Design Portfolio
11221 Architectural Design: Strategy

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WAX [DIPPING & POURING
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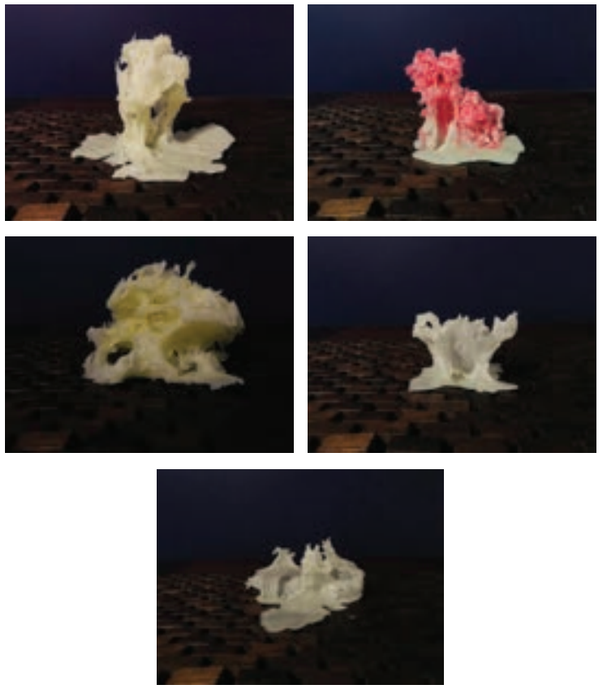
Material Fragment



Fragment Analysis 2 -

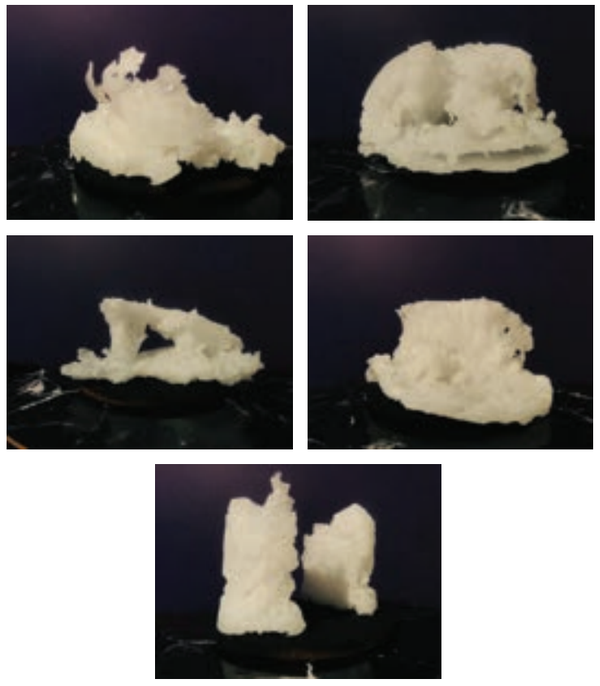
The larger created sets allow for the capability of spatial forms to appear through careful control methods. The utilisation of four times more wax further allows for the appearance of structural columns that support the structures from differing points, whilst allowing for internal space to be partitioned as a result. The manipulation of wax under experimental method controls had been realised, resulting in the necessity for fragment layering to be introduced. This resulted in the necessity to introduce gelatin at a larger scale.

Ingredients: - 500g Pillar Candle 68mm x 150mm
- 3L Mixing Bowl (Water 18ºc 2.5L Filled)
- 3 - 250ml Cups (Filled evenly)
- 700ml Stove Pot
- 400ml (Water 18ºc)
Mold: - 1.5L Mixing Bowl
Method: - High, 60cm Free-Hand Pour Triangulation, converging
Steps: - Melt 500g of wax into stove pot on low heat
- Once immediately melted at 40ºc pour immediately into 3 250ml cups to even fill
- Fill 2.5L into 3L mixing bowl with 18ºc chilled water
- Individually pour each cup at a 60cm height, free hand into the mixing bowl. each in a
triangulated, converging to centre pattern
- Shake the bowl continually, whilst slowly adding 400ml of 18ºc water to settle the wax

Fragment Analysis 1 -

The initial fragment pours involved small scale experimentation into the form capability of paraffin wax. The experimentation illustrated the controlled results of early material binding through gelatin and wax, with further conclusions of structural potential through ceramic plate and bowl dips. The results of these experiments allowed for an insight into the necessity to control form through specific techniques of method manipulation, illustrating the requirement to create a dynamic process of creation, being the constant change of ingredients, molds, methods and steps of application. The further essential element of design is thought within the importance of scale as well as the operation of wax when utilised on a larger scale. Therefore by doing so, all elements of design will need to be scaled up in order to accommodate for the new experimentation models.

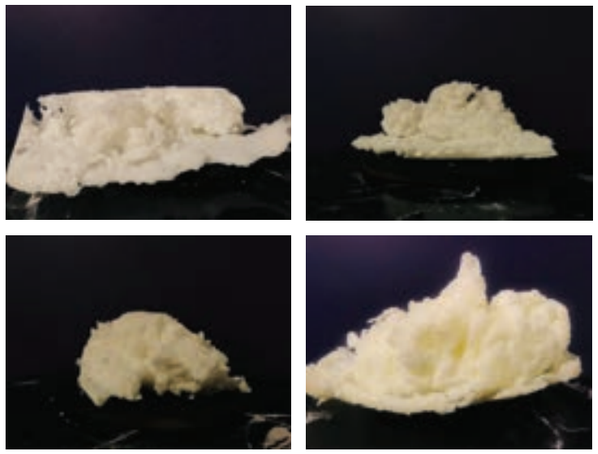
Ingredients:
- 100g Pillar Candle 68mm x 150mm
- 120mm Diameter Ceramic Cup
- 175mm Diameter, 150mm Deep Bowl (Water 18ºc Filled)
- 700ml Stove Pot
- Safety Gloves
Mold: - 175mm Diameter, 150mm Deep Bowl
Method: - Quick drop into deep bowl
Steps: - Melt 100g of wax into stove pot on low heat
- Once immediately melted pour immediately into the 70mm Diameter Ceramic Cup to fill
- Wearing the safety gloves, quickly drop the 70mm Diameter Ceramic Cup into the 175mm
Diameter, 150mm Deep Bowl (Water 18ºc Filled)
- Wait 4 - 5 minutes for the wax to cool and settle
- Remove the mold

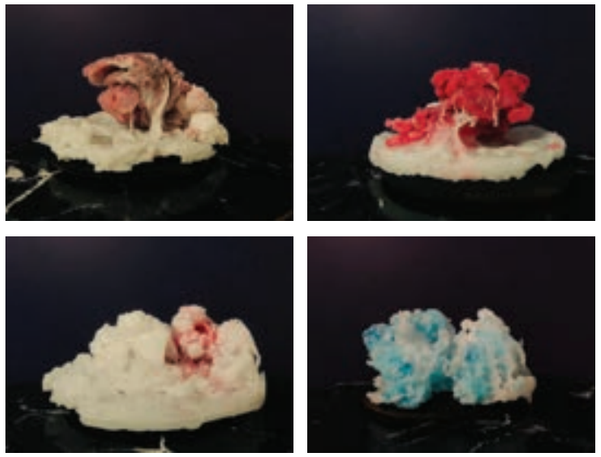


Fragment Analysis 3 -

The introduction of gelatin doesn't completely mix within the wax, reprimanding any form of material solubility, resulting in a series of quick mix pours. The resulting structures become considerably stronger and more dense, whilst retaining more internal water. The structures however lack the internal structural necessities to be considered habital space as well as having a specific control method that can efficiently and effectively pour the wax. This insight brought about the necessity for armature research and development.

Ingredients: - 500g Pillar Candle 68mm x 150mm - 3L Mixing Bowl (Water 18ºc 2.5L Filled) -
700ml Stove Pot - 400ml (Water 18ºc) - 170g A. Jelly (Gelatin) (2 packs Red) - 600ml Plastic
Vertical Container - 200g Pillar Candle 68mm x 150mm - Mixing Spoon
Mold: - 3L Mixing Bowl (Water 18ºc 2.5L Filled)
Method: - High to Low pour from 600ml Container into Mixing Bowl
Steps: - Melt 700g of wax into stove pot on low heat, only use 400g - Once melted, free pour
400g wax into 3L mixing bowl (Water 18ºc) - Use the remaining 300g of wax to pour into 600ml
Plastic Vertical Container - Once melted wax is contained, add 170g of Gelatin (2 packs) to the
wax mixture and mix vigorously
- Whilst mixing, begin to pour the mixture into the 3L mixing bowl which containers semi-settled
400g of wax. Pour the mixture from a higher point and begin to lower.
- Pour 400ml (Water 18ºc) slowly into the mixture whilst shaking to allow residual hot wax to
settle before taking from the mold.



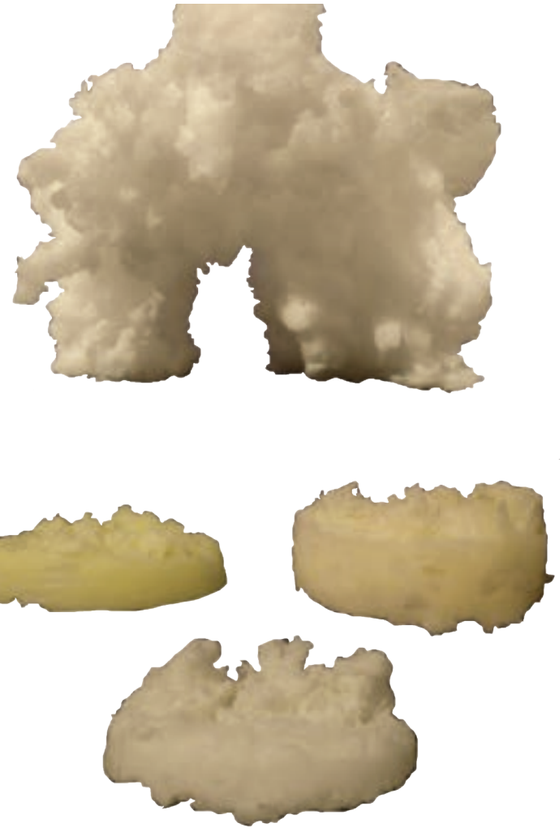


Fragment Analysis 4 -

The final experimentation designs utilised severly different methods of creation in order to achieve and internal, column space. The previous models had been essential in understanding the materiality, however vary considerably in success depending on the methods used which were constantly changing. These designs introduced the drastic change in mold, tempreture and specific pouring methods, this was utilised in order to confirm any final material speculations before intiating use of the armiture to create the final spectrum of models. These experiments confirmed certain control methods in order to achieve a stable spatial construct, as well as the primary amount of wax necessary to achieve the perfect structural scale. The final implementation of gelatin would be added within the final models in order to confirm effect of gelatin on the structural form.

Ingredients: - 500g House Hold Singular Candles 190mm - 4L Crumpled, Molded Aluminium
Oven Tray (Water 18ºc)
- 700ml Stove Pot
- 300ml (Water 18ºc)
Mold: - 4L Crumpled, Molded Aluminium Oven Tray (Water 18ºc)
Method: - High, 60cm Singular Free Hand Pour
Steps: - Melt 500g of wax into stove pot on low heat
- Once melted, allow for 1 minute to pass with wax still burning
- Begin the high, 60cm singular free hand pour into the Aluminium Oven Tray
- Allow the melted wax to settle for 2 minutes
- Once semi-settled, begin to slowly add the 300ml (Water 18ºc) to the top of the tray whilst
shaking.
- Allow to completely settle before removing the wax from the mold.

Material Fragment



Fragment Analysis 6 - Pre-Final Fragment

The creation of this model provided a significantly intriguing internal dynamic with column-wall structures surrounding the construct. The additional of gelatin through the pouring method allowed for internal structural rigidity as well as contribution towards material layering. However instances of uncontrolled issue did occur, significantly within the capability for adequate roofing as well as complexity of entering and exiting the internal space, which itself presents problems of difficulty regarding the small size and depth of the internal cavity. Therefore the necessity to disregard the capability of gelatin became apparent with capacity to fully realise the potential of previous models, specifically the three column creation which included all aspects of essential structure. The price of constant experimentation had resulted in the capability to accurately predict the result of created structure when made through the armature. The necessity for columns provided a structurally logical comparison to modern pavillions that require support from three different locations, in order to hold up the load within the roofing.

