

WOOD + LATEX

**ALLES WISE
3D DESIGN AND CRAFT
2017**



WHAT IS COMFORT?

RELAXATION


INDULGENCE



COMFORT

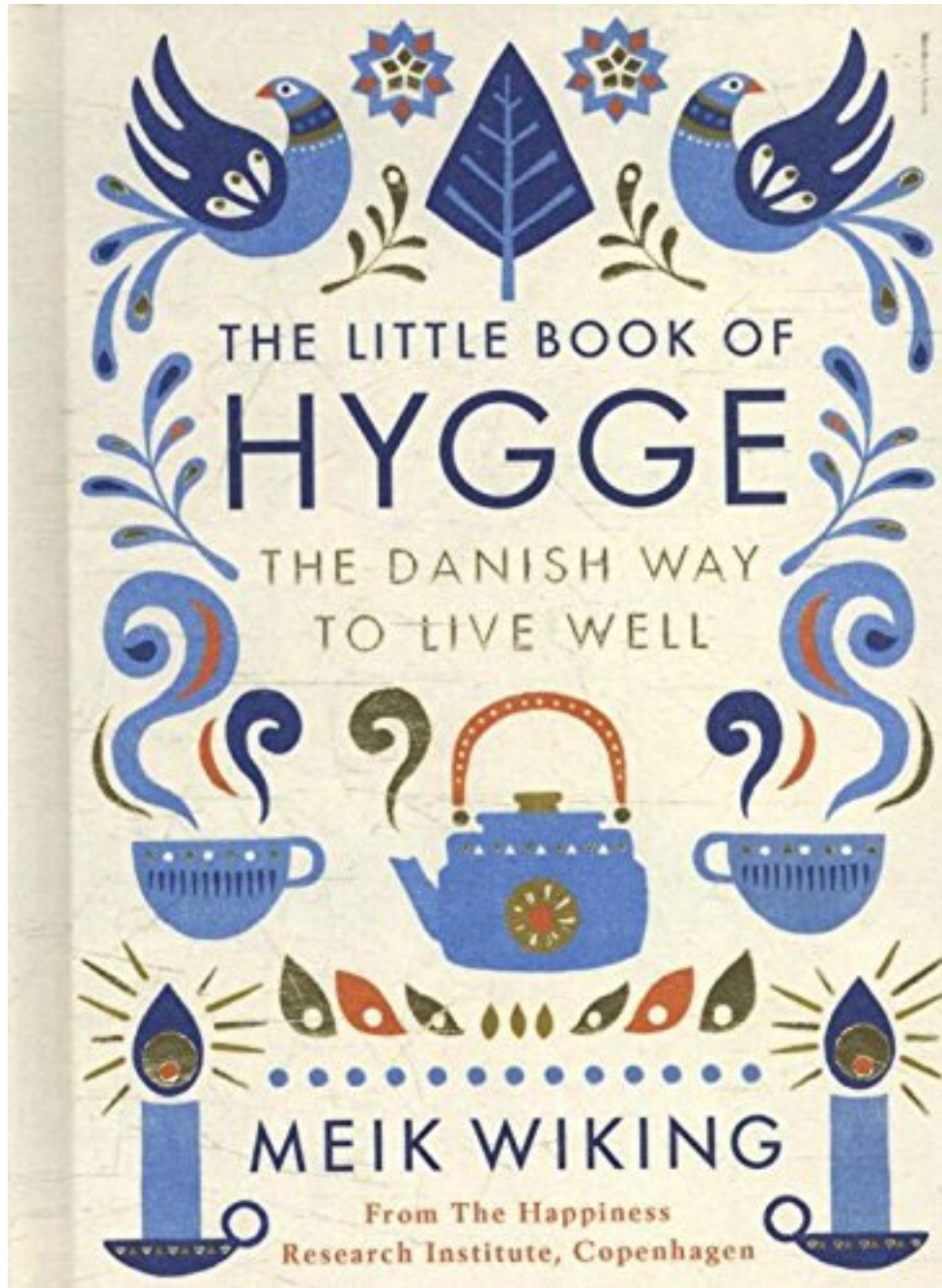
Comfort can often be seen as incredibly indulgent and often a wasteful pursuit. In the current status quo, to be in comfort almost necessarily means being wasteful; almost to the extent that society has indelibly associated wasteful living with the idea of being 'comfortable'. By creating the objects that we feel are necessary for comfort from the very materials that are wasted in industry and producing necessities, comfort no longer comes at the expense of anything, but as a result of the progressive and utilitarian production of items that people genuinely need to live.

