



Aeroponix Tower System

by Hydroponix



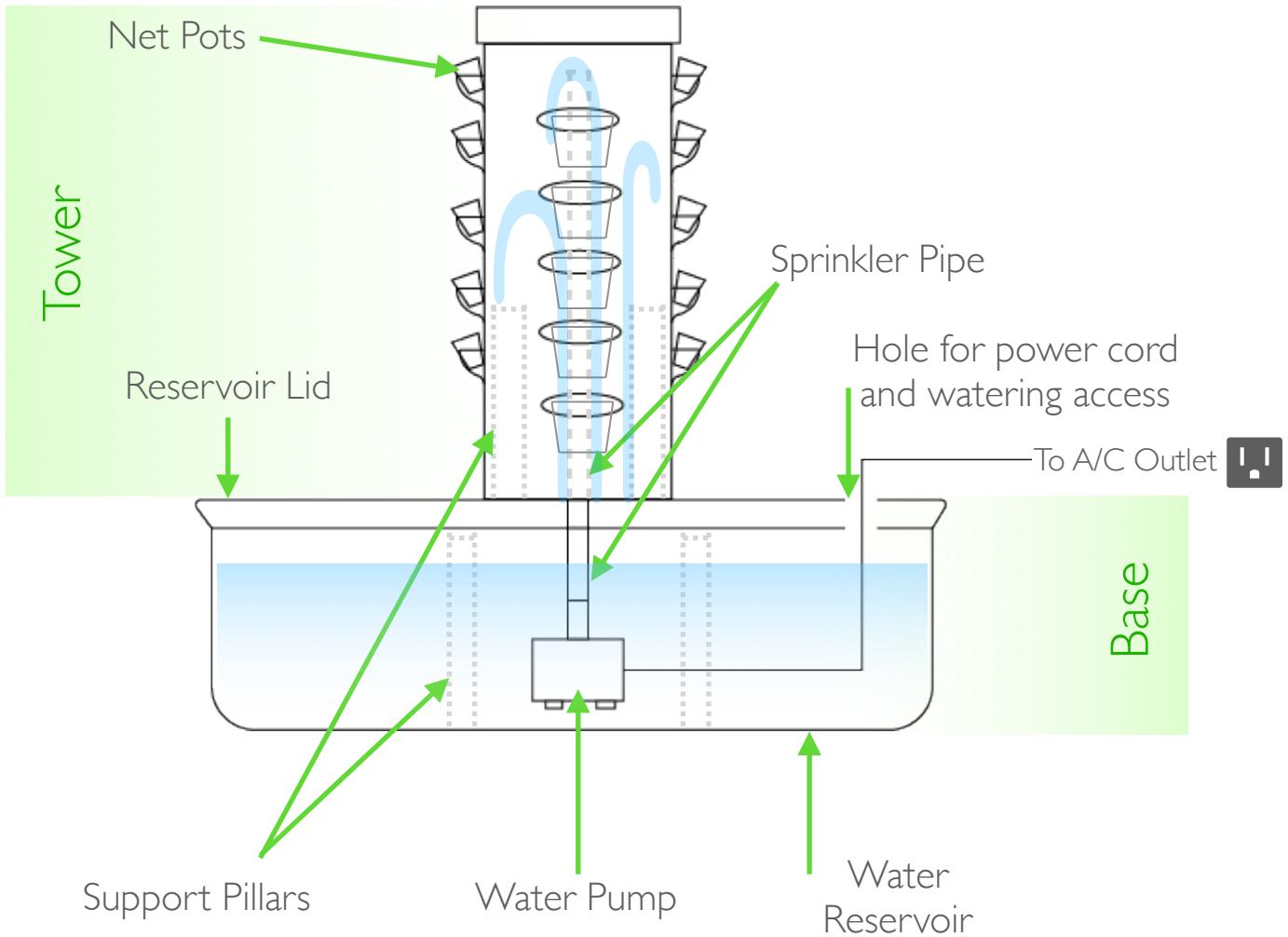
A Simple User Guide

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Unit Components



Other Important Components



Nutrient Solution



Rock wool



pH Test Strips



Timer Plug



Seeds

Will be diluted with water in the reservoir and will give the plants the nourishment they need to grow healthy and strong

This absorbed medium be used as "soil" for the seeds and goes inside the net pots along the tower wall