Fragment Analysis 5 - Final Designs

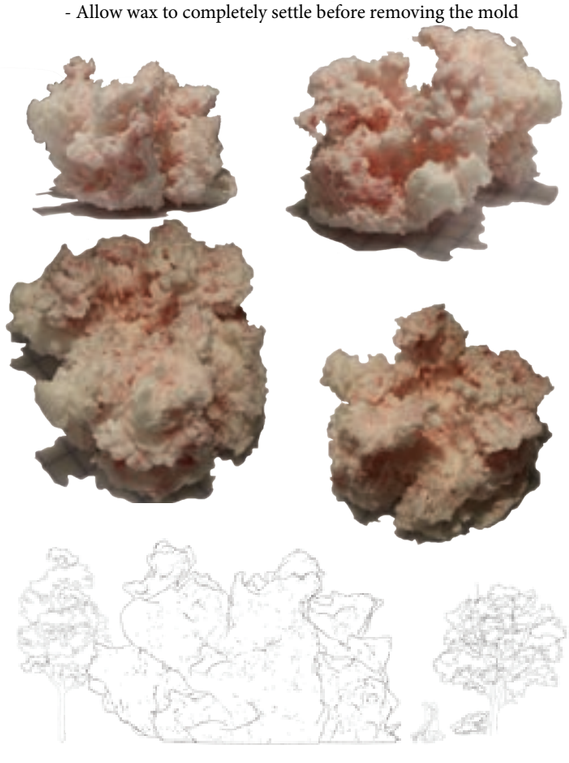
The utilisation of the armature allowed for a consistent control over the creation of all further models. The aspect of the variability was within the decision to change the specific methods or ingredients, as well as positioning of the nozzles in order to achieve the desired space. The intial three pours resulted in the creation of flat structures without coloumns or internal habitable space. However the final pour, with decision to change the varied height of positioned pour, created coloumns and space.

Ingredients:
- 3 x Pillar Candle 68mm x 150mm (Unscented)
- 25L Industrial Plastic Vertical Bucket Mold (5L Filled, Water 8°c)
- 2L Stove Pot
- 1L (Water 18°c)
- Plastic 1L Container (Water 18ªc)
- 3 x 2L Plastic Bowls

Mold:
- 25L Industrial Plastic Vertical Bucket Mold (5L Filled, Water 8°c)

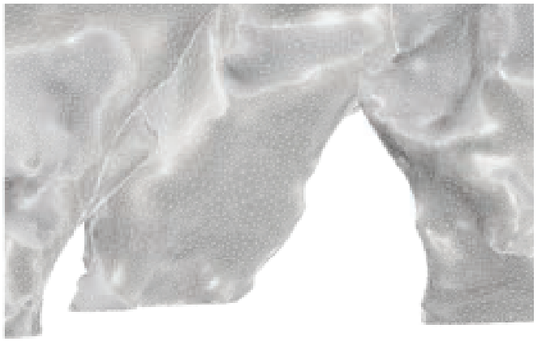
Method:
- Armature Funnel Pour, Three Locations with Extended Nozzle into 50L Industrial Metal Bucket Mold (Water 18°c)

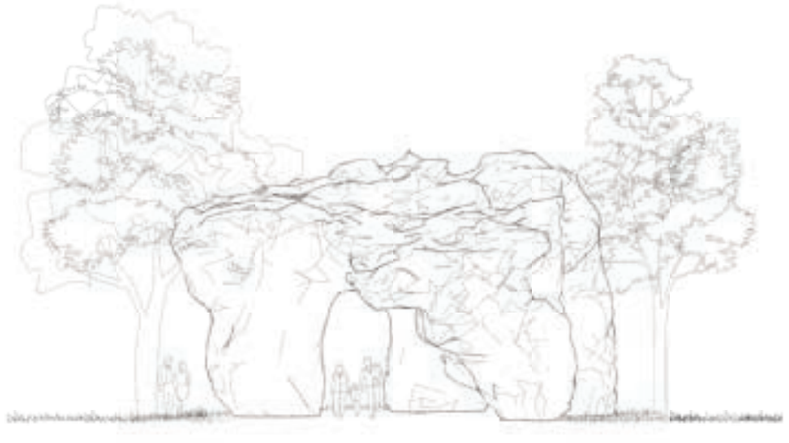
Steps:
- Melt 3 x Pillar Candle 68mm x 150mm (Unscented) of wax into stove pot on low heat
- Once melted, allow for 1 minute to pass with wax still burning
- Fill 25L Industrial Plastic Vertical Bucket Mold with 5L, 8°c Water and place into Armature
- Once wax is melted, pour evenly into 3 of the 2L Plastic Bowls
- Pour one 3 wax filled 2L Plastic Bowls into each of the funnels
- Begin to slowly add the water from the Plastic 1L Container (Water 18°c) into the bucket to help wax settle
- Allow wax to completely settle before removing the mold



Fragment Analysis 7 - Final

The final structure contains three main pillars with the main hind pillar beginning to split into two. The additional frontal pillars, specifically the right position has become a structural necssity in order to support the constructed design. The slanted left pillar provides minimal support, however provides access for the capability of a slanted roof which both protects from rainfall as well as provides adequate shading which will become necessity within the contextual confines of Centennial Park. The overall materiality and texture is rough and inconsistent, reminicent of the pours of concrete onto structural meshing. The methodology of creation was similar to that of the fina designs, proving the capability to replicate the structure where necessary based off previous controls. The structure has three entrances and exits, being the main frontal entrance as well as two adjacent smaller pathways. The roofing provides consistent cover and shade whilst the internal space being large enough to contain limited amounts of people within one specific time. The analysis into the matriality shows the true capability of wax when testing the boundaries of it's material limits. The capability to create a unique structural pavillion was a result of many failed and successful experiments that ultimately resulting in the creation of a purposefully designed armature as well as specific methods of creation that ensure similar results.

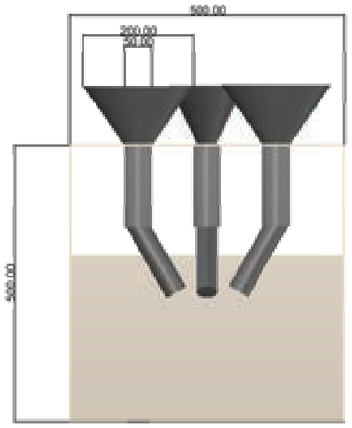


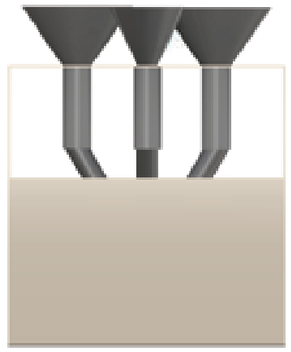


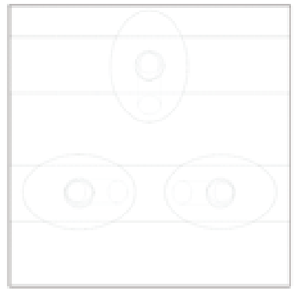
Material System Apparatus

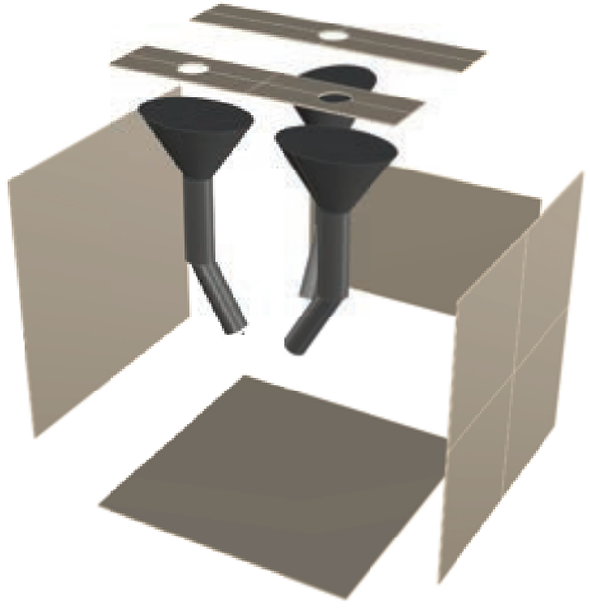
Material System Apparatus:

The apparatus used to create the final designs was initially designed with the potential to create columns through angulation of the funnel systems. Through the manipulation of specific variables, like amount of water or height of the funnels, it became fully realised as a material system apparatus rather then final replicated prototype. The addition of fully enclosed plywood sides ensured the saftey of the conductor whilst being constructs to hold the upper panels in place above, which as moveable. The funnels themselves have three different forms which include the extended long nozzle, mid length nozzle and short nozzle. Through utilisation of each it became apparent that in order to create specifically targeted columns that the longest nozzle would be superior. The mold utilised was a metal bucket that had an overall capacity of 50L, which is a significant jump from the first inital experiments which had a maximum capacity of 100ml to 200ml. The one remaining issue however is the inclusion of human error which is capable. If complete care is not taken into the timing, length of the pour or where in the funnel to pour the final result can be significantly altered. When care is taken then the results are suprisingly predictable with the ensurance that resulting models will maintain columns, However the potential for extensive column implementation isn't probable with three main funnels, therefore requiring the addition of morefunnels. By increasing this number, the spatial dynamic within 500mm x 500mm becomes extensively cramped and in-operable.





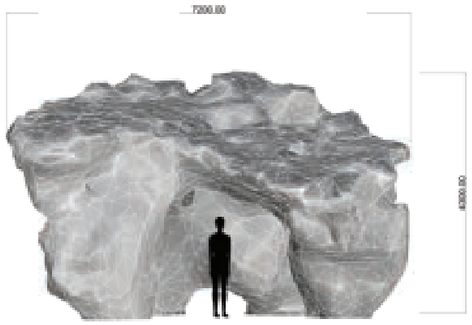


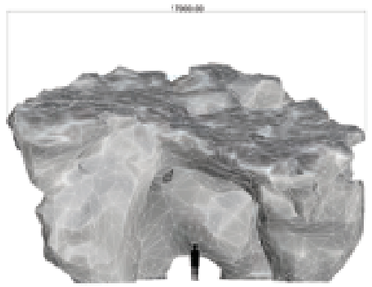


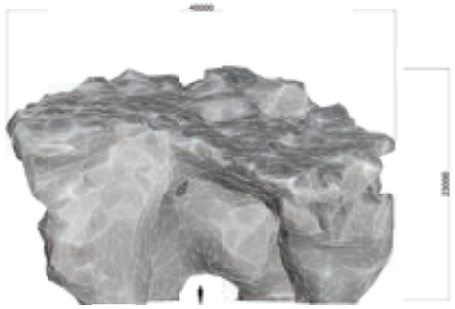
Diagrammatic Strategies

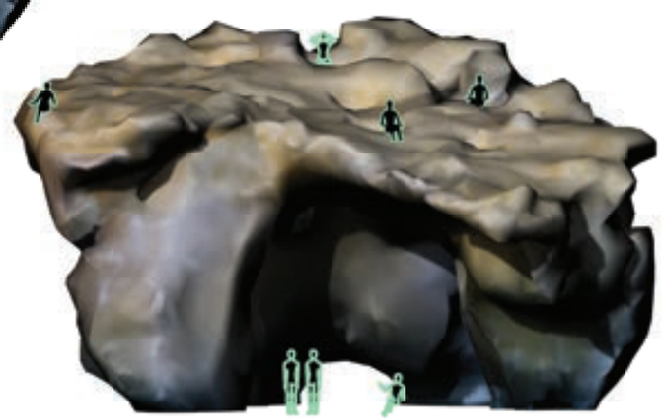
Diagrammatic Strategies: Scale -

The initial strategy of diagramming the final model resulted in detailing the complexity of scale. Three major scales were considered based on application of human interaction as well as the structural practicality and contextual relevance. The second and third option, being the two significantly larger proposals resulted in a lack of necessary association and affect between the individual and structure, although grand, the true complexity and interactive capability becomes marginalised by the size of the structure itself, therefore the first option made logical and architectural sense. The structural dynamic between construct and idividual however can only truly be realised through implementation of individuals within that scale, the second option was considered for this to elimate any further doubt. Once placing the people within the structure, it becomes clearly evident of the disparity between human and architecture due almost exclusively to the scale. This supports the first utilisation of scale and shows the necessity for diagrammatic evidence to lead the way for future design prospects.



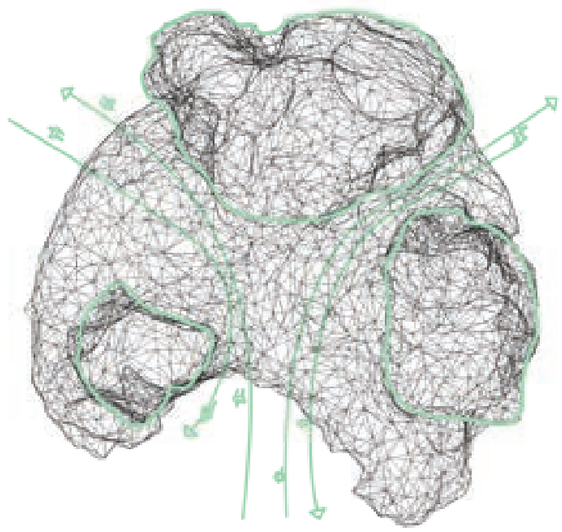


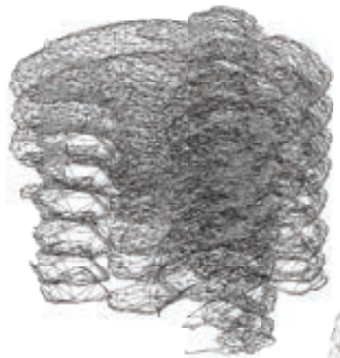


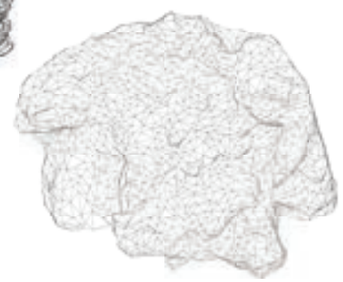


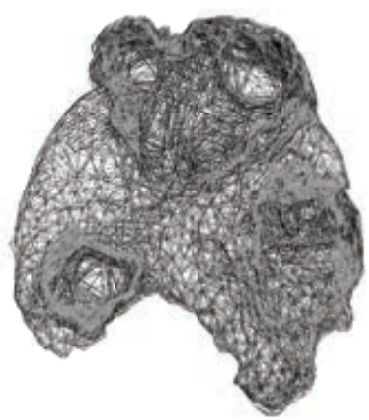
Diagrammatic Strategies: Movement and Structural Complexity -

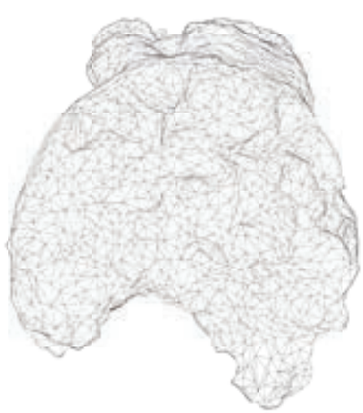
The smaller scale allows for clearer diagrammatic representation of movement patterns within an intimate and unique spatial realm. The three pillars allow for the guidance and shift in perspective around into an emerging area, which within the contextual relevance of Centennial park will allow for three unique differing perspective views. The second diagrammatic implementation is necessity to understand the structural complexity of the construct, in an advance to understanding how the structure is layered through different widths and lengths. This material 'stacking' allows for further understanding into how the internal structure may be made up, where the right side structural column may require adequate bracing beyond the internal wall structures. The final diagram details the significance of the slanted roof, as well as large back pillar which protect against almost all environmental influences specifically rain and significant sunshine. Through detailing this on a larger scale, it became apparent that the success of the structures ability to shield from the elements may be compromised by size, depending on severity and angulation of rainfall.