comfortable

/ˈkʌmf(ə)təb(ə)l/ 

adjective

1. (especially of clothes or furnishings) providing physical ease and relaxation.



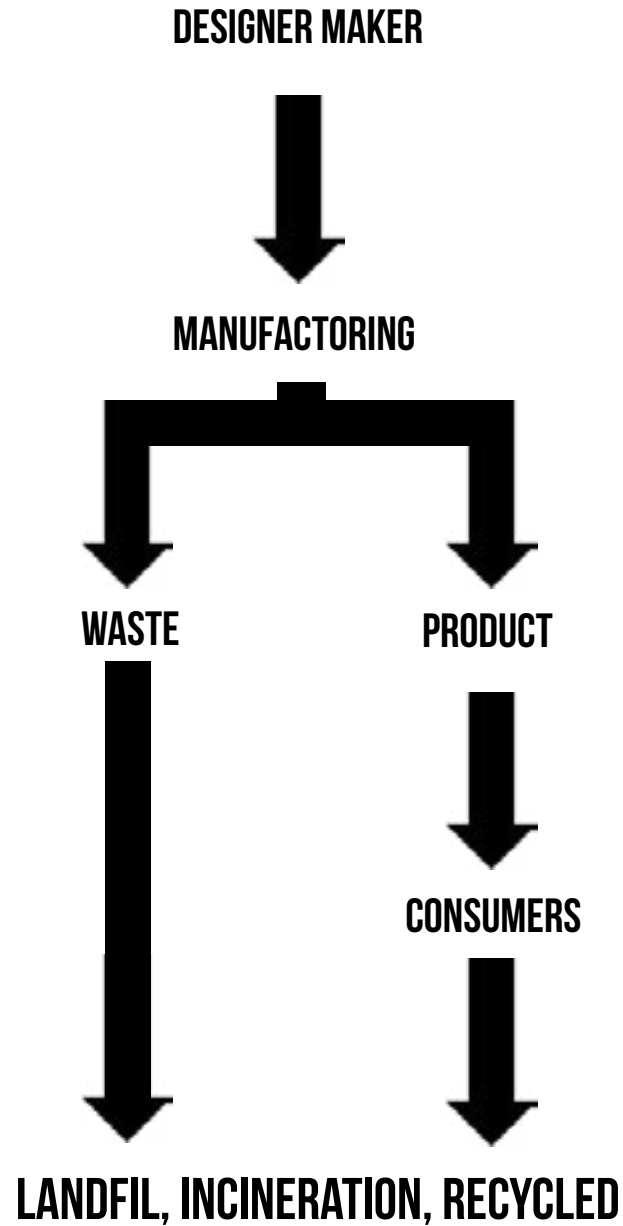
There has been an increasing amount of well-being advice being produced that aim to make peoples lives happier by taking a moment in their day to relax. The little book of Hygge talks about creating an atmosphere that helps you to live well.

With books like these becoming more and more popular, more are being produced. Manufacturing starts from cutting down timber and waste ends up in our environment.

What if we could use the waste from necessities manufactured into products that are brought?

“HYGGE IS ABOUT AN ATMOSPHERE AND AN EXPERIENCE, RATHER THAN ABOUT THINGS.”

CURRENT CYCLE



NEW CYCLE

DESIGNER MAKER

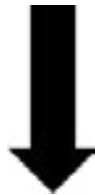


MANUFACTURING OF NECESSITIES




WASTE

PRODUCT



SUSTAINABLE PRODUCTS

minimalism

/ˈmɪnɪməˌlɪz(ə)m/ 

noun

1. a movement in sculpture and painting which arose in the 1950s, characterized by the use of simple, massive forms.

