

HYPERTUFA TROUGHS

By Patrick Ryan, Education Specialist, Alaska Botanical Garden

Hypertufa is an artificial stone material used to make garden planters. The containers are great for showing off alpine rock garden plants, succulents, dwarf hostas, dwarf conifers, bonsai etc. Making hypertufa is easy and fun. It's best done outdoors as the dry ingredients are very dusty. A dust mask and gloves are recommended.

Supplies

Mixing tub (mortar mixing tub from Lowe's/Home Depot. Doubles as a potting tray)

Container for measuring (coffee can, bucket etc.)

Peat moss (screened to remove large chunks or sticks)

Perlite

Portland cement

Concrete reinforcing fibers for larger planters (optional from concrete supply store)

Water

Dust mask

Rubber/nitrile gloves

Trowel

Plastic drop cloth

Plastic, metal, cardboard or wooden container for a form

Wire brush-to rough up surface when drying project (optional)

Duct tape to reinforce soft-sided forms (cardboard)

Plastic trash bag to line form for easy removal

Things to use for forms.

You can mold inside a container, or over the outside. A large plastic planter bowl makes a great project, either filling the bowl with a 1 ½ to 2-inch thickness tufa mixture, or turning the bowl over and adding the mix to the outside. If using the outside technique, be sure to make a flat, level bottom so the bowl will sit properly.

Always leave room inside the project for adding soil to the finished container later. Smaller pots and small soil-holding spaces dry out sooner.

Try using:

- Half gallon milk cartons (cut in half) or nursery pots
- Large stainless steel or plastic mixing bowl or planter bowl
- Hanging basket
- Cardboard boxes (reinforce outside with duct tape)
- Insulation blue board for larger troughs (make into box with screws and duct tape)
- Check craft store, junk shops, etc. for baskets, bowls etc.
- Bubble wrap, large and small-to line the pot before adding mix. For texture.
- Burlap-same as bubble wrap. Added for texture.
- Nails or screwdrivers for etching when released from mold (usually 24-48 hours).
- Jewels, shells, marbles, spruce boughs for inserting into edge while soft. Doesn't seem to work well with tufa, as it is a coarse material.
- A drill and ½ inch bit to drill holes in bottom after releasing from mold. No time limit on this.
- Use traction sand or pea gravel for topdressing when finished, especially with alpines and succulents.
- Soil mix: use half and half good potting soil and a coarse mix such as Black Gold Cactus Mix. Great for succulents and alpine plants.

There are many recipes, but I have settled on the 1-1-1/2 mix: one part peat (sifted), part 1 perlite and 1/2 part Portland cement. You can add color by mixing in pigments as you become more comfortable with the project. There are concrete dyes and stains available.

Procedure:

While wearing a dust mask and gloves, mix perlite and screened peat. Blend together. Be sure to remove sticks from the peat. They can weaken the finished container. Add Portland cement and blend all dry ingredients thoroughly.

Make a "volcano" in the middle of the mixing tub and SLOWLY add ABOUT one part water. Mix with gloved hands or use tools. Add more water if the mix is too dry. Keep mixing. You are looking for the consistency of a brownie mix. **DO NOT ADD TOO MUCH WATER**, or you will have to adjust the dry ingredients. Keep mixing until you can squeeze a handful of mix and it will only ooze 2 to 3 drops of water. Let stand for about 10 minutes for the peat to absorb the water. It will not harden during this time.

Simply pack hypertufa mix around your container, or mold it on the inside of a container.

Fill your form with the wet mix and form it up the sides and bottom to 1 $\frac{1}{2}$ - 2 inches in thickness. I like to pat down the mix until it becomes smooth and kind of shiny. That's getting the air bubbles out. Remember to leave space for soil by digging out the middle or use a pot or bowl to form that space. You can add corks, dowels or short one-inch PVC pieces to push in the bottom for holes (for drainage). **Easier method:** you can drill several holes in the bottom of the container after 48 hours. The trough will be fairly solid but can be easily drilled.

If you have mix left over, experiment! I like to fill the four-packs that plants come in to make feet for the planters.

It's a good idea to cover your project with plastic so the troughs don't dry too fast. Do not put in sun!

After 48 hours, the tufa can be popped out of the mold. You can leave it outside to weather. Use the wire brush to smooth the surface if desired, or a nail or screwdriver to scratch a pattern in the stone.

Plant the tubs with a blend of good potting soil and a gritty cactus mix soil. It's a good idea to let them weather for a few weeks or more to leach out the lime in the Portland cement, which can leave a gray film on your deck.

Experiment and enjoy!. Warning: hypertufa is slightly addicting!

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My blog: Musings of an Alaskan Gardener, located on the Laidback Gardener Blog.