

Final Submission

Mapping Space and Public Furniture

Siddhant Iyer

IADP Year - 3

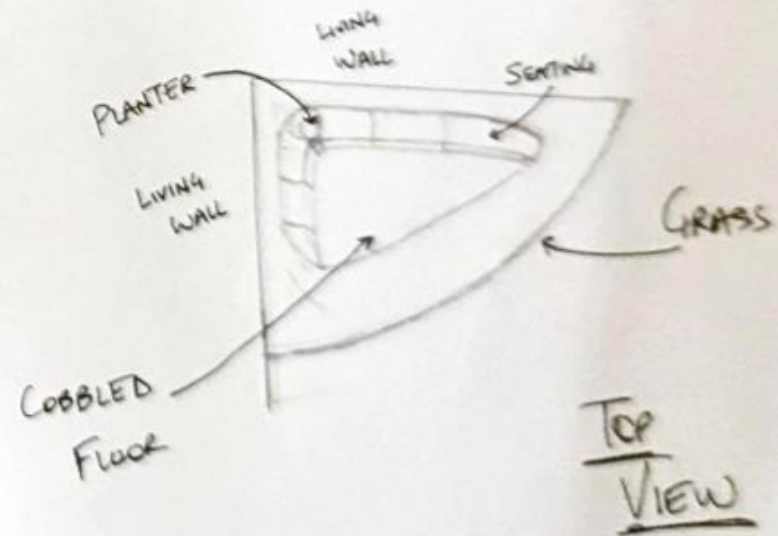
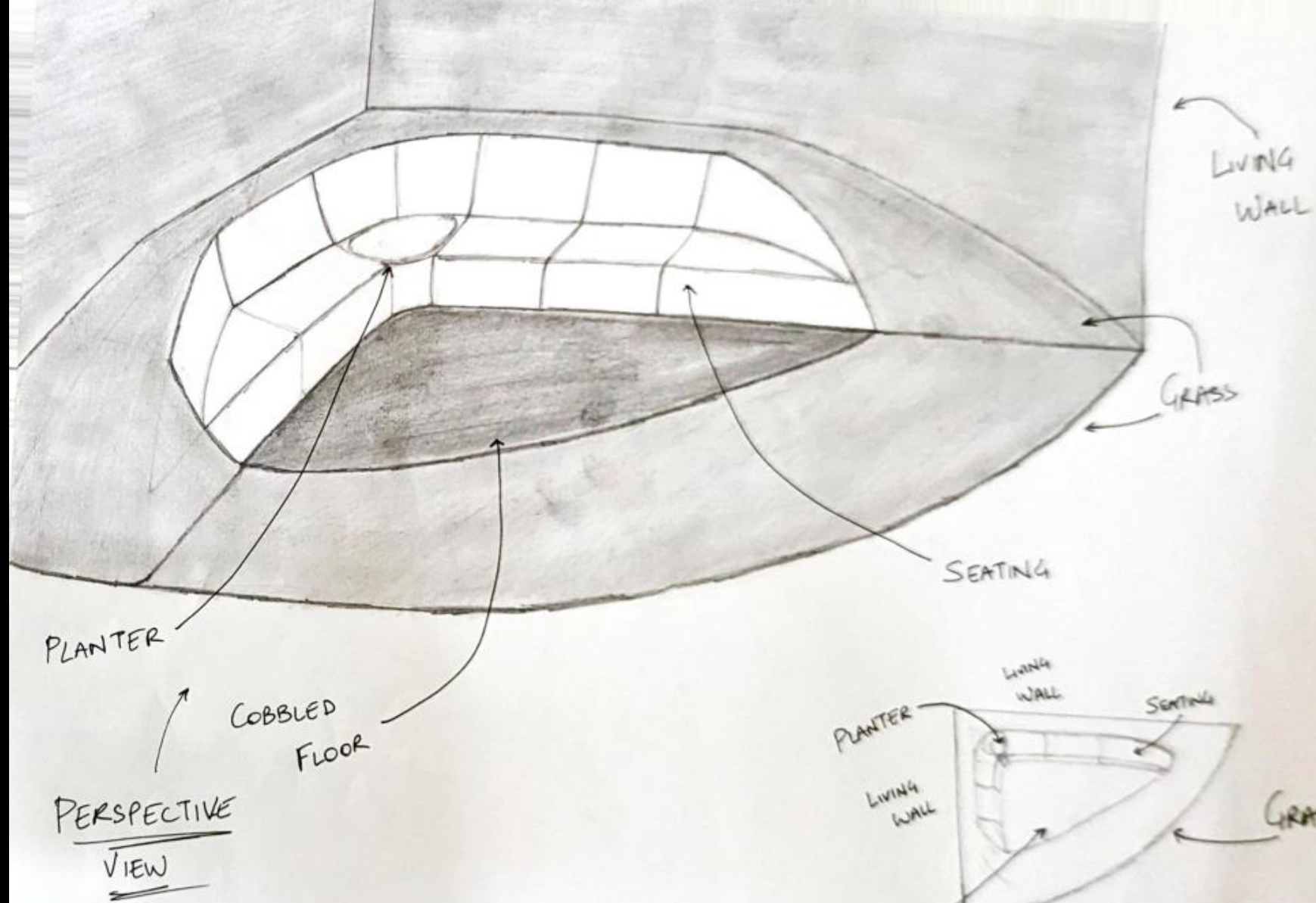
Design Brief:

Our aim is to create a multifunctional piece of public furniture for a workshop area that integrates storage, seating, aesthetics, and flora, while minimizing waste and boosting the energy of the space with vibrant materials and colors. The design should respond to the many demands of users while also making the area feel more lively and productive. Modules should be portable so that users can take it outside during workshop hours. The furniture must prioritize sustainability by using recycled or scrap materials and employing waste-minimizing production methods, all while keeping the design simple and cost-effective for easy replication. Finally, it should improve the user experience by adding a multipurpose, visually appealing, and long-lasting feature.

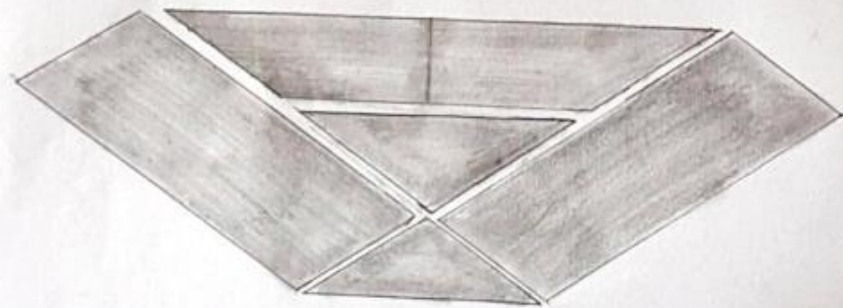


Individual Concepts

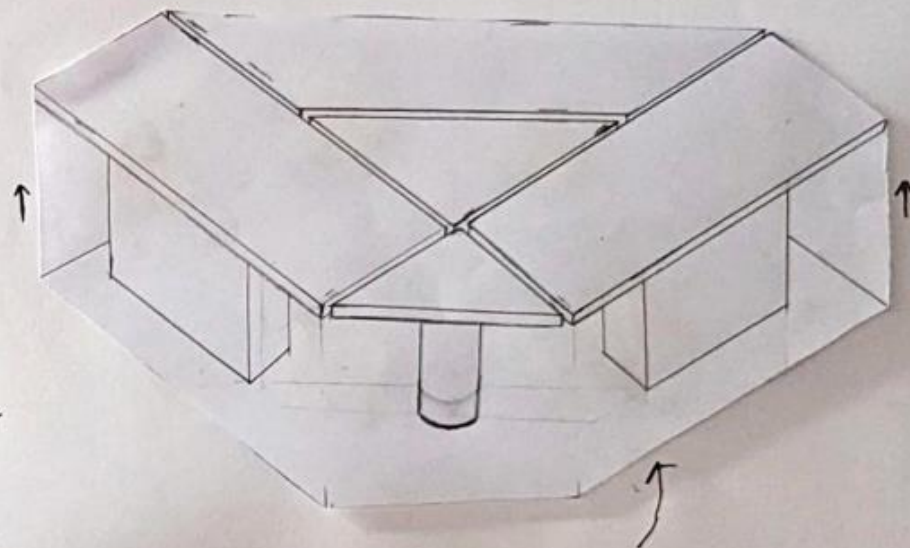
Assignment A2B



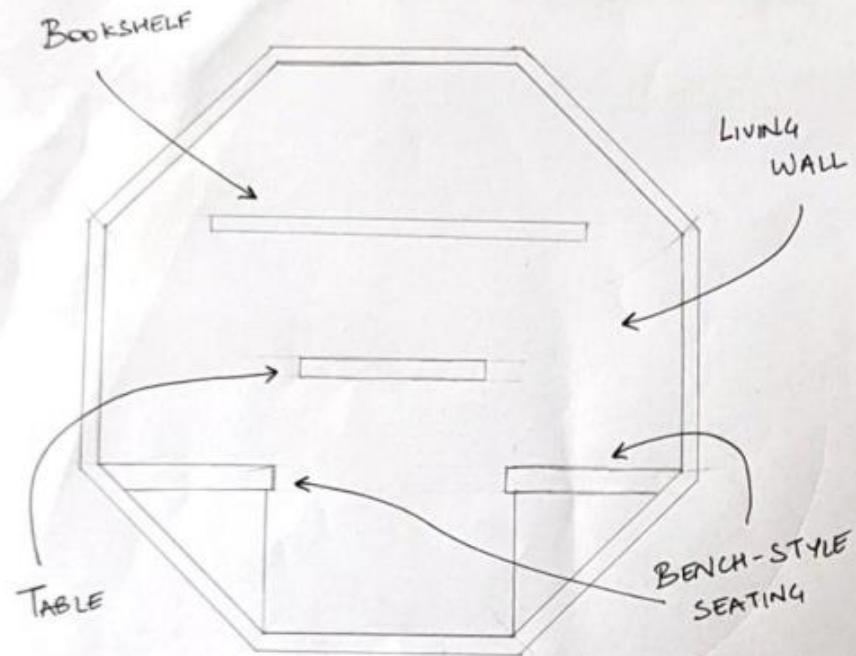
FOR MAKING SPACES THAT
ARE CUT-OFF



TABLES CONCEALED
WITHIN THE FLOOR

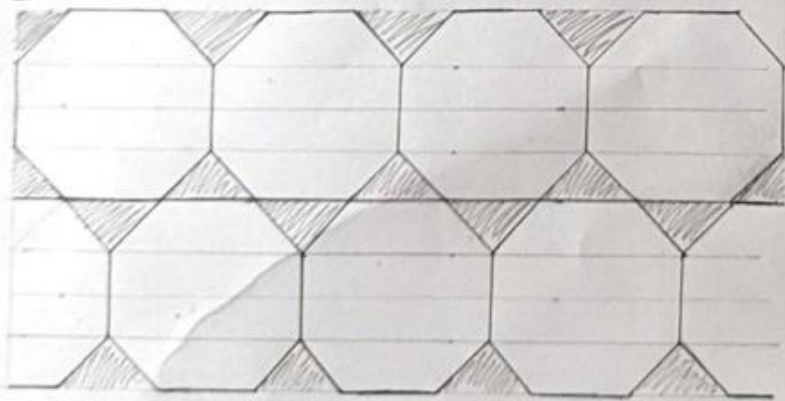


CAN BE EXTENDED
AS INDIVIDUAL PIECES.

