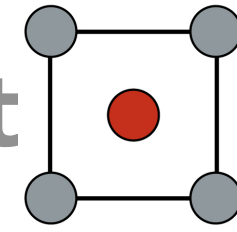

C A D M o d e l l i n g
a
B a s e b o a r d - 1 : 1 S c a l e

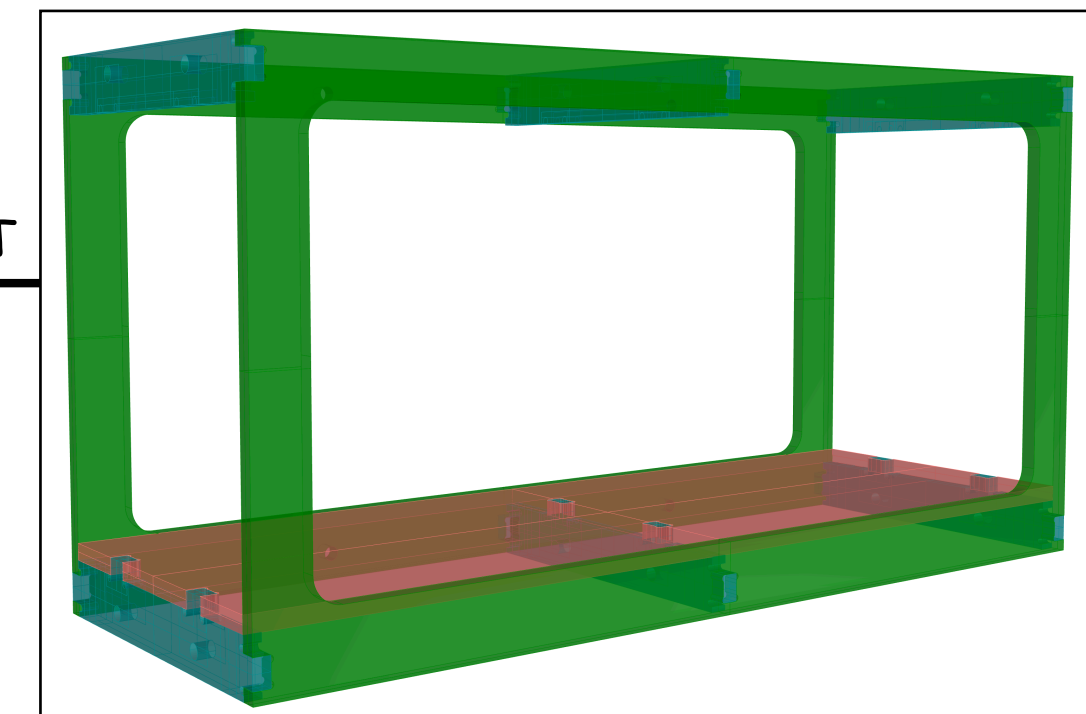
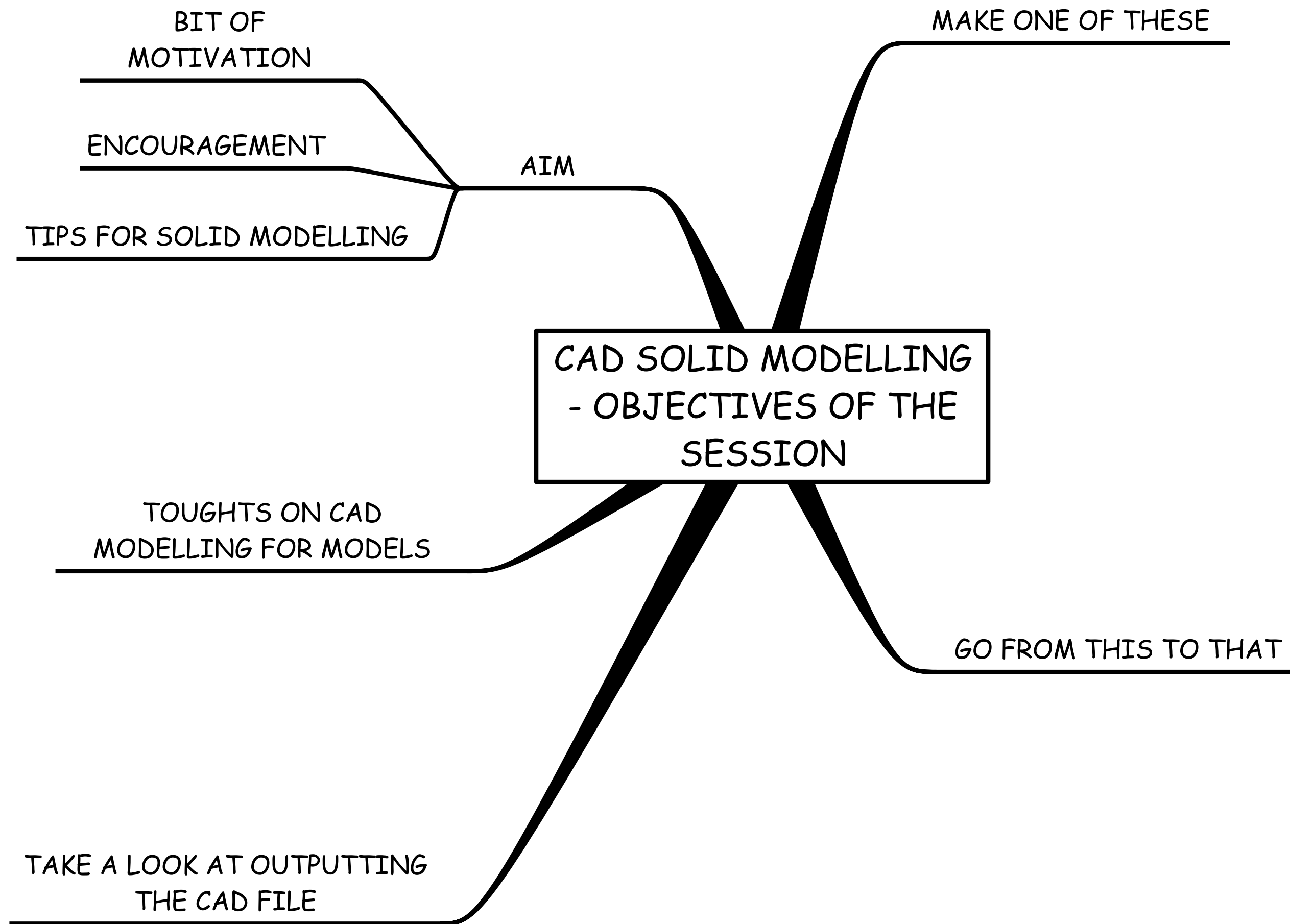
An Animated Demonstration – what could possibly go wrong – the live Demonstration

Lee E J Styger

the centre point

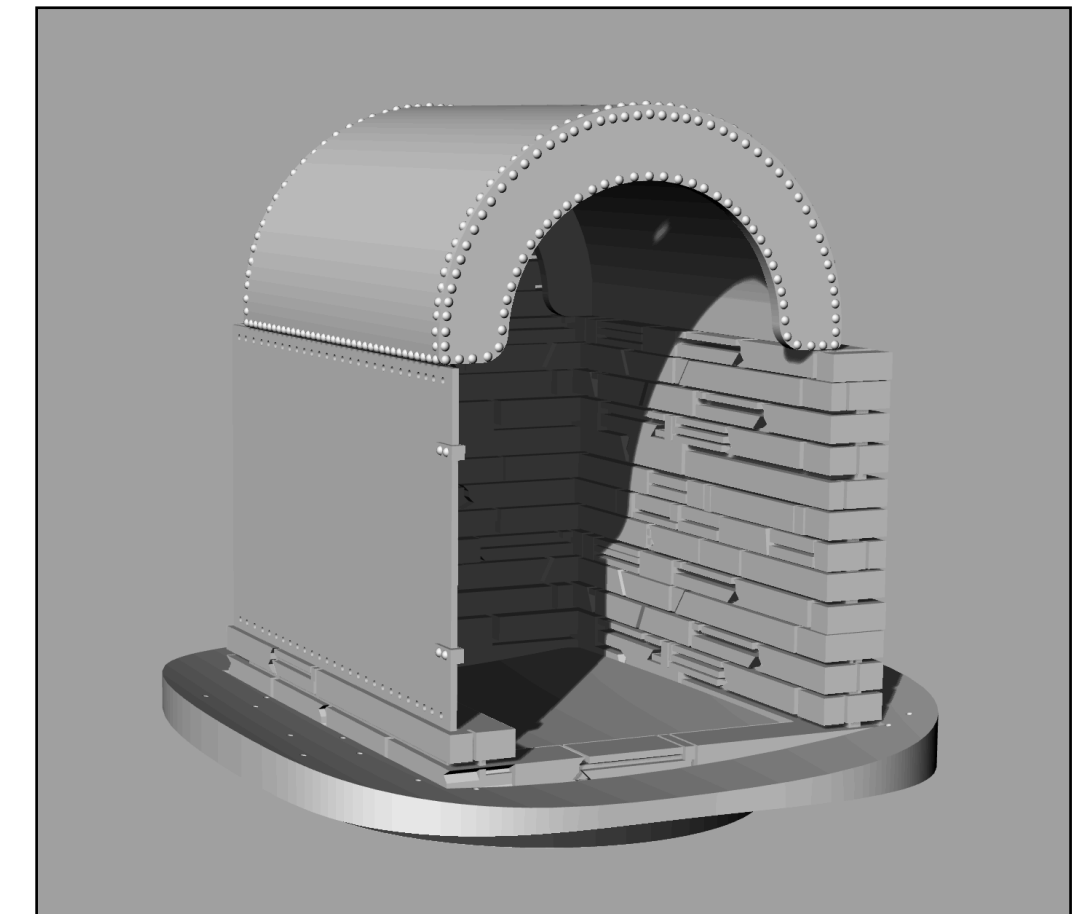
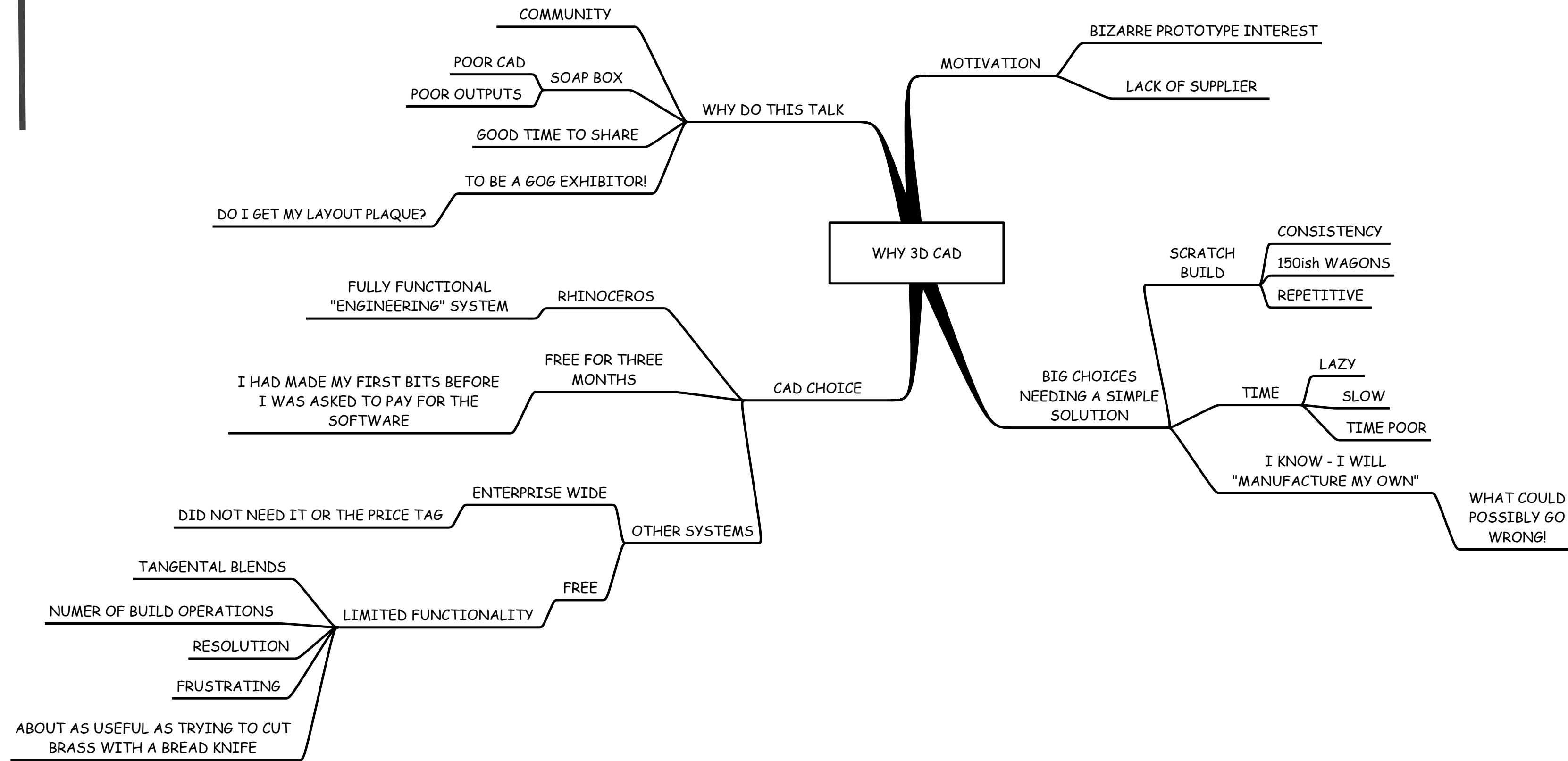