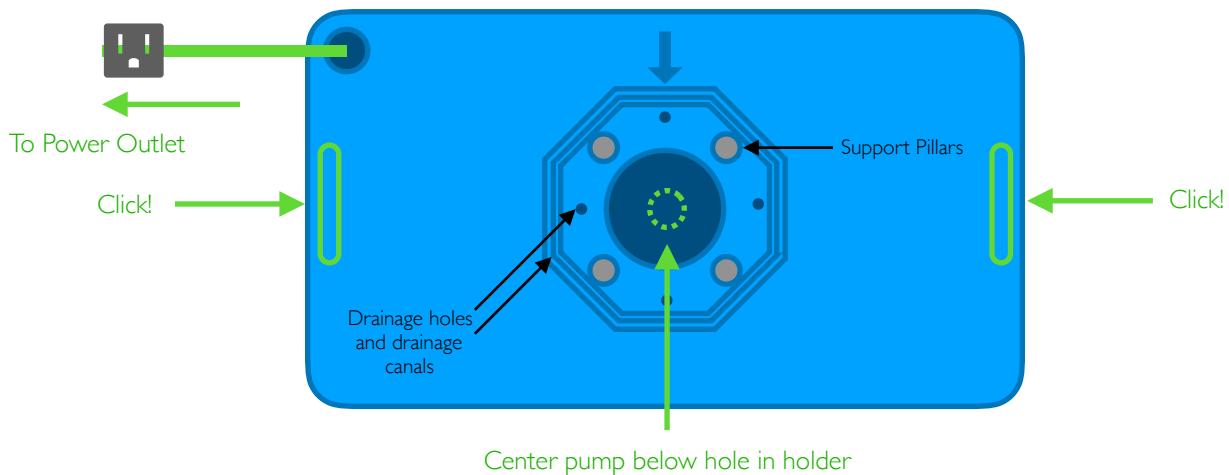
These are used to test the acidity/alkalinity of the water; to make sure the plants have the perfect water to grow

This allows you to set a schedule for when you would like the irrigation system to run and when to keep it off

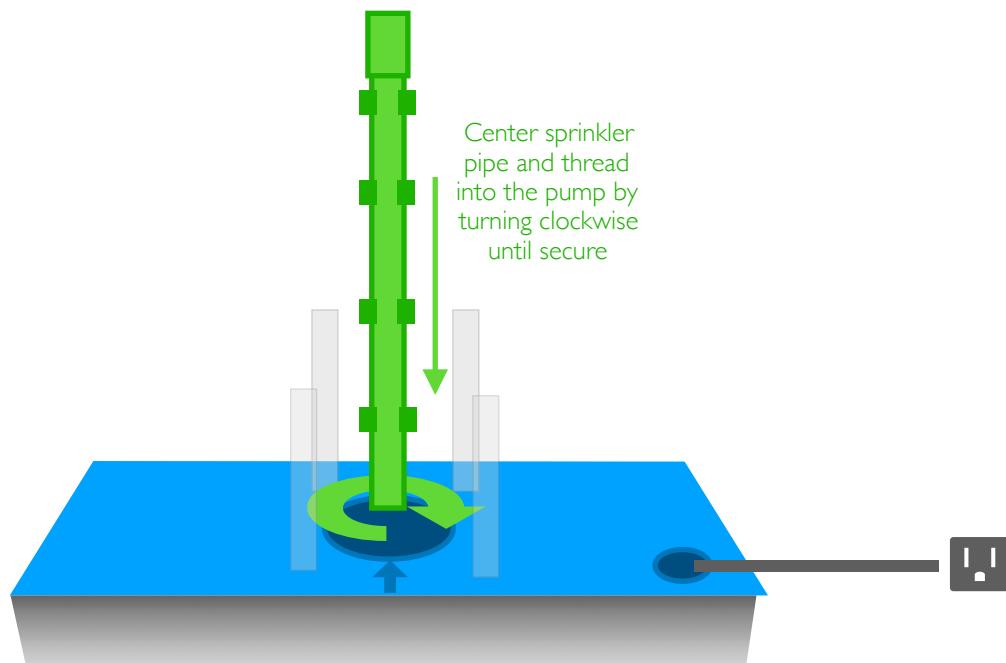
These will grow to become beautiful lush plants in your Aeroponics Tower system

