



HOW TO LAYOUT-Making manual

ADA aqua design amano

Distributed by:

Archaea Int'l Corp. DBA Aqua Forest Aquarium
1718 Fillmore Street.
San Francisco, CA 94115
E-mail: aquaforestaquarium@yahoo.com
Tel:415-929-8826 Fax: 415-929-8826

ADA USA
aqua design amano

Enjoy
Nature Life

Enjoy Slow Life with NATURE AQUARIUM

It is so beautiful to look at the underwater world life. The aquatic plants swings, and the fish swims comfortably inside the Nature Aquarium. One may think it is difficult to produce such a layout, but anyone can make a wonderful aquarium layout, by following the instruction. You could have a small nature in your home! Why don't you open the door of the Nature World?



②



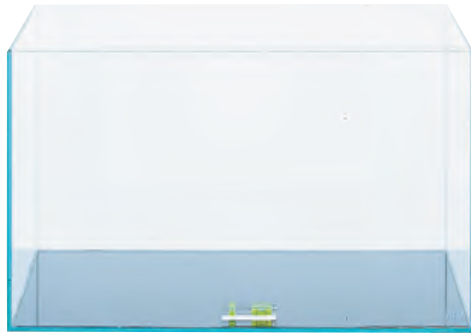
HOWTO LAYOUT-Making

③

[STEP 1]

Let's set up a tank and Substrate

There are many different tank sizes and aquascape styles, but here we focus on a basic Nature Aquarium layout for the 60cm tank which is the most popular size.



Make sure tank on the level.

1 Here we set up a 60cm Cube Garden aquarium(60x30x36cm). Make sure to place the GARDEN MAT on the GARDEN STAND. The GARDEN MAT goes underneath the tank. Also, when using a GARDEN STAND, use the adjuster to adjust the height of the stand and be sure the stand is perfectly level.



GARDEN STAND

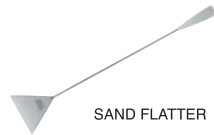


Spread evenly over the bottom glass.



Add POWER SAND as a nutrient layer.

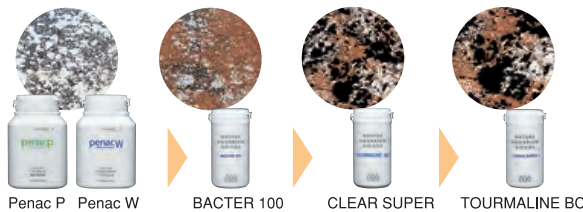
2 Spread one 2 liter bag of POWER SAND S and spread it evenly using a SAND FLATTER. Keep an open space (1-2cm) between the POWER SAND and the front and side glass. This way you do not see the POWER SAND layer after the AQUA SOIL is added and a nicer appearance is achieved.



SAND FLATTER



Substrate nutrients



The main components of the bottom substrate are POWER SAND, BACTER 100 (which generates beneficial microorganisms) and CLEAR SUPER (which provides initial food for the Microorganisms), Penac P, Penac W and Tourmaline BC may also be added to help establish and maintain a good environment in the substrate. These products may be added on the bottom glass of the tank or on top of the POWER SAND.