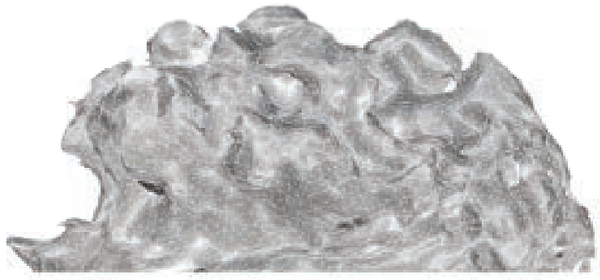


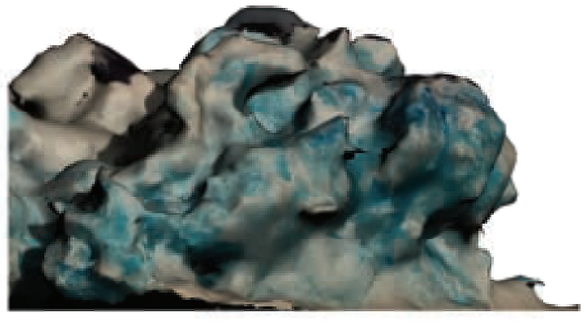






Material Scanning



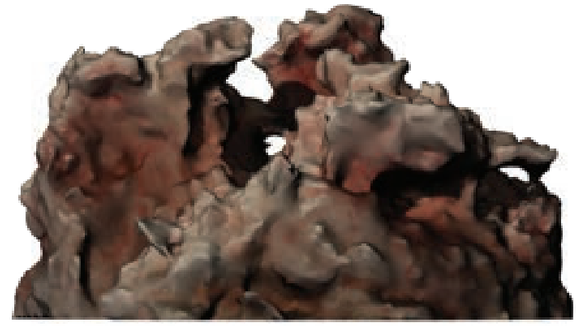


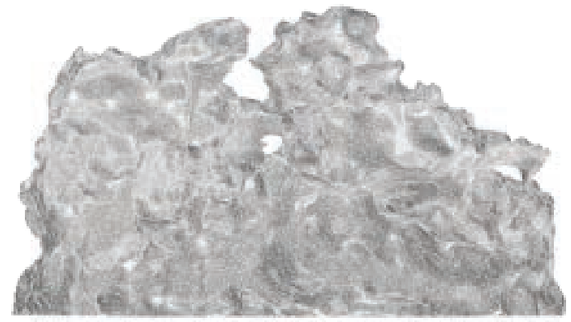
Material Scanning: Experiments

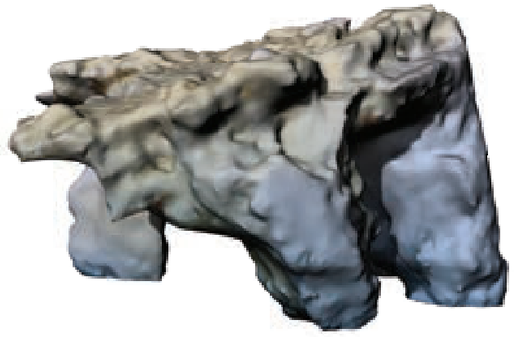
The differentiation between the original model scans throughout the experimentation phase and the gelatin layered scans provided, allowed for a indepth visual analysis of the intracate structural forms gelatin can create. The further influence of gelatin allowed for a greater, more detailed visual understanding of structural depth, as well as adding an appealing aesthetic thats original in design, not result of post design implementation. Beyond the scanning of gelatin structures, the experiments themselves allowed for the ability to understand how to perfect the nature of scanning and understanding the intricacy of wax materiality through the process. Wax itself through the state of model form, contains many small intricate notches which require extensive care when analysing.

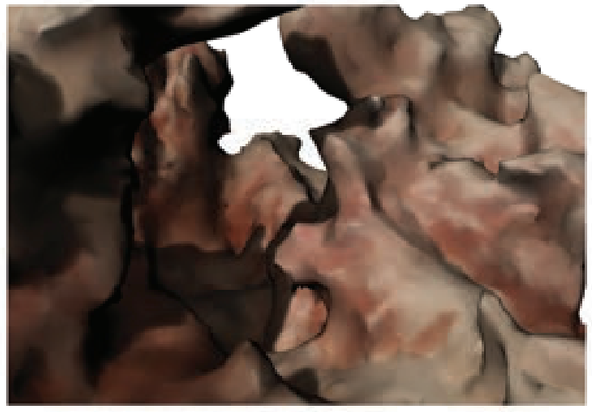
Material Scanning: Final

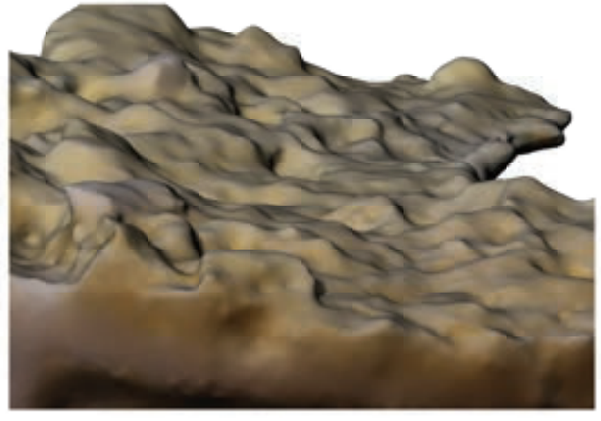
The final experimentation forms required the most care. The pre-final design was intricate throughout the internal and external structure whilst having seperate emerging walls evident throughout. Although the design itself was complex, it didn't contain the required necessary features for adequate internal space as a pavillion. The final design, on the individual mesh level, was considerably more detailed. All the intricate bumps and spots throughout the images are replicated thoroughly within the scans and allow for a further insight into the internal space as well as internal detailed structures. The roof itself is a further example of the level of detailed achieved through adequate scanning.

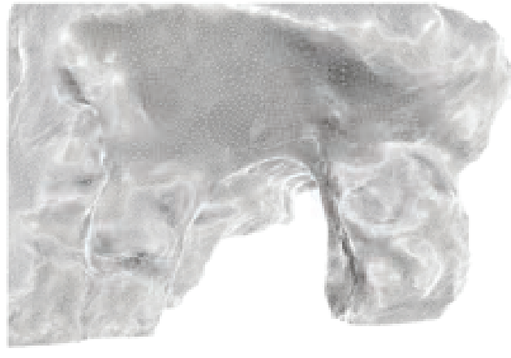












Site Plan

1:500

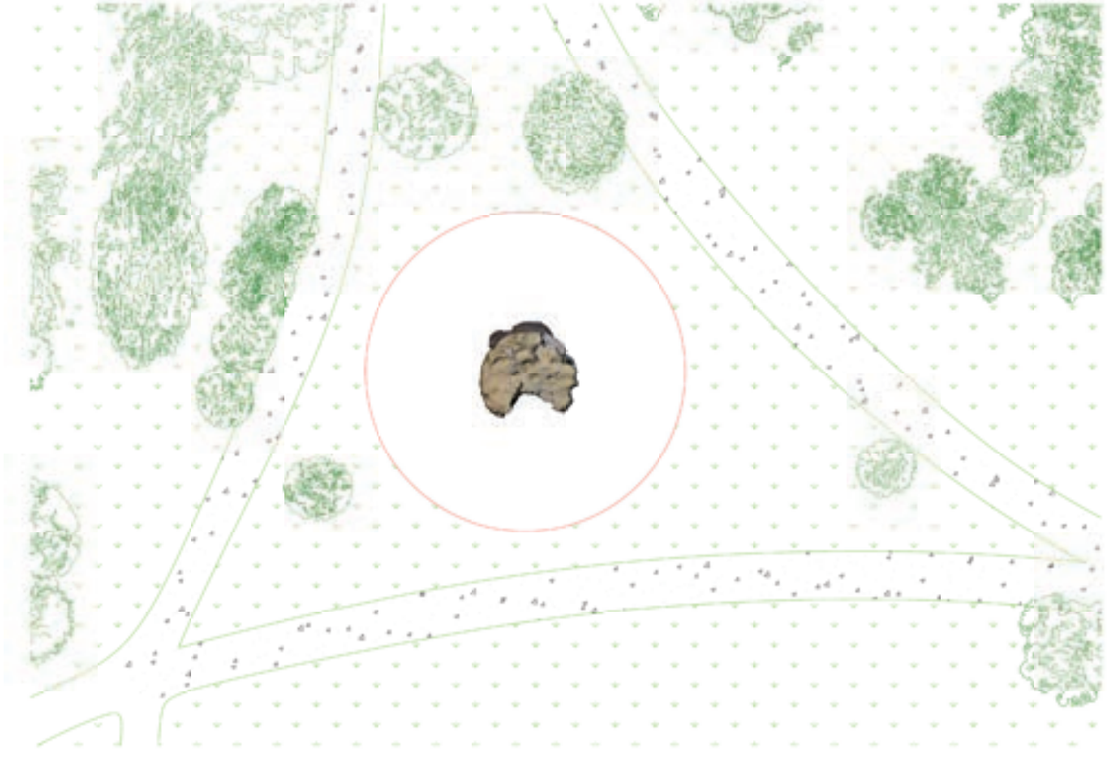
Site Plan: 1 : 500

The positioning of the pavillion within this specific location within Centennial Park was result of analysing prime movement paths as well as immediate visual contact. The space itself is the least densely crowded with trees and structures then other spatial locations, whilst maintaining enough roof for the structures potential to be fully realised as a habitable, resonant structure. The structure also sits on a flat elevated plane with slight decline closer to the adjacent footpath, which doesn't effect the concrete foundations which the pavillion lays upon. The affect of the structure provides the optional occurence of any emotion evoking event, which within this case is afflicated with the concept of intrigue. Once within the space, the idea of being encased within a large wax pavillion structure begins to incite a variety of emotional and rational responses, being how the structure is constructed?, whats the meaning behind the structures relevance to the park? or determining the functionality of the structure aswell. Any experience is effectively personal, with the optional capability to seek out the space rather then simply just admire by passing by.

Site Plan: 1 : 100

Through closer identification, it becomes clear that intrigue will drive individuals to seek out the space, whilst people approaching from any side of each footpath, being nine potential entry or exit points, will have this option avaliable. This aspect is further backed by individuals already on the grass, which may depend on weather and external conditions.

