# Introduction into Hand Building

6 October 2016

Demonstration by Anna Lambert

1. SLAB BUILDING

Anna uses mostly a mixture of Earthstone ES40 (for coarseness & stability) and a white Eathenware clay (for plasticity).

According to Scarva's website:

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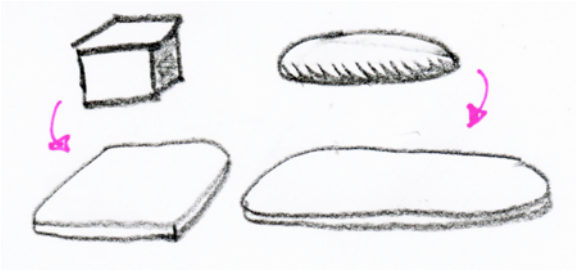
| ES40<br>Firing Temp 1200-1300°C<br>ES40's appearance and firing range are similar to Scarva Earthstone Original White. ES40 is a high quality white clay body. The addition of coarse molochite makes Earthstone Hand Building an incredibly strong clay. It is heavily enough grogged to make the most extreme sculptural forms and is highly resistant to warping and cracking. This makes it suitable for hand made tiles and ceramic murals. |

TIP: Use a cloth to wrap around dried out clay to bring it back to a workable state – better than spraying with water.

**Slab Making:**

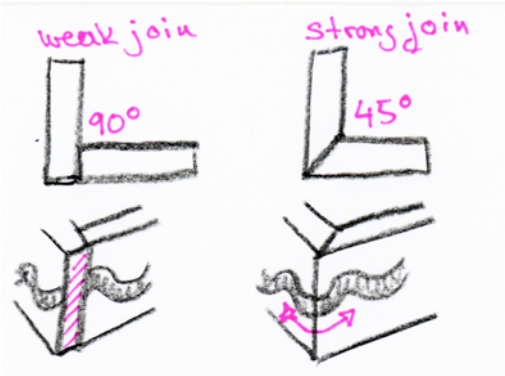
- Start off with a lump of clay approximately the same shape as the slab you want to end up with, i.e. a square or an oblong.



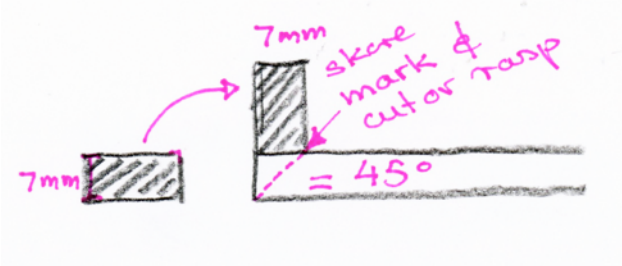
- Bang and flatten out the clay with the a flat palm or heel of your hand. This will help to rearrange the molecules in the clay.
- This will help avoid uneven shrinkage during drying and prevent cracking.
- Help to ensure an even distribution of larger and smaller clay particles.
- While doing this ensure to rotate and turn over the clay to help avoid stresses within the clay.
- Instead of peeling the clay off the surface, lift the underlying cloth. Otherwise the clay may bend and as clay 'has a memory' it is otherwise much more likely to warp. If a piece is really big, just put another piece of clay on top and a board and turn the clay over wedged between two boards.
- Another way to make a slab is by throwing and the clay onto the table and letting go at the right moment.
- One can also just flatten in by just beating it out with one's hands and using a rolling pin just to lightly smoothen down the surface at the end.
- One can use a wire harp to simply cut slabs off a large block.
- Using a slab roller is the easiest way but will make slabs prone to curling.

**Using Leather-hard Slabs:**

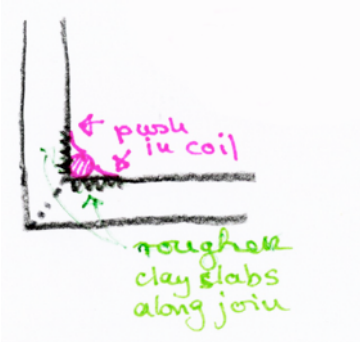
- Firstly, slightly scrape over the surface to remove any pattern left by rolling out cloth. It also helps you to check whether there are any air bubbles in the clay and helps to compress the clay.
- Prior to constructing a pot out of slabs these can be textured.
- Trimming leather hard slabs is much easier as the clay won't distort and they will retain their shape.
- When joining two slabs at an 90° angle you get a much stronger bond when you mitre the adjoining pieces at 45° as it is has a larger surface area to bond. You can use a knife to cut or a shredder rasp. Another advantage to this is that your pattern isn't interrupted and can continue around the corner.