POWER SAND and AQUA SOIL



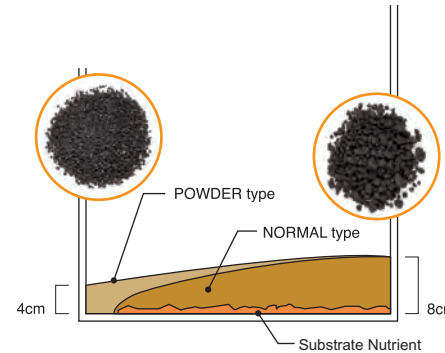
POWER SAND POWER SAND SPECIAL AMAZONIA MAYALA AFRICANA

HOW TO LAYOUT-Making

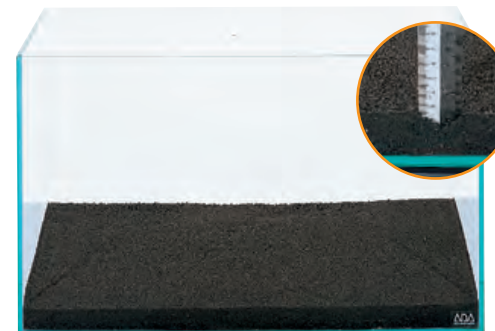
POWER SAND provides long-term nutrition for the roots of aquatic plants. POWER SAND SPECIAL is recommended for use with plants such as Echinodorus & Cryptocoryne which absorb nutrition primarily from their roots. You can choose from 3 different types of Aqua Soil depending on your preference, though AQUA SOIL AMAZONIA is recognized as the best choice for the growth of the plants.



3 Next, evenly spread one 9 liter bag of AQUA SOIL AMAZONIA on top of the POWER SAND. Making a slope of 4cm in the front to 8cm in the back creates a sense of perspective in the layout.



4 Spread a thin layer of AQUA SOIL AMAZONIA POWDER over the foreground area. POWDER-type is very fine so it looks clean and is easy to plant in. If you use POWDER type, don't use quite as much NORMAL type Aqua Soil.



5 Once you placed all the substrate, smooth is out using neatly by a SAND FLATTER. Use care to keep a straight line at the foreground. This is important because this line affects the whole impression of the aquarium.

[STEP2]

Let's make layout composition

The layout composition is the base of the Nature Aquarium. The concept's framework is compositional materials such as rock and driftwood. Here, in Step 2, driftwood is used for the layout.



! The driftwood sold by ADA can be used immediately, but the water may turn slightly brown at first due to natural tannins in the wood. To avoid this, simply soak the driftwood in water for 2-3 weeks prior to using it in the aquarium.

1 First, select the driftwood for the layout. By using 2-3 pieces, you can often more easily express distance and perspective. Be sure to select pieces that will fit the 60cm tank.

2 Tie Fontinalis antipyretica around the driftwood with MOSS COTTON. Tying is much easier if you take the driftwood out of the aquarium. MOSS COTTON will dissolve naturally by the time the Fontinalis attaches and begins growing on the driftwood.



MOSS COTTON



Try to first imagine natural moss growing on wood, then attach Fontinalis antipyretica.



Cut extra Fontinalis antipyretica



Attach using MOSS COTTON



! **Avoid drying of the Fontinalis**
Fontinalis will dry out very quickly, so use an atomizer or plant sprayer/misting bottle to keep the Fontinalis moss and all the other plants moist while you layout the tank.



Place Fontinalis at base of driftwood.



Carefully add small Riccia stones.



Add water carefully.

Riccia preparation



RICCIA LINE

Gently tie Riccia around small Fuji Rocks in advance. Take care not to damage the Riccia in the process.

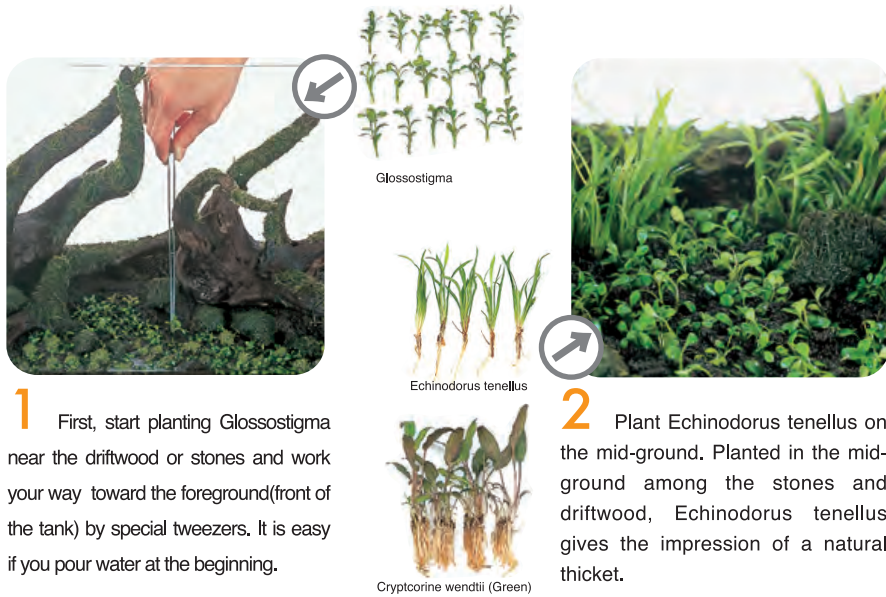
3 Use RICCIA LINE to attach Fontinalis moss to Fuji Rocks and place the rocks around the base of the driftwood. Carefully select stone sizes that will both help stabilize the driftwood and harmonize naturally with the driftwood. Adding too many rocks decreases the space for the plants, so keep this in mind so there is plenty of space for planting.