1:100



Perspective

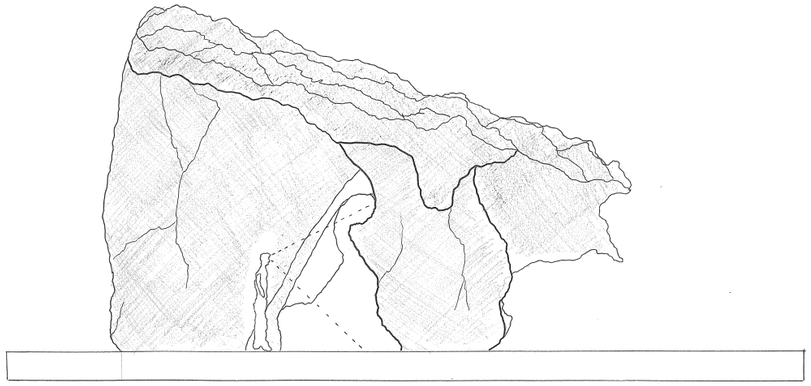
Perspective

Pavillion Plan 1:10

Pavillion Section 1: 1:10

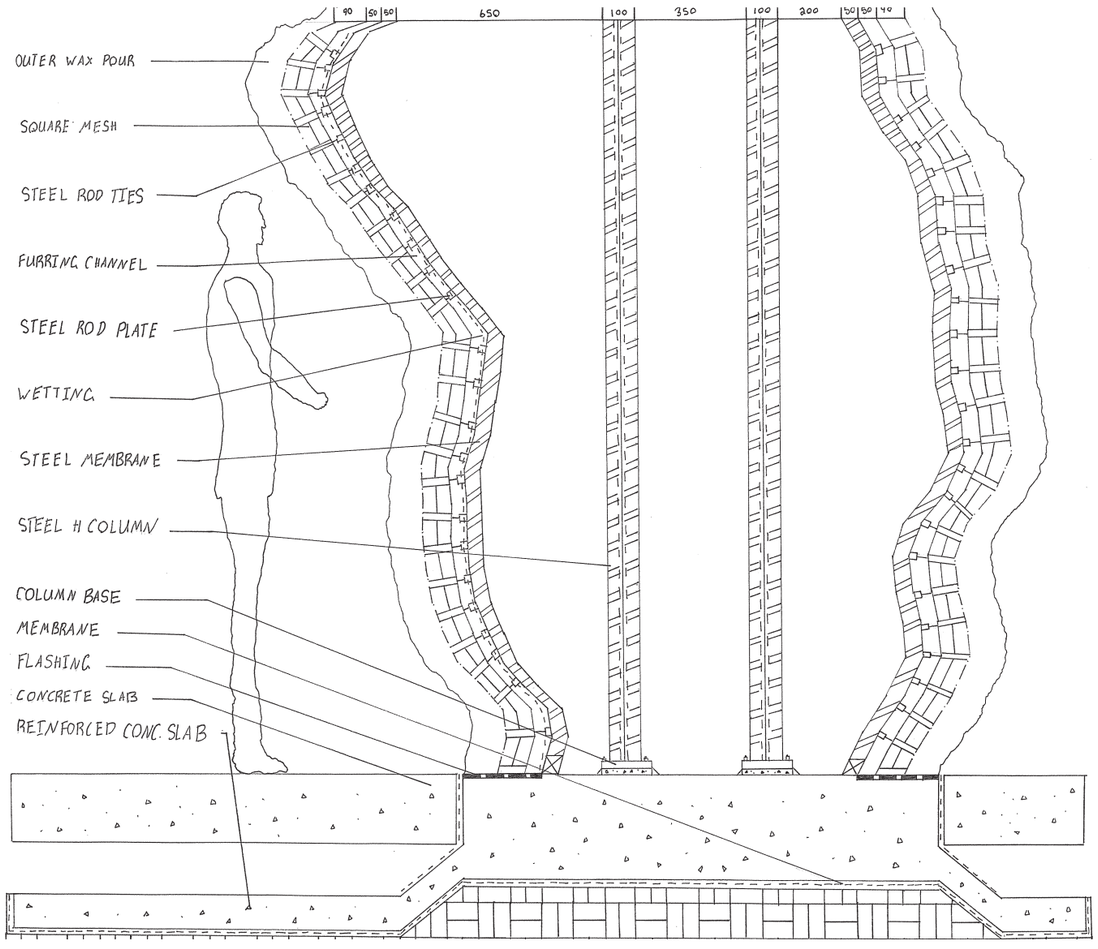
Pavillion Section 2: 1:10

Technical Sections & Details



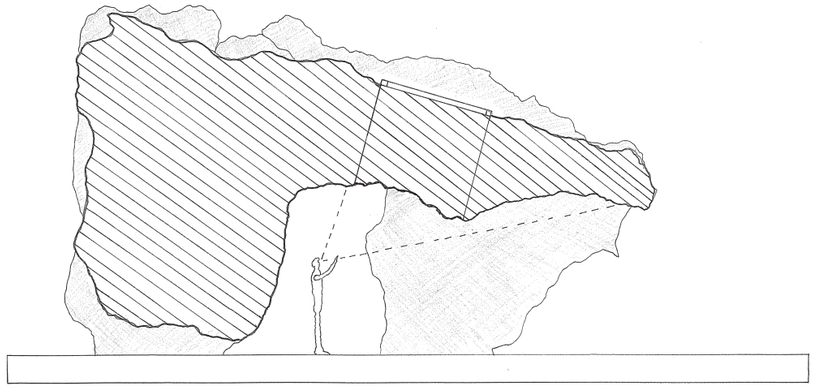
Scenario 1: Pillar

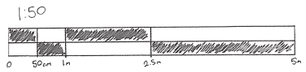
Call Out 1: Column Base



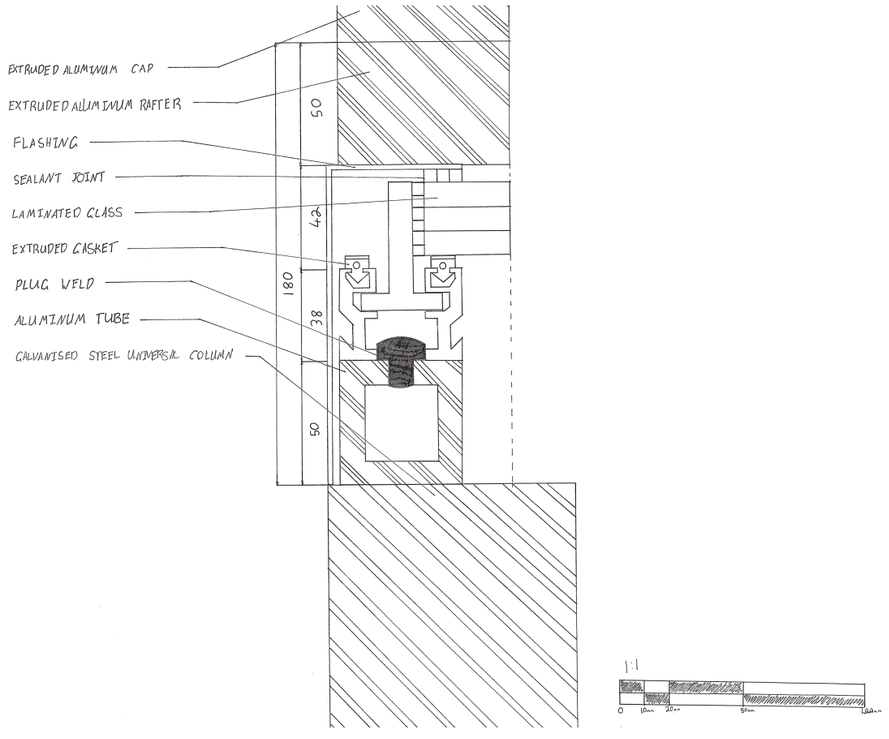
Detail 1: Pillar

Technical Sections & Details

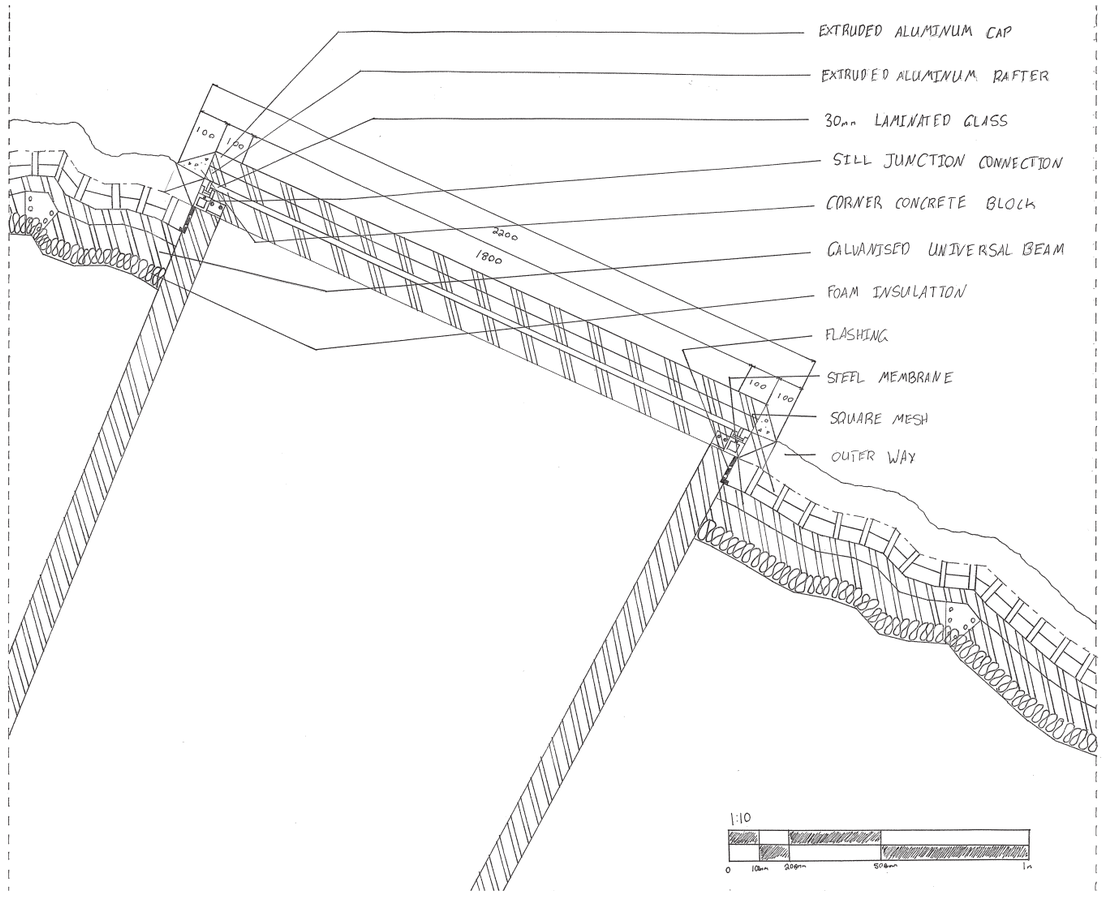




Scenario 2: Skylight

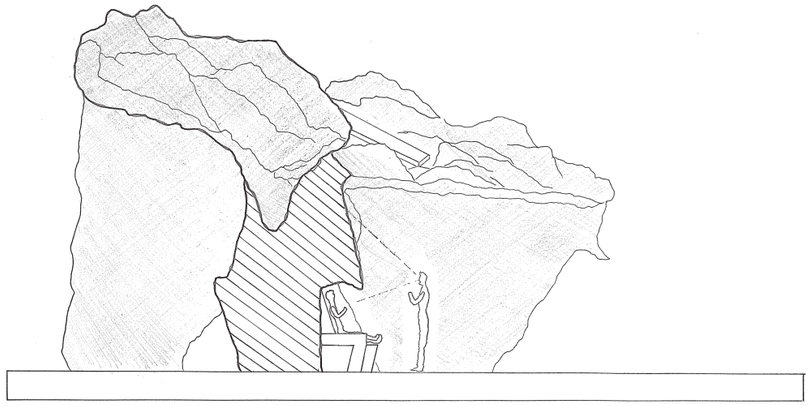


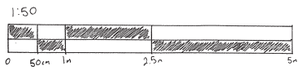
Call Out 2: Sill Junction Connection



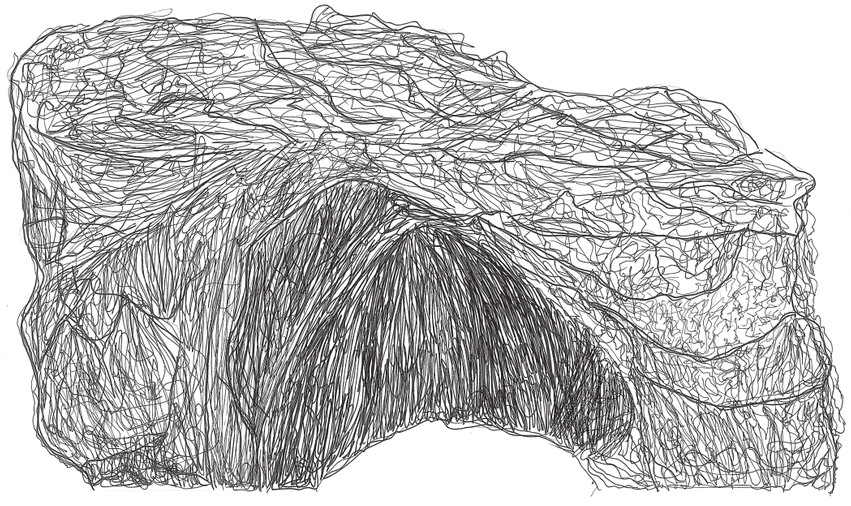
Detail 2: Skylight

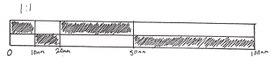
Technical Sections & Details



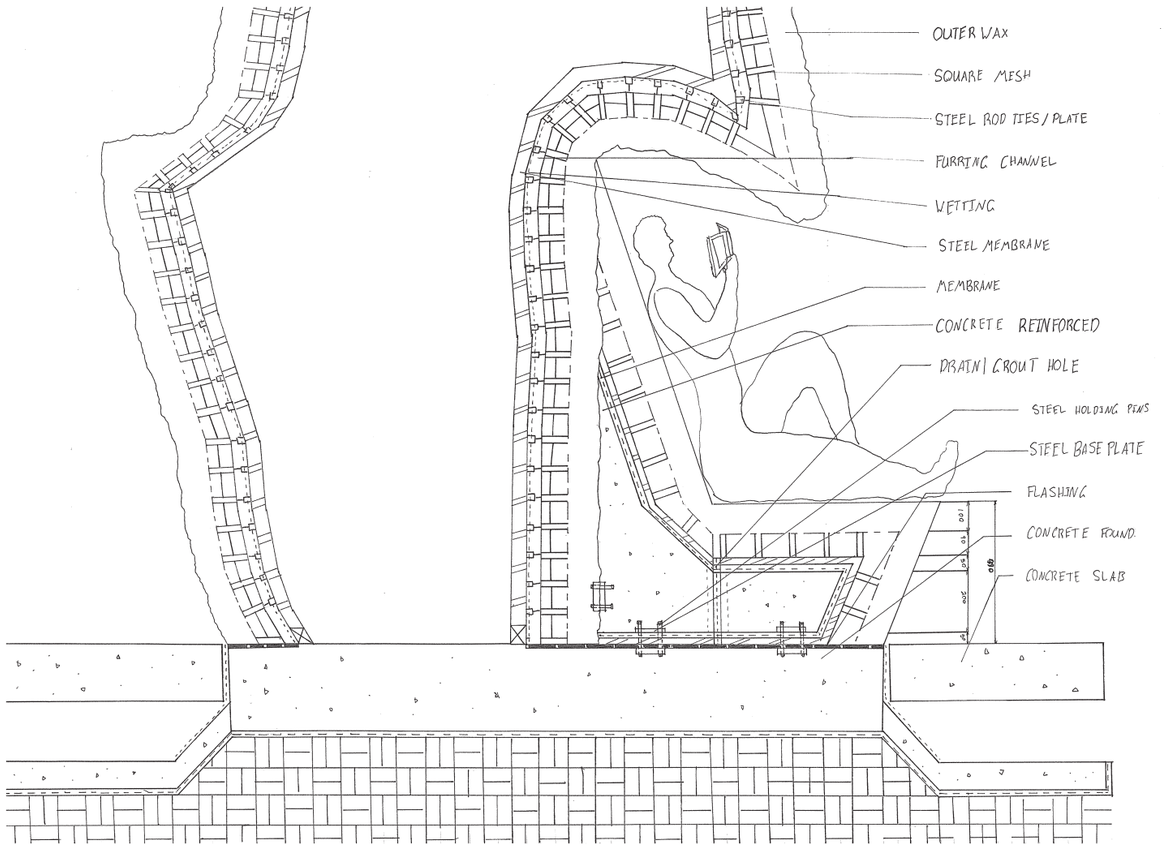


Scenario 3: Bench



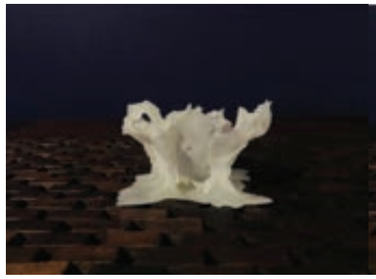


Material Panel



Detail 3: Bench

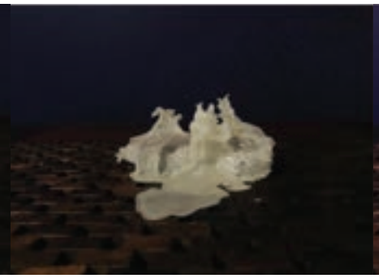
Material Archive



1) EARLY EXPERIMENTATION: VERTICAL DROP:

- Origin: Paraffin Wax (saturated hydrocarbons)
- Natural/Industrial: Pillar Candle 68mm x 150mm made of Paraffin, saturated hydrocarbons as byproduct of distillation (heating or cooling) of Petroleum.
- Strength (Strong/Weak)/Density: Weak due to small amount of wax being solidified.
- Thermal Behaviour: Cool once settled, warm once intially poured
- Moisture (Moist/Dry): Dry due to small amount of wax being used
- Temperature (Hot/Cool): Water Temp 18ºc
- Ratio (High/Low): Ratio of utilised materials is low (Wax, Water, Bowl Mold)

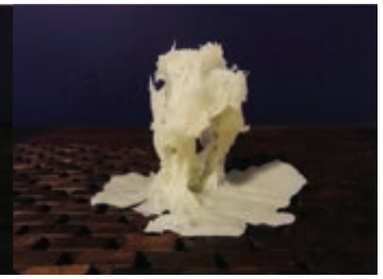
Ingredients: - 100g Pillar Candle 68mm x 150mm
- 120mm Diameter Ceramic Cup
- 175mm Diameter, 150mm Deep Bowl (Water 18ºc Filled)
- 700ml Stove Pot
- Safety Gloves
Mold: - 175mm Diameter, 150mm Deep Bowl
Method: - Quick drop into deep bowl
Steps: - Melt 100g of wax into stove pot on low heat
- Once immediately melted pour immediately into the 70mm Diameter Ceramic Cup to fill
- Wearing the safety gloves, quickly drop the 70mm Diameter Ceramic Cup into the 175mm Diameter, 150mm Deep Bowl (Water 18ºc Filled)
- Wait 4 - 5 minutes for the wax to cool and settle
- Remove the mold



2) EARLY EXPERIMENTATION: VERTICAL DROP 2:

- Origin: Paraffin Wax (saturated hydrocarbons)
- Natural/Industrial: Pillar Candle 68mm x 150mm made of Paraffin, saturated hydrocarbons as byproduct of distillation (heating or cooling) of Petroleum.
- Strength (Strong/Weak)/Density: Weak due to small amount of wax being solidified, however structure is dense.
- Thermal Behaviour: Cool once settled, warmer then previous pour.
- Moisture (Moist/Dry): Dry due to small amount of wax being used
- Temperature (Hot/Cool): Water Temp 18ºc
- Ratio (High/Low): Ratio of utilised materials is low (Wax, Water, Bowl Mold)

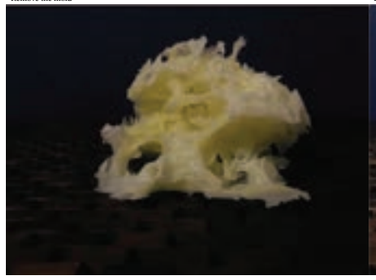
Ingredients: - 100g Pillar Candle 68mm x 150mm
- 120mm Diameter Ceramic Cup
- 175mm Diameter, 150mm Deep Bowl (Water 18ºc Filled)
- 700ml Stove Pot
- Safety Gloves
Mold: - 175mm Diameter, 150mm Deep Bowl
Method: - Slow drop into deep bowl
Steps: - Melt 100g of wax into stove pot on low heat
- Once immediately melted pour immediately into the 70mm Diameter Ceramic Cup to fill
- Wearing the safety gloves, very slowly drop the 70mm Diameter Ceramic Cup into the 175mm Diameter, 150mm Deep Bowl (Water 18ºc Filled)
- Wait 4 - 5 minutes for the wax to cool and settle
- Remove the mold



3) EARLY EXPERIMENTATION: VERTICAL DROP 3:

- Origin: Paraffin Wax (saturated hydrocarbons)
- Natural/Industrial: Pillar Candle 68mm x 150mm made of Paraffin, saturated hydrocarbons as byproduct of distillation (heating or cooling) of Petroleum.
- Strength (Strong/Weak)/Density: Slightly stronger due to more wax, however weaker at certain vertical points.
- Thermal Behaviour: Cool once settled.
- Moisture (Moist/Dry): Dry due to small amount of wax being used
- Temperature (Hot/Cool): Water Temp 18ºc