Why Are We Here

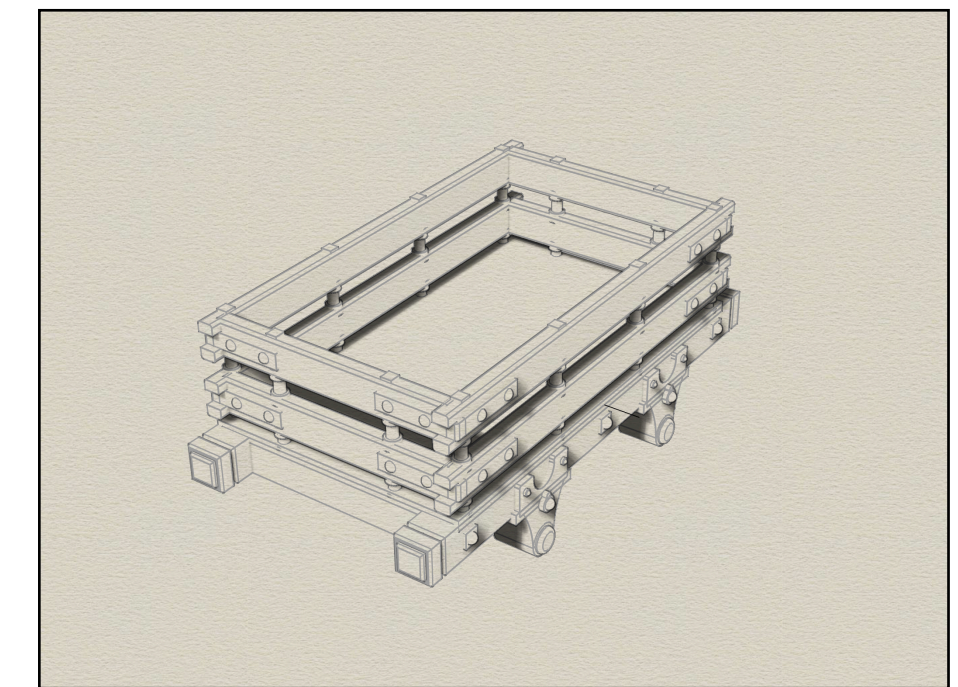
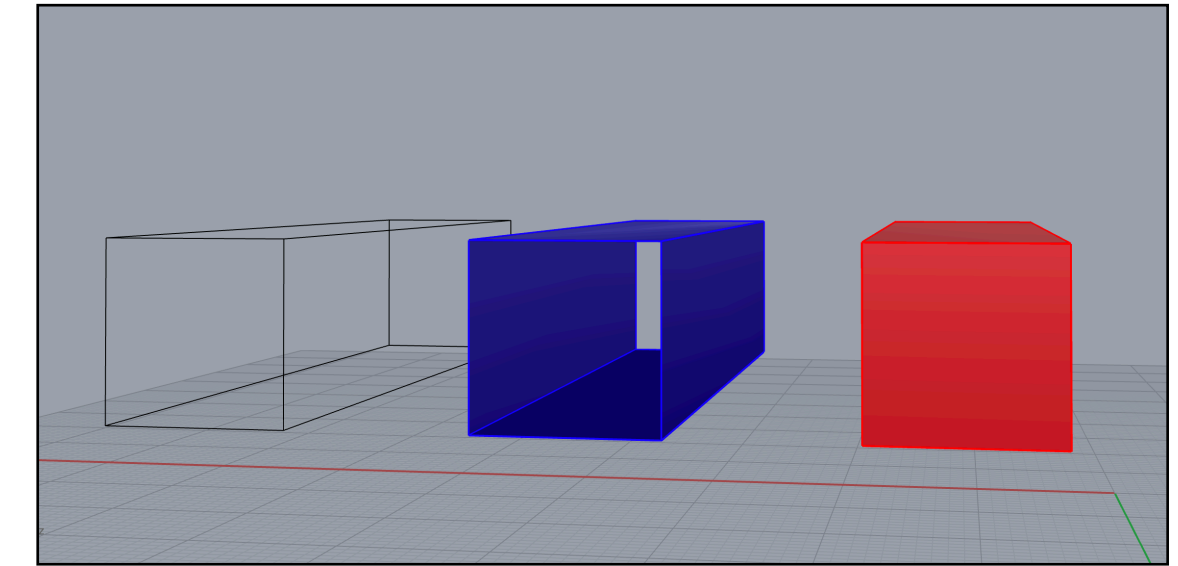
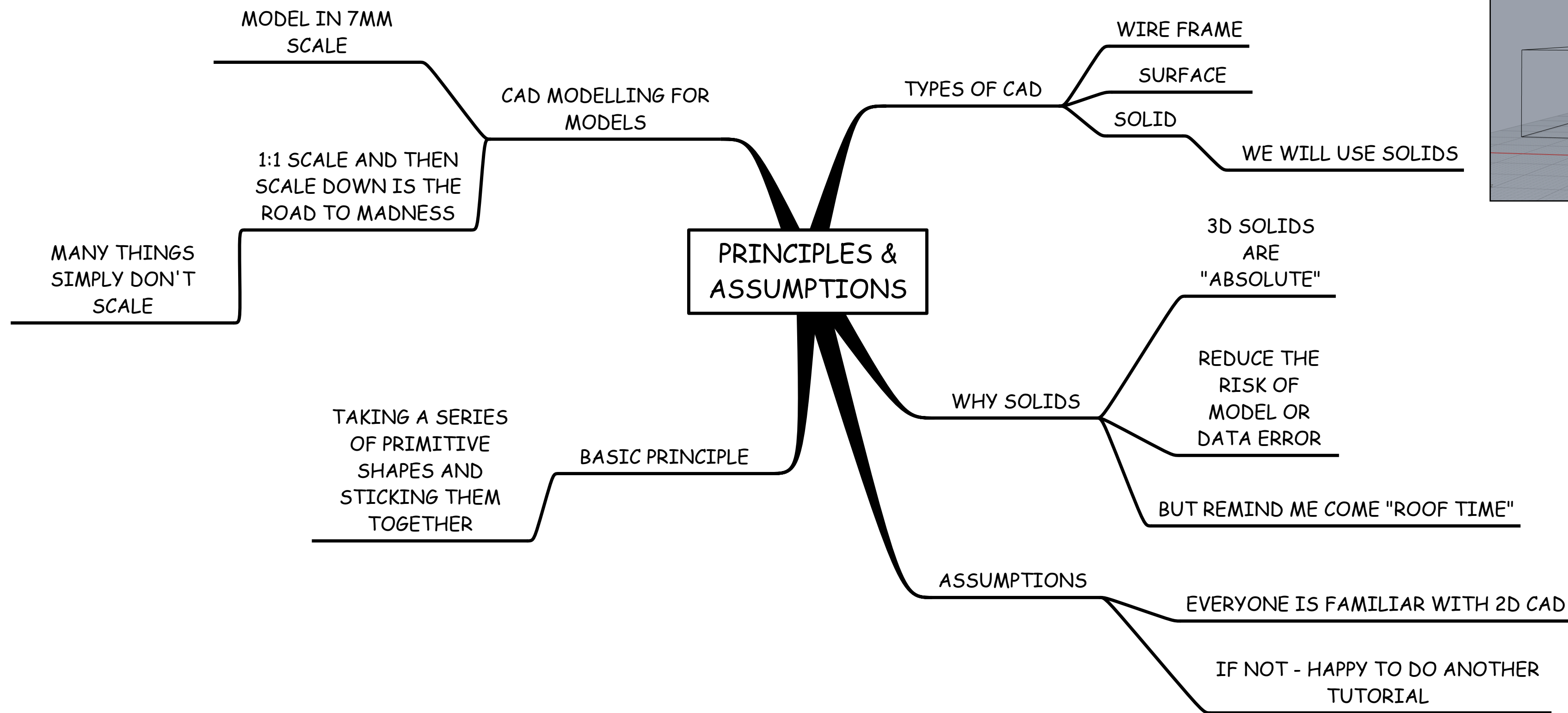