! **Adding some water**
Pouring water over a small dish is a good way to add some water without disturbing the layout.

[STEP3]

How should you plant?

The next step is to plant the tank. First, wet the substrate using your mist bottle. It is much easier to plant in a wet substrate, but you do not want the substrate to be completely full of water yet. Generally it is easier also to start by planting the foreground, then move to the mid-ground, and lastly the background.



1 First, start planting *Glossostigma* near the driftwood or stones and work your way toward the foreground(front of the tank) by special tweezers. It is easy if you pour water at the beginning.

● **Important point of foreground**
At the front glass edge, avoid adding plants that grow too horizontally.

2 Plant *Echinodorus tenellus* on the mid-ground. Planted in the mid-ground among the stones and driftwood, *Echinodorus tenellus* gives the impression of a natural thicket.

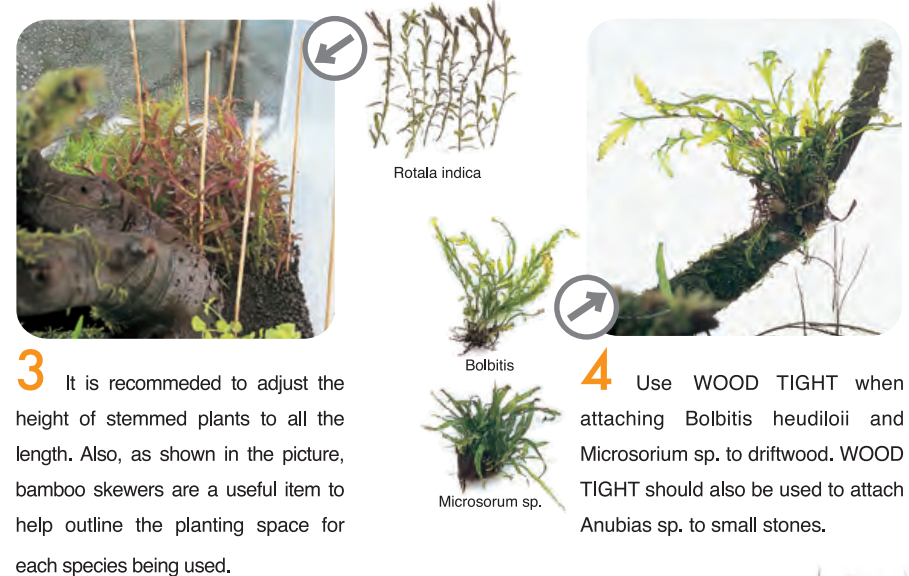
● **Important Point of the middle-ground**
Use plants that create continuous height at the mid-ground and background. This renders a natural feeling at the edge of the driftwood.

Assortment of water plant



HOW TO LAYOUT-Making

When using aquatic plants that are grown in a pot, be sure to carefully remove all at the rockwool first. Be careful not to damage the roots. Next, separate *Echinodorus tenellus* into smaller groups and remove any damaged leaves.