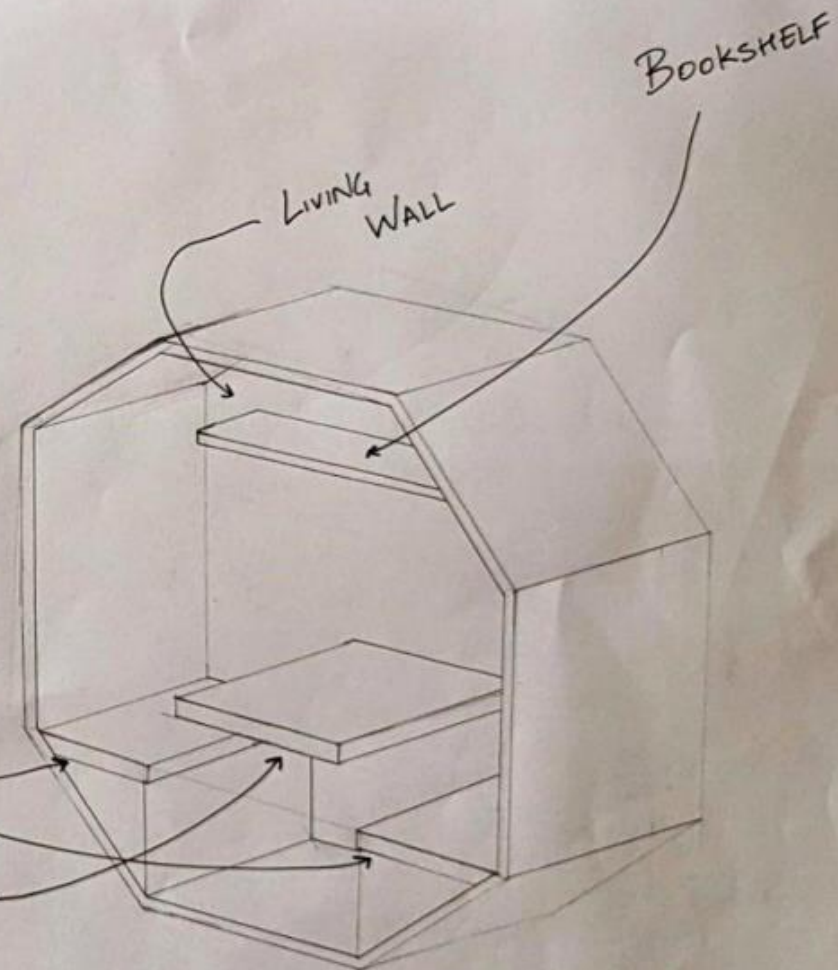


FRONT VIEW

PATTERN

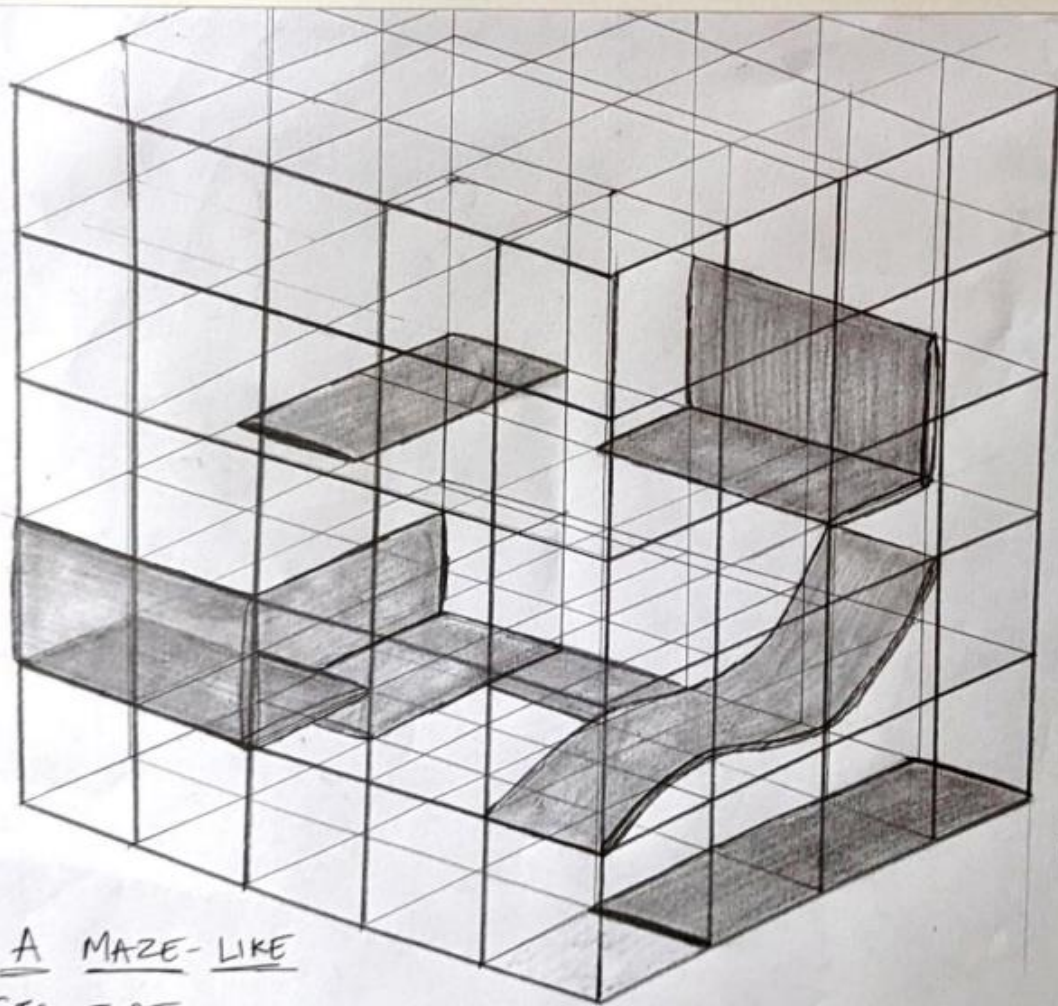


BENCH-STYLE SEATING



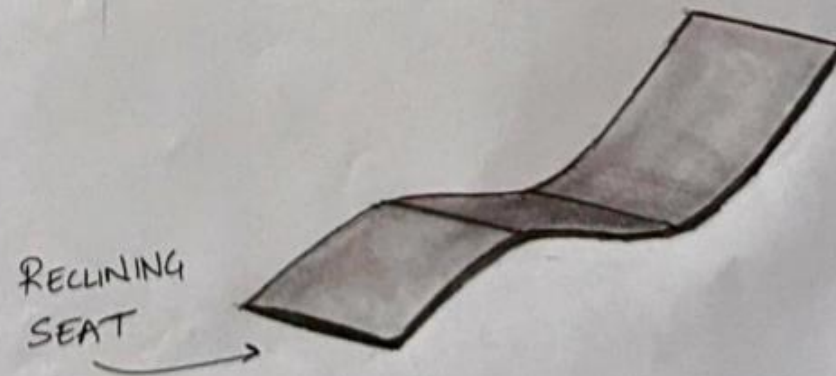
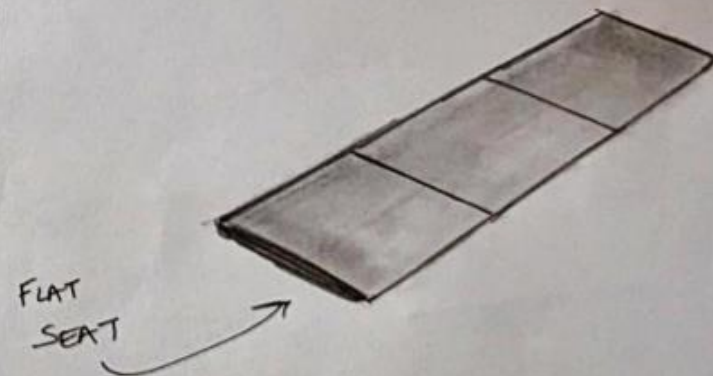
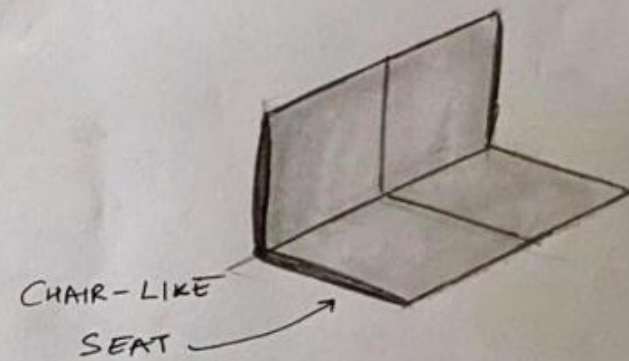
PERSPECTIVE VIEW