BY-PRODUCT AND MATERIALS

NO PARKING
ENTRANCE IN
CONSTANT USE

SLIDE OPEN →

NO PARKING
ENTRANCE IN
CONSTANT USE





At the start of my project I observed my waste as a 'designer maker'. Identifying what by-products were created when I was making.

I identified that in the wood workshop that the waste from the extraction was not recycled as it was contaminated due to the use of MDF.

On closer inspection the wood chippings that was created as a by-product of the designer maker were not contaminated and were left in their natural state. I often found these were put in the bin to be thrown away and not reused.

With the different techniques used to create the wood chipping, different characteristics were formed in the chippings.

Hand carving into wood created much bigger chunks of chipping that held their curved shape well

Planing the wood created a finer curled shaving.

Finally turning on the lathe created a finer dust like chipping, similar to the sawdust created by the extration in the workshop.



MDF

Medium Density Fibreboard is a man-made wood-based sheet material made by bonding together wood fibres with a synthetic resin adhesive.

It is made by combining wood chippings with adhesive that is then compressed into sheets. Excess is then cut off and cut into boards that come in different thicknesses and sizes.

MDF has replaced solid timber as a low-cost alternative in a wide range of applications across industry but cannot be recycled due to the adhesives used in manufacturing.

LATEX

Natural latex comes from the rubber tree. It is collected by tapping the tree which involves removing part of the bark on the tree.

Latex is a sustainable alternative to adhesives that are found in MDF. It naturally bio degrades with a life from 6 months - 3 years.



MATERIAL EXPERIMENTS



WOOD CHIPPING + PVA GLUE, COMPRESSED UNDER A BOOK PRESS.