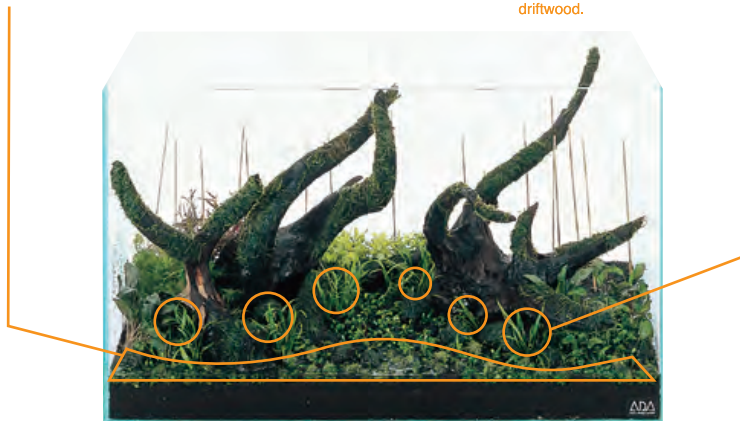


3 It is recommended to adjust the height of stemmed plants to all the length. Also, as shown in the picture, bamboo skewers are a useful item to help outline the planting space for each species being used.

● **Keep plants from floating**
To help keep plants from floating up just after planting, sprinkle **AQUA SOIL POWDER** at the base of the plants.

4 Use **WOOD TIGHT** when attaching *Bolbitis heudiloi* and *Microsorium* sp. to driftwood. **WOOD TIGHT** should also be used to attach *Anubias* sp. to small stones.

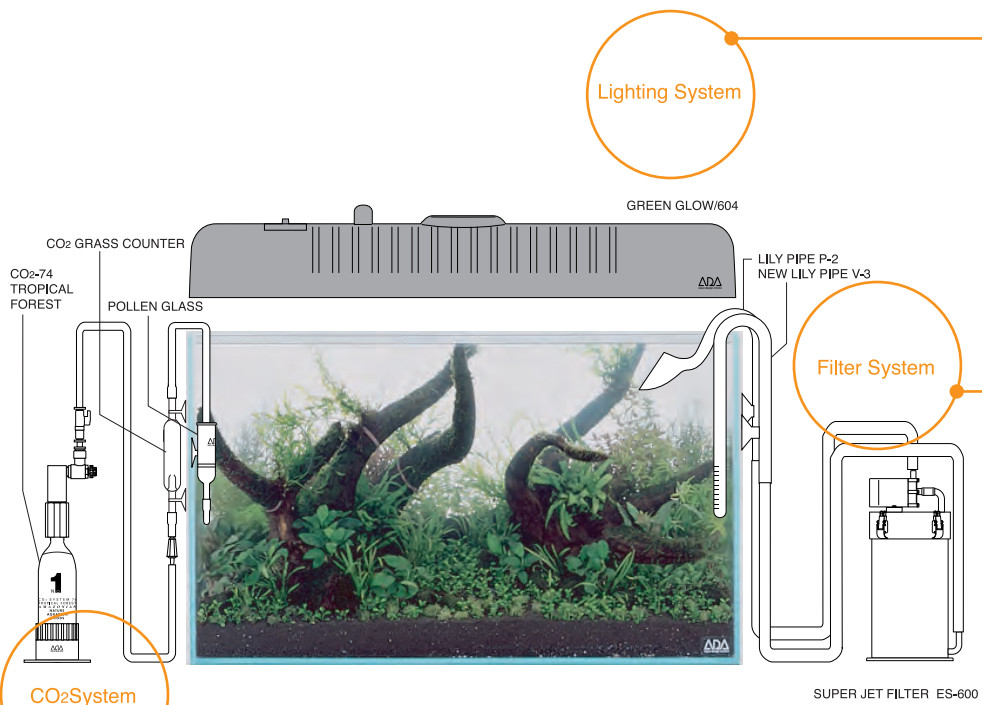
● **Point of back ground planting**
From the start, plant stemmed plants very closely in dense groups. Here, *Eleocharis vivipara* was added for the background too.



