

Garden Tower 2 Set-up and Growing Guide

Getting Started with your Garden Tower 2:

Decide on a location for your GT2. If your tower will be outdoors, choose a firm, flat surface where the feet will not sink into the ground. If you will be growing indoors, keep in mind that occasionally some water and soil may end up on the floor. Your plants will need plenty of light. Outdoor towers should be placed in a sunny spot. Most indoor towers will require grow lights. The Earth Connections team can help you choose the right lighting set-up for your specific situation.

Choose a soil. A light-weight grower's mix or potting soil works well. You can ask at your local greenhouse or plant nursery for a fluffy soil mix meant for container growing. A good soil will balance drainage, water retention, and aeration for both plants and the compost. We also highly recommend adding a soil amendment of some type. Soil amendment means anything that adds nutrition needed for plants to thrive, and is important in new GT2 set-ups until the compost column has some time to get going and your worms begin to produce their own fertilizer.

Soil amendment options:

- A non-manure-based plant food added to the soil makes nutrients immediately available in the system.
- Liquid organic plant food mixtures will provide the most available nutrition for young plants but have to be re-applied every so often.
- Granular types are more time-release and will provide nutrients for about three months. These are a great option to mix into the soil of each layer when you initially set up and fill your tower.
- We recommend staying away from animal manure products as they have an overabundance of salts.
- The best fertilizers contain NO DPW (Dehydrated Poultry Waste), Municipal sludge (labeled as Bio-Solids), or petrochemically derived fertilizers (salts).
- Follow the directions on the label of whatever type of plant nutrition you choose carefully, as they will provide the most benefit to your plants when used at the proper dilution and frequency.

There are instructions included in the box with your Garden Tower 2 with detailed information on how to set-up and fill the tower. We recommend building your tower in thirds, two rings and two compost column sections at a time. At each level, cover the compost column with its lid and add soil, amendments, and water. The amount of water needed will vary based on the amount water your chosen soil can hold, however, it is usually about 3 gallons per level. You should water each layer until water begins to drip into the drawer to help settle the soil. Be sure to check the drawer frequently to avoid over-flow, as quite a bit of water will run through especially if your soil is very dry. You can re-use the water from the drawer on the next level. Once your GT2 is built and filled, you can add red wiggler worms and begin composting. See “Vermicomposting in the GT2” for more information. It is also beneficial to add some soil-dwelling worms (earthworms) to help with keeping the soil aerated.

Adding Plants:

Choose plants that will thrive in your conditions and climate, particularly if your GT2 is outdoors. Look for “bush varieties” and compact types of your favourite veggies, which are smaller and great for container growing. Very large plants or those that produce long trailing vines can make it difficult to rotate your tower, and can overshadow other plants. Some plants, such as strawberries and mint, become very woody and send out a lot of runners often invading other pockets of the tower. If you choose to add these types of plants there may be extra work required to keep them contained. Different types of plants will have specific needs in terms of soil nutrients, soil moisture level, and light requirements. A little research can go a long way towards success in gardening. If you are a new gardener, you may want to start with just a few different easy-to-grow veggies. Local greenhouses are a great source of information that will be specific to your area, and don’t hesitate to contact the Earth Connections team if you need a little help selecting plants.

You can either start your plants from seeds or purchase seedlings. If you are beginning with seeds, you will have the best results if you start them in a tray. Seeds and tiny seedlings need consistent moisture levels and very close proximity to their light source. Your grow-lights should be no more than two inches above the tops of the plants. This will prevent them from stretching towards the light and instead encourage short, strong stems leading to stronger plants as they mature.

Transplanting into your Garden Tower 2:

- Large plants are a great choice for the top of the tower and can be trellised or staked many feet in the air. There is space for 4-5 large plants in the top level.
- Plant veggies with a high moisture requirement such as tomatoes very deeply in the soil for steady access to water.
- Trailing vines such as squash and zucchini do best on the bottom row, will require more floor space to accommodate their growth, and most importantly will make your tower very difficult to rotate. If you have limited space or wish to have the option of

being able to rotate your Tower, these types of plants may not be your best choice. Depending on the size of the plant, staking up the vines can be an option.

- Pay attention to the space requirements of the plants you're planning to grow and consider placing plants that require less space between plants that require more space.
- When planting side pockets, start at the bottom row with your bushiest mature plants. Working up the rows, choose your next plants according to size (and other factors) as you plant; you are looking to choose plants of decreasing mature size as you plant from bottom to top.
- Planting identical plants or those with similar light requirements in small clusters or diagonal rows generally performs well.
- If your Tower is outdoors, pay attention to how long each plant variety you choose will take to reach maturity and follow the recommended planting times to ensure you get to see your plants reach their full potential before the season changes.

Maintaining your GT2:

It can be helpful to set up a regular watering schedule. For outdoor Towers, morning watering is ideal and you should avoid getting your plants wet during the hottest part of the day. We recommend watering with a container instead of a hose in order to learn the ideal amount of water for your Tower. A general guideline is to add 4-6 gallons of water every 2-3 days. The amount will vary based on your soil, the heat and humidity of your Tower's location, the types of plants, and their level of maturity.

Test the soil for dryness by placing a finger in a pocket in the lowest row. If the soil feels dry, a heavier watering is required (5-7 gallons). If the soil feels slightly moist, maintenance watering is all that is required (2-4) gallons. A layer of mulch on the top surface of the tower can help maintain constant moisture.

Tend to your garden as you would with a regular garden, remove dead or damaged leaves, cut back unruly growth, and replace harvested plants.

If your plants are not thriving, the problem can usually be traced to one of these common issues:

- Over or under watering
- Not enough light, grow-lights on for too few (or more rarely, too many) hours, or light source too far away
- Lack of nutrition in the soil. (In the GT2, this is usually solved in the long term by increasing your worm population and increasing the amount and adjusting the type of scraps you are feeding them. Fertilizing may be necessary in the short term.)
- Temperatures too warm or too cold for that type of plant

We want you to be successful with growing in your GT2, and are always happy to help

solve any difficulties that may arise.

Outdoor towers in the winter:

The Garden Tower 2 has an extended growing season because of the large thermal mass presented by the volume of the Tower body and soil. This protects seeds, starts & plants both in the spring and at harvest. In the spring, The Tower heats up faster than the ground around it, therefore you can plant 2-3 weeks ahead of what you would put in the ground. On the flipside, in the fall, you will be able to harvest 2-3 weeks later than similar plants in the ground. If there is frost, you may need to protect your plants by covering them.

As winter approaches, you can either move your GT2 to a warm location and keep growing or leave it out and replant in the spring. If you choose to leave the tower out, you will need to flip over the drawer to prevent damage from ice build-up, and it's a good idea to cover the tower to prevent unnecessary UV damage.

Your worms will not survive outside once temperatures are consistently below zero. Empty your compost column, using the castings to top up the level of soil in your Tower. Separate out your worms, place them in a storage bin, and feed them inside until the spring when they can go back to work in the GT2.