forming the point 

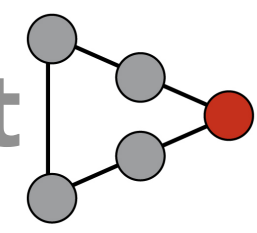
Why Am I Here



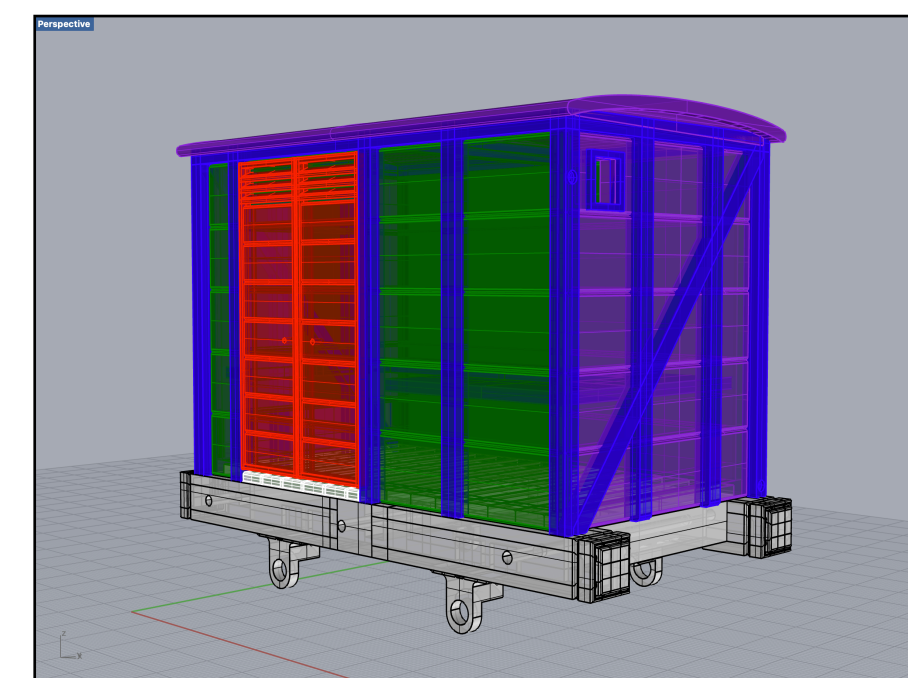
The Tech Bit



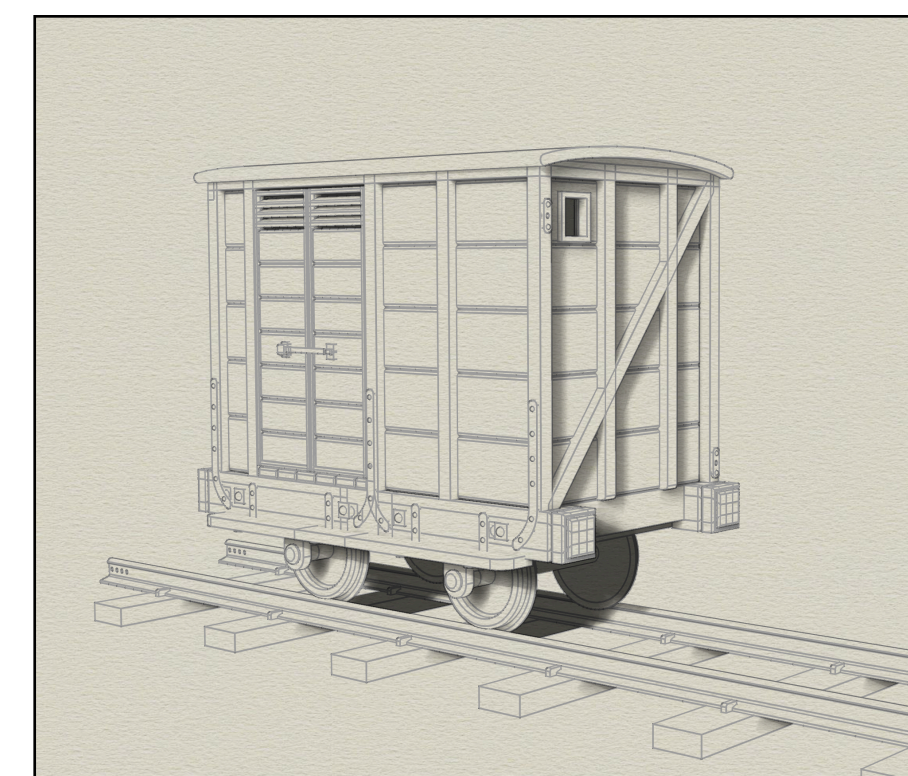
making the point



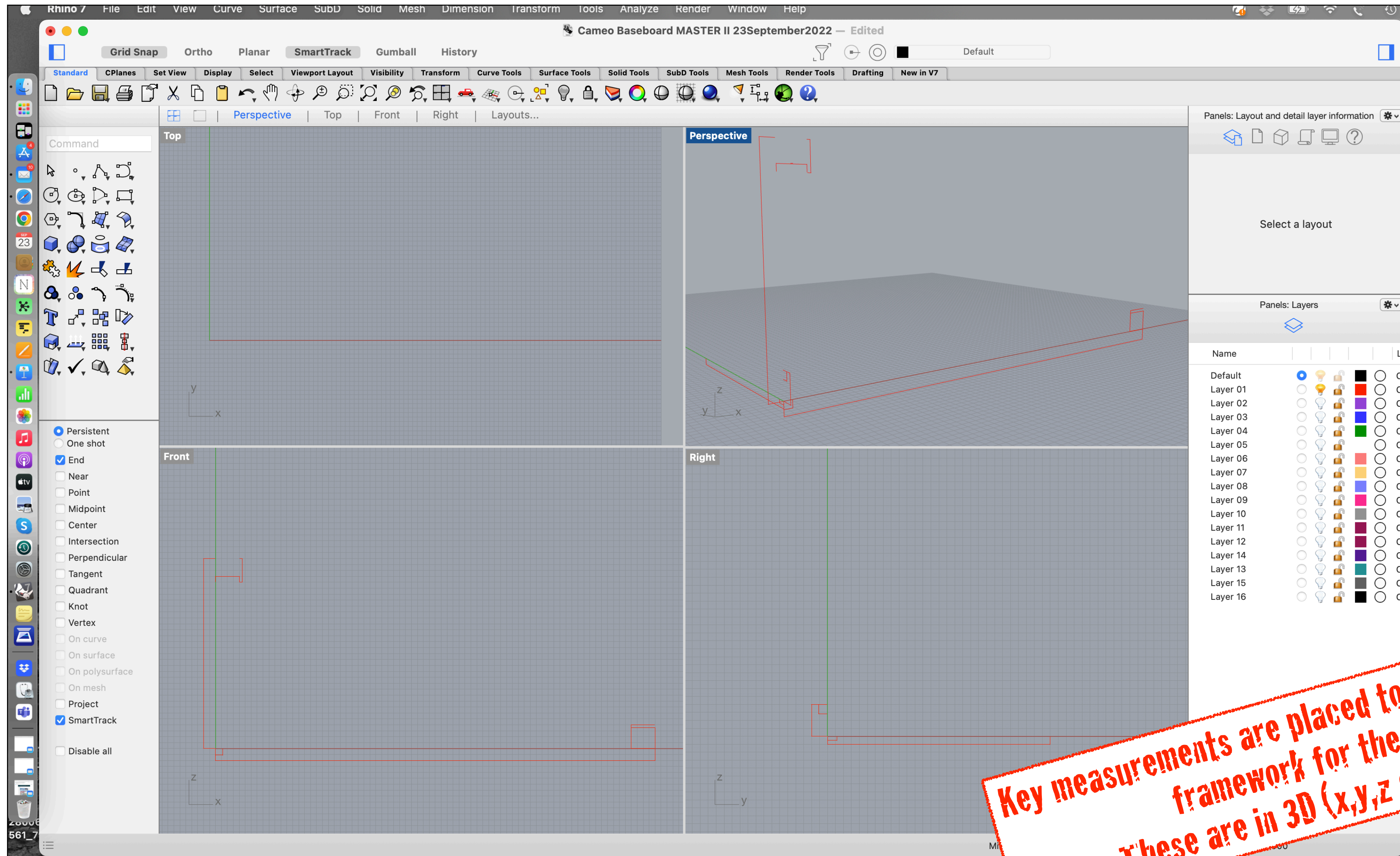
And We Thought This Was a Good Idea Because....



**DOING IT LIVE!
WHAT COULD POSSIBLY GO WRONG**

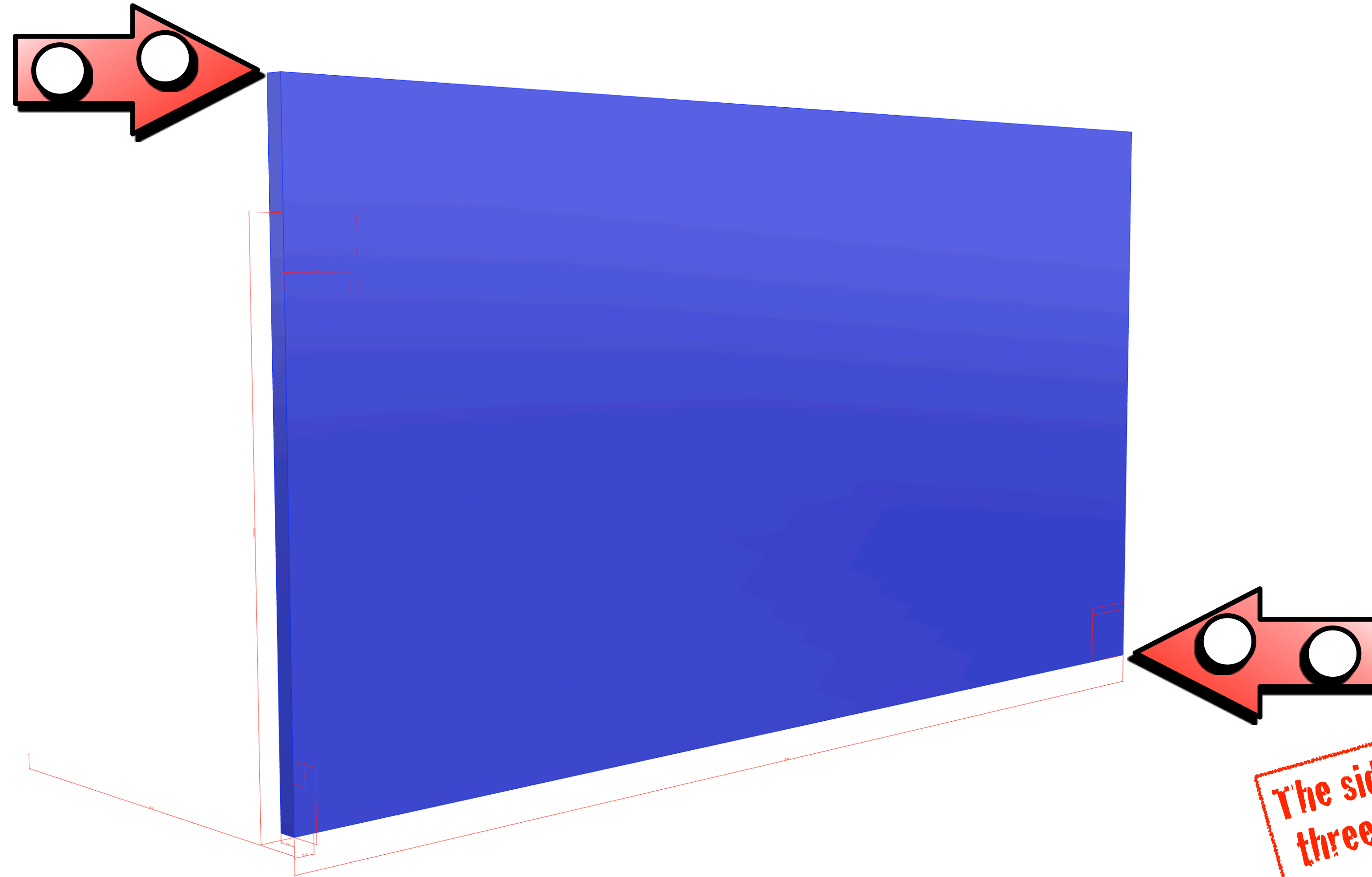


Animated Sequence to Show Construction Methods and Strategy



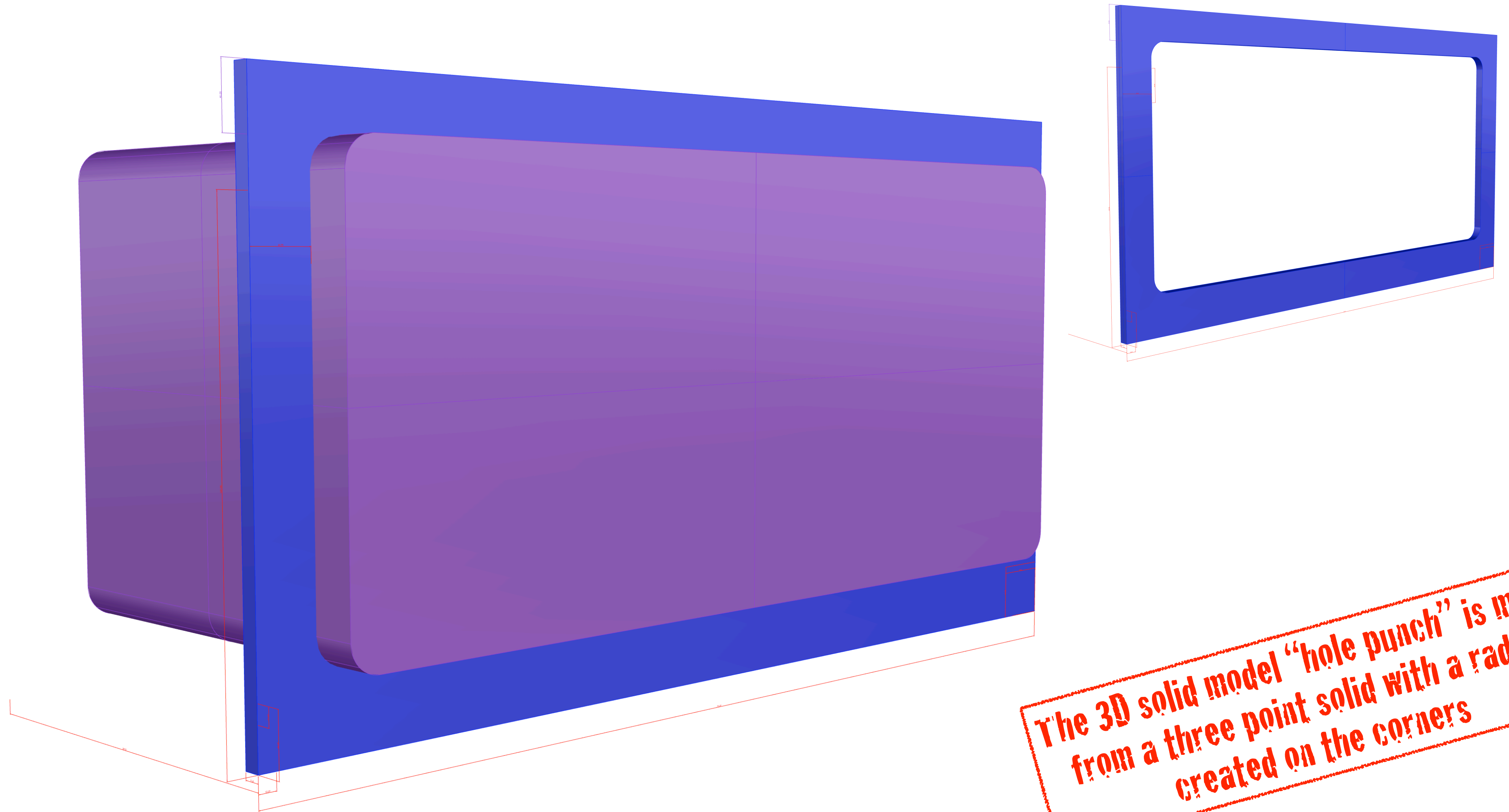
Key measurements are placed to provide a working framework for the model
NOTE - These are in 3D (x,y,z construction planes)

Animated Sequence to Show Construction Methods and Strategy



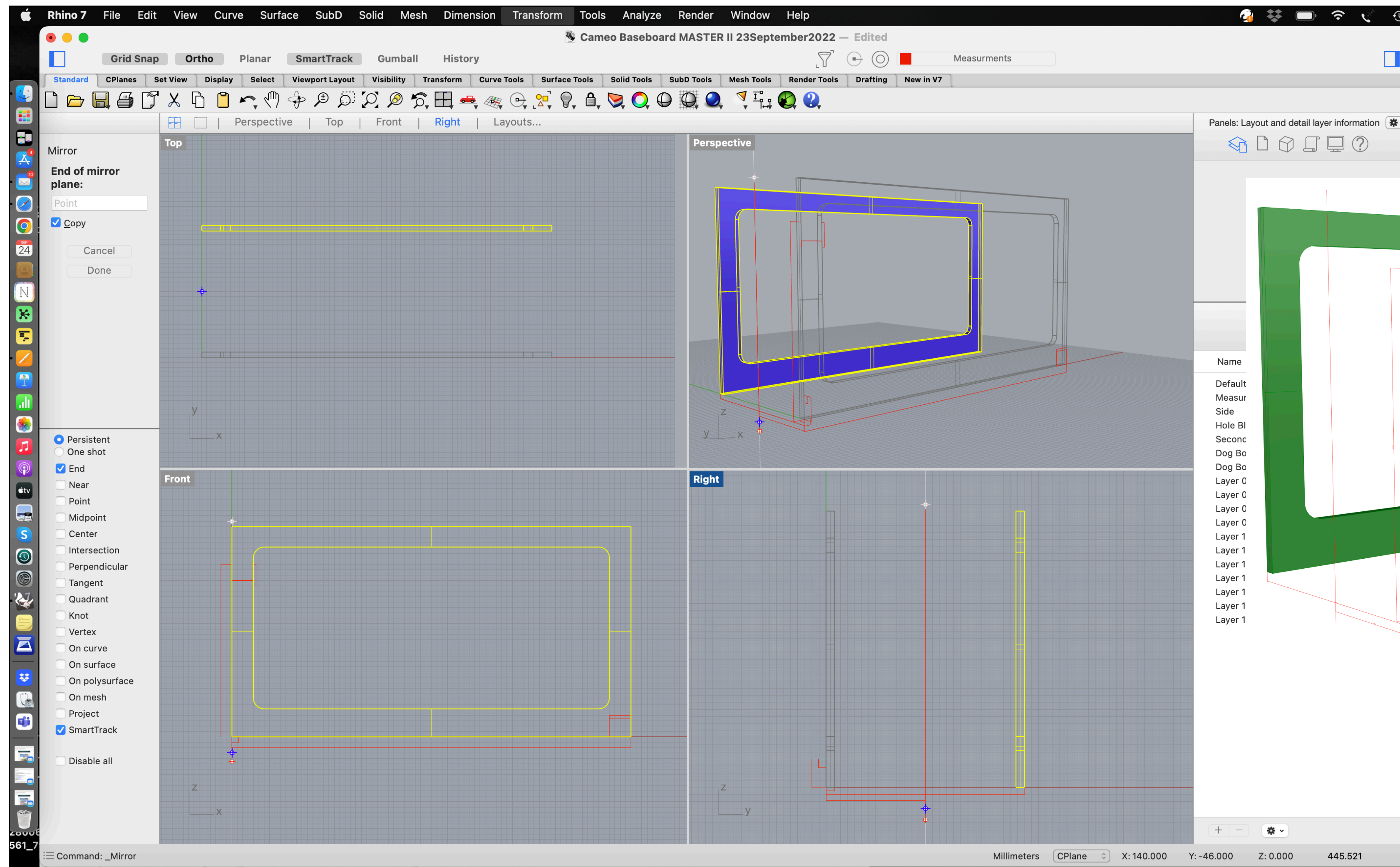
The side profile is drawn as a three point primitive solid in 3D space