Quick Start Guide

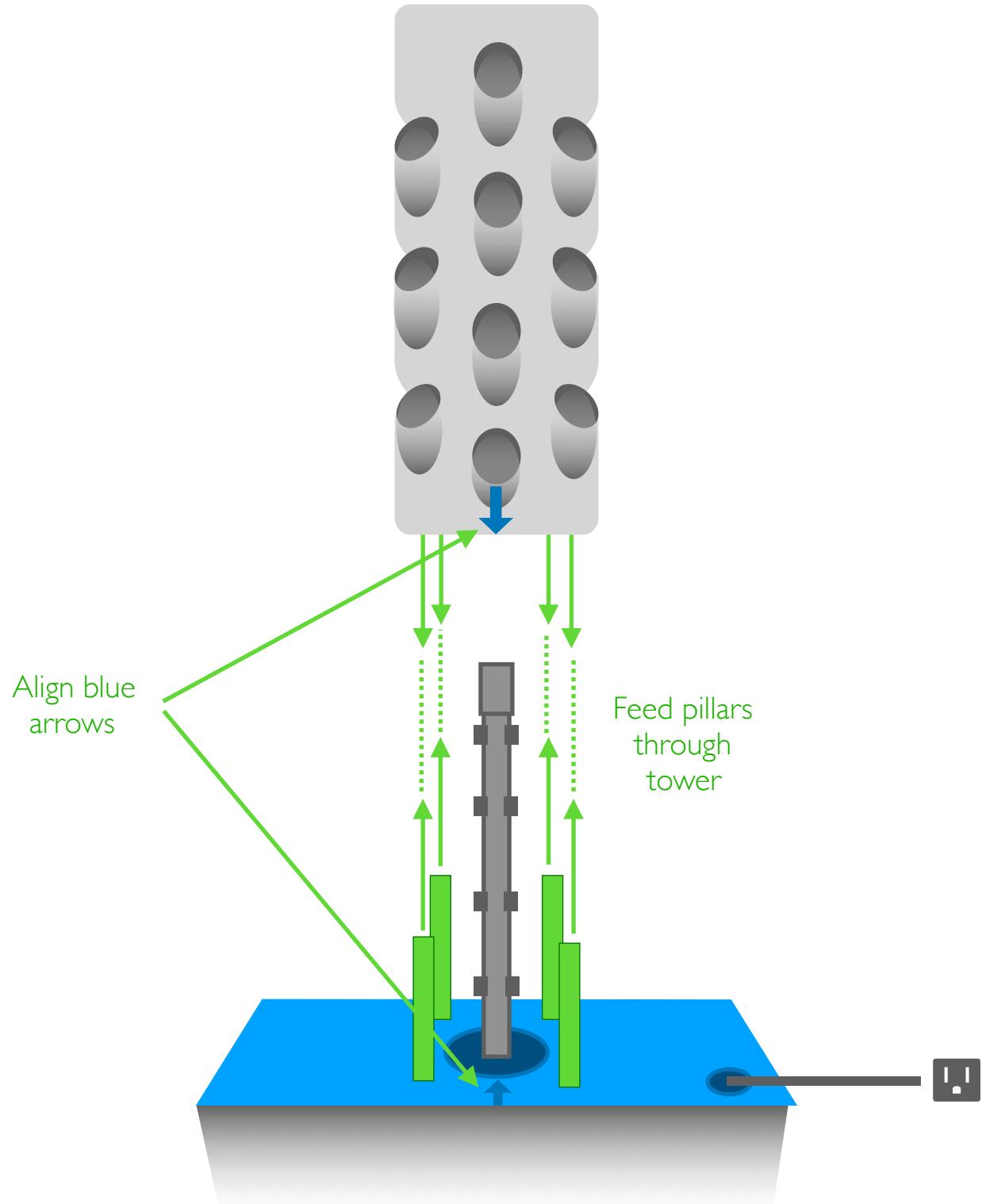
1. Place the base on a stable surface, with close proximity to a power outlet.
2. Secure the lid onto the base, ensuring that the **pump** is centered below, the **power cord** is fed through the corner hole, and that that the lid is **clicked** firmly onto the edges of the container.