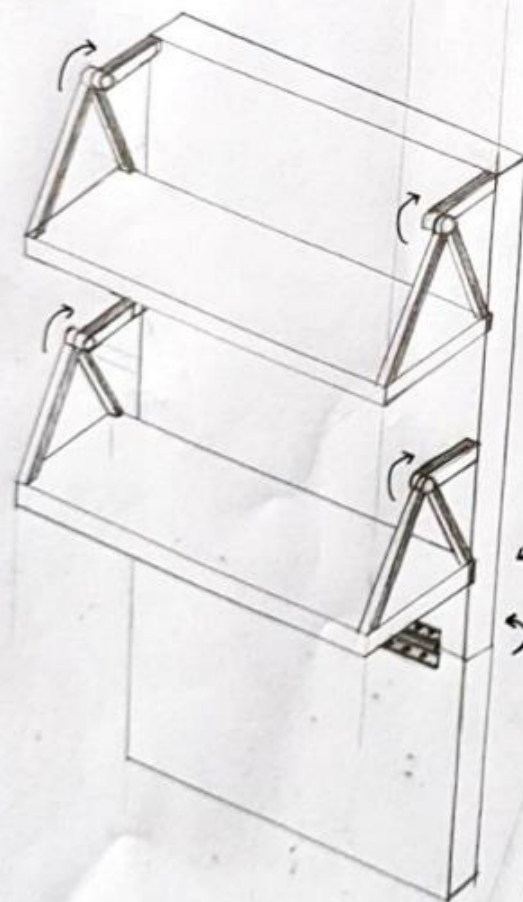
CAN SEAT 2-4 PEOPLE



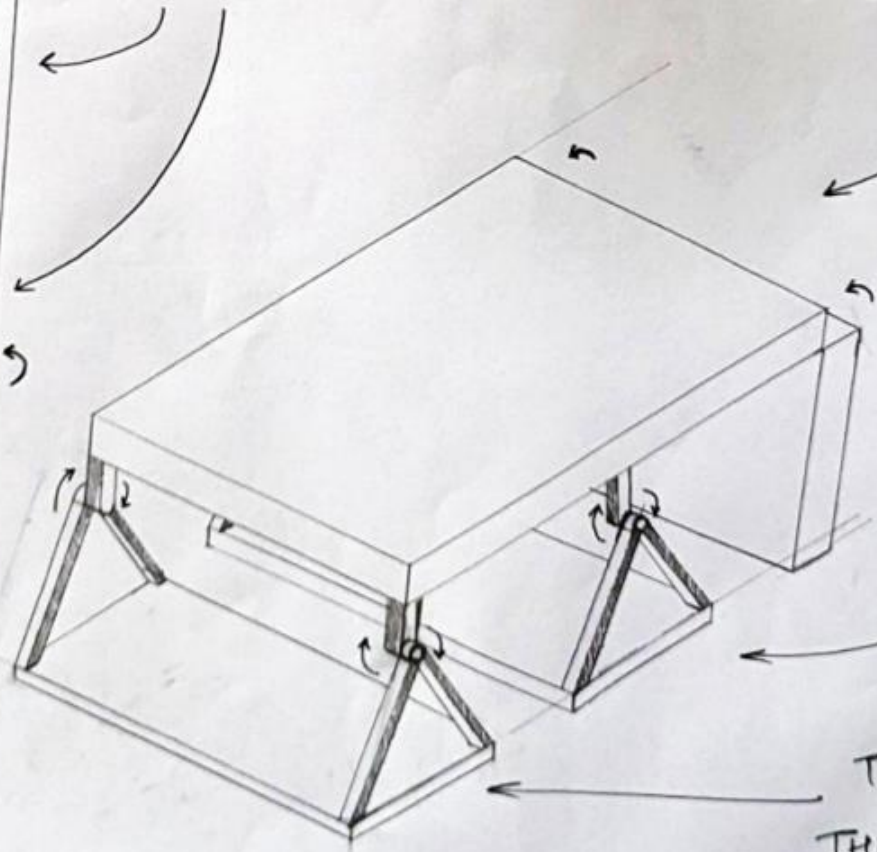
A MAZE-LIKE
STRUCTURE

WITH DIFFERENT SEATS



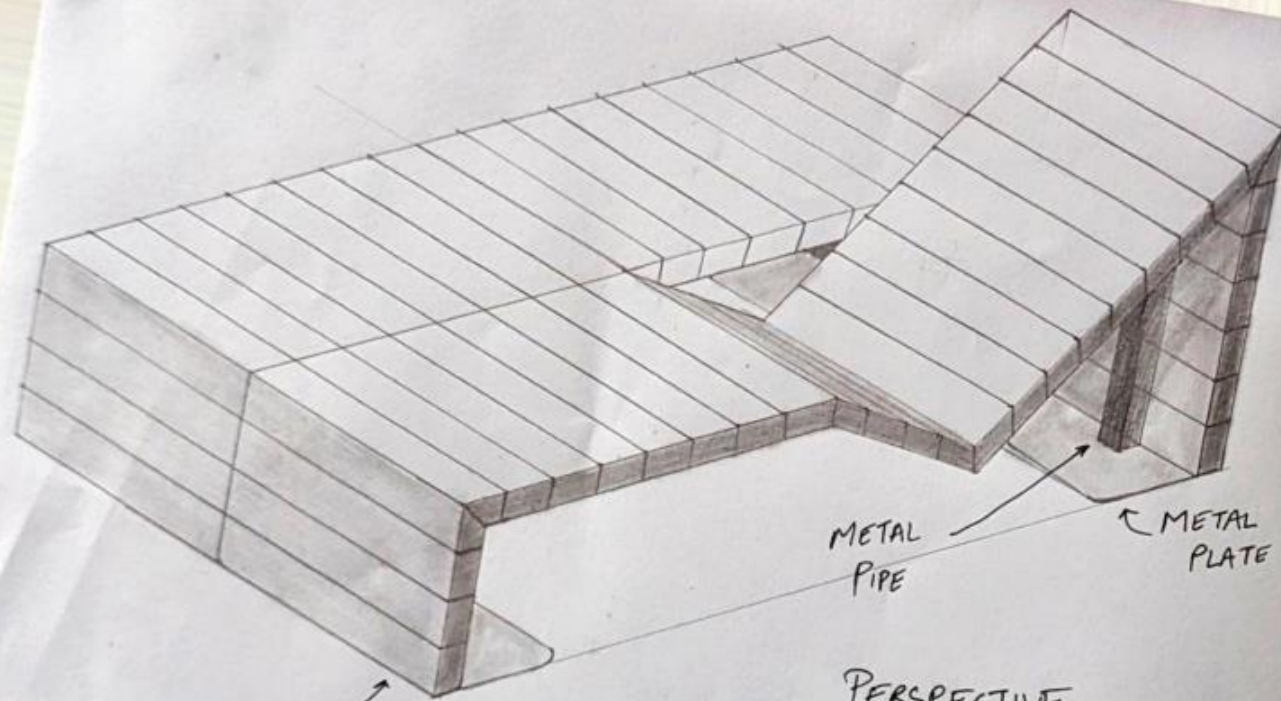


LEDGES THAT
SWIVEL



THE TOP FOLDS TO
CREATE A TABLETOP

THE LEDGES
FUNCTION AS
THE LEGS FOR
THE TABLE



METAL
PIPE

METAL
PLATE

WOOD
PLANKS

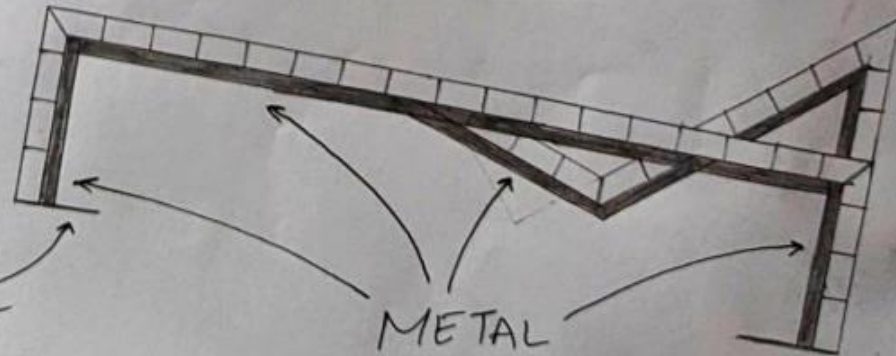
PERSPECTIVE
VIEW

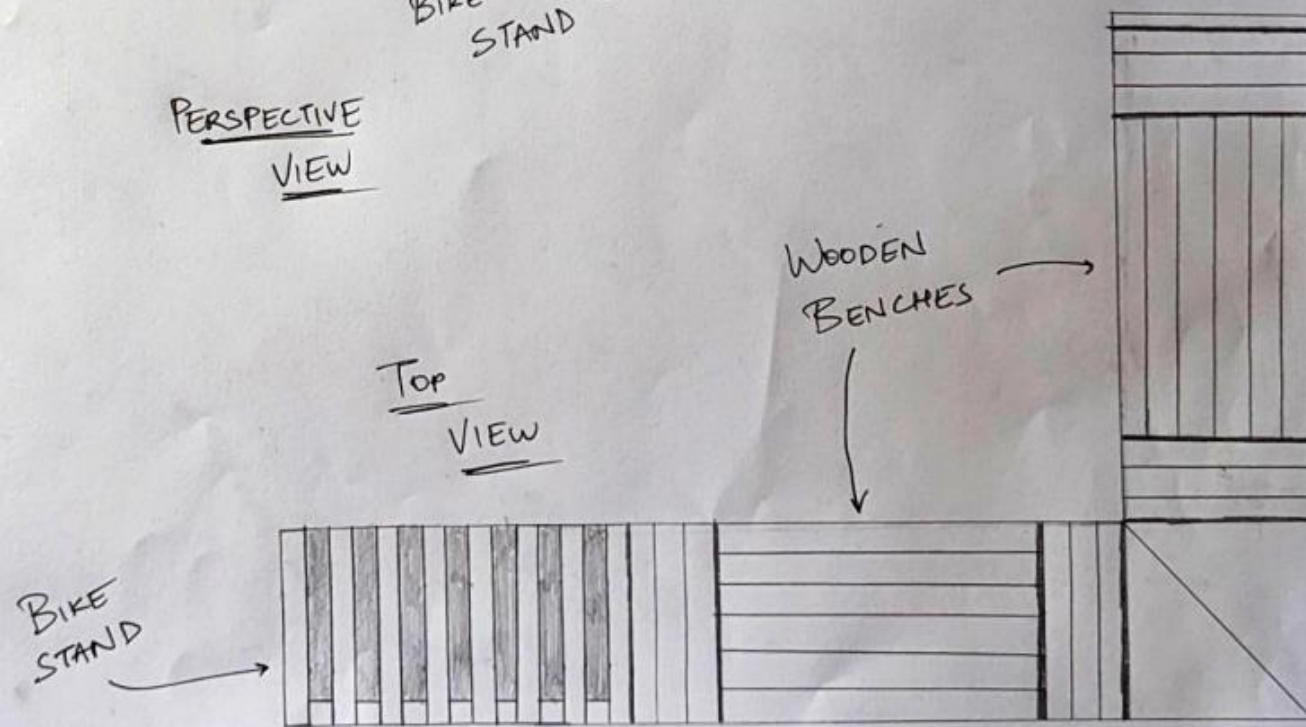
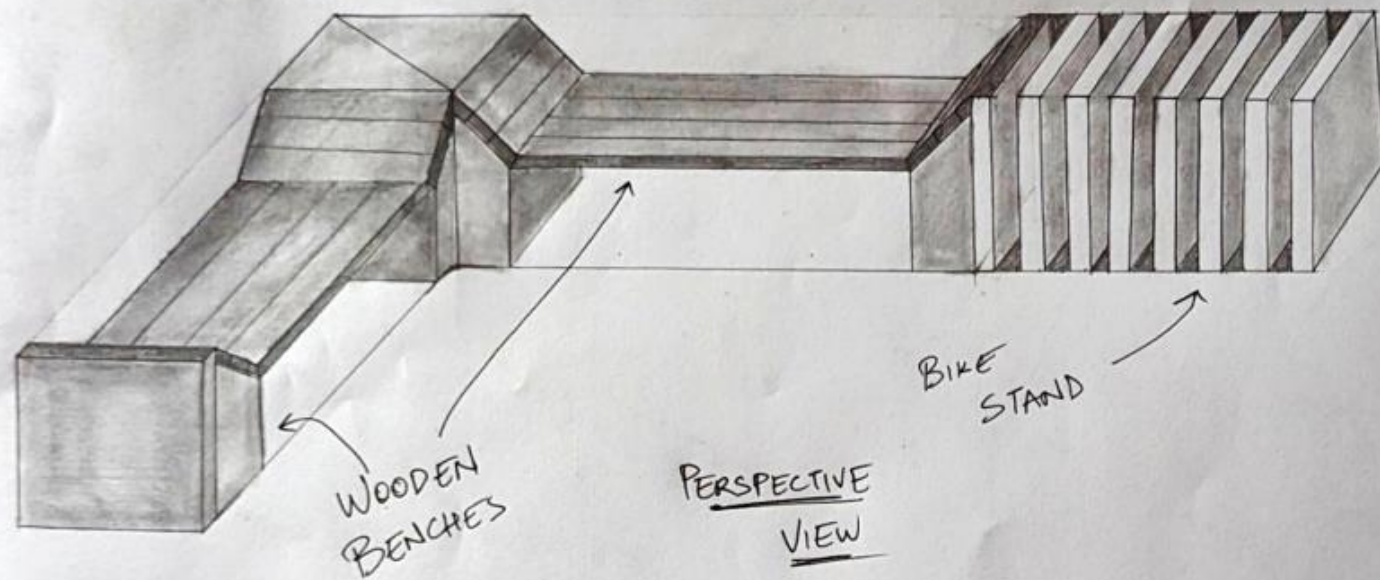
WOOD
PLANKS