Animated Sequence to Show Construction Methods and Strategy



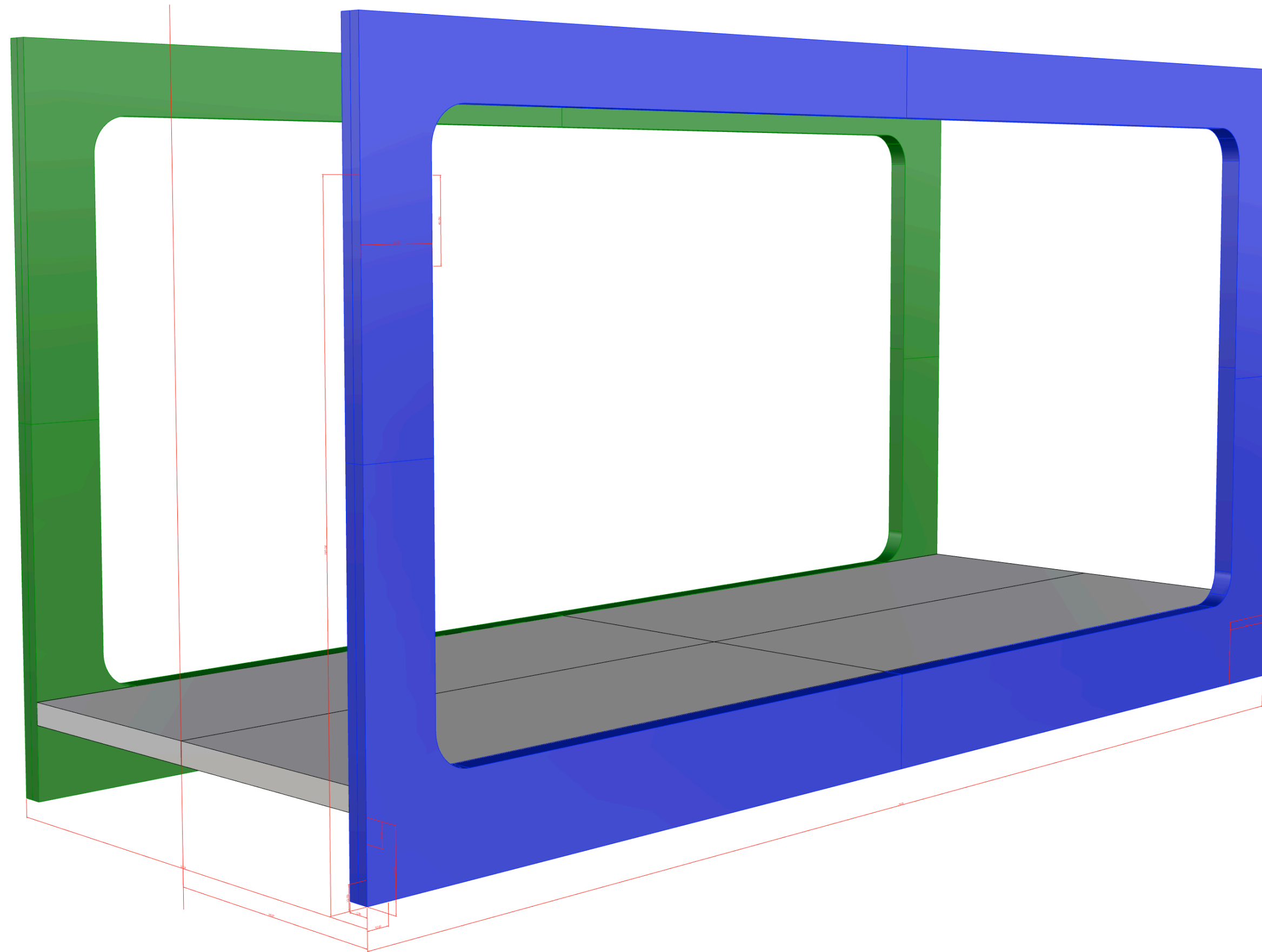
The 3D solid model "hole punch" is made from a three point solid with a radius created on the corners

Animated Sequence to Show Construction Methods and Strategy



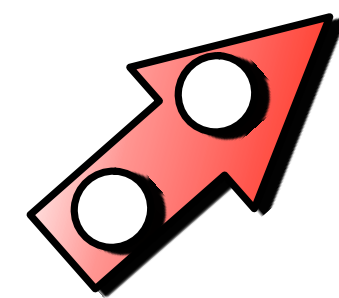
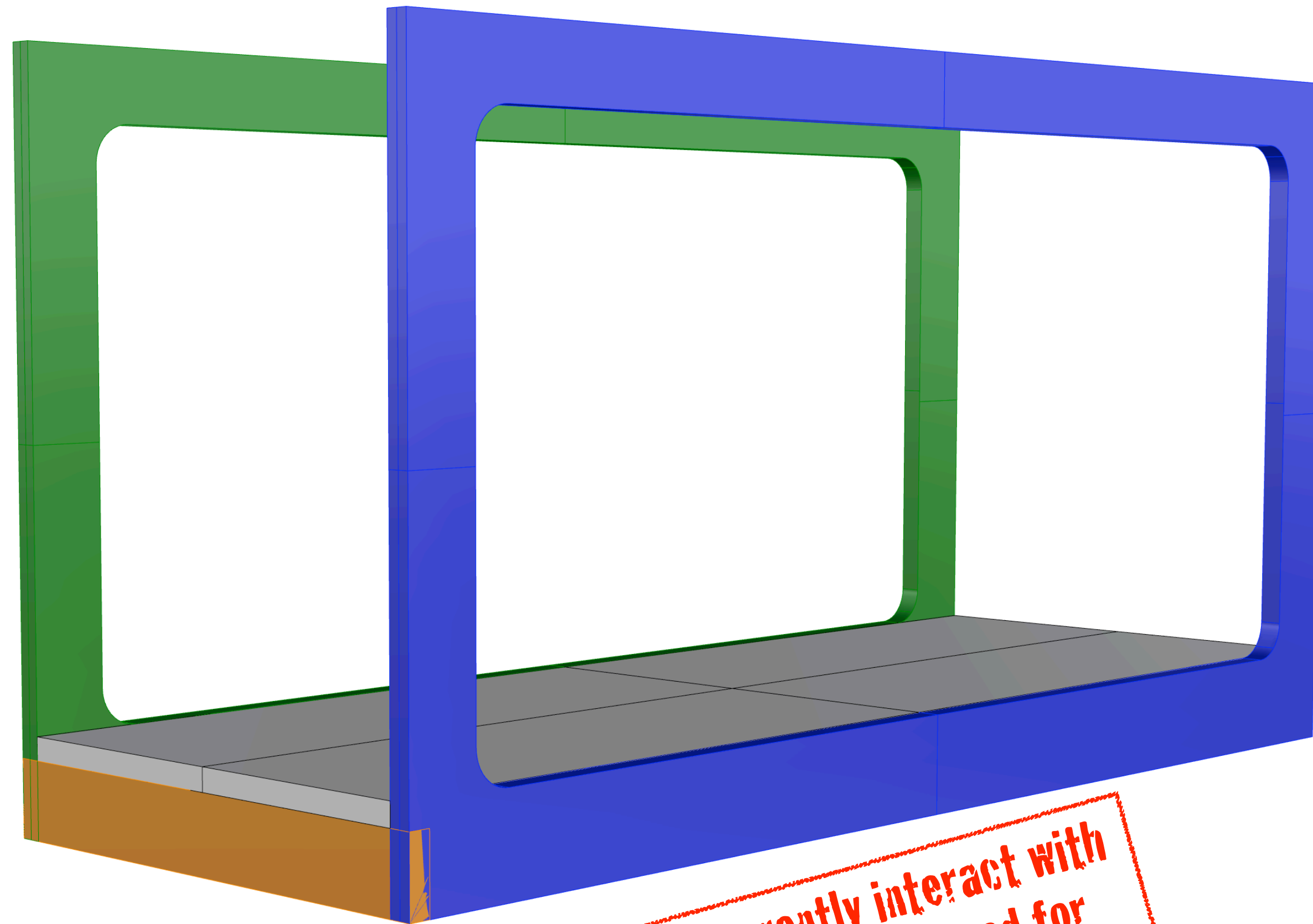
The second side is now mirrored from the first through the centre line

Animated Sequence to Show Construction Methods and Strategy



The baseboard top is created using a three point solid

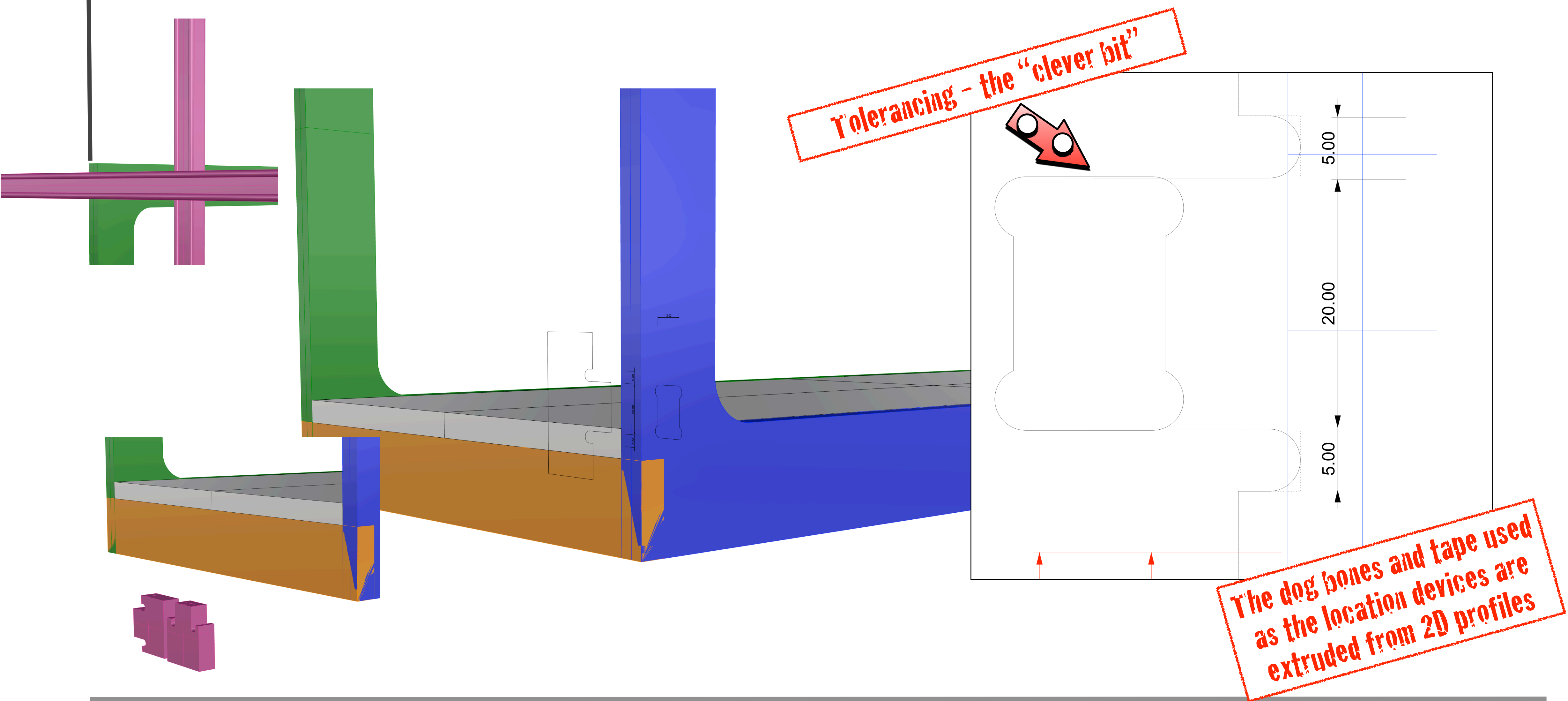
Animated Sequence to Show Construction Methods and Strategy