- Ratio (High/Low): Ratio of utilised materials is low, higher then previous pours (Wax, Water, Bowl Mold)

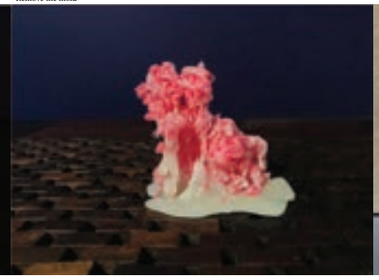
Ingredients: - 150g Pillar Candle 68mm x 150mm
- 120mm Diameter Ceramic Cup
- 175mm Diameter, 150mm Deep Bowl (Water 18ºc Filled)
- 700ml Stove Pot
- Safety Gloves
Mold: - 175mm Diameter, 150mm Deep Bowl
Method: - Quick drop into deep bowl
Steps: - Melt 150g of wax into stove pot on low heat
- Once immediately melted pour immediately into the 120mm Diameter Ceramic Cup to fill
- Wearing the safety gloves, quickly drop the 120mm Diameter Ceramic Cup into the 175mm Diameter, 150mm Deep Bowl (Water 18ºc Filled)
- Wait 4 - 5 minutes for the wax to cool and settle
- Remove the mold



4) EARLY EXPERIMENTATION: VERTICAL DROP 4:

- Origin: Paraffin Wax (saturated hydrocarbons)
- Natural/Industrial: Pillar Candle 68mm x 150mm made of Paraffin, saturated hydrocarbons as byproduct of distillation (heating or cooling) of Petroleum.
- Strength (Strong/Weak)/Density: Stronger again due to more wax, more dense due to less vertical area.
- Thermal Behaviour: Cool once settled.
- Moisture (Moist/Dry): Dry due to small amount of wax being used
- Temperature (Hot/Cool): Water Temp 18ºc
- Ratio (High/Low): Ratio of utilised materials is low, higher then previous pours (Wax, Water, Bowl Mold)

Ingredients: - 300g Pillar Candle 68mm x 150mm
- 200mm Diameter Ceramic Cup
- 3L Mixing Bowl (Water 18ºc 2.5L Filled)
- 700ml Stove Pot
- Safety Gloves
Mold: - 3L Mixing Bowl (Water 18ºc 2.5L Filled)
Method: - Quick drop into 3L Mixing Bowl (Water 18ºc 2.5L Filled)
Steps: - Melt 300g of wax into stove pot on low heat
- Once immediately melted pour immediately into the 200mm Diameter Ceramic Cup to fill
- Wearing the safety gloves, quickly drop the 200mm Diameter Ceramic Cup into the Quick drop into 3L - Mixing Bowl (Water 18ºc 2.5L Filled)
- Wait 4 - 5 minutes for the wax to cool and settle
- Remove the mold



5) EARLY EXPERIMENTATION: GELATIN + WAX:

- Origin: Paraffin Wax (saturated hydrocarbons), Gelatin (beef origin).
- Natural/Industrial: Pillar Candle 68mm x 150mm made of Paraffin, saturated hydrocarbons as byproduct of distillation (heating or cooling) of Petroleum. Gelatin made of cow cartilage, skin and bones.
- Strength (Strong/Weak)/Density: Gelatin mix made the structure considerably weaker and less dense.
- Thermal Behaviour: Cool once settled.
- Moisture (Moist/Dry): Gelatin mix retained significantly more water.
- Temperature (Hot/Cool): Water Temp 18ºc
- Ratio (High/Low): Ratio of utilised materials is higher, but low in quantity.

Ingredients: - 150g Pillar Candle 68mm x 150mm
- 120mm Diameter Ceramic Cup - 42.5g A. Jelly (Gelatin) (0.5 pack Red) - 3L Mixing Bowl (Water 18ºc 2.5L Filled) - 700ml Stove Pot - 600ml Plastic Vertical Container - Mixing Spoon
Mold: - 3L Mixing Bowl (Water 18ºc 2.5L Filled)
Method: - Quick drop into 3L Mixing Bowl (Water 18ºc 2.5L Filled)
Steps: - Melt 150g of wax into stove pot on low heat
- Once immediately melted pour 42.5g A. Jelly (Gelatin) (0.5 pack Red) into the stove pot and mix with the spoon
- Whilst mixing, pour wax and gelatin into 120mm Diameter Ceramic Cup to fill
- Wearing the safety gloves, quickly drop the 120mm Diameter Ceramic Cup into the - 3L Mixing Bowl (Water 18ºc 2.5L Filled)
- Wait 4 - 5 minutes for the wax to cool and settle
- Remove the mold

6) EARLY EXPERIMENTATION: SINGLE POUR LOW:

- Origin: Paraffin Wax (saturated hydrocarbons)
- Natural/Industrial: Pillar Candle 68mm x 150mm made of Paraffin, saturated hydrocarbons as byproduct of distillation (heating or cooling) of Petroleum.
- Strength (Strong/Weak)/Density: Strong due to quick, low pour resulting in a small, dense object
- Thermal Behaviour: Cool once settled.
- Moisture (Moist/Dry): Dry due to small amount of wax being used
- Temperature (Hot/Cool): Water Temp 18ºc
- Ratio (High/Low): Ratio of utilised materials is low.