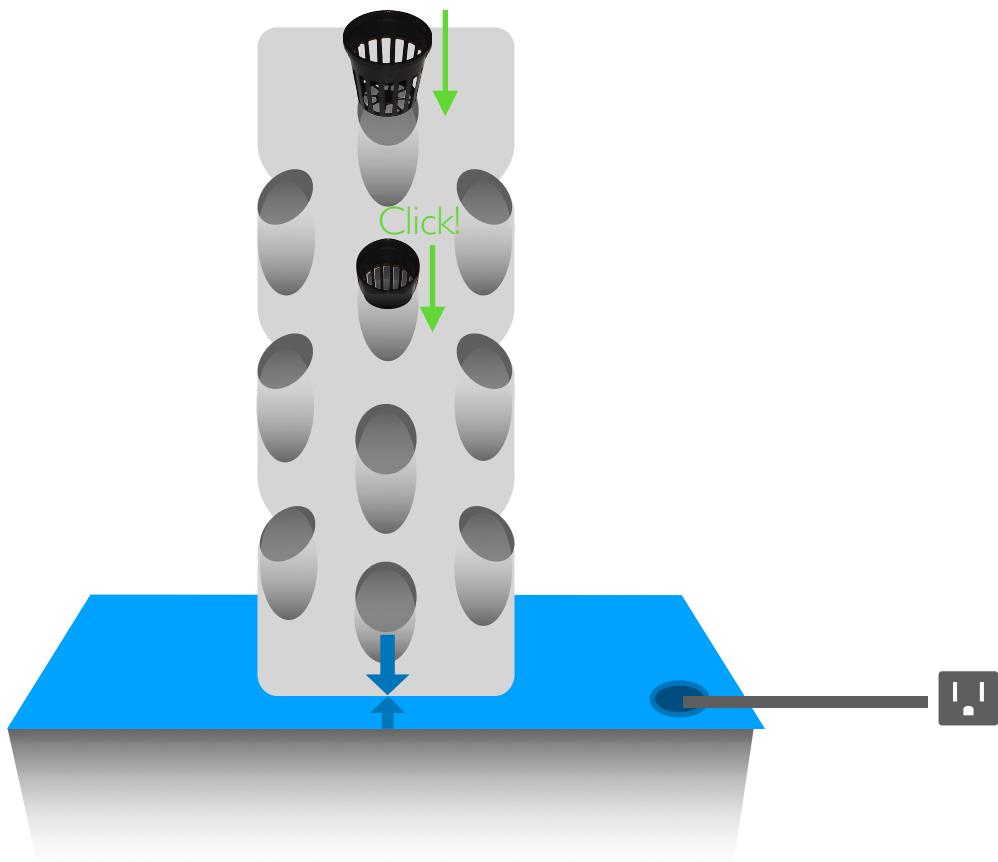
3. Attach the **sprinkler pipe** to the the pump through the threaded end and twist until secure.



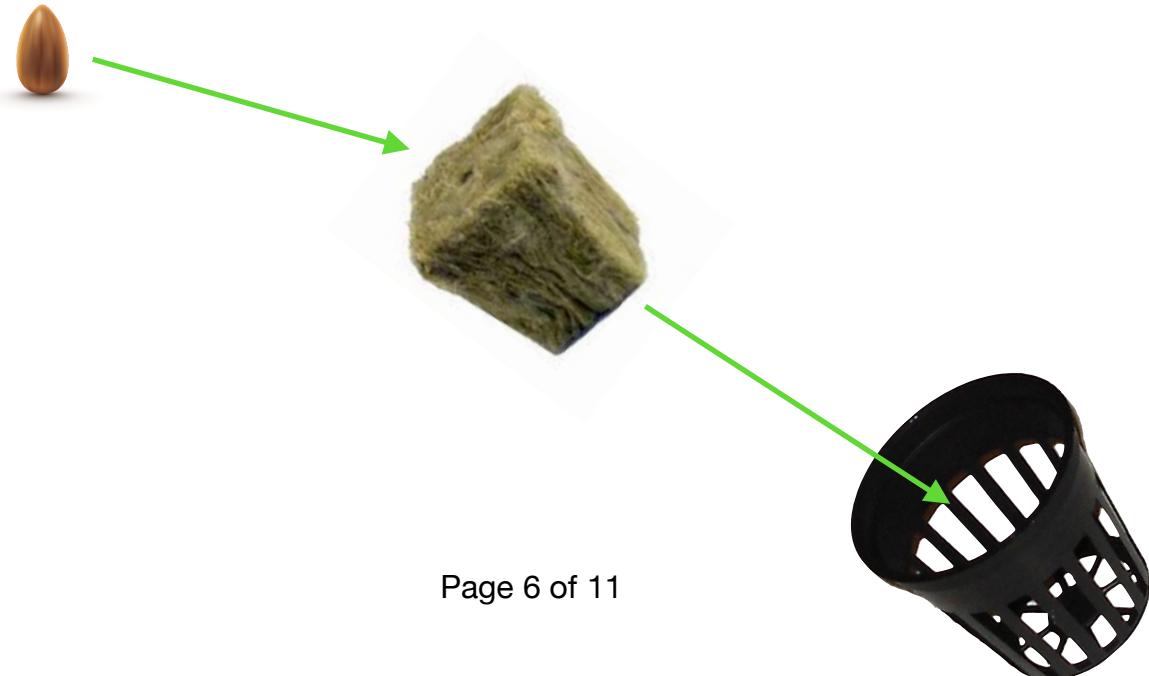
- Secure the tower onto the base located near a bright window. This may require someone else's help. Align the blue arrow on the tower with the blue arrow on the base. Then, feed the pillars through the tower until the tower sits comfortably on the base. Note: the tower will still be able to move and sway, but will still stay upright.