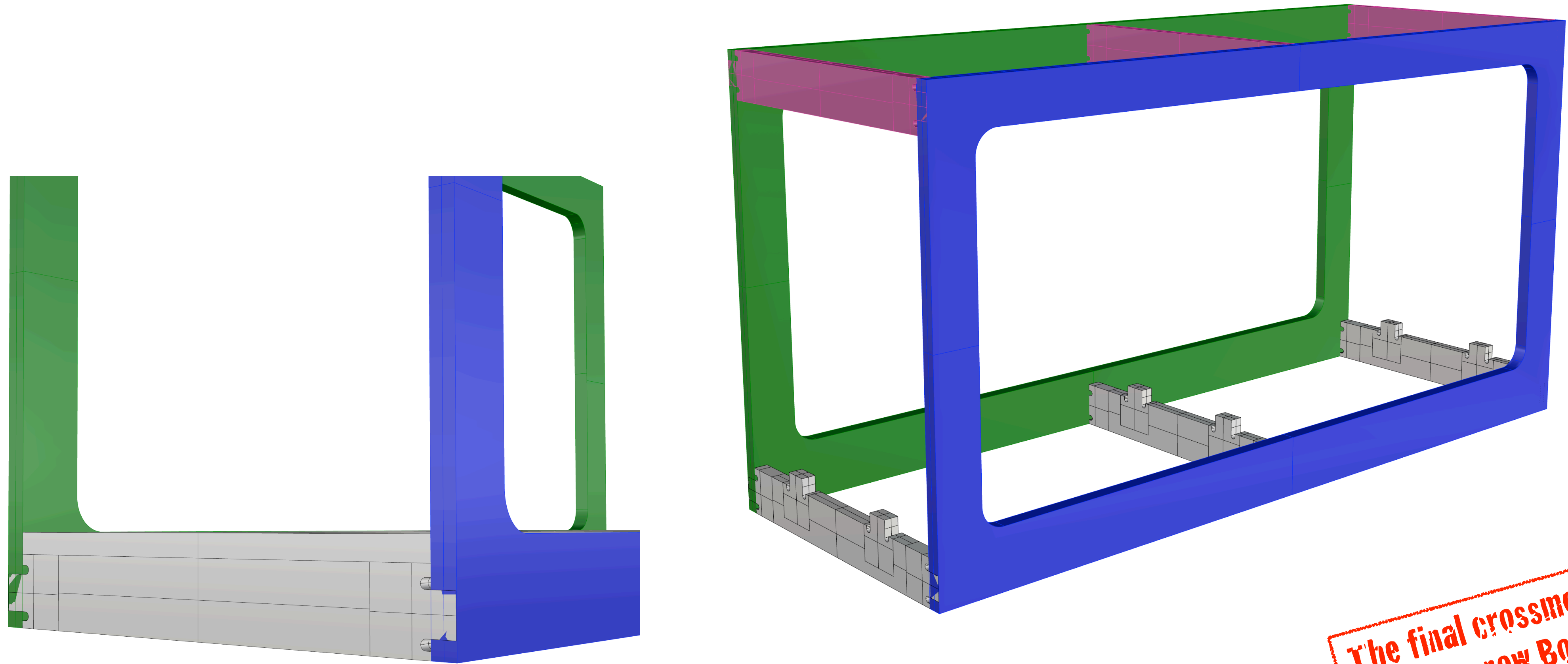
All "solids" currently interact with each other - this is ungood for manufacture

The crossmember is created using a three point solid

Animated Sequence to Show Construction Methods and Strategy

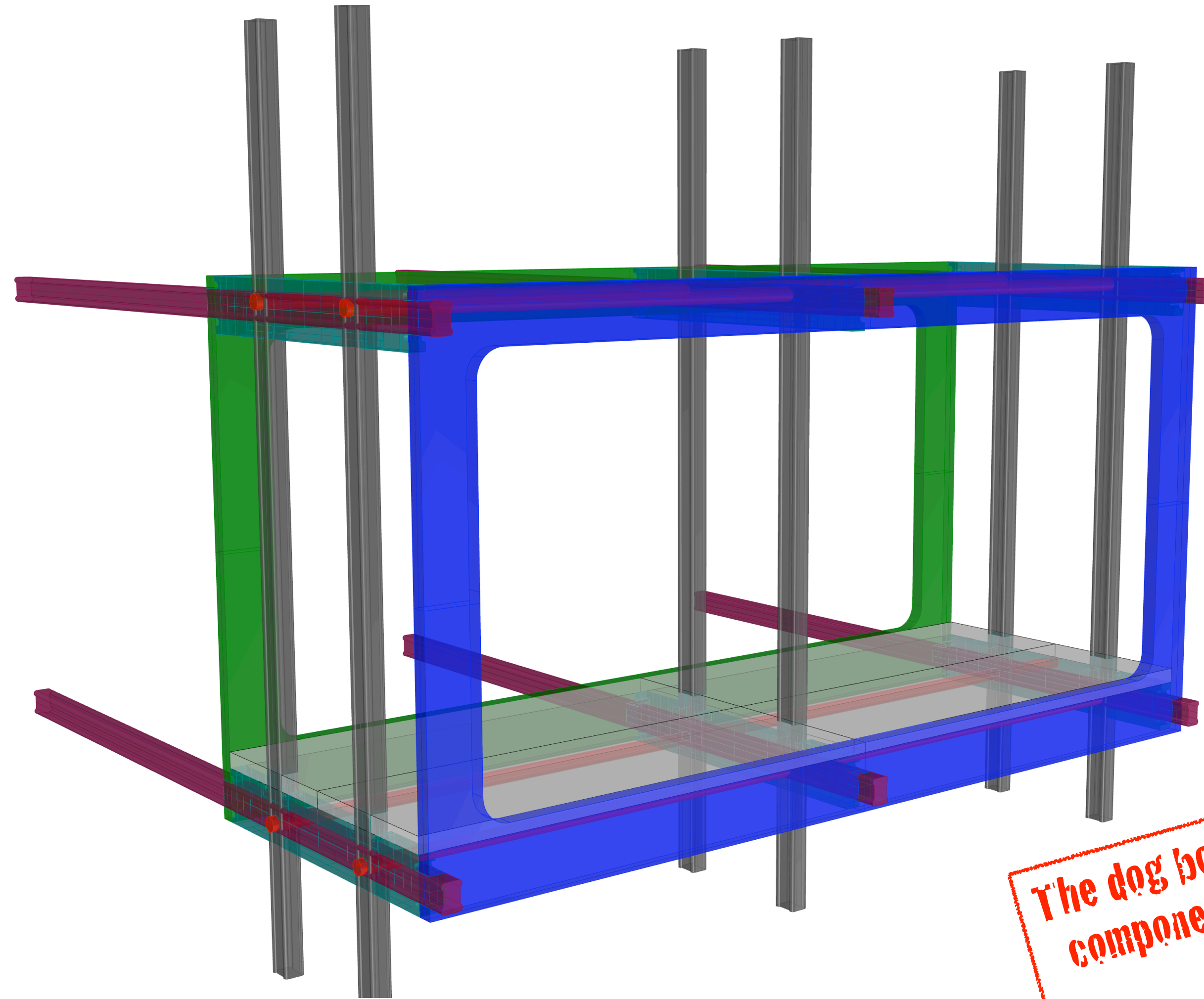


Animated Sequence to Show Construction Methods and Strategy



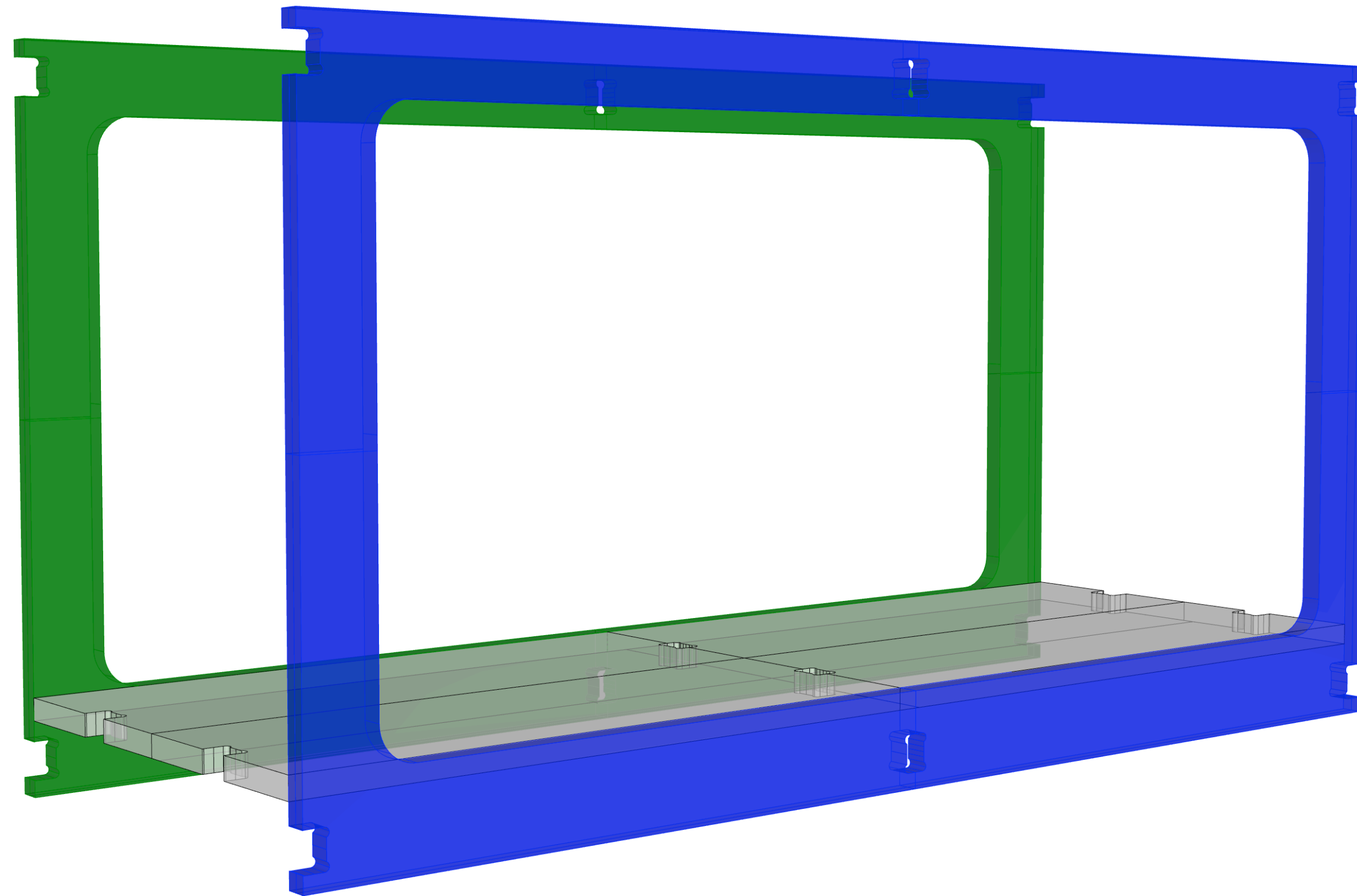
The final crossmembers with the tabs now Boolean joined into the geometry