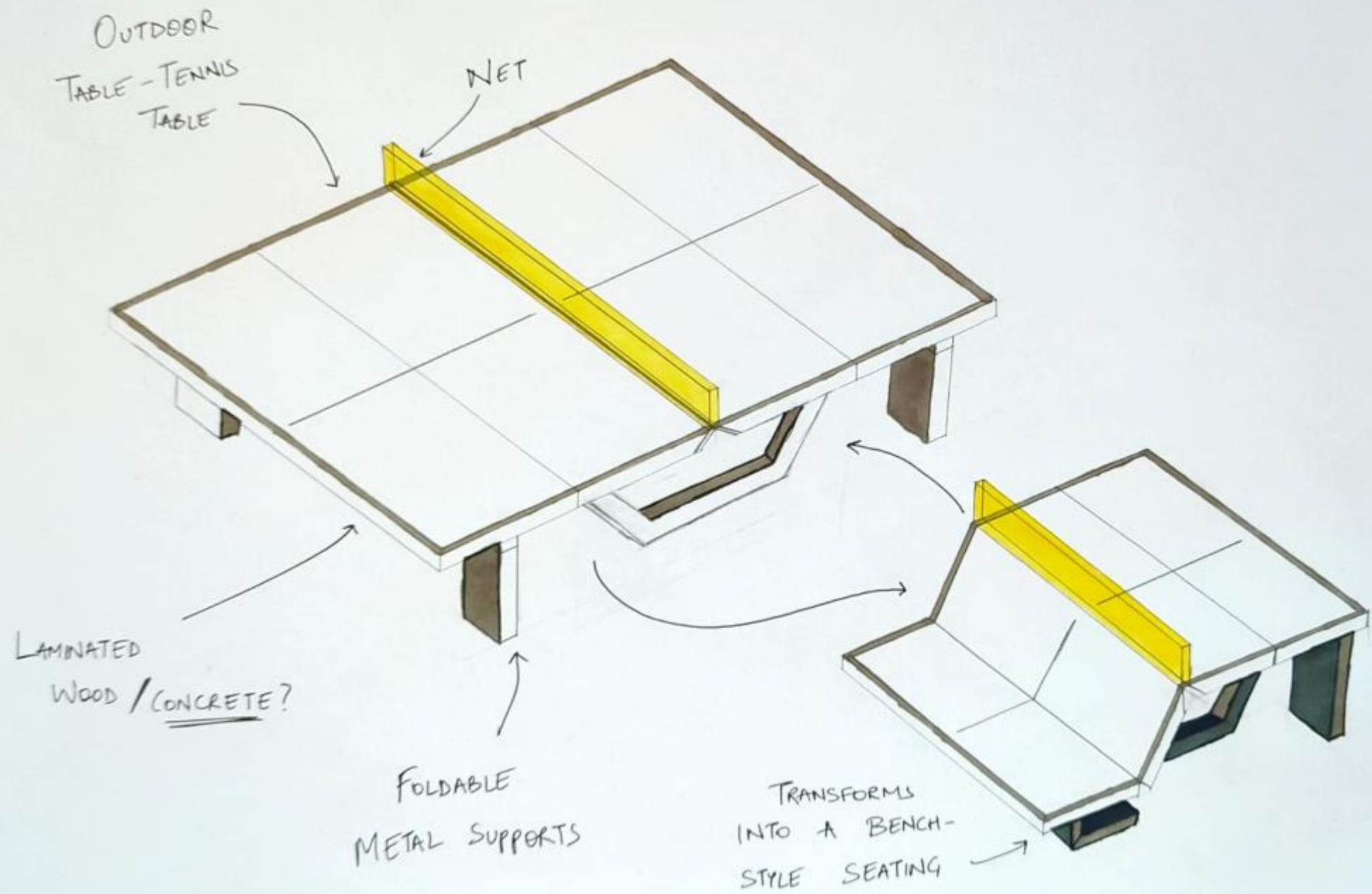
SIDE
VIEW

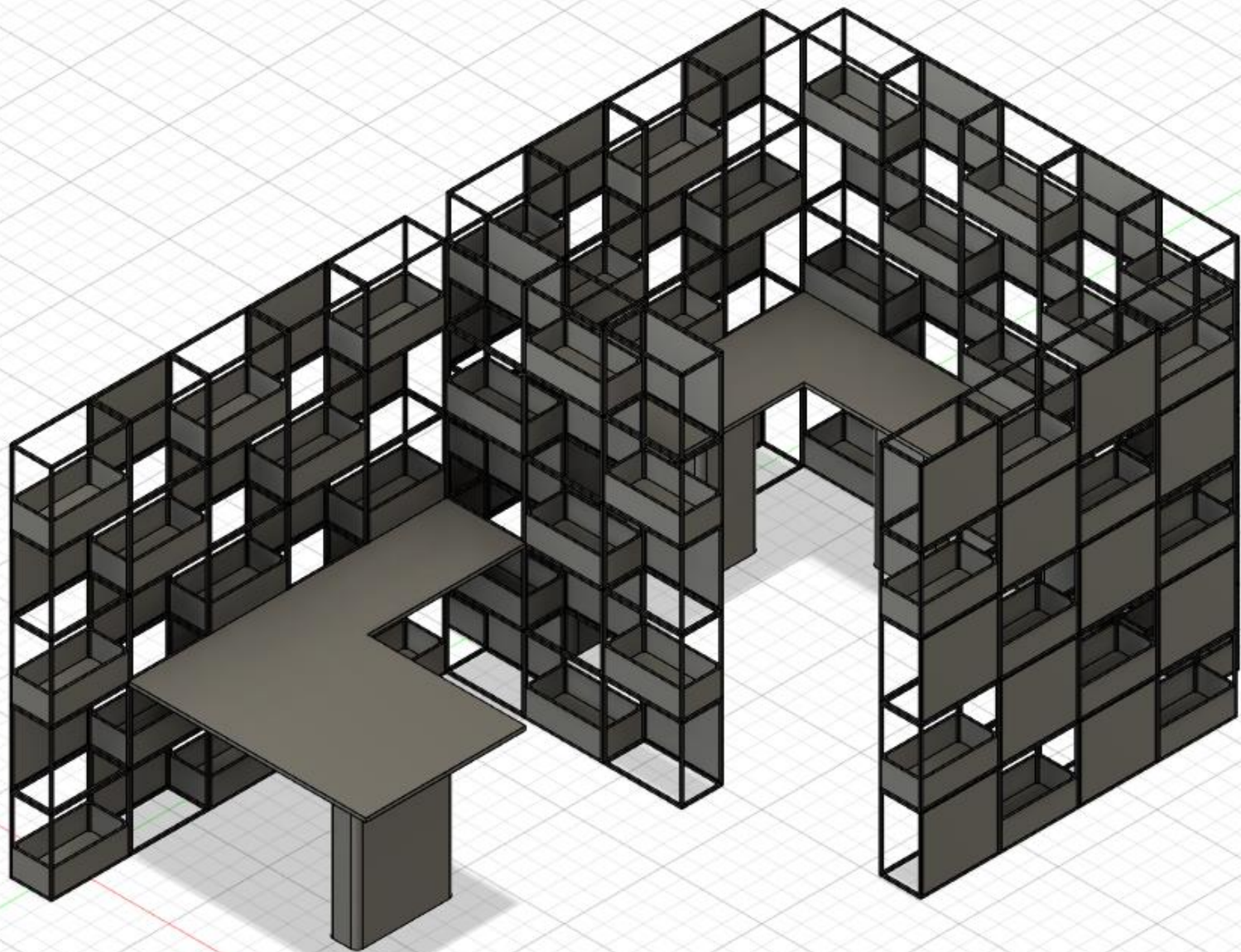
METAL
PLATE

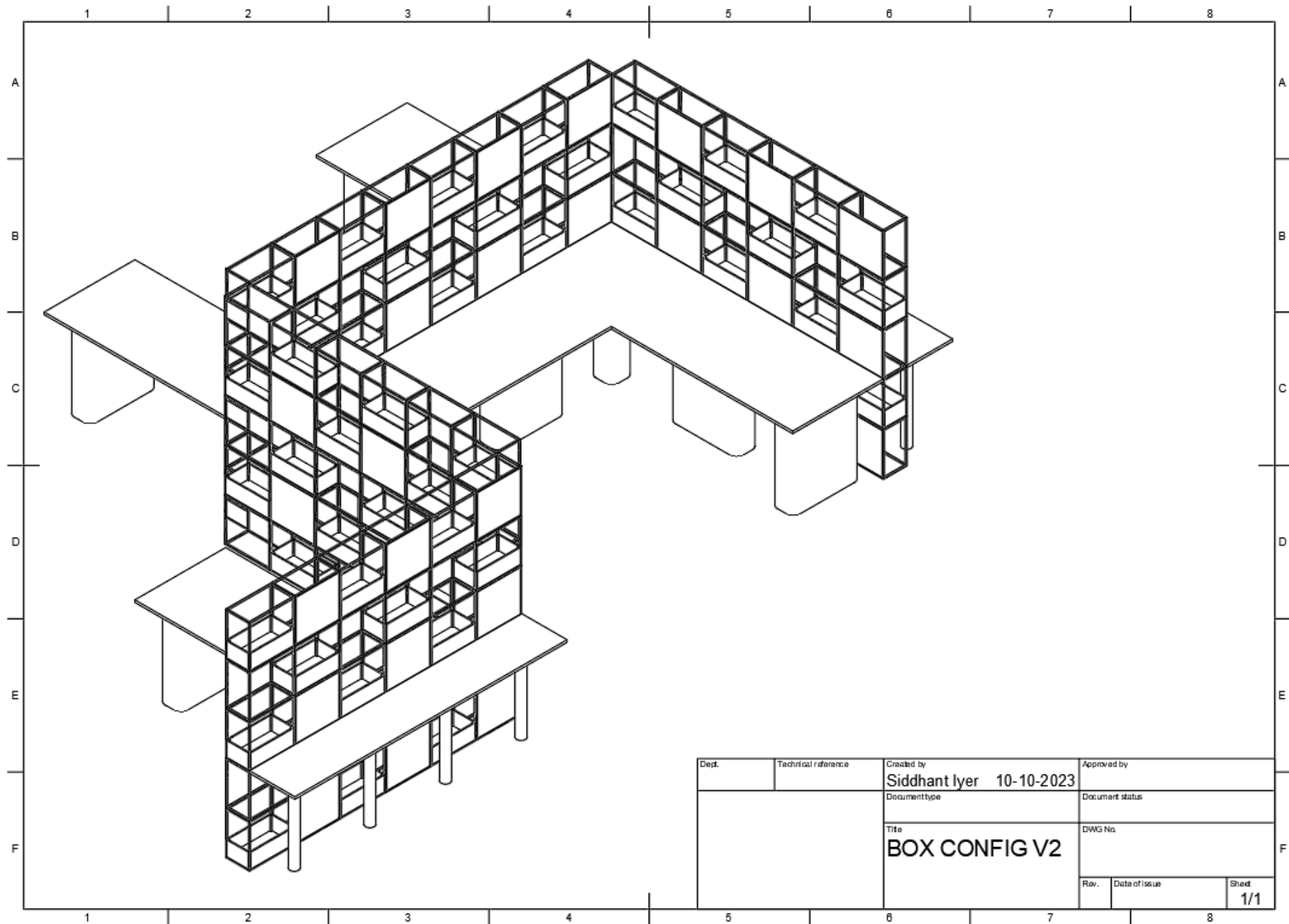
METAL
PIPE