[STEP4]

Setting of the other tools

When you finish making the layout, next step is setting of appliance.
 Correct setting up is very important for making the aquarium clean.
 Connection parts should be arranged neatly.



Lighting System

Filter System

CO2 System



Proving the light for the plants

Light is the most important factor in growing aquatic plants, and providing sufficient light encourages more active photosynthesis. For beginners, a fluorescent lighting system is generally easier to manage.

! The NA LAMP was developed specifically for growing aquatic plants and has a blue spectrum that penetrates the water easily. It is a good idea to write the date the lamp was installed so it can be changed at the appropriate intervals.



Purifying the water and maintaining the environment within the aquarium.

The filter plays the role of purifying the water, so one with a high filtration capacity is very important.

! The SUPER JET ES 600 has a large filtration capacity and maintains a steady flow rate for a long period of time.



Promoting the photosynthesis of aquatic plants.

CO2 supplementation is necessary to promote photosynthesis. Active photosynthesis makes the plants grow much better. Placing the POLLEN GLASS diffuser at a middle height in the aquarium helps ensure a good CO2 supply.



CO2 ADVANCE SYSTEM is included every appliance which is necessary for CO2 supplementation. Every aquarist can use this product safely and supply proper CO2.

Checking the CO2 density



Monitoring CO2 density seems to be difficult. But with help of Drop Checker, you can understand the CO2 condition easily. Putting aquarium water and reagent inside the Drop Checker, and you could find the CO2 density from the color change of the reagent.



Proper condition



Insufficient CO2 Superfluity CO2

! Washing the glass products.

Algae growth detracts from a nice appearance and proper function of glass products. A periodic cleaning with SUPERGE removes unsightly algae.



[STEP5]

What are the key points of Nature Aquarium maintenance?

Daily maintenance practices ultimately decide both the condition of the plants and the aquarium as a whole. Close observation of the condition plants, fish and water clarity becomes essential for maintaining a healthy system. The regular close observation of the aquarium enables you to respond quickly to changes before they become bigger problems.

DAILY Work !



Regular Work !



Supplying Potassium and micronutrients promote healthy aquatic plants

Among the major (or macro) nutrient elements necessary for the growth of aquatic plants, nitrogen and phosphorus are produced by natural processes within the aquarium, while potassium tends to be in short supply. Potassium supplementation with BRIGHTY K is highly effective and also promotes photosynthesis. When no significant algae is present in the aquarium, supplementing micronutrients is also very effective. The original ADA STEP method for micronutrient supply starts with GREEN BRIGHTY STEP 1, and graduates to STEP 2 and STEP 3 over time.



BRIGHTY K
GREEN BRIGHTY STEP 1

Check the water condition and understand the aquarium environment

Watch closely for the appearance of the algae while also observing water clarity and the movement of the fish and shrimps. Analyze the water condition checking for nitrate, nitrite, and CO2 for the first week or two after set-up. In aquariums with steady plant growth, check pH regularly, and control the CO2 supply as needed.



PACK CHECKER

Water Change is the basis of maintenance

Performing regular water changes is the most important task in a routine maintenance regimen. For the first 1-2 weeks, 1/2 or more the tank volume water change is necessary. Once the plants start to grow and no major algae is visible, a water change of 1/2 to 1/3 tank volume once per week is recommended.

Chlorine neutralization for tap water

Though BRIGHTY K has both supplements potassium and neutralizes chlorine, CHLOR OFF is suitable should you want to just neutralize chlorine.

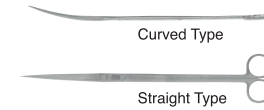


CHLOR OFF

HOW TO LAYOUT-Making

Trimming by specialized tool

Use specialized trimming scissors for aquatic plants. A long length and very sharp edge and tip are best as those features will help you make a proper cut more easily and consistently. Curved tip scissors are recommended for trimming small plants on the aquarium bottom.



