

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 18°C)
- 3 x 2L Plastic Bowls

Mold:

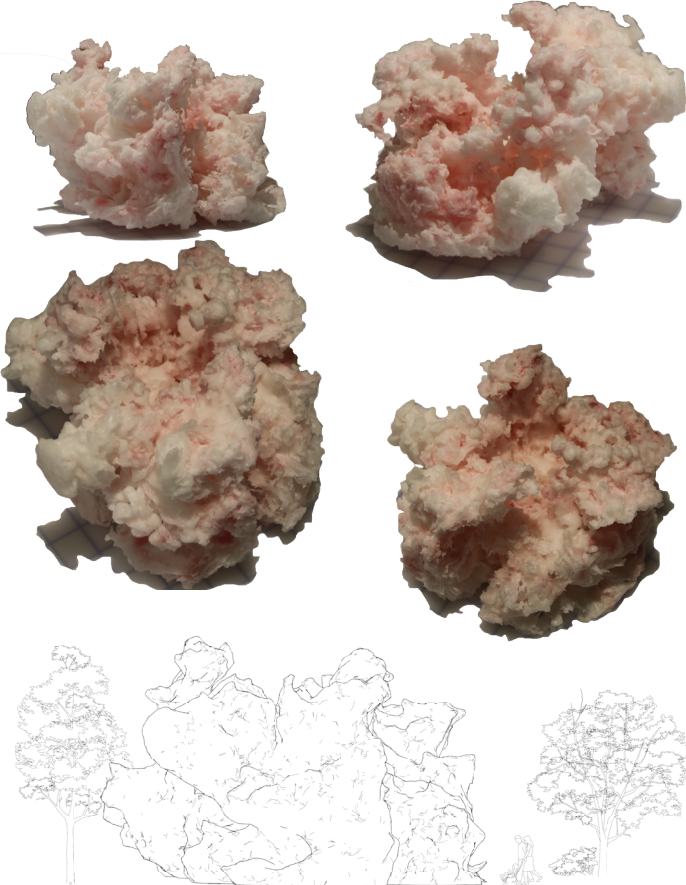
- 25L Industrial Plastic Vertical Bucket Mold (5L Filled, Water 8°C)

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 necessity 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, reminiscent 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.