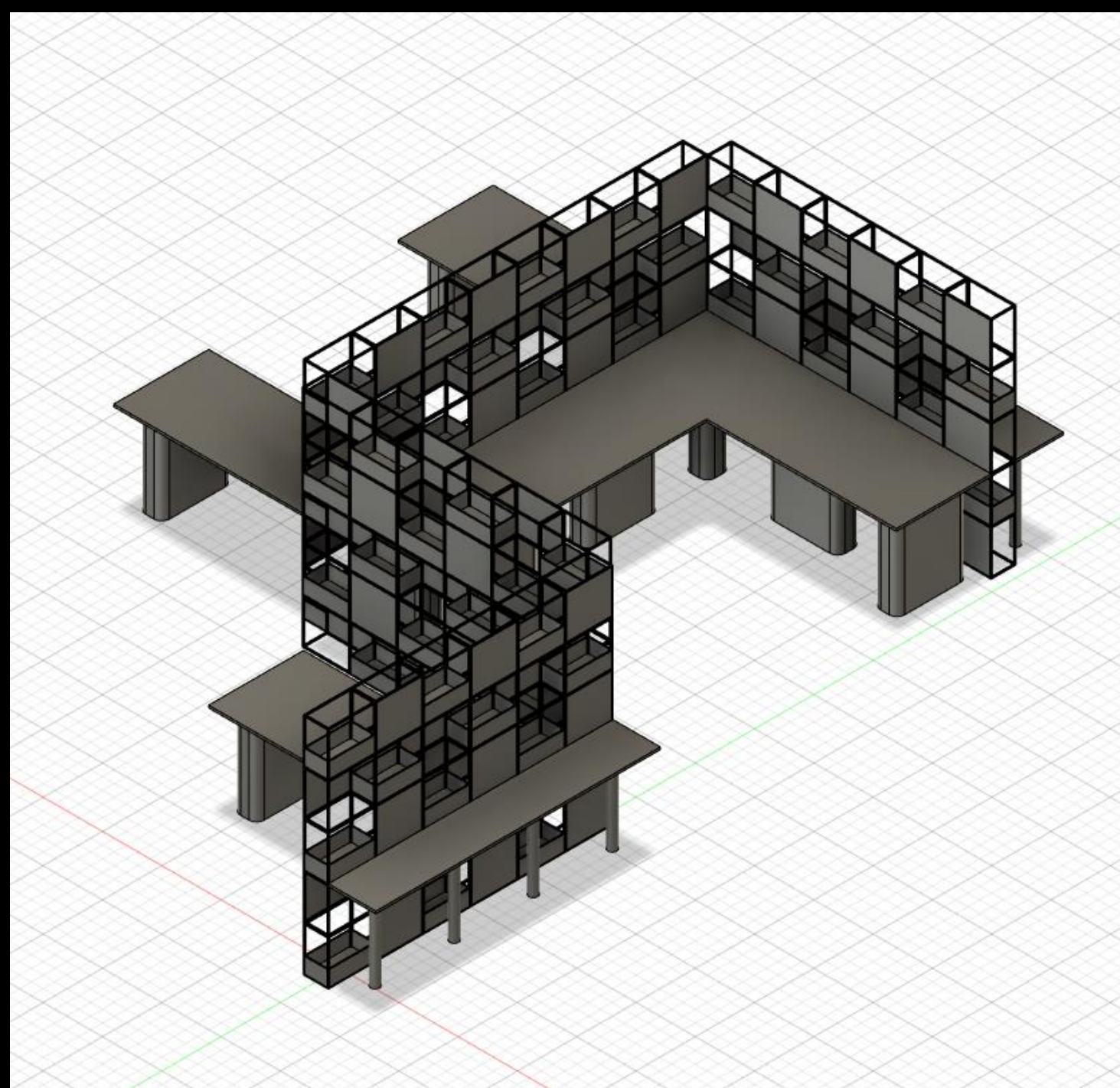


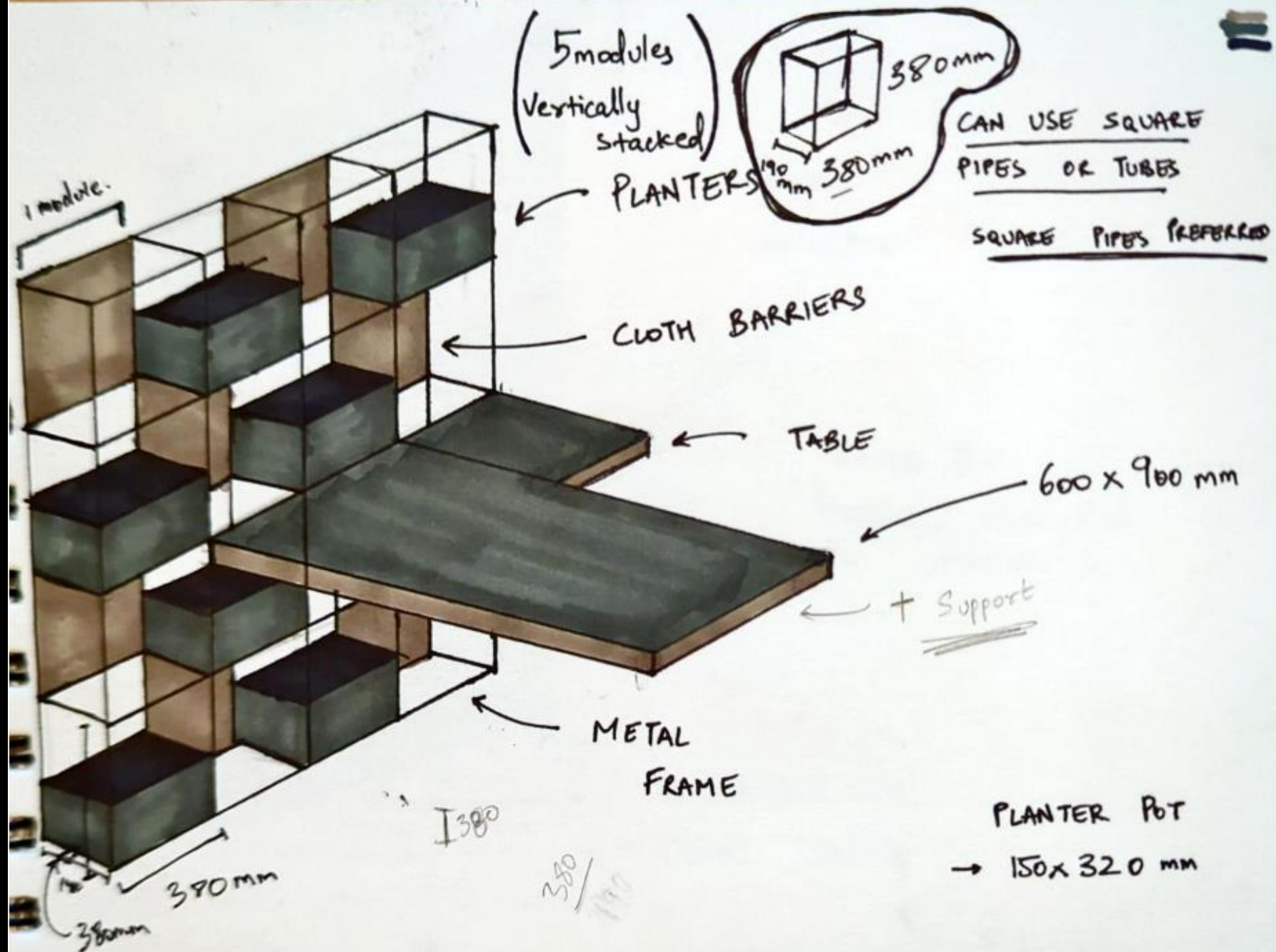


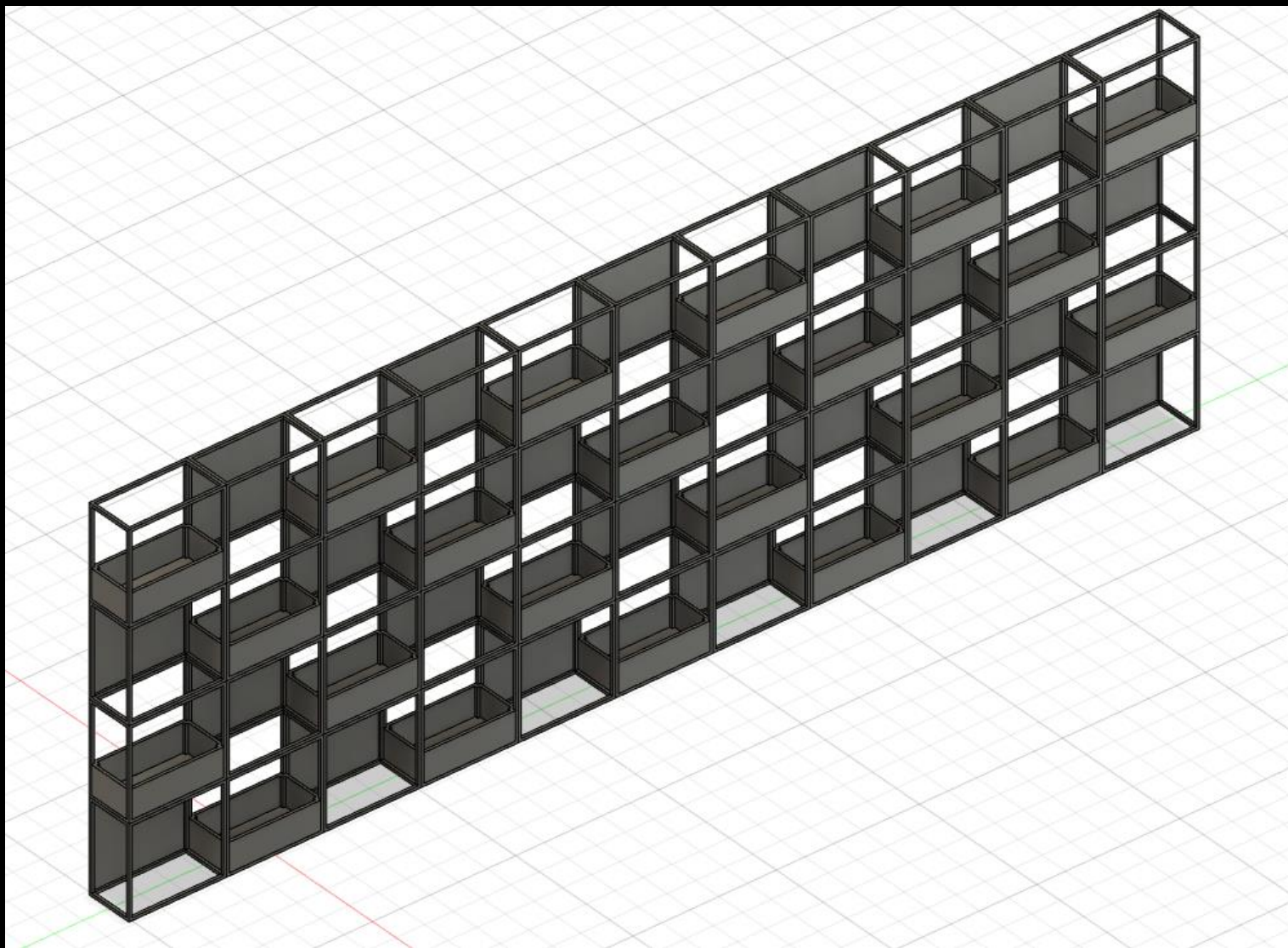
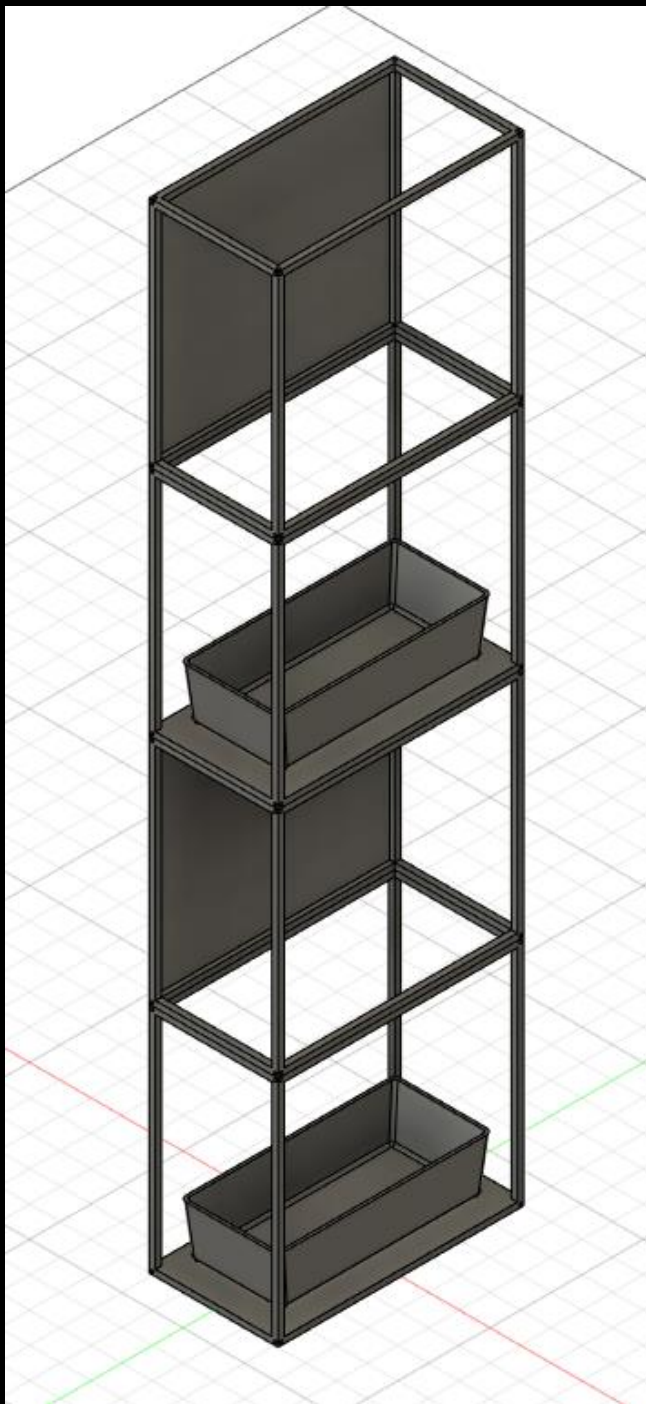