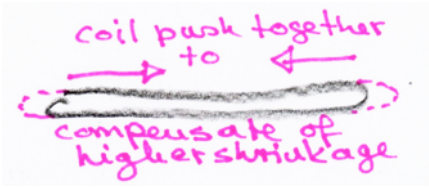



TIP:Use the same rolling out guide to mark up the 45° cutting line for the joint:




- Roughen up the edges and paint these with thin slurry.
- Butt the two pieces together and press lightly together all along the bond.
- Let the slurry firm up a bit before doing anything else.
- To make the joints even stronger support them from the inside with thin coils. Lightly cross hatch all along both sides of the inside joint and brush with slurry. Push in a thin clay coil and smoothen out.



- Be aware that the coil is probably wetter than the slabs and take that into account. Don't stretch coils. Rather condense them by pushing them together. This is particularly important when working with porcelain, which has a very high shrinkage.

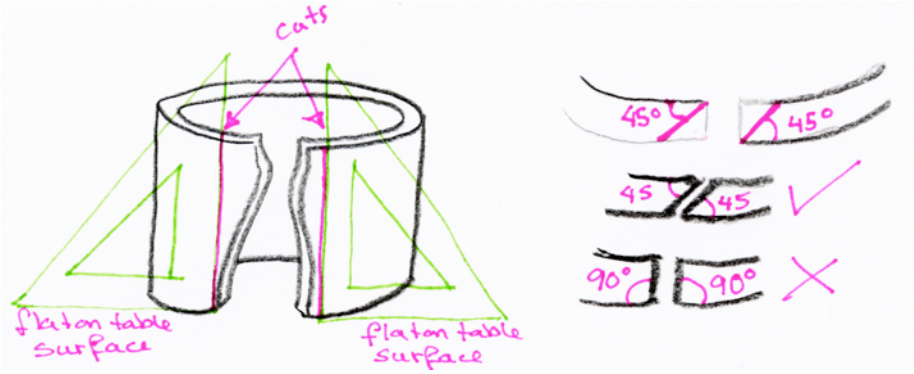
**Using Soft Slabs:**

- Start off by removing texture with a kidney.

- Soft slabs are great for draping over moulds. It is generally a good idea to have a thin cloth between the wet clay and the mould in order to prevent the clay from sticking to the mould.
- When building a vessel Anna very often uses a slightly stiffer slab for the bottom of her pots. However, this means that she is very aware of the different amounts of shrinkages the soft and harder slabs will have and factors this into her way constructing pots, i.e. the softer slabs are going to shrink more than the drier slabs. Thus you want to prevent the softer slabs pulling away from the drier ones and weakening their joining. Instead she makes sure the softer encase the drier ones. This is how she uses this to her advantage with Butt Joints.

TIP: For joining two pieces of upright slabs together, such as in a round cylinder:

Use a set square to ensure both cut lines are 90° to the table surface. And make sure that the joining cuts are cut or rasped at 45°.



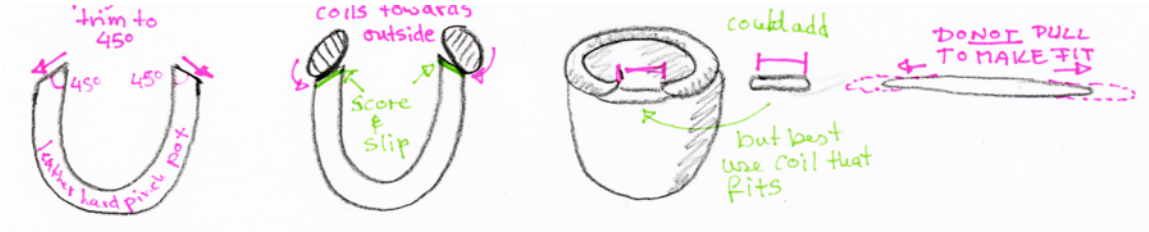

PINCH POTS

- The shape of your lump of clay should be roughly the same shape as the pot you are planning to make.
- Open up your pot with your thumb. Create a pot by squeezing and pushing the clay at the same time between fingers and thumb. Make duck-shaped hands and not round pinch pincer-shaped hands.

- When the pot gets too floppy let in dry to a more leather hard consistency. Then you can do some more pinching or beat or scrape it into the shape you want it. To get a nice smooth finished surface use a rubber kidney tool.