WOOD CHIPPING + RESIN



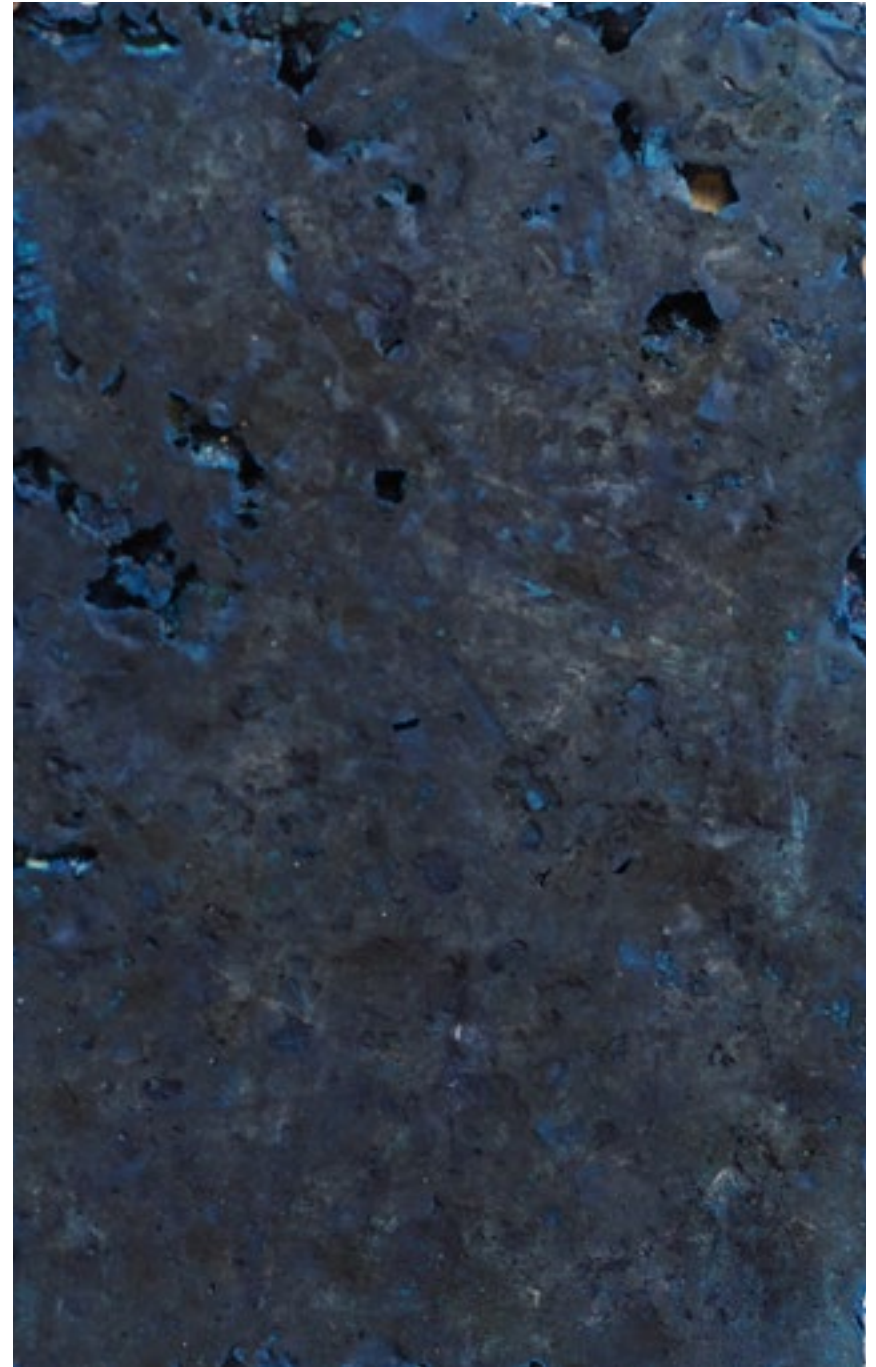
WOOD CHIPPING + LATEX

COLOUR TESTS

I tested colouring the new composite with latex colouring and acrylic paint.

Latex colouring created strong bold colours. The main colours that are manufactured for colouring latex are primary colours. Red, Green, Blue and Yellow.

I decided to not add colours to the latex for my final pieces as it was not a necessity.



In early experiments with combining wood chipping and latex I learnt that by using a plastic mould only the surface to the air would dry. When trying to remove it from the mould even after a nights curing the top surface would remain wet. I would then need to remove them from the mould to allow the air to cure the combination of materials. This created a organic look to the wood chippings and a unfinished look.

To resolve this issue I created a mould in plaster. By using a plaster mould it helped the curing process by removing the moisture that is in the latex. Therefore making it easier to remove from the mould as the materials had fully cured after 24 hours.