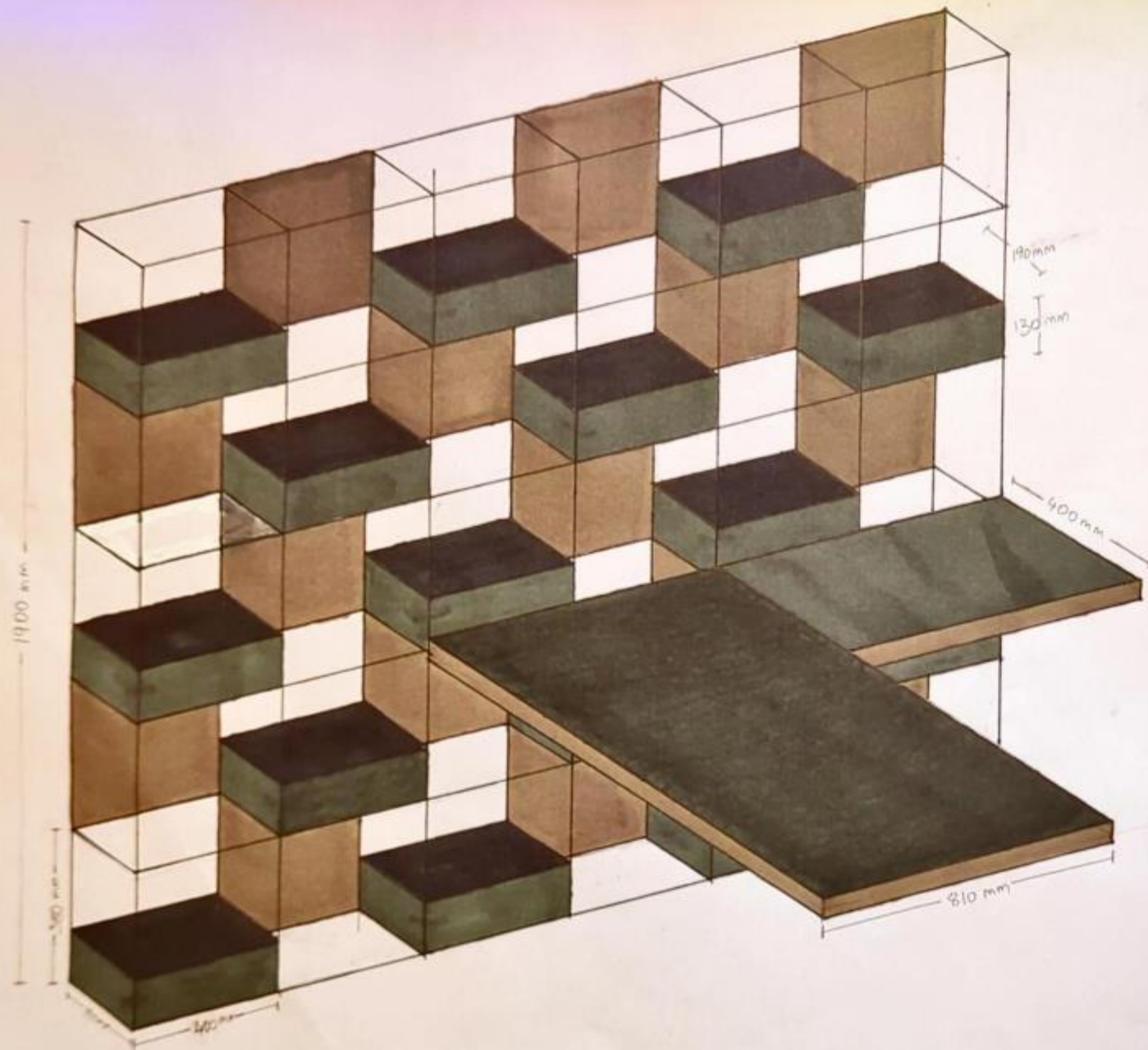


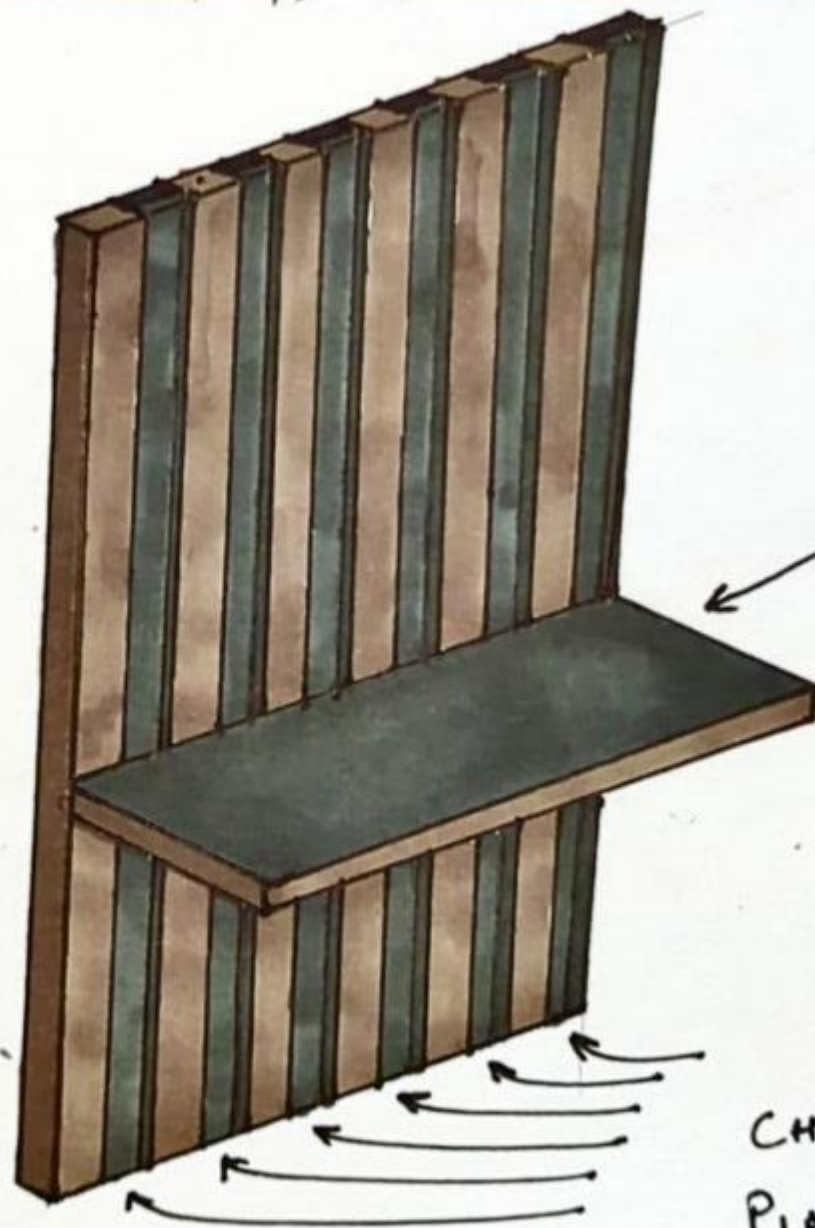
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		Document type	Document status
		Title BOX CONFIG V2	DWG No.
		Rev.	Date of issue
		Sheet 1/1	