Animated Sequence to Show Construction Methods and Strategy



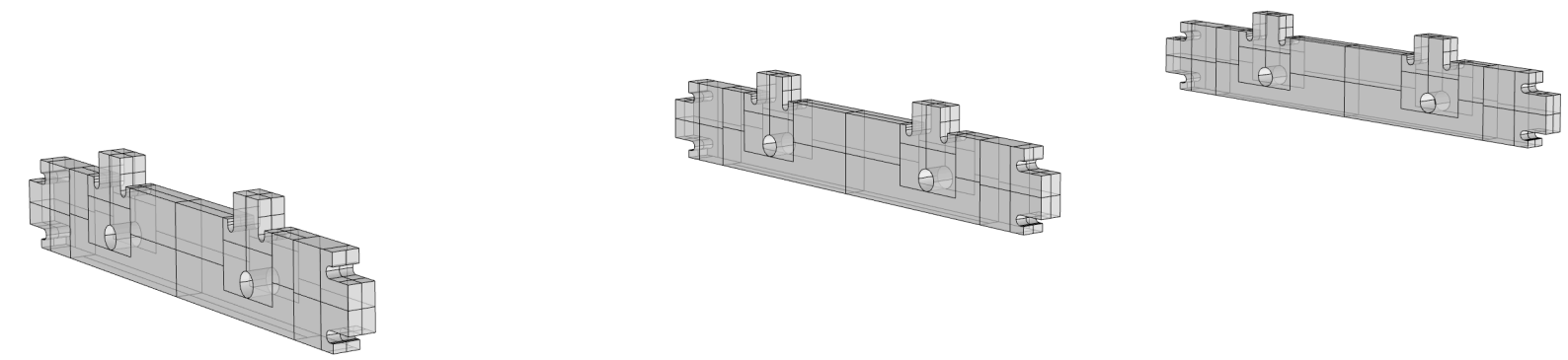
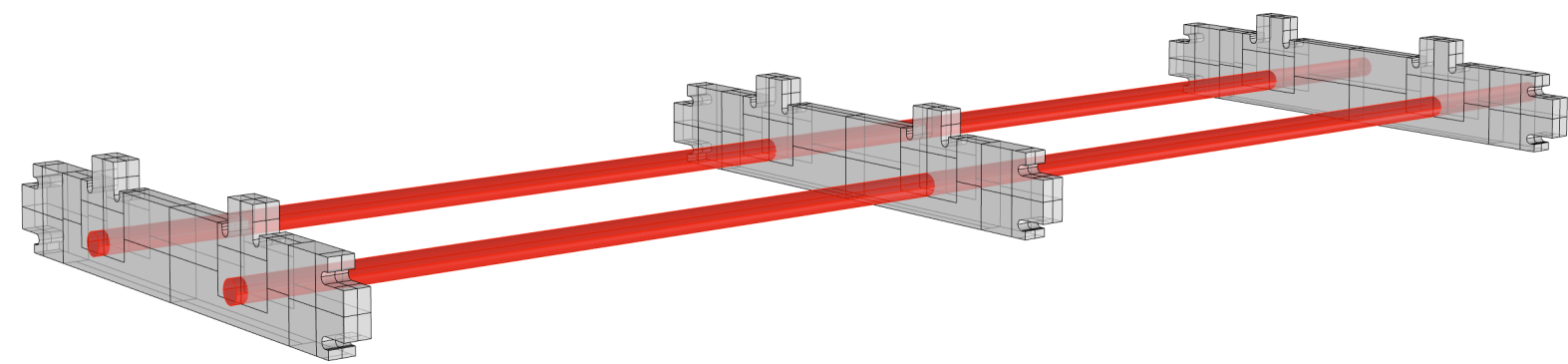
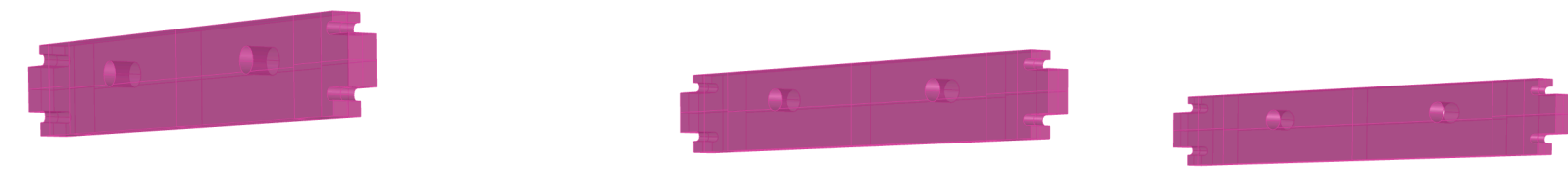
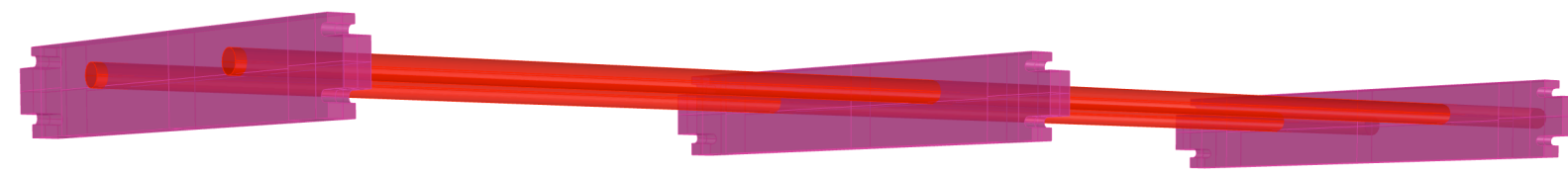
The dog bone solid extrusions passing through the components ready to be Boolean differenced to make the holes for the slots

Animated Sequence to Show Construction Methods and Strategy



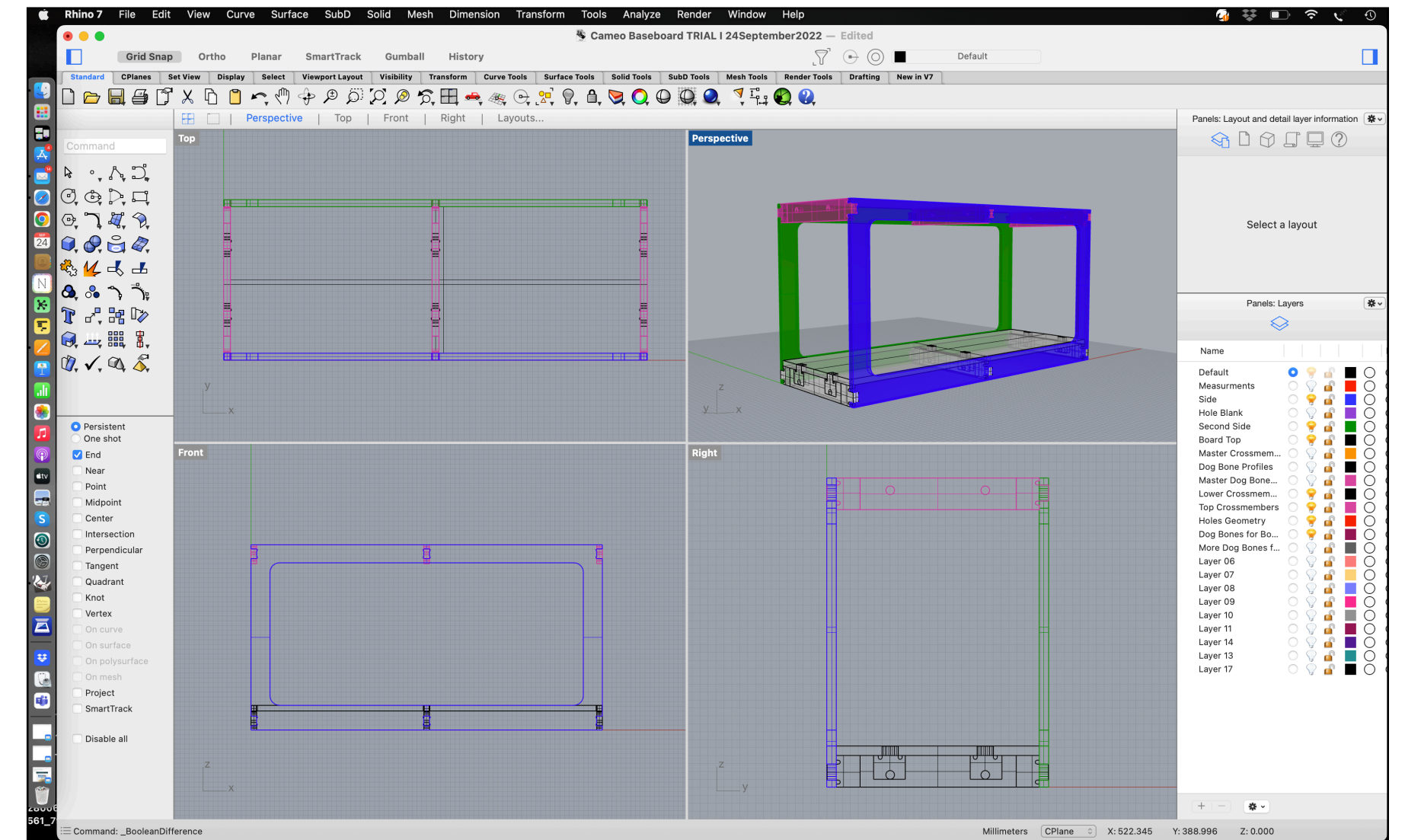
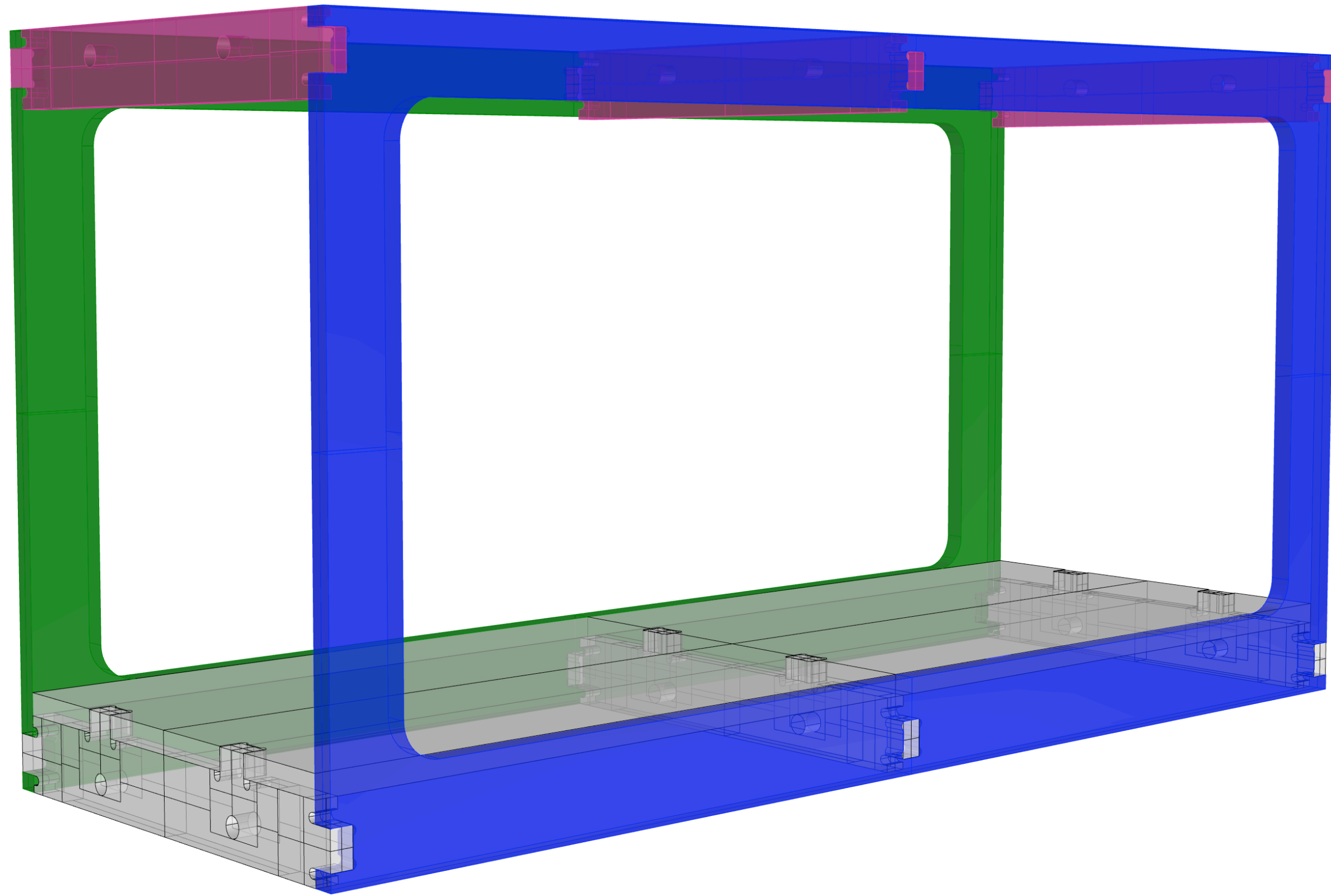
All dog bone holes now in the components

Animated Sequence to Show Construction Methods and Strategy



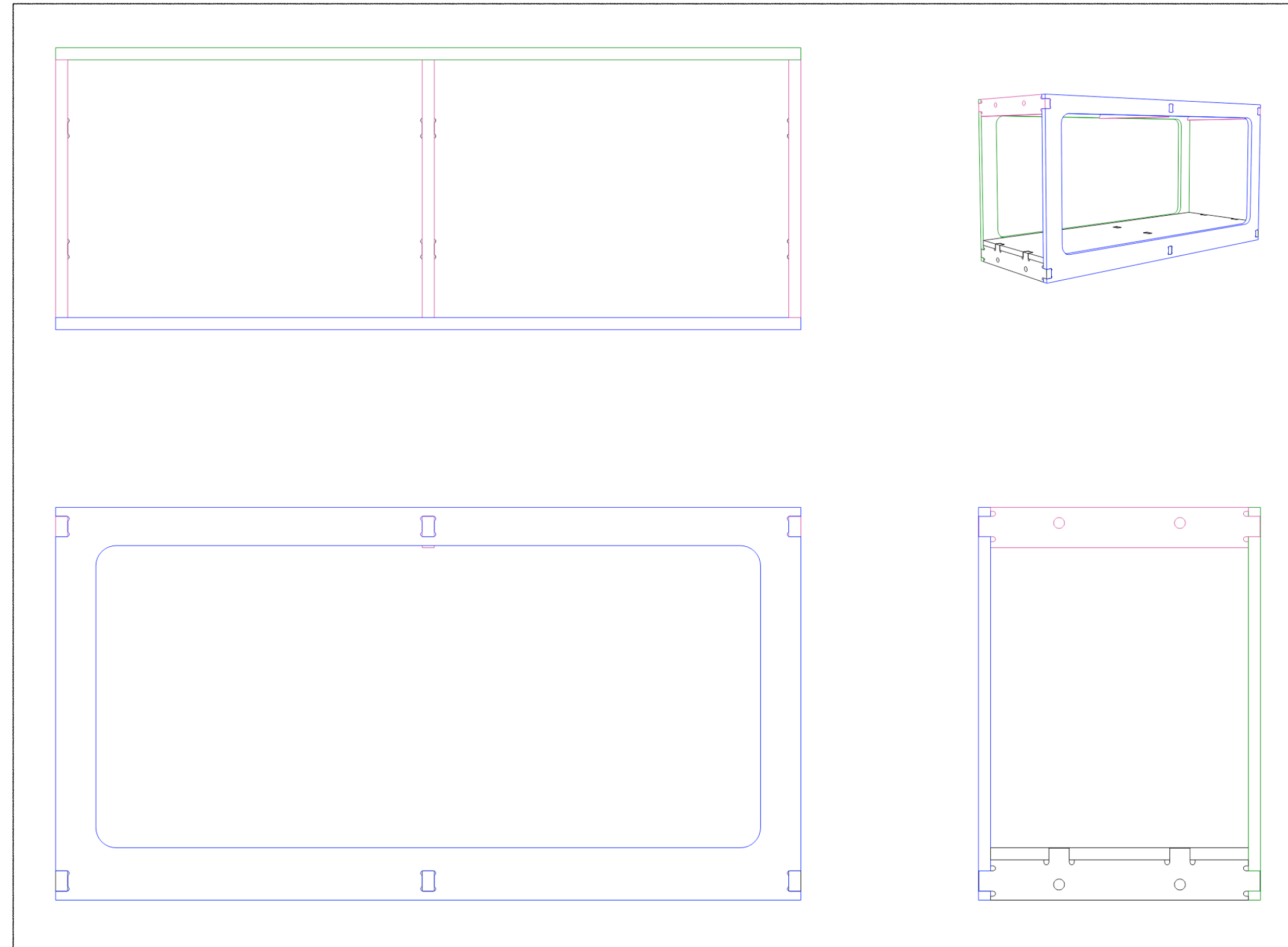
Wiring and connecting holes are similarly addressed by Boolean difference from solid extrusions

