

# Filtration Types

## Power Filter

The very easy to maintain power filter hangs on the back of the aquarium (easy access). Water is pulled through a mechanical filtration, using floss and insert cartridges. They also provide enough space for chemical filtration media. Within the last few years a wet dry wheel (biowheel) was developed, to provide an even larger area for bacteria to settle.

## Internal filters

Internal filters usually are rectangular boxes attached with suckers on a side glass of the tank. They may have two or three sections inside, thought to divide filter materials, pump and sometimes also the water heater.

## Canister Filter

A closed canister filter is where water is forced through filtration media (mechanical and/or chemical). This filter is generally placed beside or underneath the aquarium. The canister filter has the most powerful mechanical filtration system, and can be used with messy eaters. The down side is that it requires frequent cleaning. Bacteria will also settle in this filter type. Biological filtration can be improved, by placing wet dry wheels at the outflow of the canister filter.

## Wet/dry Filters

Wet/dry filters achieve optimum aquarium conditions through the use of mechanical and biological filtration. These filters out perform other means of filtration and reduce maintenance time. Top mounted input provides more filter positioning options than side mounted inputs. Unique removable foam block wall provides chemical and protein skimmer return area. Slide out drip tray simplifies cleaning filter pad. Sealed top reduces salt creep and quiets filter. Included with filter are bio-balls, foam water polishing block, 36" drain hose, 60" return hose and instruction manual. Ideal for fresh or salt water aquariums.

## **Berlin Reef Sumps**

The BERLIN REEF SUMP is designed with the needle wheel skimmer in mind. The sump incorporates a center chamber with a constant water level of 8" where the most popular brands of skimmers can be placed. Mechanical filtration is accomplished through 200 micron filter socks. Area for chemical media and protein skimmer return. Included with filter are foam water polishing block, 2-36" drain hoses, 60" return hose, and instruction manual. Ideal for salt or fresh water aquariums.

## **Refugiums**

Refugiums are designed primarily for use on reef tanks but can be used on fish tanks that have adequate biological filtration. Refugiums work on the principal of placing algae and other marine plants in the filter and providing adequate light for them to grow. The algae remove organics, nitrates and other harmful chemicals from the water. As the algae grow, it is harvested and the harmful chemicals are removed from the tank permanently. Deep sand bed keeps nitrate at a safe level. Top mounted input provides more filter positioning options than side mounted inputs. Black refugium walls reduce light scatter and reduce unwanted algae growth in sump area. Micron sock prefiltration produces crystal clear aquarium water. Separate sock and refugium covers simplify sock removal. Refugium lid with light stand offs and light lens reduce heat, evaporation and prevent water from splashing onto light. Algae gate in refugium keeps algae from entering sump. Framed filter top adds rigidity and eliminates warping. Chemical compartment and protein skimmer return area. Included with filter are power compact lighting, refugium cover with lens, sock compartment cover, foam water polishing block, 36" drain hose, 60" return hose, and instruction manual. Recommended for saltwater aquariums only.