1. DOME FORM



2. DOME FORM + BLACK ACRYLIC PAINT

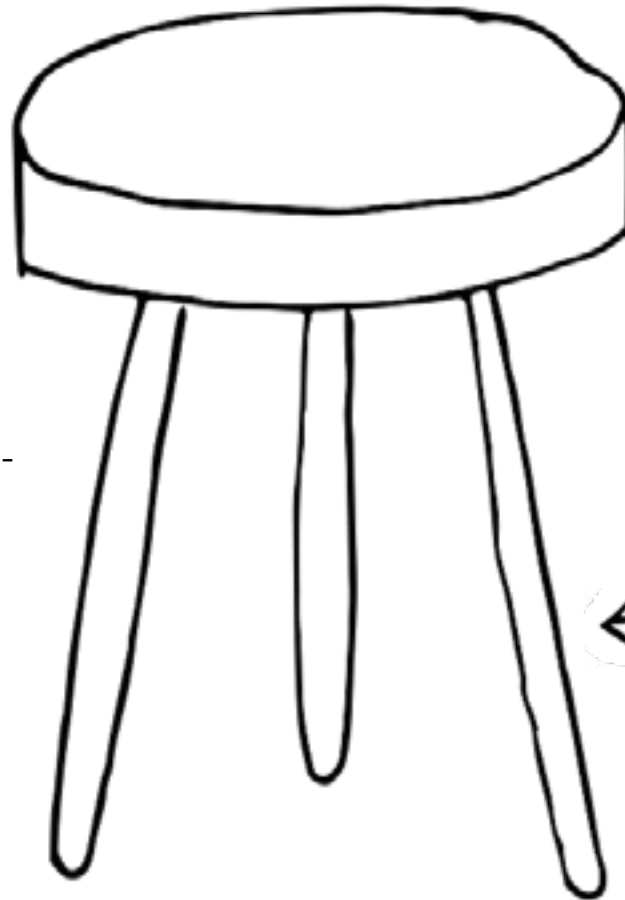


**3. THIN LAYER OF
COMPOSITE IN
DOME FORM**

Experiments with dome forms.

These tests managed to hold the structure whilst I stood on them, the dome with black acrylic paint added was less structurally sound.

Seat of stool made from wood + latex.



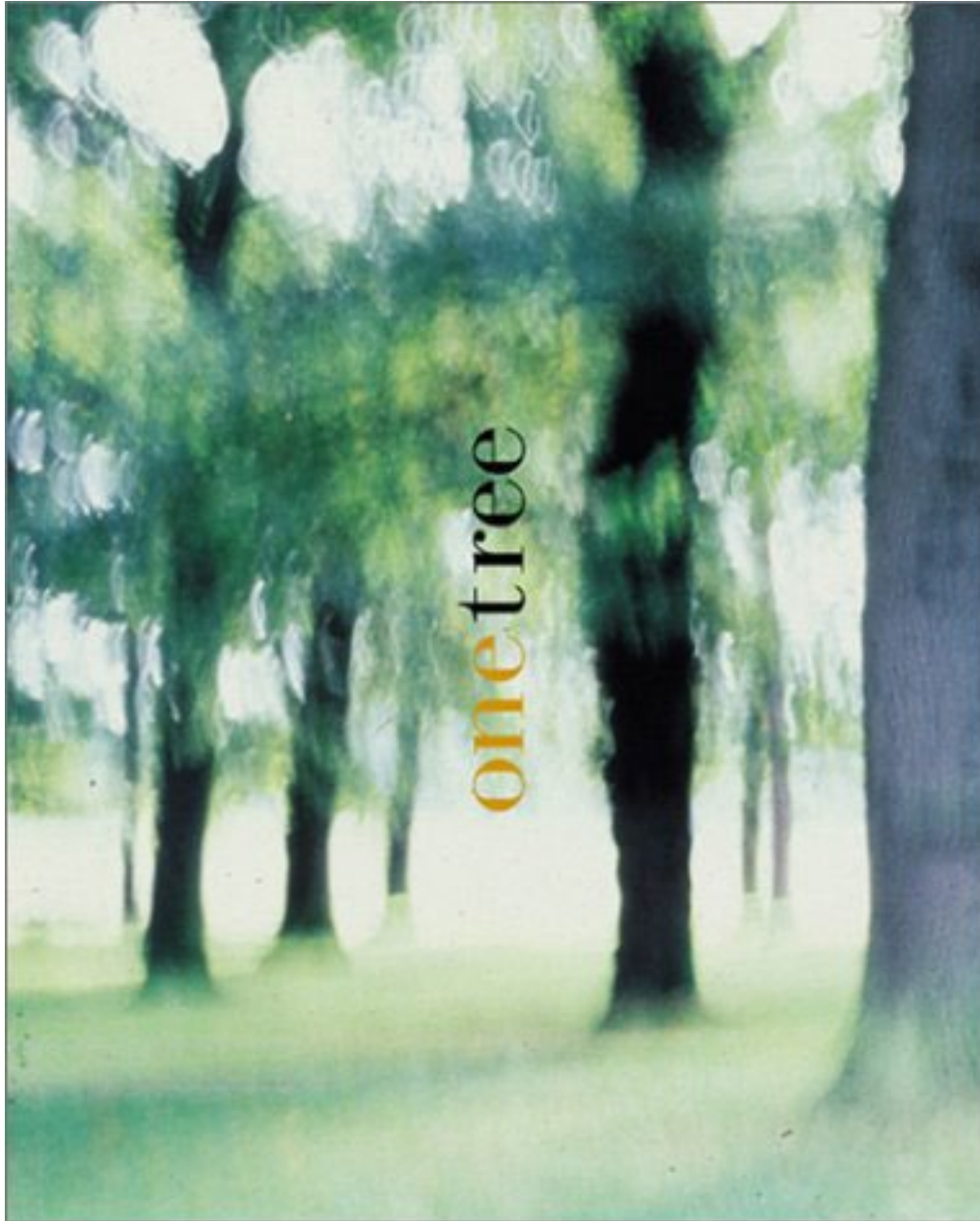
The waste created when turning the legs can then be put into the top of the seat. Adding comfort to the stool.