Animated Sequence to Show Construction Methods and Strategy



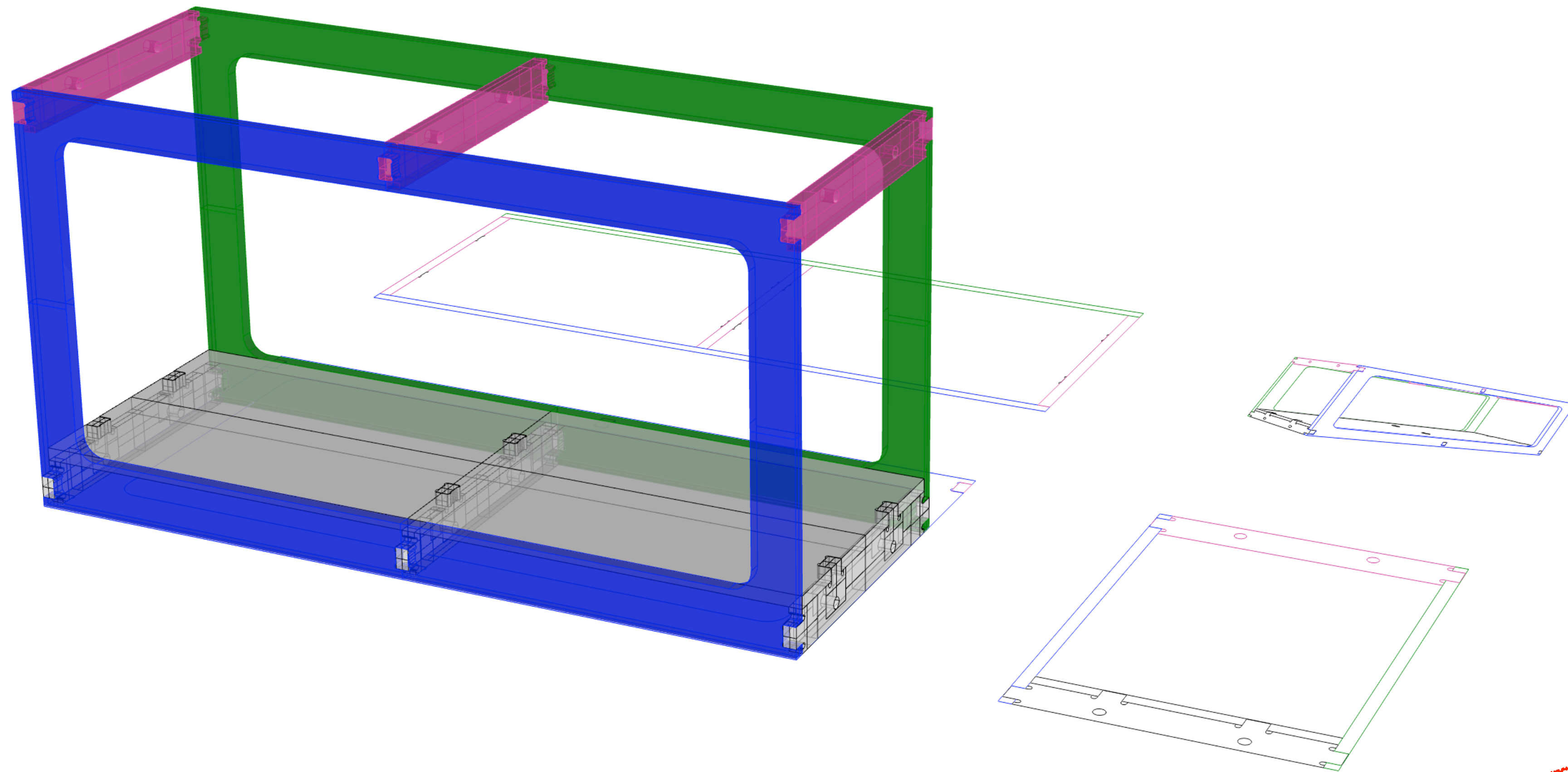
**The completed components
of the baseboard**

Animated Sequence to Show Construction Methods and Strategy



**2D Drawing made automatically
from the 3D solid model**

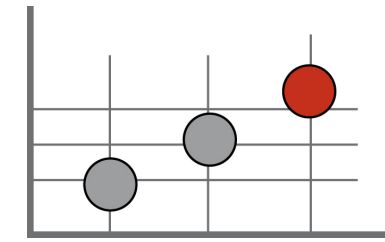
Animated Sequence to Show Construction Methods and Strategy

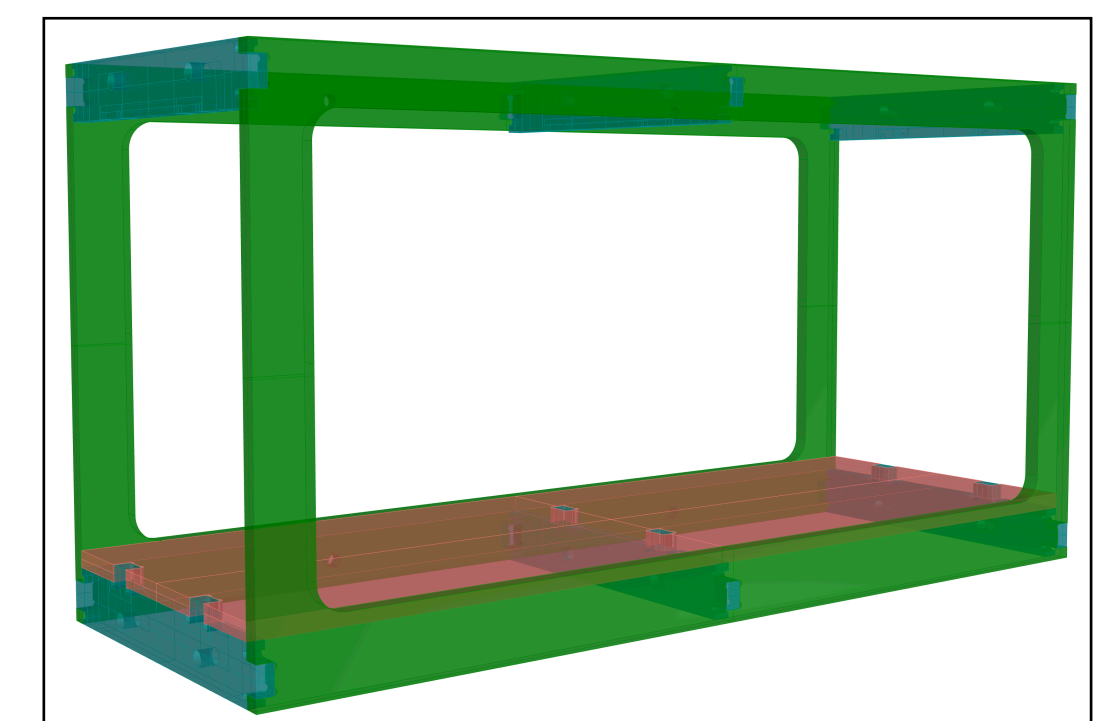
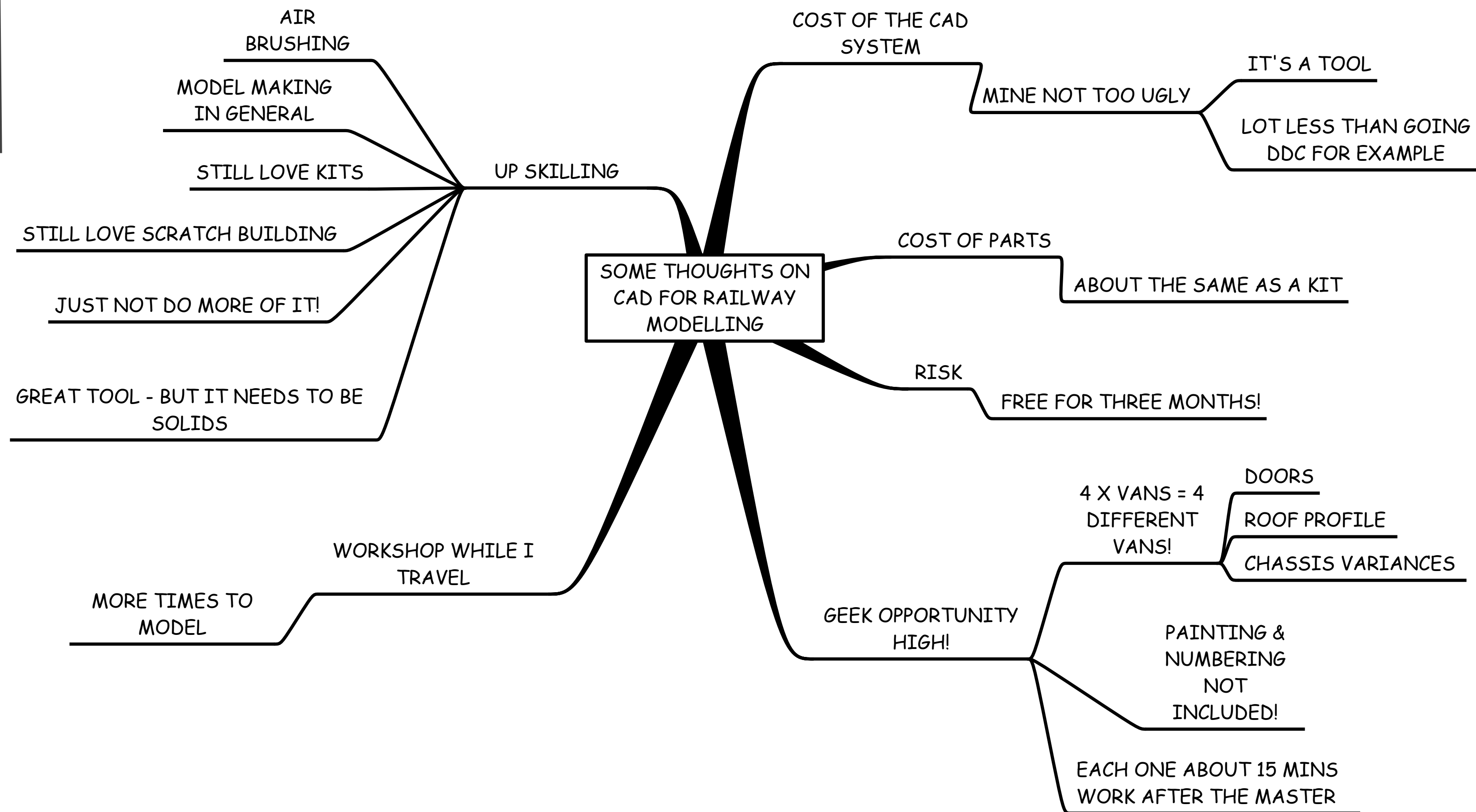


