Hypertufa Kit

Step 1
Paint a layer of PVA onto the outer surfaces, just over the rim and just over the edge of the bottom. (all the surfaces to which we will apply hypertufa mix) Dry

Step 2
Repeat

Prepare your work surface, it will need to be in position for two days out of direct sunlight. Use a board larger than the polystyrene box covered in stout plastic

Step 3 WEAR WATERPROOF GLOVES - Cement is caustic and will burn

Mix the larger bag of peat and pumice in a large container like an old bucket. Divide in half, reserve remainder. Add ½ the larger amount of cement (don't breath the dust) and just enough water to make a moist, but not sloppy mix. It should be able to be squished into a sausage and hold its shape without exuding dirty water. NOTE To avoid excess water, add the water very judiciously. Mix well. If you add too much water, adjust the consistency with
additional cement and mix. The proportions are about 2:1. If you use lots of your next batch, be sure to cover more area.

Step 4
Place the largest of the box's surfaces uppermost onto your prepared board. Press a thin layer of hypertufa onto the side. Go right to the edges and slightly over the base by 10-20mm. Aim for 5mm thickness. Don't worry if it is a bit rough, this will add to the effect. Be sure to spread it thin enough to cover this side and at least one more, smaller side.

Step 5
Use the plastic to hold the mix on and gently turn the box over 180 degrees and cover the opposite side.
If you are doing a large box, or you are struggling to have it stick, you can pause half way through and let it go hard for 12-24 hours.
Holes and glitches can be fixed.

At some stage you will need to mix up the next batch. Keep the extra in reserve.Step 6
Turn so that you can cover the third side and repeat with the last side.

(there is an extra mix for the top, which can be done later, it can be used for the last side, but be frugal, so there is enough to finish)

Step 7
Very gently place box right way up and re-adhere loose or slumped bits.

If you haven't needed the extra mix, mix it now and use it to cover the top edge. The trough will look much better if the white edge is not visible. Bring it down as much as you can up to about 20mm down the sides.

Using the plastic to assist in shaping the bottom, ensure that it isn't square at the base. A gentle curve looks more natural. If you're having trouble this can be scraped off and reshaped the next day as it hardens off.

Drying and setting is improved with moisture so leave in a cool spot and gently cover with plastic.

After a full day it is possible to gently erode the surface if you would like it aged looking with water and a nail brush. Be gentle with the structure however.

Shiny pre-eroding

Eroded - with gentle water blasting

Full curing will take a week, so it is best not to plant until full hardening has occurred.

The trough must have good drainage so drill cut decent holes in the base. Over them with non-rotting mesh for example shade cloth, onion bags, metal mesh. Do not compromise your trough with small holes in the polystyrene which will block at a later date.

The mix you use is important. Primulas will be happy with a gritty mix, for example 25% pumice with potting mix, but bulbs and alpines will require 75% grit at least. These particles should not be sandy, but 3-5mm particle size. Slow release fertiliser can be added.

Consider adding thin rocks or pieces of slate (recycled building materials eg The Pumphouse in Christchurch) and planting between these with small plants that can grow on and will be happy together. Another option is to plant just one variety, for example lots of bulbs or a small alpine shrub. Be sure to fill the trough well above the white of the box, expecially if a peat based mix is used as it will settle and look unsightly.

Always finish with a layer of 5mm washed chip. This can be collected from a river or purchased from Intelligro as can supplies of pumice.
Look for ideas online, the NZAGS.com website and Ian Young's bulb log (use the index) on the Scottish Rock Garden website.