5. Place the **net pots** into each of the holes on the tower wall.



6. Plant the **seeds** into the **rock wool**, and place the rock wool into each **net pot** on the tower.



7. Fill the unit with water up to the designated fill line on the base.
8. Add in the right amount of nutrient solution according to the instructions listed on the bottle, and allow it to dissolve. The full capacity of the reservoir is 26 quarts.
9. Let the nutrient solution mix in, and test the pH using the **pH test strips** by dipping them through the **fill hole**. Ensure that the pH is as close as possible to pH 6.2 (which is slightly acidic, with neutral distilled water being pH 7.0). On most universal indicator pH test strips, a pH 6.2 is indicated by the color yellow.
10. If the pH is too high, add in a few drops of acid from either a lemon or some apple cider vinegar. Only add a few drops at any one time. Retest the pH each time to ensure that the solution does not become too acidic.
11. If the pH is too low, dissolve a small pinch of baking soda. Only add a small pinch at any one time, and allow it to dissolve. Retest the pH each time to ensure that the solution does not become too alkaline.



12. Setup the timer plug according to the manufacturer's instructions. When selecting the "on" segment, it is ideal to have the irrigation running for approximately 14 to 16 hours out of the day. Set this segment to your desired schedule.
13. Plug the unit in and watch it grow.
14. Regularly check the water level and add more water plus nutrient solution when the level gets low. Be sure to check the pH every time this is done according to steps 7 to 11 on the previous page.
15. In rare instances, certain plants can develop a condition called "nutrient burn" in which the edges of the leaves begin to brown over time despite having access to irrigation, due to the buildup of certain nutrients in the water supply. This typically occurs in units with low variety of plants. If this happens, just drain the entire reservoir and refill with water and solution according to steps 7 to 11.
16. Sometimes, some seeds may fail to grow due to inherent defects. If you notice any seeds that are having trouble growing in comparison to others, just remove them from the rockwool and re-plant the pod with a new seed.

How Aeroponics Works

Seeds for the Aeroponix Tower System are started in natural rock wool fiber seeding cubes. The Aeroponix Tower System has a 26 quart reservoir at its base. This reservoir stores the nutrient solution and water supply. Inside the reservoir is a small, low wattage submersible pump. The pump draws the nutrient solution up through the center of the tower through a pipe and is sprayed on each plant pod.

From there, the nutrient solution is absorbed through the rock wool which allows the nutrient solution to feed the plant roots. As the water is sprinkled from the central tube, it becomes highly oxygenated and nourishes the plant's roots with all the necessary components for healthy growth.

This process is continually repeated, providing fresh oxygen, water, and nutrients to the roots of the plants. Because of the design of the Aeroponix Tower System system, the crops grow faster than they would in soil.



Vendor Information

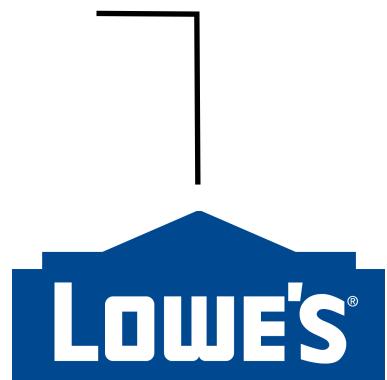


You can find various types of nutrient solutions, seeds, and pH test systems at hardware stores such as Lowes and The Home Depot. There are many different brands of nutrient solution, and many of them work well. We recommend "Fish Fertilizer" by Alaska, which can easily be found at the Home Depot, but any good quality nutrient solution concentrate can work. Any universal pH test strip will work for this system, and are widely available. We do not recommend any specific one.

For more information, visit:

www.homedepot.com

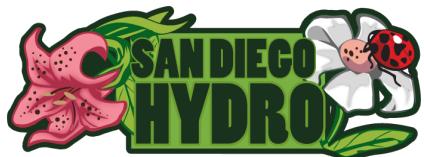
www.lowes.com



Special items such as rock wool, net pots, pumps, as well as specialized hydroponic and aeroponic nutrient solutions (for growing food, typically more expensive) can be found at San Diego Hydroponics and Organics. They carry an extensive selection of everything needed to build or maintain a hydroponics or aeroponics system. They have multiple locations around San Diego County.

For more information, visit:

www.sdhydroponics.com



Contact Information

If you have any questions, comments, issues, or concerns, or need help troubleshooting any issues, please don't hesitate to contact Rasheed Al Kotob at (831) 224-7017 or at ralkotob@ucsd.edu.