Comparison of 2D & 3D modelling

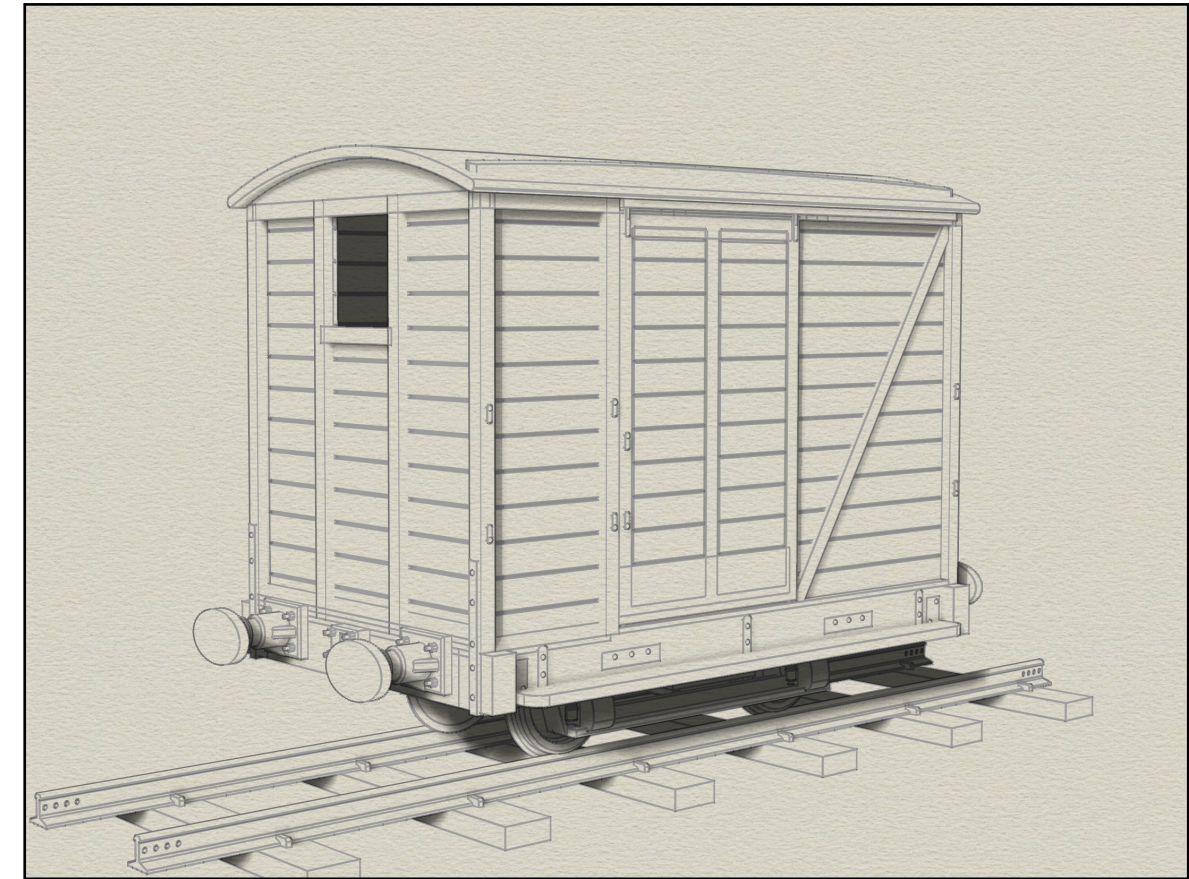
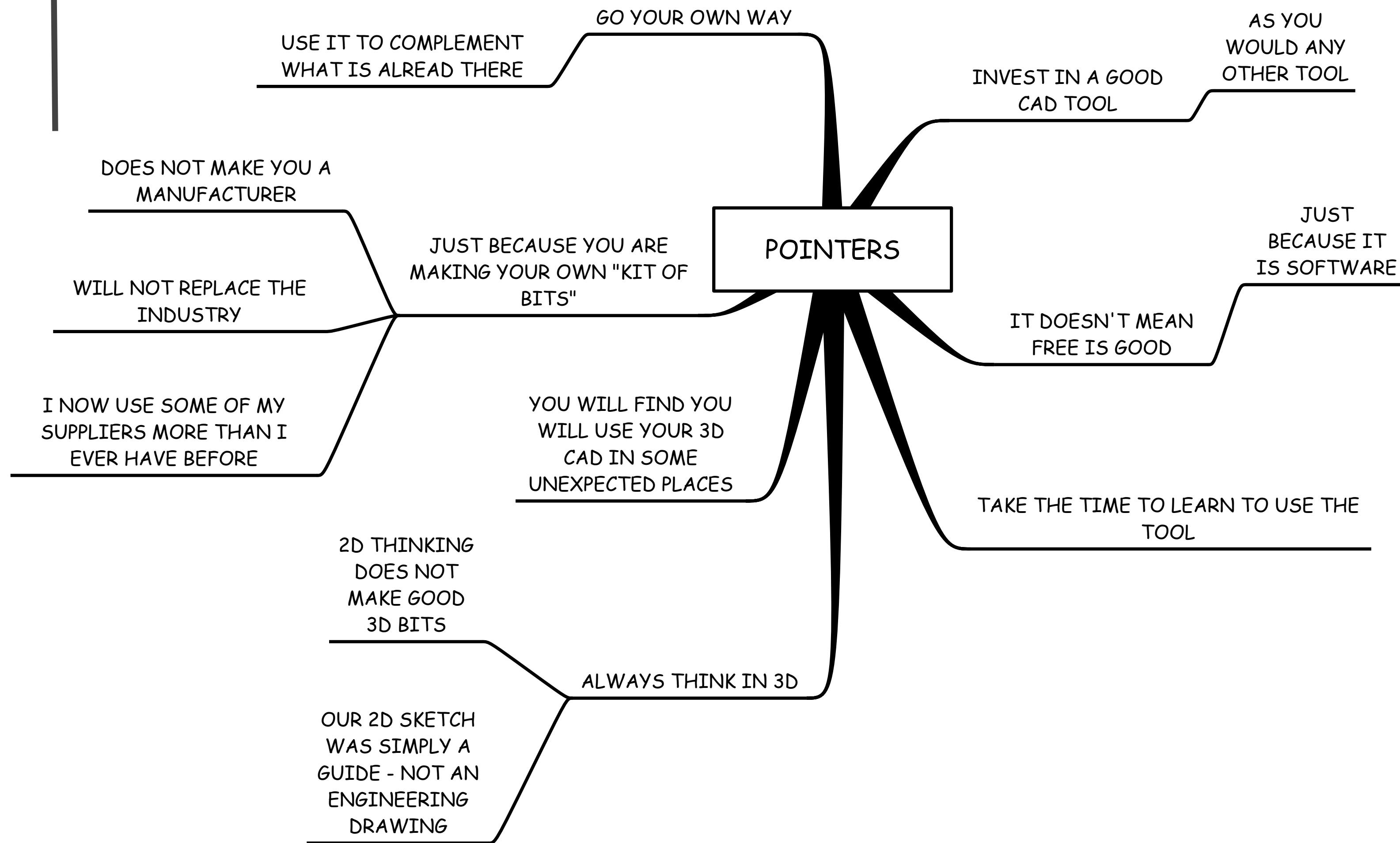


the data point





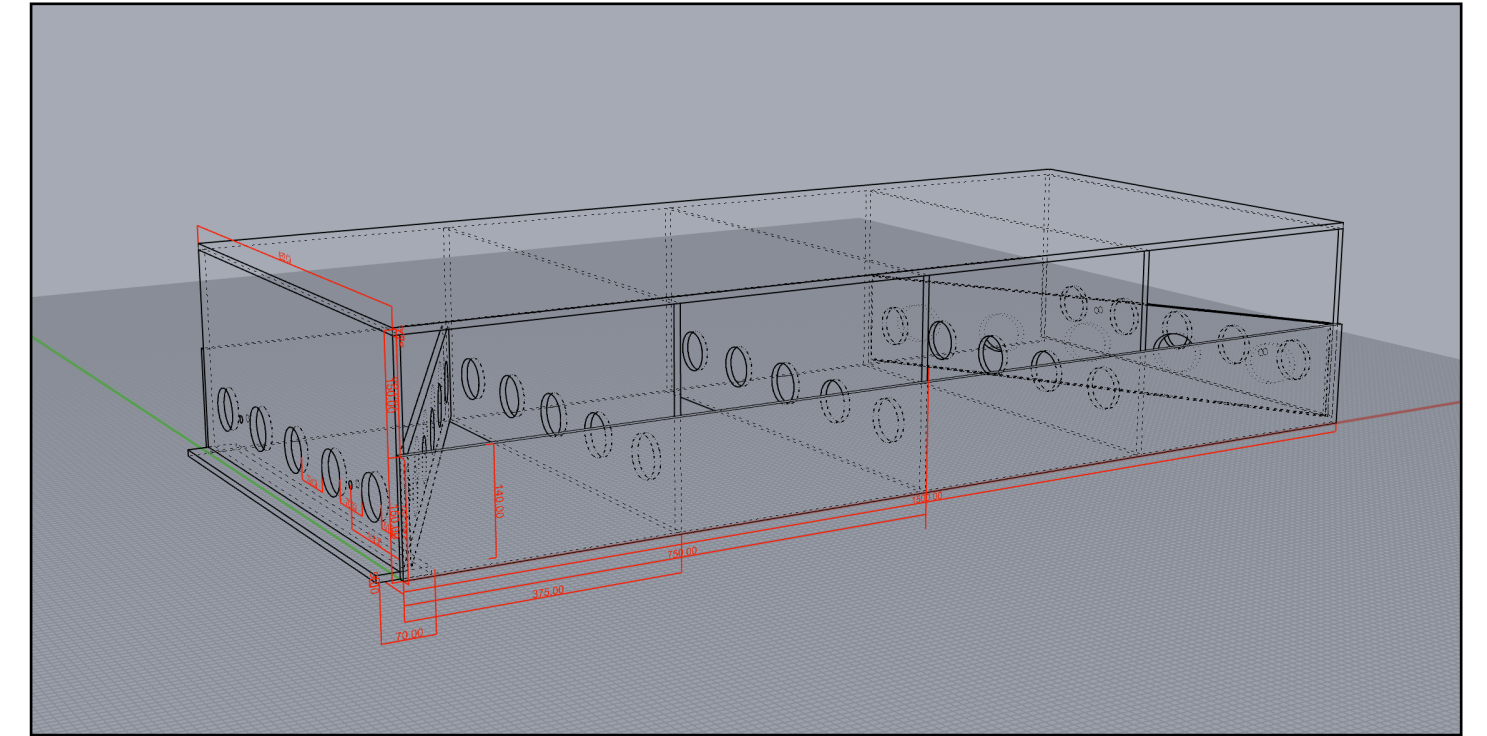
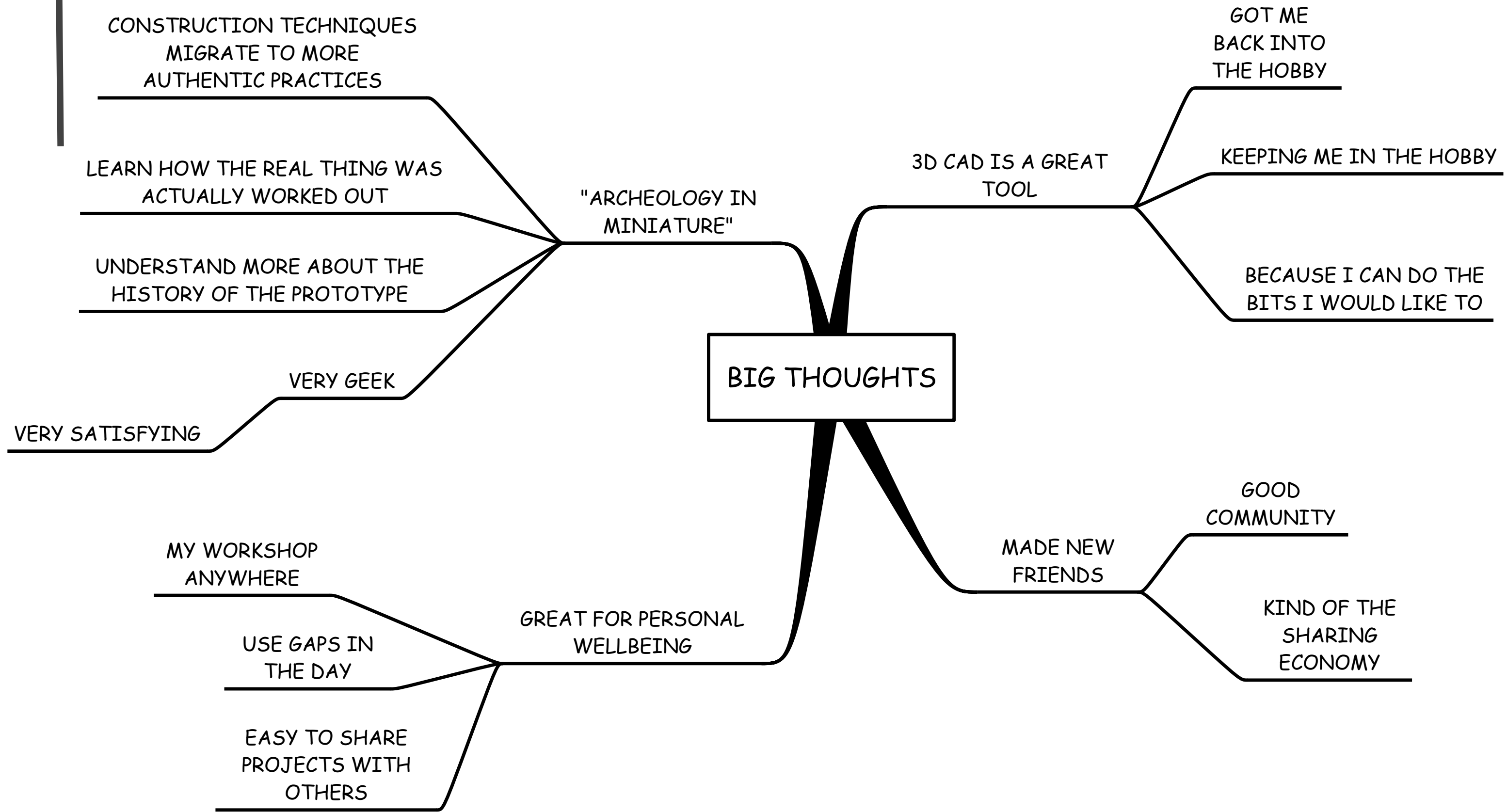
Dreams and Reality





the end point 

A Thought for the Day



Thank You For Your Time

leestyger@me.com