**Adding Coils**

- You can roll your own coils. Make sure you don't put to much pressure on them and reduce pressure at the end of your rolling motion and when lifting your hands or otherwise they will flatten out and cannot be rolled again to make smaller coils. However, many people will purposefully pat their coils flatter for use to gain more instant height to a pot.
- When trimming your leather hard pinched pot ready for adding coils make sure to cut the top at an 45° outwards sloping angle. Again this will strengthen your bond between wetter and drying clay pieces.
- Score and slip as usual and add the slightly wetter coils to the outside. Make sure not to stretch the coils. If they are too short, choose a longer one or add an extra bit of coil.
- Seal the joint on the outside and then on the inside.




- Once that is done you can pinch the added coils and achieve extra height that way. After about adding three coils you will probably have to let the pot firm up again before continuing to add more coils.

Demonstration by Wendy Lawrence

Wendy uses Earthstone PF540 – it is heavily grogged and works well for her rough textures and large sculptures.

According to Scarva's website:

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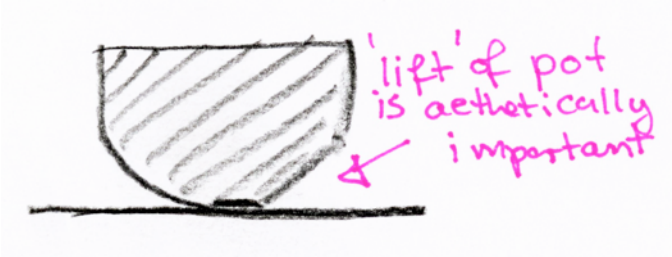
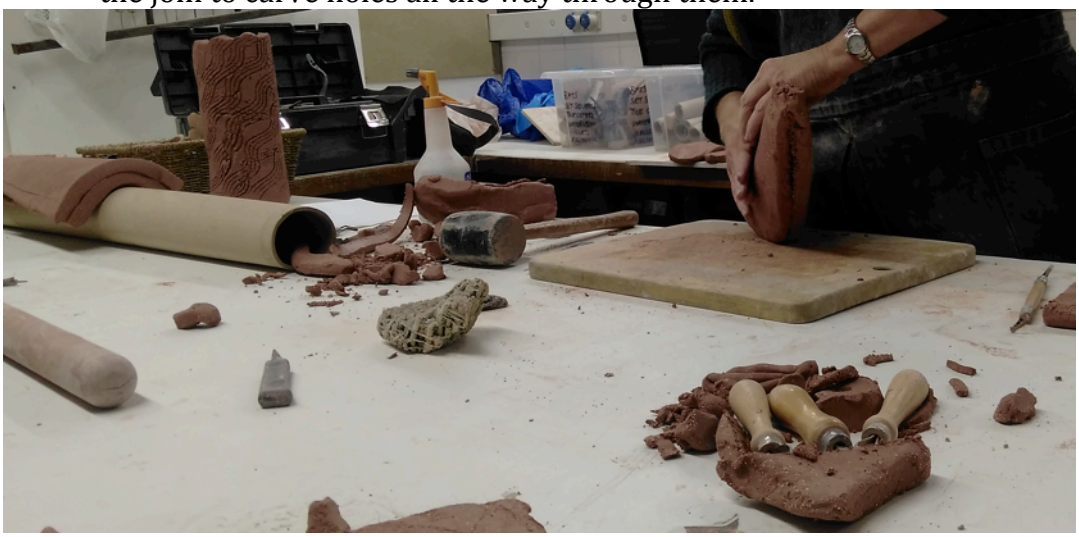
| Firing Temp 1220-1310°C<br>PF540<br>A heavily grogged, coarse crank clay dev-eloped for Jim Robison. This body has all the elem-ents to allow the maker to produce large textured sculptural pieces. Made from highly plastic, iron bearing ball clays, it offers low shrinkage and is ideal for ceramic murals and figurative work. This body is suitable for oxidising or reduction atmospheres. |

- Wendy does not wedge the clay up but uses it directly from the bag. For her "Clay-Time-Management" is the most important part of working with clay, i.e. making sure that the clay has the correct moisture content which determines its correct consistency for the job planned. It may mean taking out an entire solid block clay out of the bag days before working with it.
- She uses leather hard clay for her carved pieces. And clay-moisture management is critical for this.

