

Mixing Your Soilless Media

Whether growing hydroponically or organically you'll need a growing media or substrate to support the plant roots, water and nutrients. For convenience and low cost Verti-Gro has chosen Perlite as it's base growing media substance. This product is supplied with all vertical gardens except the larger. Perlite is a volcanic sand that has been heated and expanded to become very light-weight and porous. Think of Perlite as a piece of sand popped like popcorn. Commercial growers use a lot of perlite for aeration and to make their potting soil mix lighter. It is excellent for drainage but should not be used alone except in certain cases. Perlite is bulky and light weight, so the freight is relatively high. To find Perlite locally, check with your local nursery or garden center. If they don't carry it ask them if they could. Most likely they will. The economy size is 4 cubic feet, which is about 30 gallons. Many stores stock small bags, which are more expensive. If perlite is unavailable Verti-Gro can ship it to you or you can use coarse grade horticultural grade Vermiculite. Even certain good grades of peat base potting mixes can be used to mix with the Perlite.

Coconut fiber, which is aged organic coconut husks (or coir), is the other ingredient to mix with perlite for water holding capacity. This product is clean, consistent, stable and easy to use. It comes in a compressed block for ease of shipping. Simply add water according to the instructions on the compressed brick, or use approximately 3 quarts of warm water for every one pound of compressed coconut fiber. Once you add the water and let the brick expand make sure to mix (fluff) the coconut fiber to a light fluffy mixture consistency before mixing with the perlite. Vermiculite and Perlite is being used at Epcot in our vertical growing systems.

In most cases the mixing of perlite and coconut fiber is simple because we have given you the correct amounts to add together. If you latter on mix extra for you use, mix 15-20% by volume of coconut fiber with 80-85% perlite. For example, the 2 stack comes with approximately 10 gallons of perlite and 2 grow bricks. After expanding the grow bricks mix 2 gallons with the 10 gallons of perlite. You can do this in a large plastic bag or garbage can. Wet the perlite slightly first to avoid the dust. The dust is not harmful but it is annoying. Fill the Verti-Gro pots to the lip where the next pot rests. Do not overfill. Do not over compact. Simple press lightly with you hand until it is firm. The percentage is not critical but consistent evenly mixed media necessary.

(For organic growers a separate mix is supplied which is mixed with 60% perlite. The organic media is recommended only for outdoor drip irrigation systems. See separate instructions for adding liquid seaweed extract to the media)

The pots can be filled on the stack or off the stack. Put the debris screen in the pot that goes one the base (hole in lid that is the same size as the pot). If you fill the pots off the stack and then put them on the stack tape over the pipe so that debris does not get into the pipe and plug the emitter. Once all the pots are on the stack you are ready to test the system. Turn on the pump by hand or with the timer and adjust the flow of the emitter to just a trickle (about 2-3 gallons per hour). The timer runs for a minimum of 15 minutes on the smaller units but the excess returns to the tank for re-use.

(See separate instructions for more growing and planting information)

Vertical Gardening