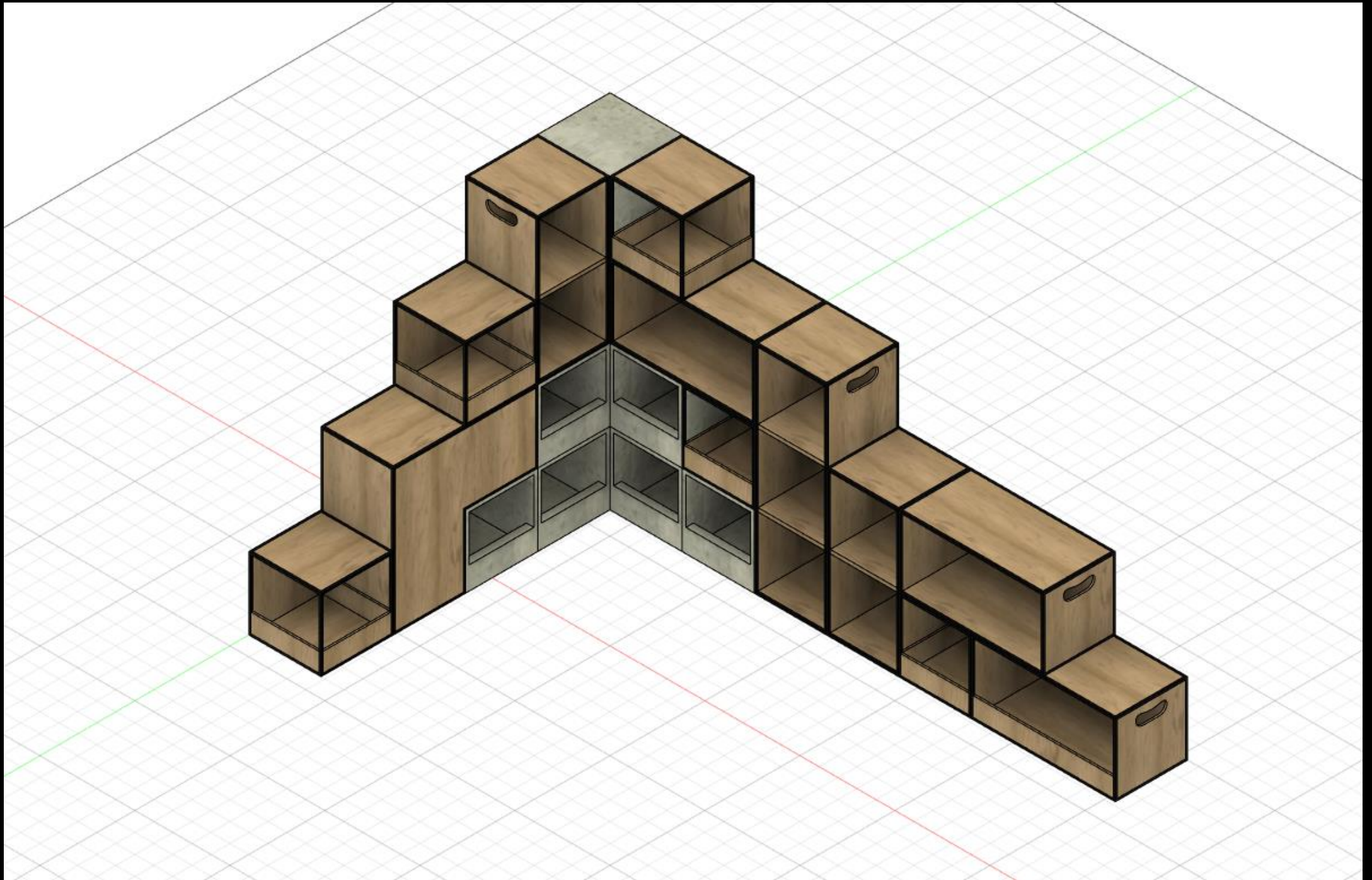


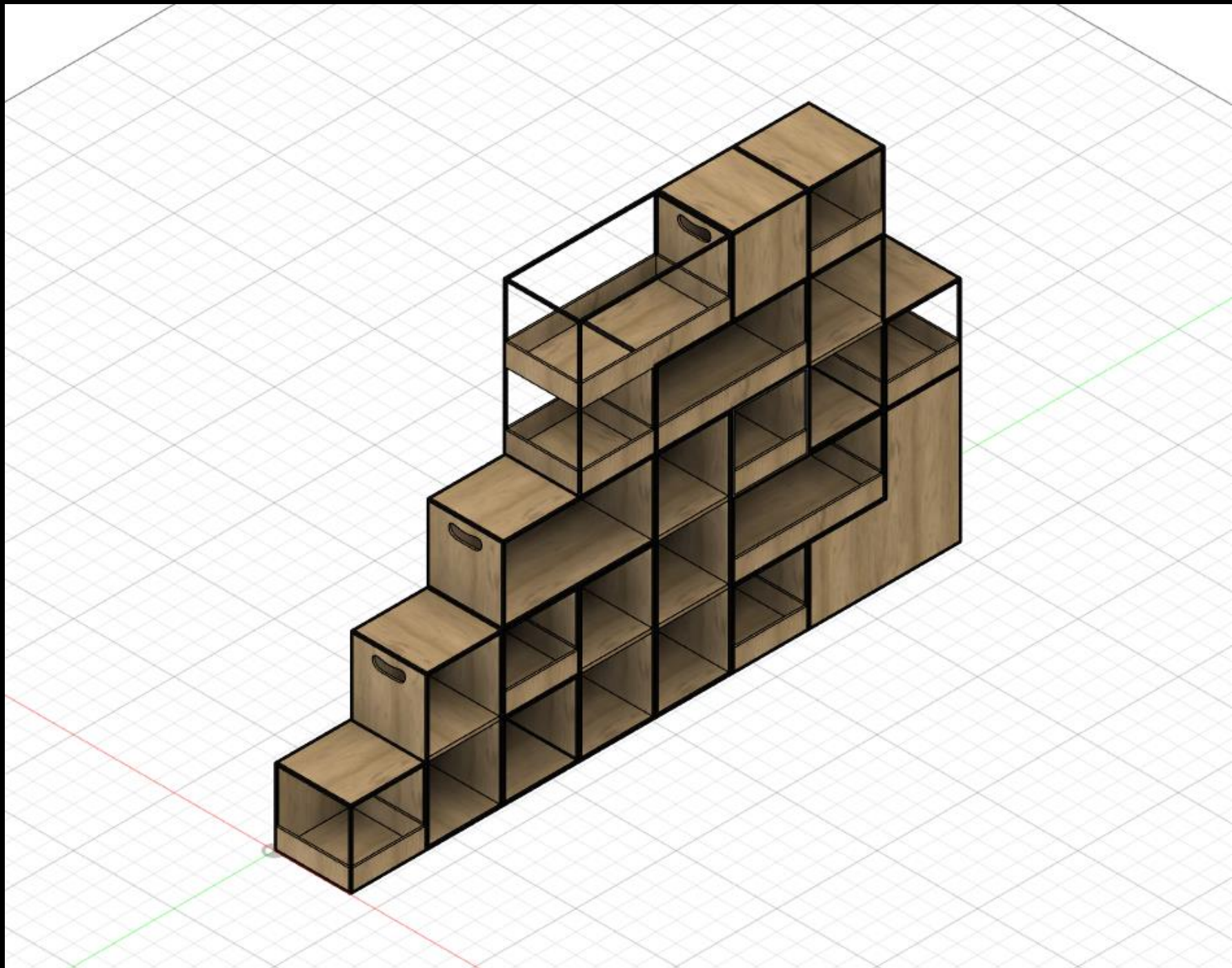


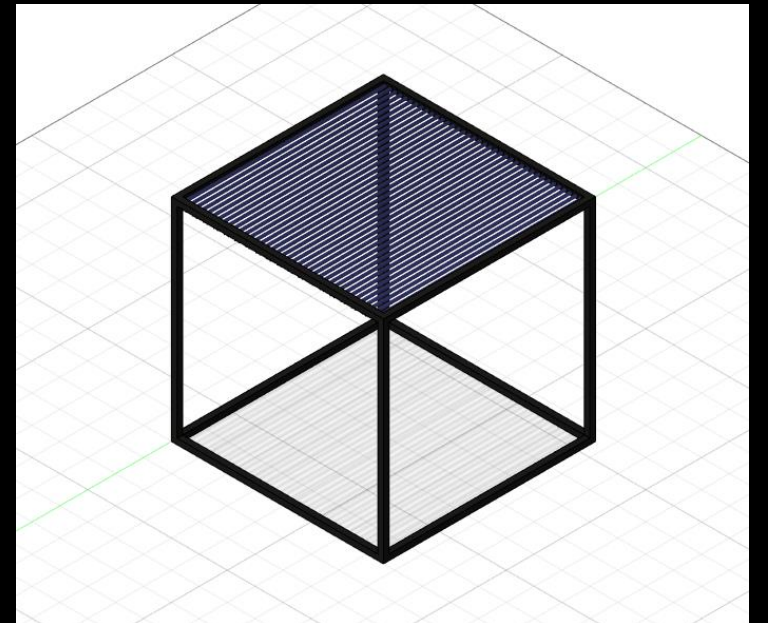
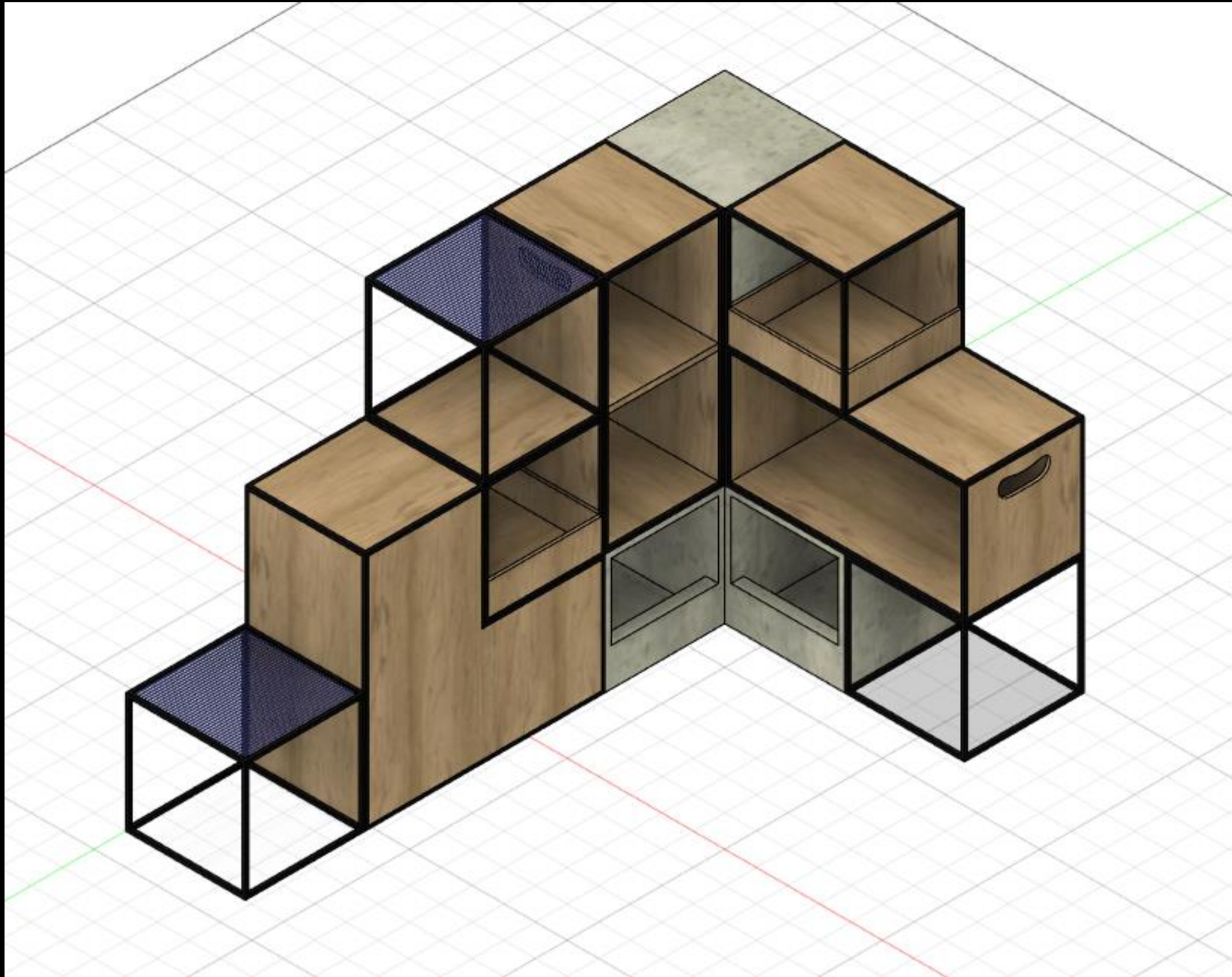
STANDING
WORKBENCH

