

setting up a saltwater aquarium

Saltwater aquariums start out as simple tanks of water into which aquatic life is placed with the goal of creating the ultimate aquatic environment. A little extra care and patience in the beginning will go a long way toward creating a healthy and problem-free aquarium for years to come.

Location:

Before any work is done with the tank itself, determine the best location for the aquarium. It should be placed away from windows, outside doors, heat vents and air conditioners. Rapid changes in water temperatures are extremely stressful for all fish, and especially so for saltwater fish. Keep in mind that once it's set up, your tank will weigh approximately 8 pounds per gallon that it holds. That means that a 55 gallon tank will weigh approximately 460 pounds! Be sure your floor will support this amount of weight. Place your aquarium out of direct sunlight, in a room where you will be likely to spend a good amount of time. If you rent your home, be sure to check your lease. Some apartments and condos limit the size of aquariums allowed. Also, check for electrical outlets. Most salt tanks will need access to at least four plug-ins.

Make sure you have enough distance between the wall and the back of the tank to adequately fit your filters and to allow easy access for maintenance.

Set up the tank:

1. Rinse out the tank to get rid of any dust or debris inside.
2. Set the tank stand into place, making sure it's level and adjust accordingly. If



Developed with and approved by a qualified veterinarian.

you don't have access to a carpenter's level, place the tank on the stand and fill with one to two inches of water. Check to see that the water is an even distance from the top of the stand on all four sides. An unbalanced aquarium can be extremely hazardous. Also, placing a tank on an uneven or tilted surface increases the risk that the tank will crack or leak. Using anything other than a manufactured tank stand may void your tank's warranty.

3. Make sure there is enough space between the wall and the back of the aquarium to adequately fit filters and to allow easy access for maintenance.

4. Affix your background to the tank.

5. Fill the tank approximately $\frac{1}{3}$ full.

Carefully dry off the bottom edge of the tank and the stand. Now check for leaks. Look for water beading up on the bottom edge or running down the sides of the stand. If the tank leaks, empty it and return it to the store for a replacement. You can attempt to fix it, but repairing a leaky tank is difficult, with no guarantee of success.

The filter and skimmer:

Set up your filter and protein skimmer according to the manufacturer's directions. Do not plug your filter or protein skimmer in at this time.

Add substrate:

Rinse substrate and décor before placing it into the aquarium (a kitchen colander works well, but be sure to disinfect it before using it for food preparation). If purchasing live sand, rinse it in a small amount of premixed saltwater and discard the saltwater after rinsing.

Fill the tank and add salt:

If no leaks have been noted, fill the tank the rest of the way with water. To protect the décor and aqua-scaping, place a small saucer or bowl into the tank and pour the water directly onto that. Check the tank for leaks.

Add the appropriate amount of water conditioner or additive to the tank. Start adding commercial marine salt, a little at a time, until you get a specific gravity reading of around 1.020 with the hydrometer. Your goal is a specific gravity of 1.020 to 1.025 for fish-only aquariums and 1.023 to 1.025 for aquariums that house fish and invertebrates. It may take up to 24 hours for the specific gravity level to stabilize, so wait before making your final specific gravity adjustments.

The heater and thermometer:

Place the heater into the tank. **Do not plug it in at this time.** The best place for the heater depends on the type of heater. Clip-on non-submersible heaters that must hang vertically in the tank should be placed as close to the outflow of the filter as possible. Submersible heaters should be placed as close as possible to the inflow of the filter. These placements allow the heated water to be better dispersed throughout the tank. Check the tank for leaks.

Be sure the heater is installed appropriately to avoid overheating.

Install the thermometer according to the manufacturer's directions. The thermometer should be on the opposite end of the tank from the heater in a position that is easy to check. Place the hood and light (if applicable) onto the tank. Plug in the filter and light. Make sure the cords running from the tank touch the ground before looping back up to the plug. This is called a "drip loop" and prevents water from running down the cord into your electrical socket. You may find that the tank's level drops slightly when the filter starts. Add as much water as necessary to bring the water level to the appropriate level.

Wait 20 minutes, then plug in your heater and protein skimmer. Top off your water level, if needed. Following the instructions included with the heater, adjust your heater to keep your tank between 72 to 78°F.

Stabilizing period:

Your saltwater system is now set up and running, but don't rush off to buy fish just yet. You need to wait until the temperature of your tank has remained stable for at least 24 to 48 hours. This allows the atmospheric gases in the water to dissipate, and makes certain that your heater is working correctly. Don't be surprised if your water becomes cloudy. Wait until the cloudiness dissipates before adding fish.

If the water temperature and specific gravity levels have remained stable for at least 24 to 48 hours and the cloudiness has disappeared, you are now ready to begin **the cycling process** of your new tank. There are additives that will speed up the nitrogen cycle. Please refer to the Nitrogen Cycle Care Sheet for your next steps.

Resources:

Books and websites that include information on common fish diseases and how to treat them.

Petco Care Sheet on Nitrogen Cycling

Petco Care Sheet on Water Quality

Aquatic Success Kit, available for download on **petco.com**