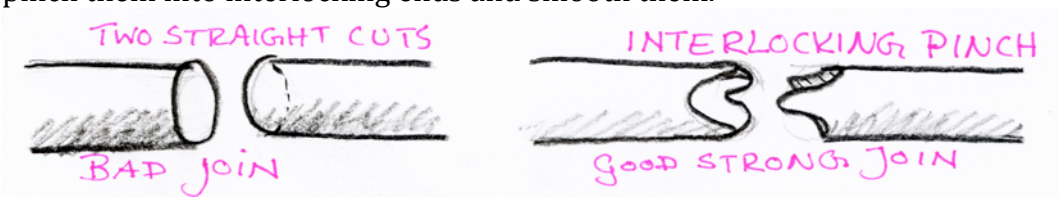
- First of all she shapes the bottom/foot of a solid piece of clay. It is important to give the piece of pottery 'lift', i.e. let its line not run directly into the surface it is standing on.



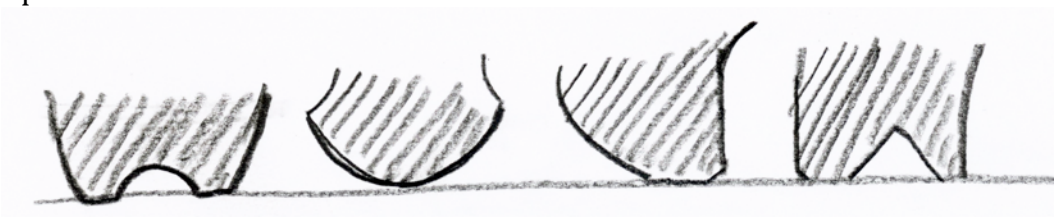

- Then she gouges out the centre of the clay.
- Textures can be created with all sorts of found objects such as coral or stones etc.
- When joining different parts of clay together she generally scores both surfaces heavily with a fork and just moderately spray wets both sections. She warns about not adding too much water to the clay body when joining.
- Joining thick slabs together and pinching them even leaves enough clay at the join to carve holes all the way through them.



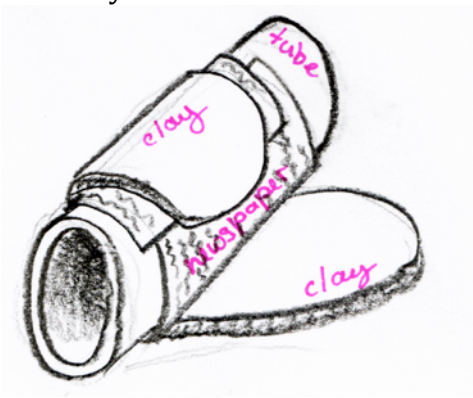
- In order to join the ends of coils together she will not score and slurry but pinch them into interlocking ends and smooth them.

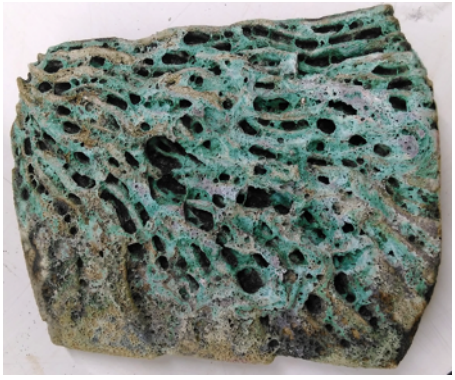
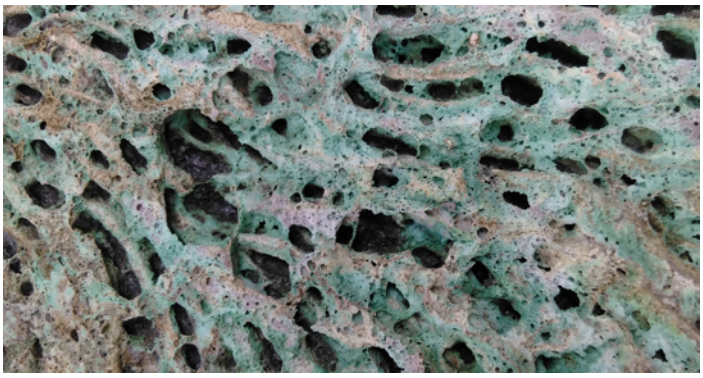



- Consider different style of basis and also different style of rims to finish off a pot.



- When using a cylinder to wrap slabs of clay around make sure that:
  1. You wrap a sheet of paper over the cylinder to avoid the clay sticking to the cylinder & don't wrap the paper too tightly.
  2. Neither wrap the slab of clay too tightly around the cylinder – remember the clay will contract and shrink when drying.




Here is one of Wendy's pieces. It has layer upon layers of ozides and slips and glazes but only gets glaze fired once. All holes are hand carved but the glaze will create air pockets which burst.