Ingredients: - 150g Pillar Candle 68mm x 150mm
- 3L Mixing Bowl (Water 18ºc 2.5L Filled)
- 700ml Stove Pot
Mold:
- 3L Mixing Bowl (Water 18ºc 2.5L Filled)
Method:
Quick, low pour into 3L Mixing Bowl (Water 18ºc 2.5L Filled)
Steps:
- Melt 150g of wax into stove pot on low heat
- Once immediately melted pour the 150g of wax quickly and low into the 3L Mixing Bowl (Water 18ºc 2.5L Filled)
- Wait 4 - 5 minutes for the wax to cool and settle
- Remove the mold

7) EARLY EXPERIMENTATION: SINGULAR POUR + GELATIN:

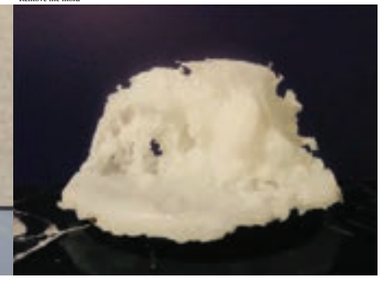
- Origin: Paraffin Wax (saturated hydrocarbons), Gelatin (beef origin).
- Natural/Industrial: Pillar Candle 68mm x 150mm made of Paraffin, saturated hydrocarbons as byproduct of distillation (heating or cooling) of Petroleum. Gelatin made of cow cartilage, skin and bones.
- Strength (Strong/Weak)/Density: Quick, low pour resulted in a dense structure, Gelatin contributed towards the strength of the structure in this case.
- Thermal Behaviour: Cool once settled.
- Moisture (Moist/Dry): Gelatin mix retained significantly more water.
- Temperature (Hot/Cool): Water Temp 18ºc
- Ratio (High/Low): Ratio of utilised materials is higher, but low in quantity.

Ingredients:- 150g Pillar Candle 68mm x 150mm - 85g A. Jelly (Gelatin) (1 pack Red) - 3L Mixing Bowl (Water 18ºc 2.5L Filled) - 700ml Stove Pot - 600ml Plastic Vertical Container - Mixing Spoon
Mold: - 3L Mixing Bowl (Water 18ºc 2.5L Filled)
Method: - Quick, low pour into 3L Mixing Bowl (Water 18ºc 2.5L Filled)
Steps: - Melt 150g of wax into stove pot on low heat
- Once immediately melted pour the 150g of wax into the 600ml Plastic Vertical Container
- Add the 85g A. Jelly (Gelatin) (1 pack Red) into the 600ml Container, using the mixing spoon to mix together the wax and gelatine
- Mix for 1 minute
- Pour the liquid mixture low, whilst mixing continuously into the 3L Mixing Bowl (Water 18ºc 2.5L Filled) quickly.
- Wait 4 - 5 minutes for the wax to cool and settle - Remove the mold

8) EARLY CONTROL: WAX PAVILLION:

- Origin: Paraffin Wax (saturated hydrocarbons)
- Natural/Industrial: Pillar Candle 68mm x 150mm made of Paraffin, saturated hydrocarbons as byproduct of distillation (heating or cooling) of Petroleum.
- Strength (Strong/Weak)/Density: Significantly weaker and more fragile due to spread of more wax over a larger surface area.
- Thermal Behaviour: Cool once settled.
- Moisture (Moist/Dry): Significantly more moist due to amount of wax removed from the water mold
- Temperature (Hot/Cool): Water Temp 18ºc
- Ratio (High/Low): Ratio of utilised materials is even and medium.

Ingredients: - 500g Pillar Candle 68mm x 150mm
- 3L Mixing Bowl (Water 18ºc 2.5L Filled)
- 3 - 250ml Cups (Filled evenly)
- 700ml Stove Pot
- 400ml (Water 18ºc)
Mold: - 1.5L Mixing Bowl
Method: - High, 60cm Free-Hand Pour Triangulation
Steps: - Melt 500g of wax into stove pot on low heat
- Once immediately melted at 40ºc pour immediately into 3 250ml cups to even fill
- Fill 2.5L into 3L mixing bowl with 18ºc chilled water
- Individually pour each cup at a 60cm height, free hand into the mixing bowl. each in a triangulated pattern
- Shake the bowl continually, whilst slowly adding 500ml of 18ºc water to settle the wax



9) CONVERGING THREE POUR:

- Origin: Paraffin Wax (saturated hydrocarbons)
- Natural/Industrial: Pillar Candle 68mm x 150mm made of Paraffin, saturated hydrocarbons as byproduct of distillation (heating or cooling) of Petroleum.
- Strength (Strong/Weak)/Density: Significantly stronger as a result of spatial density.
- Thermal Behaviour: Cool once settled.
- Moisture (Moist/Dry): Significantly more moist due to amount of wax removed from the water mold
- Temperature (Hot/Cool): Water Temp 18ºc
- Ratio (High/Low): Ratio of utilised materials is even and medium.

Ingredients: - 500g Pillar Candle 68mm x 150mm
- 3L Mixing Bowl (Water 18ºc 2.5L Filled)
- 3 - 250ml Cups (Filled evenly)
- 700ml Stove Pot
- 400ml (Water 18ºc)
Mold: - 1.5L Mixing Bowl
Method: - High, 60cm Free-Hand Pour Triangulation, converging
Steps: - Melt 500g of wax into stove pot on low heat
- Once immediately melted at 40ºc pour immediately into 3 250ml cups to even fill
- Fill 2.5L into 3L mixing bowl with 18ºc chilled water
- Individually pour each cup at a 60cm height, free hand into the mixing bowl. each in a triangulated, converging to centre pattern
- Shake the bowl continually, whilst slowly adding 400ml of 18ºc water to settle the wax

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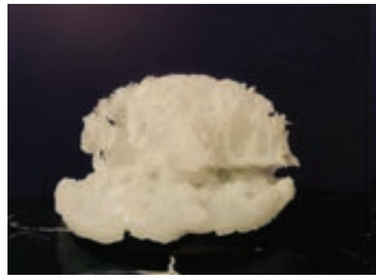
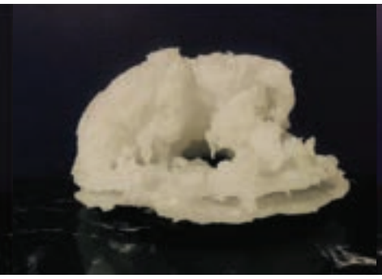
Tutor: Adrian Taylor



10) SINGULAR COLUMN:

- Origin: Paraffin Wax (saturated hydrocarbons)
- Natural/Industrial: Pillar Candle 68mm x 150mm made of Paraffin, saturated hydrocarbons as byproduct of distillation (heating or cooling) of Petroleum.
- Strength (Strong/Weak)/Density: Significantly stronger as a result of spatial density.
- Thermal Behaviour: Cool once settled.
- Moisture (Moist/Dry): Significantly more moist due to amount of wax removed from the water mold
- Temperature (Hot/Cool): Water Temp 18ºc
- Ratio (High/Low): Ratio of utilised materials is even and medium.

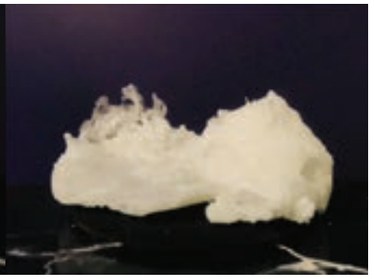
Ingredients: - 500g Pillar Candle 68mm x 150mm
- 3L Mixing Bowl (Water 18ºc 2.5L Filled)
- 700ml Stove Pot
- 400ml (Water 18ºc)
Mold: - 1.5L Mixing Bowl
Method: - High, 60cm Free-Hand Pour quick pour
Steps:
- Melt 500g of wax into stove pot on low heat
- Once immediately melted at 40ºc pour immediately into the centre of the 3L mixing bowl from a 60cm above range
- Once wax has been poured, allow to settle for 1 minute
- Begin to add slowly the 400ml (Water 18ºc) to the mixing bowl whilst slowly begin to shake the wax to aid in cooling



12) LAYERED INTERNAL CAVERN:

- Origin: Paraffin Wax (saturated hydrocarbons)
- Natural/Industrial: Pillar Candle 68mm x 150mm made of Paraffin, saturated hydrocarbons as byproduct of distillation (heating or cooling) of Petroleum.
- Strength (Strong/Weak)/Density: Significantly stronger as a result of spatial density.
- Thermal Behaviour: Cool once settled.
- Moisture (Moist/Dry): Significantly more moist due to amount of wax removed from the water mold
- Temperature (Hot/Cool): Water Temp 18ºc
- Ratio (High/Low): Ratio of utilised materials is even and medium.

Ingredients: - 500g Pillar Candle 68mm x 150mm - 3L Mixing Bowl (Water 18ºc 2.5L Filled) - 700ml Stove Pot - 400ml (Water 18ºc)
- Blunt Edge (Knife edge)
Mold: - 1.5L Mixing Bowl
Method: - Low, 15cm Pour slowly in a circulation pattern, whilst diverging the centre
Steps: - Melt 500g of wax into stove pot on low heat
- Once melted, slowly begin pouring wax into the water in a circle around the edge
- Once semi-settled, using a blunt edge slowly begin to clear out the middle from settling wax
- Slowly continue to do so until wax has begun to settle completely
- Using the remaining wax, pour over the already circulated, layered exterior to create even more depth to the base
- Use the 400ml (Water 18ºc) to slowly cool the settled wax whilst maintaining the internal cavern.



11) DOUBLE SUSPENSION:

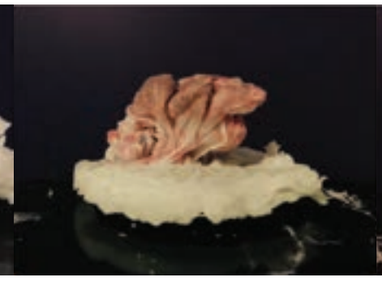
- Origin: Paraffin Wax (saturated hydrocarbons)
- Natural/Industrial: Pillar Candle 68mm x 150mm made of Paraffin, saturated hydrocarbons as byproduct of distillation (heating or cooling) of Petroleum.
- Strength (Strong/Weak)/Density: Certain areas of the structure were strong, however the higher vertical, less structurally dense areas were considerably weaker.
- Thermal Behaviour: Cool once settled.
- Moisture (Moist/Dry): Significantly more moist due to amount of wax removed from the water mold
- Temperature (Hot/Cool): Water Temp 18ºc
- Ratio (High/Low): Ratio of utilised materials is even and medium.

Ingredients: - 500g Pillar Candle 68mm x 150mm
- 3L Mixing Bowl (Water 18ºc 2.5L Filled)
- 2 - 250ml Cups (Filled evenly)
- 700ml Stove Pot
- 400ml (Water 18ºc)
Mold: - 1.5L Mixing Bowl
Method: - High, 60cm Free-Hand Pour Perpendicular Sides
Steps: - Melt 500g of wax into stove pot on low heat
- Once immediately melted at 40ºc pour immediately into 2 250ml cups to even fill
- Fill 2.5L into 3L mixing bowl with 18ºc chilled water
- Individually pour each cup at a 60cm height, free hand into the mixing bowl. each in a Perpendicular pattern
- Shake the bowl continually, whilst slowly adding 500ml of 18ºc water to settle the wax

15) GELATIN + WAX:

- Origin: Paraffin Wax (saturated hydrocarbons), Gelatin (beef origin).
- Natural/Industrial: Pillar Candle 68mm x 150mm made of Paraffin, saturated hydrocarbons as byproduct of distillation (heating or cooling) of Petroleum. Gelatin made of cow cartilage, skin and bones.
- Strength (Strong/Weak)/Density: The structure became significantly stronger then previous singular wax pours.
- Thermal Behaviour: Cool once settled.
- Moisture (Moist/Dry): Gelatin mix retained significantly more water.
- Temperature (Hot/Cool): Water Temp 18ºc
- Ratio (High/Low): Ratio of utilised materials is higher, in addition to the extra pack of Gelatin, additional wax and water.

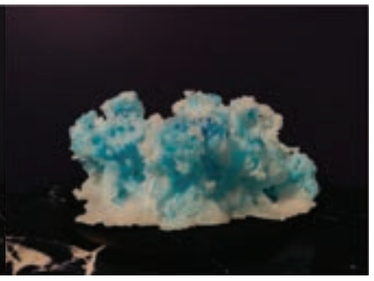
Ingredients: - 500g Pillar Candle 68mm x 150mm - 3L Mixing Bowl (Water 18ºc 2.5L Filled) - 700ml Stove Pot - 400ml (Water 18ºc) - 170g A. Jelly (Gelatin) (2 packs Red) - 600ml Plastic Vertical Container - 200g Pillar Candle 68mm x 150mm - Mixing Spoon
Mold: - 3L Mixing Bowl (Water 18ºc 2.5L Filled)
Method: - High to Low pour from 600ml Container into Mixing Bowl
Steps: - Melt 700g of wax into stove pot on low heat, only use 400g - Once melted, free pour 400g wax into 3L mixing bowl (Water 18ºc) - Use the remaining 300g of wax to pour into 600ml Plastic Vertical Container - Once melted wax is contained, add 170g of Gelatin (2 packs) to the wax mixture and mix vigorously
- Whilst mixing, begin to pour the mixture into the 3L mixing bowl which containers semi-settled 400g of wax. Pour the mixture from a higher point and begin to lower.
- Pour 400ml (Water 18ºc) slowly into the mixture whilst shaking to allow residual hot wax to settle before taking from the mold.