A minimum of three legs are needed to make the stool stable. Why add a 4th when 3 are only needed to balance?

Simple straight form.

Legs locally sourced ash wood.





One Tree
by Garry Olson, Peter Toaig, Gary Olsen.

One tree is about a project in 2001. The project was to use all parts of a tree that was cut down. Different artists and makers got given different parts of the tree to use.

CUSHION SEAT.

Made in two parts from wood chipping and latex. Both parts are then joined together with latex. Continuing same form as stool seat.

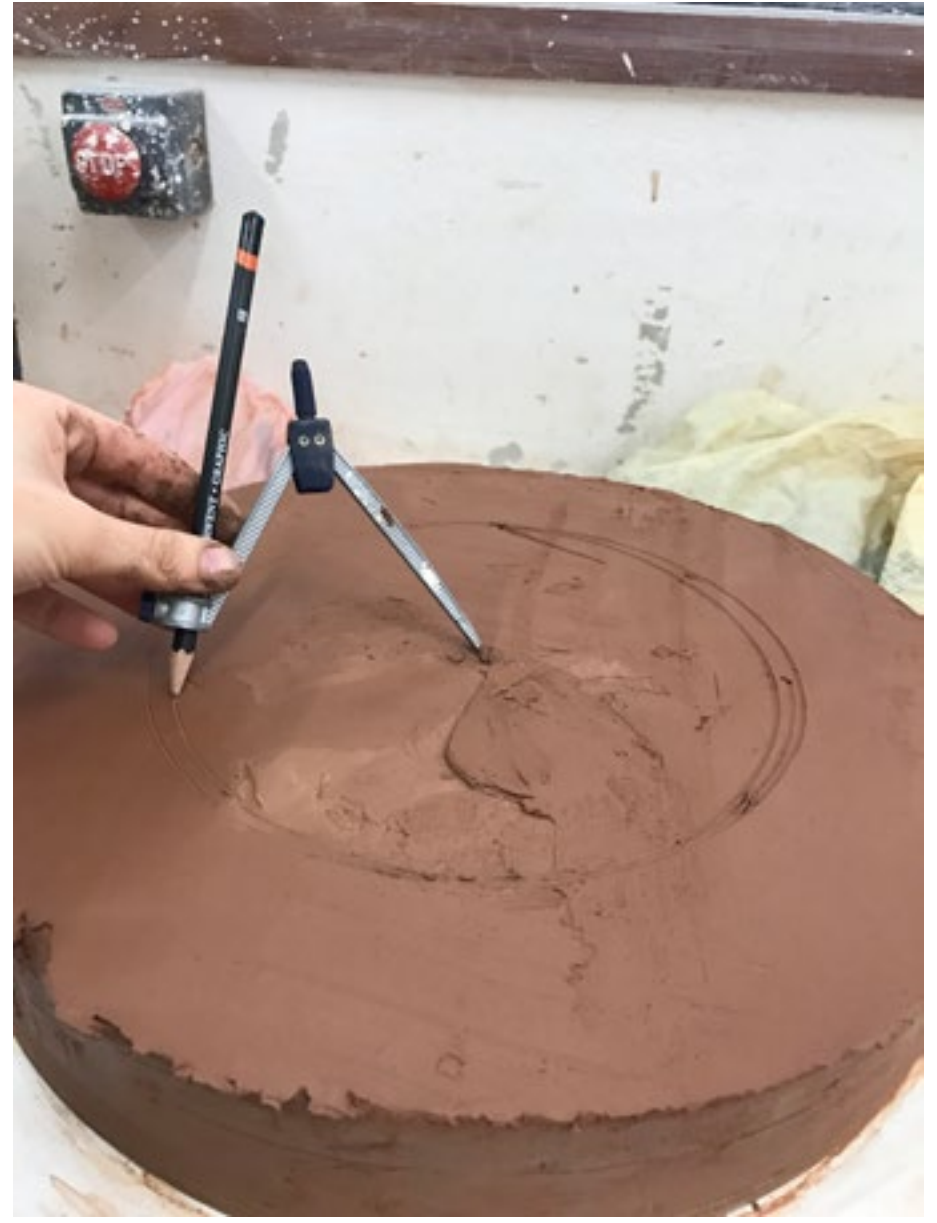
To be used as a floor seat.





