# Technical Description

How to grow tomato plants in a raised bed

There is a satisfying feeling attached to watching the growth of plants. Tomatoes are probably the most popular plant to grow at home. They originated in tropical climates and usually die in colder temperatures. When growing tomatoes, it is crucial to see if the base conditions are met and whether the space to grow plants is available. A garden is recommended, but a balcony will also be sufficient. Tomatoes need a lot of sunlight and high temperatures. If region’s climate is moderate, it needs to be checked when to plant tomatoes outside. If the region is in a cold climate zone, it is possible to build a small greenhouse to grow them. This description focuses on planting tomatoes in a raised bed/flowerpot

The next important step is to buy the parts required to build a raised bed. Firstly, the required space needs to be measured. Measurements and planning are vital when purchasing wood planks. Furthermore, you will need to measure the height required for your raised bed to maximize the duration in the sunlight. The following items are needed to build a raised bed:

* wood planks (the amount is determined by the height of the bed and the width of the bed)
* Four wood posts
* metal spikes to support them (optional; also only possible in a garden)
* big and small wood screws (DIN 571 60 mm or similar and 15 mm)
* UV Protection wood wax
* Notched protection foil (or other water protection)
* Rocks (ordinary big stones can do the job as well. You don’t have to buy them)
* Tools for the screws, a sledgehammer, and some brushes

The metal spikes and use the sledgehammer to force the metal spikes into the ground. They should form the corner points of your bed. Once in place, the wood posts can be positioned into the spikes. Screw the matching wood planks into the posts and make sure they are parallel to the ground. They should form the walls of the raised bed. Afterwards, lift the huge collected rocks into the bed. This way, the roots of your plants will be safe from stagnant water. Place the notched protection foil along the inner wall of your bed and screw it in place with the smaller screws. The last step is to cover the outer walls with wax. The raised bed is now ready to be filled with soil.

In order to save costs, it is possible to mix generic soil with some biological compost. The ratio should be around 50% each. Slice a tomato and put each slice into small pots. Daily watering is essential for the plants in their seedling phase. In about a week, little seedlings should pop up. When the plants are 20-30 cm tall, you can dig deep holes in your raised bed and place them exactly where you want them to be. Tomato plants have tiny hairs sticking out from their stem. All of these are potential roots, so the deeper they are, the better, however, all leaves need to be removed which would be underground. Tomatoes tend to fall over at some point, and it is therefore recommended to buy some rods to support the plants. Regular watering is required for the plants to stay healthy. To have a huge harvest, fertilize them every 2-3 weeks. After 3-4 months you should see your first fruits.