HYPERTUFA

The ingredients for Hypertufa

Cement, sand, **reinforcing fibers** and peat moss. All these are readily available at local building centers, hardware stores or Garden centers. Reinforcing fibers are available from Vermillion and Associates on the following website.

http://www.vermillionassociates.com/pages/21/index.htm

For cement, purchase Type I Portland cement. Avoid prepared concrete mixes. You just want cement, not a concrete mix. Concrete contains gravel and it gives a coarse texture to your finished product. If you want to liven' up the cold gray color of the cement try a little bit of concrete colorant, generally this is found as a powder in a plethora of colors. A little bit goes a long way so use a little per batch (measure it) and after a few pours you will have the color you want.

For sand we prefer Mason's sand because it makes a stronger container than coarser grades of sand do. I personally prefer the look of mason's sand as the units come out looking more natural like stone, That's the whole point!! Purchase the last ingredient Peat Moss by the bale or large bag. Before using it, pick out all the chunks and sticks of wood. Making a hypertufa planter is very inexpensive. Even in the 2000's you can still purchase a 94 pound bag of Portland cement for about $7.00, a bag of masons sand for probably $4.00 and a 3-4 cubic foot bag of peat moss for under $15.00.

One bag of Type I Portland cement, 1 bag of sand (80-100 pounds) and 2 cu foot of peat moss will make about 8-9 containers each about 12" x 14" by 6" deep with walls 1 1/2" thick. A container this size will weigh a little more than 20 pounds. Hey, not bad for way under $4.00 a unit!!! A handful of reinforcing fibers (about 3.0 oz.) for each gallon of total Hypertufa mix.

Order your reinforcing fibers from Vermillion and Associates in time to receive them by Priority Mail. They sell these fibers in convenient Hypertufa boxes which contain 1.5 lbs. of reinforcing fiber inside a box which makes a really nice little trough mold. You order them right off their website. You can pay by credit card, check or PayPal.

In addition to purchasing the ingredients you need some other " stuff": a steel chisel and a wire brush , a large pan to mix in and some rubber gloves, wear the gloves, cement is alkaline and will dry your hands out and possibly cause a rash !! Also a short piece of dowel or a stick of some kind, you'll find out why in a minute.

Finally, you'll need a mold that has the size and shape you require, [you can use the little box the fibers come in for a small rectangular trough if you like] and plastic (rolls or garbage bags) for lining the mold. For large containers, those wider or longer than 2 ft., for example, wooden molds are a good idea , fill in the corners with something so the bottoms aren't square) For the smaller containers it's easier to use old rubber dishpans, large pots or pans, plastic pots or tubs, or other containers.

Making a container

We will now explain the process of making a rectangular trough. The same basic methods apply to containers of different sizes and shapes as well. Start by gathering your materials and equipment.

To make a trough with outside dimensions of 12 in. by 12 in. by 6 in., use an old dishpan for an outer mold, lining it with a plastic to keep the hypertufa from sticking to the mold as it dries. In addition, you can use a small plastic dish as an inner mold, to shape the opening inside the trough.

The texture of a finished hypertufa container depends upon the proportions of cement, reinforcing fibers, sand and peat moss used to make it. Always measure these ingredients. For the trough described, use about 3 qt. of Portland cement, 3 qt. of sand and 6 qt. of peat moss (a 1: 1: 2 ratio) to get a cottage cheese like texture. For a texture like sandstone, increase the amount of sand to 4 1/2 qt. and reduce the volume of peat moss to 4 1/2 qt. (a 1 : 1 1/2 : 1 1/2 ratio). Mix the peat moss and sand together first, then add the cement, and the reinforcing fibers and mix everything together by hand (wearing gloves, of course). This is the time to add concrete colorant, it desired. If you have a paddle mixer and a drill motor it will save you a lot of effort. Paddle mixers are available in the masonry department of your local building supply and many of us already own an electric drill.

After combining the dry ingredients, add water a little at a time, blending the mixture thoroughly after each addition. If the mixture is dry, just wet enough to bind the materials together, the finished container will have a dense and relatively smooth surface. If the mix is wetter, with a consistency like cottage cheese, the surface texture will be more irregular. One way or the other it will look pretty nice.

Fill the bottom of the mold first, making a layer about 1 1/2 in. thick and pressing the hypertufa mix down to firmly to eliminate air holes or pockets, then use the dowel (here is where you use the stick) to carve out three four ½ in. dia. drainage holes. If your working with a dry mixture, shape it by hand to the sides of the mold, building up walls about 1 1/2 in. thick. If the mixture is wetter, wrap the inner mold in plastic and set it on top of the mixture on the bottom of the outer mold, then fill in the space between the two molds with the hypertufa mix.

After filling the mold, fold the plastic over the top of the hypertufa to keep it from drying too fast, and leave it undisturbed for 24 hours or longer. Let the container sit until it's dry enough to be handled, but not so dry that it's hard to " work it" that is, to give it the texture and character of old stone. It's ready when you can't dent the surface with your finger but can still scratch it with your fingernail. Working the container is the best step.

First, un-mold the semi-hard container and remove any plastic sheeting that sticks to it. With your chisel, make a series of marks along the entire container to mimic the tool marks in cut stone. Then use a wire brush to roughen the surface of the hypertufa, and an old paintbrush to remove any clinging bits of sand or other debris.

When your satisfied with the surface, set the container where it can "cure" for about four weeks, protected from direct sunlight and temperatures below freezing. Freshly cured containers are still too "green or limey" from the chemicals released in the wetted cement to be suitable for growing plants. In order to neutralize the chemicals, set cured containers outside and let the rain wash them for several weeks, or wash them with the hose. You can use potassium permanganate crystals (available at industrial chemical-supply stores) to speed up the neutralization process. Mix the crystals with water to produce a Chianti-colored solution, brush it over the surface of the container, and wait several hours before washing it off, Dispose of the used solution away from animals and plants.

Planting

You’re on your own. the ones we have at our house are full of herbs.. A sundial placed nearby. maybe a small fountain or water feature of some kind....nice...very nice..