Before



After



Aquarium tank will be beautiful depend on trimming.

It is time to trim aquatic plants once they reach the surface or when lower plants are simply becoming too thick. Basically, trimming stem plants consists of cutting the top parts and keeping the roots and some parts of the stem. This allows for new growth that is thicker and more lush as one stem may now produce 2 or more new buds. The idea is to create a beautiful thicket.

Also, establish clear lines with your trimming in order to express the ultimate composition clearly. To maintain a beautiful appearance, trim often and before plants are overgrown too much.



Take care of plants after trimming

Trimming weakens and stresses aquatic plants. Adding GREEN GAIN helps promote faster recuperation and regrowth.



GREEN GAIN

Remove algae as soon as possible

2-3 weeks after set-up, brown diatom (powder-like) algae and even thin tangles of algae may appear. First siphon out as much of this algae using a thin hose. Then add around 10 Caridina japonica (in a 60cm tank). Later, if other algae appears, the idea is the same: physically remove as much as you can and add algae-eating fish or shrimps to help deal with the rest. If the plants have suffered due to a delayed response, it may be best to cut the weakened or infested part of the plant all together. Algae on the glass in areas where you cannot reach may be removed using the PRO RAZOR.



Otocinclus sp. Crossocheilus siamensis



Just like Caridina japonica, Otocinclus sp. and Crossocheilus siamensis are effective algae eaters. Normally only a few are necessary to remove or control algae. Reduce the population if feeding damage to the plants becomes a problem.



PRO RAZOR

[STEP6]

Release of the fish and the final process!

Around one month after set-up is the best time to introduce fish into the aquarium as the plants have started to grow well and any algae is under control. When the aquarium environment is stable, the fish swim comfortably and remain in good health. The basic concepts of fish selection are to either choose a single species for more minimalist aquascapes lots of wide open space, or add multiple fish species for aquascapes with densely grown plants and greater plant species variety.

After 90 days

Fish play the lead role in the Nature Aquarium.



1. Scarlet gem / Though this fish can be timid, they are very pretty and are graceful swimmers. 2. Inpaictic Kelly / A type of Characin, their purple coloration

is highly noticeable. They look very natural against a planted aquarium layout. 3. Aplocheirictic macrofuturamus / This fish is a type of killfish known to swim near the surface. Their blue glowing eyes are most impressive. 4. Paracheiroidon axelrodi / The neon blue and red of this tetra make it very popular species of tropical fish. Their coloration promotes a sense of lightness and joy in the planted tank. 5. Red Phantom Tetra / This fish's red body adds a splash of color to the layout. Their wide swimming pattern pairs well a densely planted type of layout.



Cube Garden Mist W60xD30xH36(cm)

! Raise the fish

Watch the fish very closely when feeding to make sure all the food is being eaten.

Feed only small amounts of food at a time and notice that when the fish start to feed very slowly or spit out food, they are full and you should not feed anymore. Check to see also that all the fish are getting enough of the food. Overfeeding can cause a decline in water quality and promote algae problems. AP series FISH FOOD is high in nutrition and digestability which helps maintain better water quality and lessens the emergence of algae as there is less overall waste produced when feed in proper amounts.

Choose AP 1, 2, or 3 based on the mouth size of your fish.



FISH FOOD AP-1

AP-2

AP-3



AP-GLASS

AP-GLASS is a must have item for feeding the fish without touching the food. The food is released with a simple push.

Enjoying the underwater world in your own space is one of the wonderful dynamics of the Nature Aquarium. Densely planted aquatic plants growing and colorful fish swimming about are a sight to behold. Even in a small aquarium you can find the drama of nature. Just imagine aquatic plants producing tiny bubbles of oxygen and fish swimming gracefully. The nature captured within the glass is full of life, and it soothes your mind and calms your heart. Let's all start a Nature Aquarium together.