundation. Start the work with making an excavation to a depth of 40 cm. Next fill the excavation with a layer of aggregate to ensure a stable foundation of the planned construction. On the aggregate, pour the concrete mixture of thickness that allows for laying the planter solidly. After binding of the mixture, fill the holes of the planter with for instance: earth, fine aggregate, etc. Then place next layers of planters, remembering to compact (harden) the soil under each layer. If we want plants in planters, then we have to fill them with soil to such depth that roots can fit into planters.

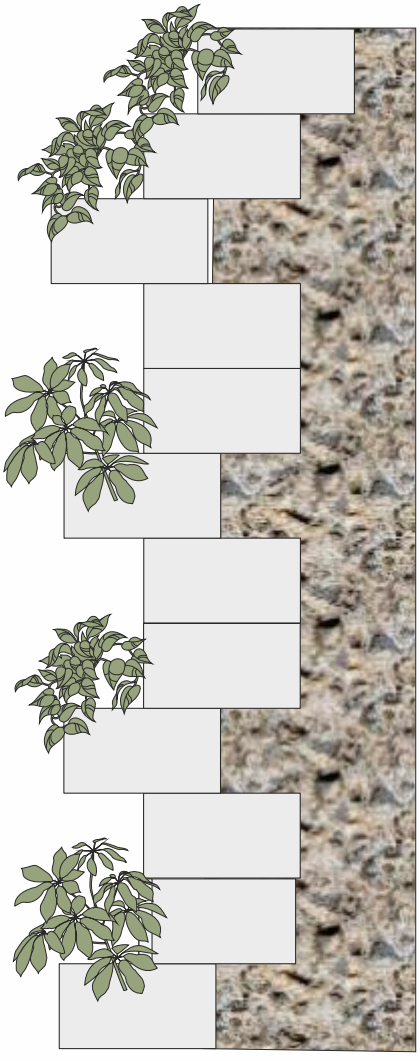


2. CONSTRUCTION OF RETAILING WALL

The retaining wall acts as a stabilizing soil. Start the wall with planning and making a full foundation below the level of ground freezing. Due to those levels, Poland is divided into four zones. The level of freezing is respectively: in 1st climate zone – 0,8 m, in 2nd climate zone – 1 m, in 3rd climate zone – 1,2 m, and in 4th climate zone – 1,4 m. This parameter should not be ignored because in winter groundwater is freezing, what causes foundation damages and in result damage of wall made of planters.

Before filling excavation with concrete, make formwork, especially when soil is not cohesive. Thanks to that, the land will not fall to the excavation and concrete will not mix with it. Concrete used to foundation should meet the requirements of the PN-EN 206:2014 norm. According to it, concrete of class XC2 is predicted for that type of elements. If we are dealing with an individual project, we should use requirements contained therein.

Prepare drainage from the slope so that it does not penetrate the walls of the planters. Start by laying the drainage pipe along the foundation (from the slope side) and bringing it to the nearest drain. Filling the drainage with the aggregate ensures proper flow of water and prevents the system from silting. Place planters on prepared foundation and fill with concrete mixture. Consult with contractor the necessity of making reinforcement of the entire structure. If the last layer of the retaining wall have to function as a flowerpot, then the concrete mix shall be poured all the way to the penultimate layer. Fill the top planters with soil plants.
Separate the retaining wall made of the planters from the soil with vertical layer of gravel. Connect gravel with prepared drainage system.



3. CONSTRUCTION OF VERTICAL WALLS

3.1. Wall of height to 2-3 planters.
Make an excavation to a depth of 40 cm. Next fill the excavation with a layer of aggregate to ensure a stable foundation of the planned construction. On the aggregate, pour the concrete mixture of thickness that allows for laying the planter solidly. Fill planters with concrete mixture till last or penultimate layer – if the function of last layer of planters is a flowerpot.

3.2. Wall over 3 layers of planters.
Start the wall with planning and making a full foundation below the level of ground freezing. Due to those levels, Poland is divided into four zones. The level of freezing is respectively: in 1st climate zone – 0,8 m, in 2nd climate zone – 1 m, in 3rd climate zone – 1,2 m, and in 4th climate zone – 1,4 m. This parameter should not be ignored because in winter groundwater is freezing, what causes foundation damages and in result damage of wall made of planters.

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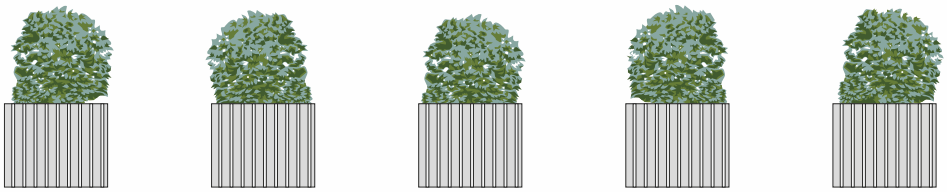
Place planters on prepared foundation and fill with concrete mixture. Consult with contractor the necessity of making reinforcement of the entire structure. If the last layer of the retaining wall have to function as a flowerpot, then the concrete mixture shall be poured all the way to the penultimate layer. Fill the top planters with soil and plants.

4. FLOWERPOTS

Make an excavation to a depth of 40 cm. Fill the excavation with a layer of aggregate and then pour concrete mixture of thickness that allows for laying laid the planter solidly. Fill planter with soil and plant chosen plants.



III. MOONFLOR PLANTER