13) OVERLAY VERTICAL SUSPENSION:

- Origin: Paraffin Wax (saturated hydrocarbons)
- Natural/Industrial: Pillar Candle 68mm x 150mm made of Paraffin, saturated hydrocarbons as byproduct of distillation (heating or cooling) of Petroleum.
- Strength (Strong/Weak)/Density: The structure, being complimented by added structural wax allowed for more dense, rigid wax partitions throughout.
- Thermal Behaviour: Cool once settled.
- Moisture (Moist/Dry): Significantly more moist due to amount of wax removed from the water mold
- Temperature (Hot/Cool): Water Temp 18ºc
- Ratio (High/Low): Ratio of utilised materials is even and medium, however more wax was added to contribute towards structural strength.

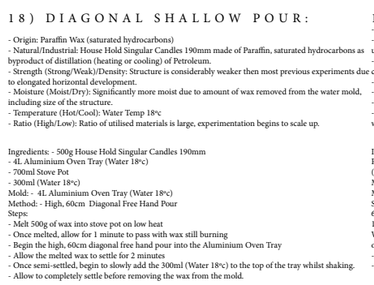
Ingredients: - 500g Pillar Candle 68mm x 150mm - 3L Mixing Bowl (Water 18ºc 2.5L Filled) - 700ml Stove Pot - 400ml (Water 18ºc) - Blunt Edge (Knife edge) - 100g Pillar Candle 68mm x 150mm (EXTRA)
Mold: - 1.5L Mixing Bowl
Method: - High, 60cm Pour Free Hand Pour, whilst stopping diverging centre
Steps: - Melt 600g of wax into stove pot on low heat, only use 500g
- Once melted, free hand pour from 60cm into 2 adjacent sides of the 3L Mixing Bowl
- Using the Blunt Edge, don't allow for the centre to divulge without adding anymore wax then the 2 initial free hand pours
- Begin to shake the bowl to allow for wax to settle.
- Slowly add 400ml (Water 18ºc) in order to fully settle the remaining hot wax.
- Once released, from the mold, place half the base side onto top to create a 'ceiling'
- Use 100g of extra Pillar Candle wax to bind together suspended columns and roof



14) SECTIONED VERTICAL PILLAR:

- Origin: Paraffin Wax (saturated hydrocarbons)
- Natural/Industrial: Pillar Candle 68mm x 150mm made of Paraffin, saturated hydrocarbons as byproduct of distillation (heating or cooling) of Petroleum.
- Strength (Strong/Weak)/Density: The density of being one, full structure results in the controlled rigidity of the structure.
- Moisture (Moist/Dry): Structure became dry quicker due to less horizontal space and hollow compartments.
- Temperature (Hot/Cool): Water Temp 18ºc
- Ratio (High/Low): Ratio of utilised materials is higher then previous experiments, specifically spatial potential of the mold.

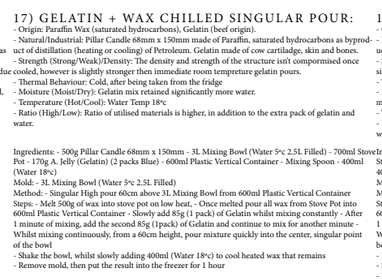
Ingredients: - 500g Pillar Candle 68mm x 150mm - 5L Plastic Vertical Vase (Water 18ºc, 5L Filled) - 700ml Stove Pot - 300ml (Water 18ºc) - Large, Sharp Kitchen Knife - 600ml (Water 100ºc) - 1L Metal Vertical Container
Mold: - 5L Plastic Vertical Vase (Water 18ºc, 5L Filled)
Method: - High, 120cm Deep Free Hand Pour
Steps: - Melt 500g of wax into stove pot on low heat - Once melted, allow for 1 minute to pass with wax still burning - Begin the high, 120cm deep free hand pour into the vertical vase directly within the middle - Allow the melted wax to settle for 2 minutes - Once semi-settled, begin to slowly add the 300ml (Water 18ºc) to the top of the vase without shaking. - Allow to completely settle before removing the wax from the mold. - Pour 600ml of boiling (100ºc Water) into 1L metal vertical container
- Carefully place kitchen knife into container rest for 2 minutes
- Section the vertical pillars with kitchen knife to create 2 equal halves.



18) DIAGONAL SHALLOW POUR:

- Origin: Paraffin Wax (saturated hydrocarbons)
- Natural/Industrial: House Hold Singular Candles 190mm made of Paraffin, saturated hydrocarbons as byproduct of distillation (heating or cooling) of Petroleum.
- Strength (Strong/Weak)/Density: Structure is considerably weaker then most previous experiments due to elongated horizontal development.
- Moisture (Moist/Dry): Significantly more moist due to amount of wax removed from the water mold, including size of the structure.
- Temperature (Hot/Cool): Water Temp 18ºc
- Ratio (High/Low): Ratio of utilised materials is large, experimentation begins to scale up.

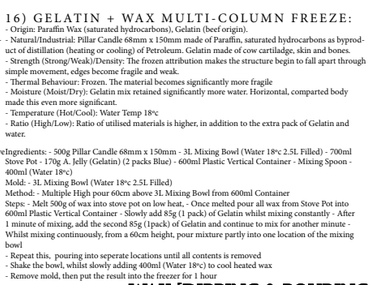
Ingredients: - 500g House Hold Singular Candles 190mm
- 4l. Aluminium Oven Tray (Water 18ºc)
- 700ml Stove Pot
- 300ml (Water 18ºc)
Mold: - 4l. Aluminium Oven Tray (Water 18ºc)
Method: - High, 60cm Diagonal Free Hand Pour
Steps:
- Melt 500g of wax into stove pot on low heat
- Once melted, allow for 1 minute to pass with wax still burning
- Begin the high, 60cm diagonal free hand pour into the Aluminium Oven Tray
- Allow the melted wax to settle for 2 minutes
- Once semi-settled, begin to slowly add the 300ml (Water 18ºc) to the top of the tray whilst shaking.
- Allow to completely settle before removing the wax from the mold.



17) GELATIN + WAX CHILLED SINGULAR POUR:

- Origin: Paraffin Wax (saturated hydrocarbons), Gelatin (beef origin).
- Natural/Industrial: Pillar Candle 68mm x 150mm made of Paraffin, saturated hydrocarbons as byproduct of distillation (heating or cooling) of Petroleum. Gelatin made of cow cartilage, skin and bones.
- Strength (Strong/Weak)/Density: The density and strength of the structure isn't compormised once cooled, however is slightly stronger then immediate room tempreture gelatin pours.
- Thermal Behaviour: Cold, after being taken from the fridge
- Moisture (Moist/Dry): Gelatin mix retained significantly more water.
- Temperature (Hot/Cool): Water Temp 18ºc
- Ratio (High/Low): Ratio of utilised materials is higher, in addition to the extra pack of gelatin and water.

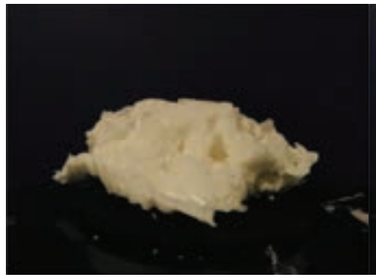
Ingredients: - 500g Pillar Candle 68mm x 150mm - 3L Mixing Bowl (Water 5ºc 2.5L Filled) - 700ml Stove Pot - 170g A. Jelly (Gelatin) (2 packs Blue) - 600ml Plastic Vertical Container - Mixing Spoon - 400ml (Water 18ºc)
Mold: - 3L Mixing Bowl (Water 5ºc 2.5L Filled)
Method: - Singular High pour 60cm above 3L Mixing Bowl from 600ml Plastic Vertical Container
Steps: - Melt 500g of wax into stove pot on low heat, - Once melted pour all wax from Stove Pot into 600ml Plastic Vertical Container - Slowly add 85g (1 pack) of Gelatin whilst mixing constantly - After 1 minute of mixing, add the second 85g (1pack) of Gelatin and continue to mix for another minute - Whilst mixing continuously, from a 60cm height, pour mixture quickly into the center, singular point of the bowl
- Shake the bowl, whilst slowly adding 400ml (Water 18ºc) to cool heated wax that remains
- Remove mold, then put the result into the freezer for 1 hour



16) GELATIN + WAX MULTI-COLUMN FREEZE:

- Origin: Paraffin Wax (saturated hydrocarbons), Gelatin (beef origin).
- Natural/Industrial: Pillar Candle 68mm x 150mm made of Paraffin, saturated hydrocarbons as byproduct of distillation (heating or cooling) of Petroleum. Gelatin made of cow cartilage, skin and bones.
- Strength (Strong/Weak)/Density: The frozen attribution makes the structure begin to fall apart through simple movement, edges become fragile and weak.
- Thermal Behaviour: Frozen. The material becomes significantly more fragile
- Moisture (Moist/Dry): Gelatin mix retained significantly more water. Horizontal, comparted body made this even more significant.
- Temperature (Hot/Cool): Water Temp 18ºc
- Ratio (High/Low): Ratio of utilised materials is higher, in addition to the extra pack of Gelatin and water.

Ingredients: - 500g Pillar Candle 68mm x 150mm - 3L Mixing Bowl (Water 18ºc 2.5L Filled) - 700ml Stove Pot - 170g A. Jelly (Gelatin) (2 packs Blue) - 600ml Plastic Vertical Container - Mixing Spoon - 400ml (Water 18ºc)
Mold: - 3L Mixing Bowl (Water 18ºc 2.5L Filled)
Method: - Multiple High pour 60cm above 3L Mixing Bowl from 600ml Container
Steps: - Melt 500g of wax into stove pot on low heat, - Once melted pour all wax from Stove Pot into 600ml Plastic Vertical Container - Slowly add 85g (1 pack) of Gelatin whilst mixing constantly - After 1 minute of mixing, add the second 85g (1pack) of Gelatin and continue to mix for another minute - Whilst mixing continuously, from a 60cm height, pour mixture partly into one location of the mixing bowl
- Repeat this, pouring into seperate locations until all contents is removed
- Shake the bowl, whilst slowly adding 400ml (Water 18ºc) to cool heated wax
- Remove mold, then put the result into the freezer for 1 hour

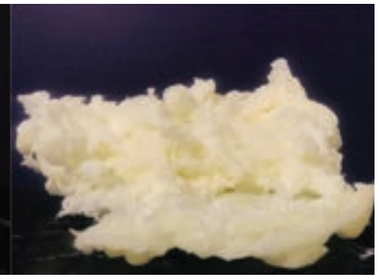


19) SINGULAR MOLDED SHALLOW POUR:

- Origin: Paraffin Wax (saturated hydrocarbons)
- Natural/Industrial: House Hold Singular Candles 190mm made of Paraffin, saturated hydrocarbons as byproduct of distillation (heating or cooling) of Petroleum.
- Strength (Strong/Weak)/Density: Complete opposite of previous pour, structure is one of the most dense and rigid of all experiments.
- Moisture (Moist/Dry): Significantly less moist due to small, dense surface area.
- Temperature (Hot/Cool): Water Temp 18ºc
- Ratio (High/Low): Ratio of utilised materials is large, experimentation continues scaling up.

20) SINGULAR MOLDED SHALLOW POUR + TEMP. CHANGE:

- Origin: Paraffin Wax (saturated hydrocarbons)
- Natural/Industrial: House Hold Singular Candles 190mm made of Paraffin, saturated hydrocarbons as byproduct of distillation (heating or cooling) of Petroleum.
- Strength (Strong/Weak)/Density: Weakest structure composed, due to hot water residing within the mold. Structure began to fall apart with the slightest touch
- Moisture (Moist/Dry): One of the most water retensive experiment created.
- Temperature (Hot/Cool): Water Temp 28ºc, detrimental effects towards the structural integrity of the experiment, showing negative potential for future experiments.
- Ratio (High/Low): Ratio of utilised materials includes the most amount of wax utilised with large range in combined water tempretures.



21) VERTICAL LARGE SCALE:

- Origin: Paraffin Wax (saturated hydrocarbons)
- Natural/Industrial: Pillar Candle 68mm x 150mm made of Paraffin, saturated hydrocarbons as byproduct of distillation (heating or cooling) of Petroleum.
- Strength (Strong/Weak)/Density: Structure of the pour resulted in the last full uncontrolled pour, which showed strength and density.
- Moisture (Moist/Dry): Structure is moist due to compartments and sections of horizontal space within the interior.
- Temperature (Hot/Cool): Water Temp 18ºc
- Ratio (High/Low): The most amount of wax utilised within a significantly larger mold, resulting in a bigger structure overall.

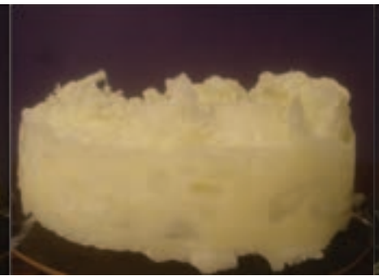
Ingredients: - 500g House Hold Singular Candles 190mm - 4L Crumpled, Molded Aluminium Oven Tray (Water 18ºc)
- 700ml Stove Pot
- 300ml (Water 18ºc)
Mold: - 4L Crumpled, Molded Aluminium Oven Tray (Water 18ºc)
Method: - High, 60cm Singular Free Hand Pour
Steps: - Melt 500g of wax into stove pot on low heat
- Once melted, allow for 1 minute to pass with wax still burning
- Begin the high, 60cm singular free hand pour into the Aluminium Oven Tray
- Allow the melted wax to settle for 2 minutes
- Once semi-settled, begin to slowly add the 300ml (Water 18ºc) to the top of the tray whilst shaking.
- Allow to completely settle before removing the wax from the mold.