PAVILION GARDENS, BRIGHTON AND HOVE





To create a 'dip' into the stool seat I used a compass to measure the correct distance using the centre point from wedging the clay to form the master of my stool seat top.





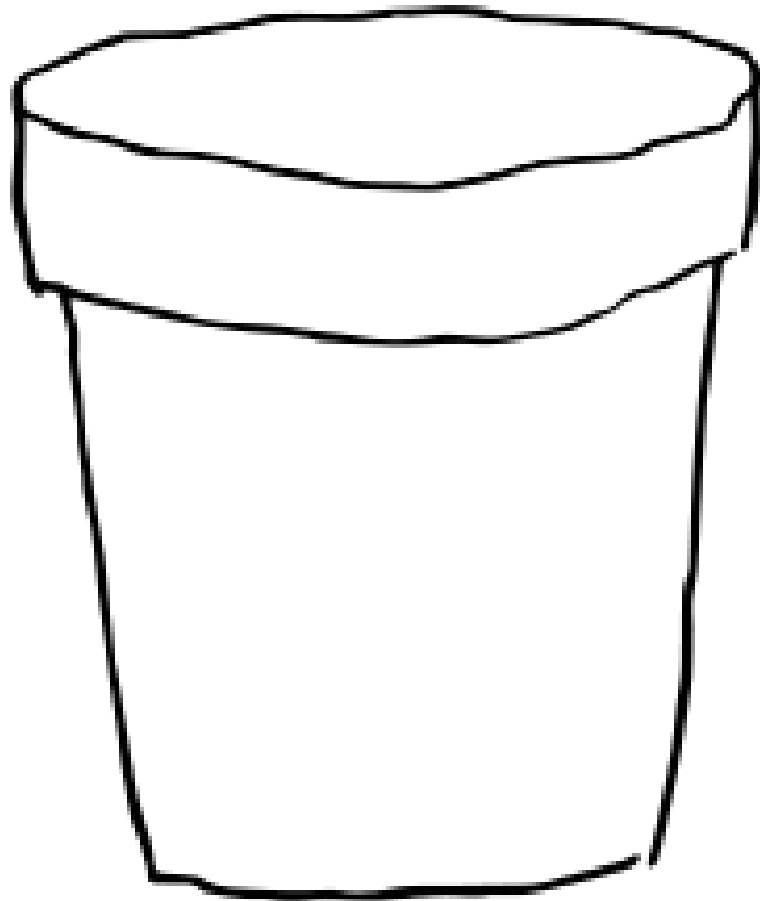


When casting the mould I compress the edges to create a flatter surface. This gives the products a cleaner and more finished look.

CURING TIME

It takes 24 hours for the wood chipping and latex to fully cure. Although it is possible to remove the cast after a few hours the latex has not fully set and can then lose its shape or even break.

As the latex cures you can see the cast slowly come off of the plaster mould.



9" PLANTER

When completing material tests I found that water was able to naturally run through the new composite.



4" PLANTER





FINAL PRODUCTS



STOOL



4" PLANTER AND SAUCER

9" PLANTER