Ingredients: - 700g House Hold Singular Candles 190mm - 4L Crumpled, Molded Aluminium Oven Tray (Water 28ºc) - 700ml Stove Pot
- 300ml (Water 18ºc)
Mold: - 4L Crumpled, Molded Aluminium Oven Tray (Water 28ºc)
Method: - High, 60cm Singular Free Hand Pour
Steps:
- Melt 700g of wax into stove pot on low heat
- Once melted, allow for 1 minute to pass with wax still burning
- Begin the high, 60cm singular free hand pour into the Aluminium Oven Tray
- Allow the melted wax to settle for 2 minutes
- Once semi-settled, begin to slowly add the 300ml (Water 18ºc) to the top of the tray whilst shaking.
- Allow to completely settle before removing the wax from the mold.

Ingredients: - 1kg Pillar Candle 68mm x 150mm (Unscented) - 25L Industrial Bucket Mold (Water 18ºc) - Plastic Internal Layering (Bag) - 2L Stove Pot - 1L (Water 18ºc) - Plastic 1L Container
Mold: - 25L Industrial Bucket Mold (Water 18ºc)
Method: - High, 1.5m Singular Free Hand Pour
Steps:
- Melt 1kg of wax into stove pot on low heat
- Once melted, allow for 1 minute to pass with wax still burning
- Line bucket with plastic internal layer (bag) and move outside to continue experiment
- From a 1.5m, free hand pour wax directly into 25L industrial bucket mold
- Once semi-settled, begin to slowly add the 1L (Water 18ºc) to the top of the bucket with wax poured, slowly shaking the bucket whilst doing so
- Allow to completely settle before removing the wax from the mold.

22) FINAL ARMATURE 1:

- Origin: Paraffin Wax (saturated hydrocarbons)
- Natural/Industrial: Pillar Candle 68mm x 150mm made of Paraffin, saturated hydrocarbons as byproduct of distillation (heating or cooling) of Petroleum.
- Strength (Strong/Weak)/Density: Structure is has a controlled strength and density. Through this control the creation of architectural traits can occur.
- Moisture (Moist/Dry): Flat, horizontal nature of the structure with small interior sections results in significant water and moisture content.
- Temperature (Hot/Cool): Water Temp 18ºc
- Ratio (High/Low): 3 utilised candles specifically with a larger mold then previous experiment shows elements of the control being manipulated, where the ratio differences continue to be high.



23) FINAL ARMATURE 2, LESS WATER, MORE WAX:

- Origin: Paraffin Wax (saturated hydrocarbons)
- Natural/Industrial: Pillar Candle 68mm x 150mm made of Paraffin, saturated hydrocarbons as byproduct of distillation (heating or cooling) of Petroleum.
- Strength (Strong/Weak)/Density: The strongest control experiment created through the utilisation of more wax. The horizontal, dense plane secures structural integrity.
- Moisture (Moist/Dry): Flat, horizontal nature of the structure with small interior sections results in significant water and moisture content.
- Temperature (Hot/Cool): Water Temp 18ºc
- Ratio (High/Low): 5 utilised candles through upscaling the control results in a thicker main body, however the vertical plane is lacking significantly.

24) FINAL ARMATURE 3, 10L FILLED:

- Origin: Paraffin Wax (saturated hydrocarbons)
- Natural/Industrial: Pillar Candle 68mm x 150mm made of Paraffin, saturated hydrocarbons as byproduct of distillation (heating or cooling) of Petroleum.
- Strength (Strong/Weak)/Density: Slightly weaker structure then previous, however the vertical structuring displays architectural and interior spatial potential.
- Moisture (Moist/Dry): Flat, horizontal nature of the structure with small interior sections results in significant water and moisture content.
- Temperature (Hot/Cool): Water Temp 18ºc
- Ratio (High/Low): Less candles, however through different methodolgy resulted in the controlled development of vertical pillars with the range of materials being high.

Ingredients: - 3 x Pillar Candle 68mm x 150mm (Unscented) - 50L Industrial Metal Bucket Mold (Filled, Water 18ºc) - 2L Stove Pot - 1L (Water 18ºc) - Plastic 1L Container (Water 18ºc) - 3 x 2L Plastic Bowls
Mold: - 50L Industrial Metal Bucket Mold (Filled, Water 18ºc)
Method: - Armature Funnel Pour, Three Locations with Extended Nozzle into 50L Industrial Metal Bucket Mold (Water 18ºc)
Steps:- Melt 3 x Pillar Candle 68mm x 150mm (Unscented) of wax into stove pot on low heat - Once melted, allow for 1 minute to pass with wax still burning - Fill 50L Industrial Metal Bucket Mold with 18ºc Water and place into Armature- Once wax is melted, pour evenly into 3 of the 2L Plastic Bowls - Pour one 3 wax filled 2L Plastic Bowls into each of the funnels - Begin to slowly add the water from the Plastic 1L Container (Water 18ºc) into the bucket to help wax settle
- Allow wax to completely settle before removing the mold

Ingredients: - 5 x Pillar Candle 68mm x 150mm (Unscented) - 50L Industrial Metal Bucket Mold (25L Filled, Water 18ºc) - 2L Stove Pot - 1L (Water 18ºc) - Plastic 1L Container (Water 18ºc) - 3 x 2L Plastic Bowls
Mold: - 50L Industrial Metal Bucket Mold (25L Filled, Water 18ºc)
Method: - Armature Funnel Pour, Three Locations with Extended Nozzle into 50L Industrial Metal Bucket Mold (Water 18ºc)
Steps: - Melt 5 x Pillar Candle 68mm x 150mm (Unscented) of wax into stove pot on low heat - Once melted, allow for 1 minute to pass with wax still burning - Fill 50L Industrial Metal Bucket Mold with 25L, 18ºc Water and place into Armature - Once wax is melted, pour evenly into 3 of the 2L Plastic Bowls - Pour one 3 wax filled 2L Plastic Bowls into each of the funnels - Begin to slowly add the water from the Plastic 1L Container (Water 18ºc) into the bucket to help wax settle
- Allow wax to completely settle before removing the mold

Ingredients: - 3 x Pillar Candle 68mm x 150mm (Unscented) - 50L Industrial Metal Bucket Mold (10L Filled, Water 18ºc) - 2L Stove Pot - 1L (Water 18ºc) - Plastic 1L Container (Water 18ºc) - 3 x 2L Plastic Bowls
Mold: - 50L Industrial Metal Bucket Mold (10L Filled, Water 18ºc)
Method: - Armature Funnel Pour, Three Locations with Extended Nozzle into 50L Industrial Metal Bucket Mold (Water 18ºc)
Steps: - Melt 3 x Pillar Candle 68mm x 150mm (Unscented) of wax into stove pot on low heat - Once melted, allow for 1 minute to pass with wax still burning - Fill 50L Industrial Metal Bucket Mold with 10L, 18ºc Water and place into Armature - Once wax is melted, pour evenly into 3 of the 2L Plastic Bowls - Pour one 3 wax filled 2L Plastic Bowls into each of the funnels
- Begin to slowly add the water from the Plastic 1L Container (Water 18ºc) into the bucket to help wax settle
- Allow wax to completely settle before removing the mold

22) FINAL ARMATURE 4 MOLD CHANGE:

- The 'Final Armature 4 Mold Change' experiment represents the final capability to manipulate methods of creation whilst maintaing the same armature control throughout. The armature has allowed for the ability to pour from multiple different locations, angling specifically to create certain structures which allow for architectural space. This influence, in effect, contributed significantly to the creation of the final design. The benefits of the architecture allow for a high placed roof, dynamic and functional interior space as well as 3 large scale pillars which are both structurally intergral as load bearing and influence the architectural form completely. The structure further retains it's integral textural identity, being the rugged, free form layers of wax that emerge from all angles of the structure. The importance of this model shows the capability to further extend the potential to create more pillars, which in turn allows for the ability to create new free-formed space within the structure.

- The progression of the model from previous experiments was only capable through understanding of the necessary controls, which occured through understanding of how wax forms. The previous armature experimentations required specific changes in the mold and tweaking of the pour, where it became necessary to pour slow. How much wax and how little water was necessary, was a further byproduct of earlier experimentation. The structure however, within this form, only shows the basic preliminary aspects of architectural potential. The interior space is crowded, being enveloped by 3 consuming pillars with a large ceiling height that drops dramatically through one of the entrances. Aspects like these had to be considered when controlling the development of the final model. The pre-final model represented armature development closer to 1, 2 and 3, whilst the final model took the necessary aspects of this model and built upon them.

Ingredients:
- 3 x Pillar Candle 68mm x 150mm (Unscented)
- 25L Industrial Plastic Vertical Bucket Mold (5L Filled, Water 8ºc)
- 2L Stove Pot
- 1L (Water 18ºc)
- Plastic 1L Container (Water 18ºc)
- 3 x 2L Plastic Bowls
Mold:
- 25L Industrial Plastic Vertical Bucket Mold (5L Filled, Water 8ºc)
Method:
- Armature Funnel Pour, Three Locations with Extended Nozzle into 50L Industrial Metal Bucket Mold (Water 18ºc)
Steps:
- Melt 3 x Pillar Candle 68mm x 150mm (Unscented) of wax into stove pot on low heat
- Once melted, allow for 1 minute to pass with wax still burning
- Fill 25L Industrial Plastic Vertical Bucket Mold with 5L, 8ºc Water and place into Armature
- Once wax is melted, pour evenly into 3 of the 2L Plastic Bowls
- Pour one 3 wax filled 2L Plastic Bowls into each of the funnels
- Begin to slowly add the water from the Plastic 1L Container (Water 18ºc) into the bucket to help wax settle
- Allow wax to completely settle before removing the mold

PRE. FINAL

- The pre. final design is the natural progression from the intial armature control experiments, whilst maintaining both the vertical and horizontal architectural components evident within them, including the necessity for functional internal space as well as entrance and exit potentials.

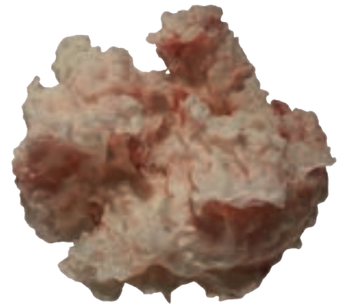
- The utilisation of Gelatin combined with the wax element resulted in the shaping of vertical pillars as well as securing the rigidity and structural integrity of these pillars. The addition of colour adds a further impact upon the shading and capability to judge depth within the structure.

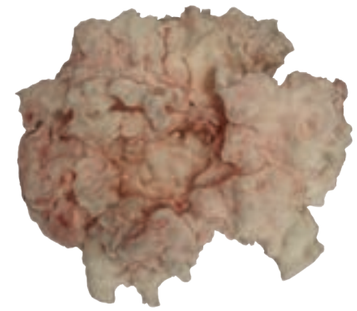
- The complex interior is further aided by the exterior space avaliable, being the structural formations of over-head shelters. This further increases the character functionality of the architecture.

- The combination of issues arising includes the necessity to have an enclosed space. Where the capability for groups or individuals using the space are intimately connected with the architecture as well as protected completely from exterior influence. The secondary issue includes the struggle for accessibility and potential dangers from climbing the structure.

- One further issue that is evident within the structure is the lack of natural organic flow throughout the architecture. The chaotic swells and spires that contribute towards overall form represent on the surface, a lack of architectural control through the creation of the design, resulting in the inability to secure the complete vision for the interior design. The contextual placement of the structure within a park setting, creates an intriguing invitation into the unknown, however contains the lack of full architectural intent necessary to represent the final controlled creation.

- Overall the architecture contains elements of strength and weakness, whilst allowing for capability to utilise the same control aspects, just shifting certain methods of creation in order to create controlled architecture that eliminates the negative aspects of design will allow for more successful architecture.





FINAL

- The final design shows a distinct reference back to 4th armature creation, which includes significant vertical emphasis. The creation of pillars with additional over-head protection, allows for full internal functionality through controlling where, how large and how many pillar will be created. This is the main control aspect that is changed when creating the final.

The creation of 4 distinct pillars allowed for the planned inclusion of 3 entrance and exit points, rather then the pre. final's specified 2 points. The benefit of this inclusion allows for more manipulation of interior functionality and how individuals interact with more spatial opportunities then previously presented.

- The limitation factor of specified interior function is also removed, where no struggle to navigate the space is present as the horizontal plane remains constant and flat, allowing for primary focus to be upon the spatial nature of the architecture, rather then complexity of the structural form itself, thats lacks architectural intent.

The design simplicity shows a clear representation of how the space works. The intial pre. final design displays a lack of architectural clarity with contradictory design elements being evident. However the abundance of natural flow and meaning within the architecture allow for understanding of how to access the space, feeling and immersion within the structural interior as well as contains all necessary elements that allow for clear movement throughout the spatial realm.

The key factor of accessibility therefore becomes a main factor, whilst the architectural form itself manifests and displays the intent behind it's creation. It displays interactive internal space that's functional, containing multiple entrances and exits with over-head protection. The main exit forms a larger 'emergence' into the exterior world, illustrating the feeling of being comfortably occupied within the architecture of the space. The successful of the architecture heavily draws upon it's own form and capability to interact with individuals physically and metaphysically.