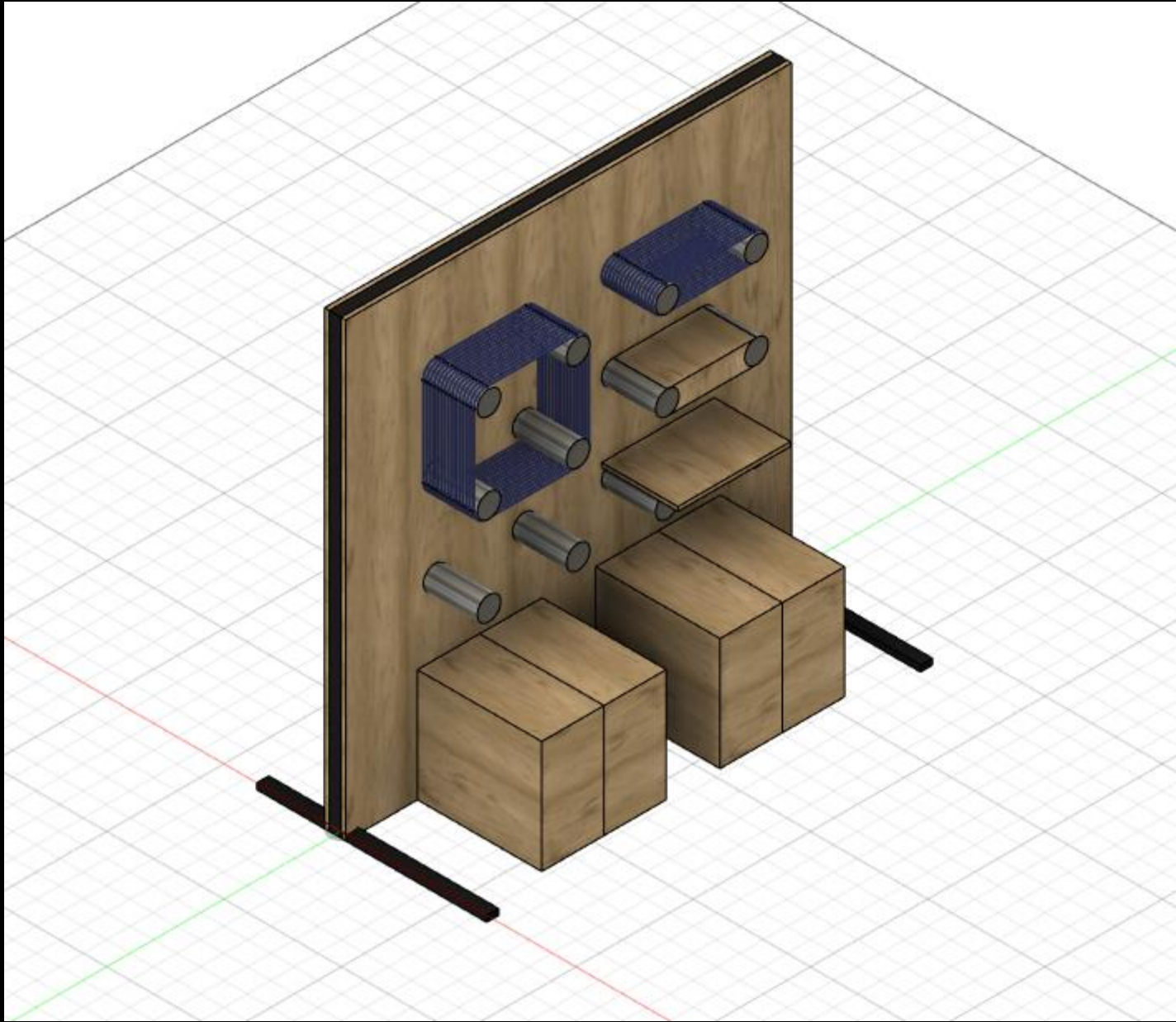
COULD BE
DOUBLED FOR USE
SEATING

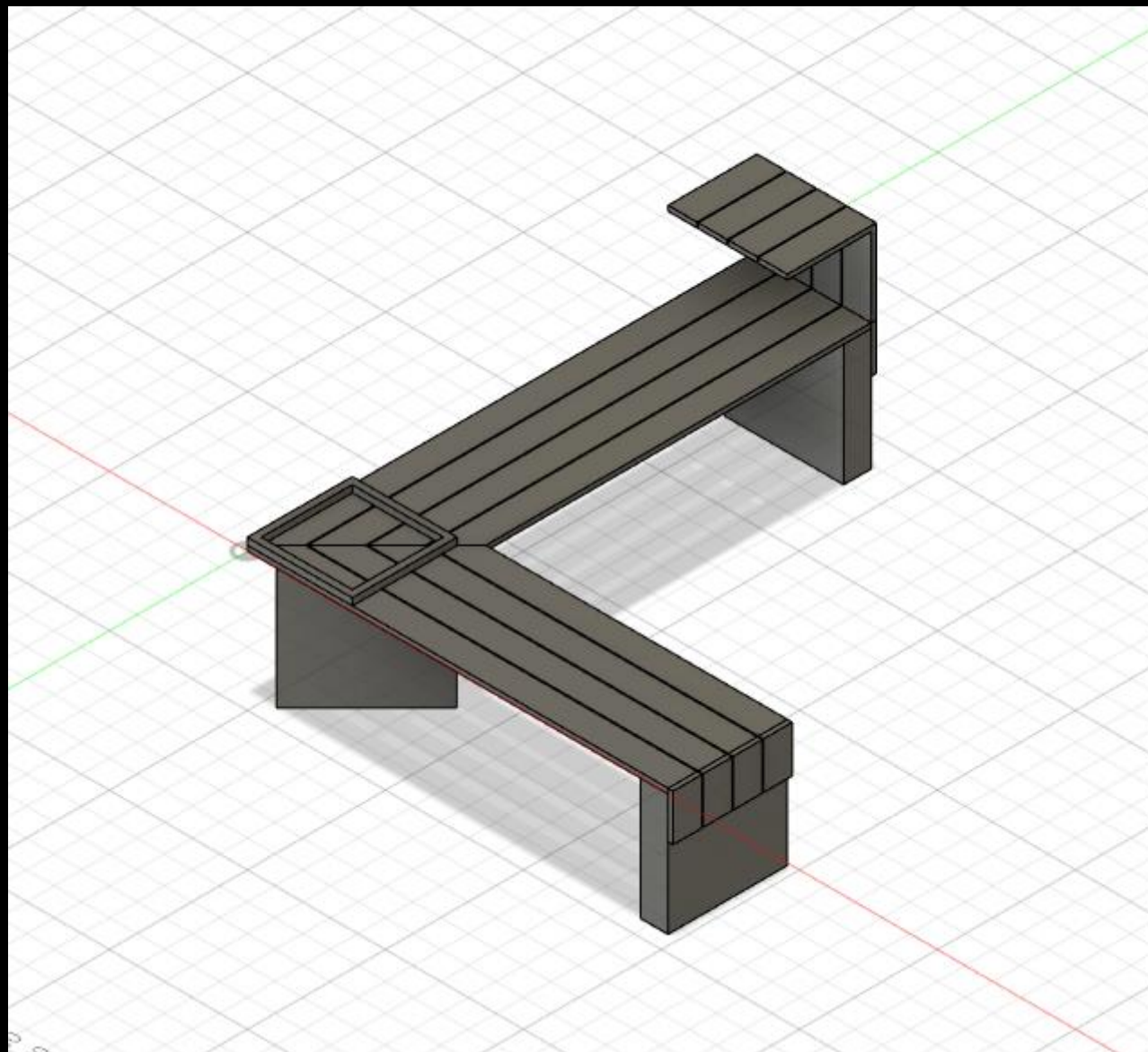
CHANNELS TO
PLANT PLANTS

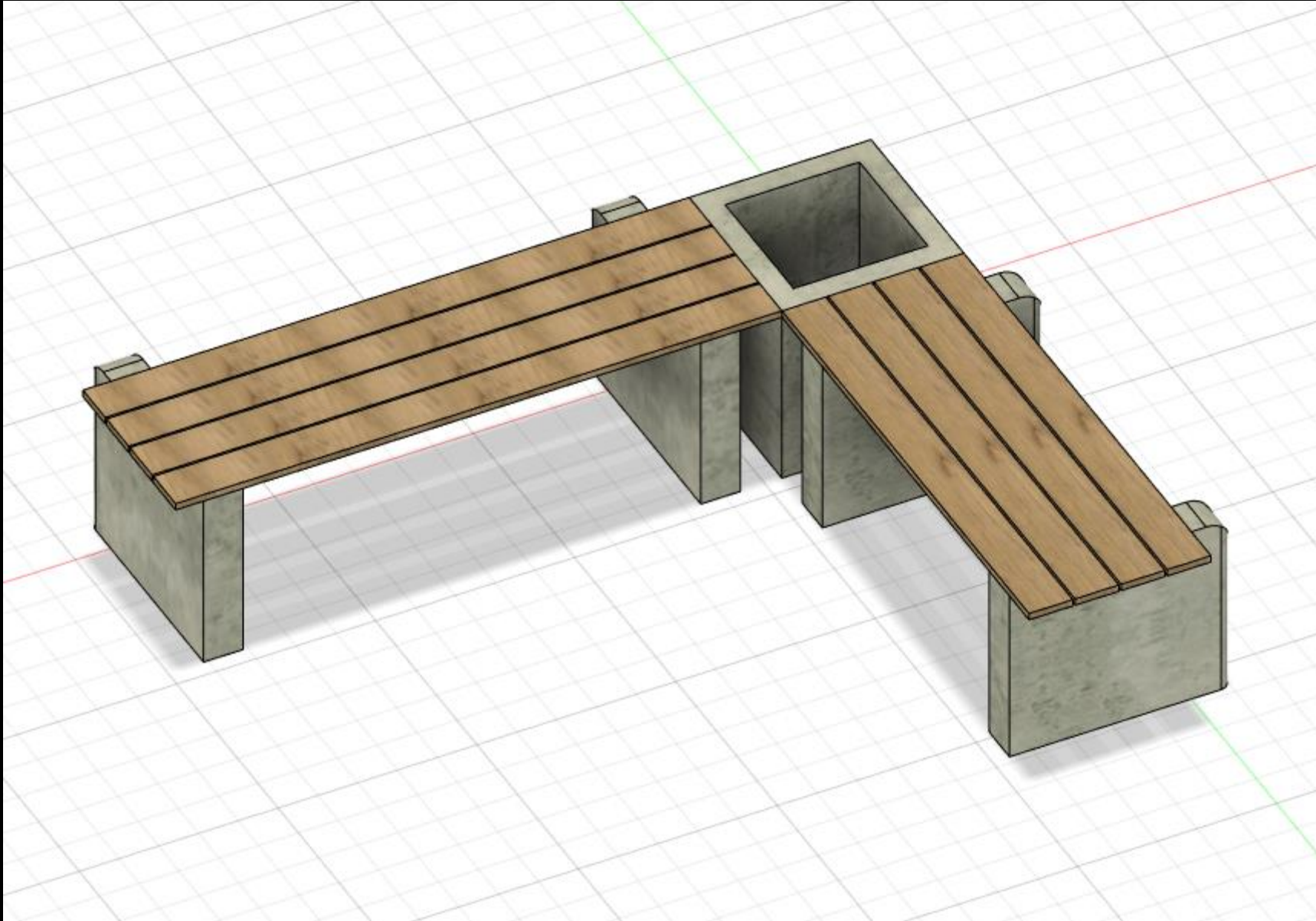










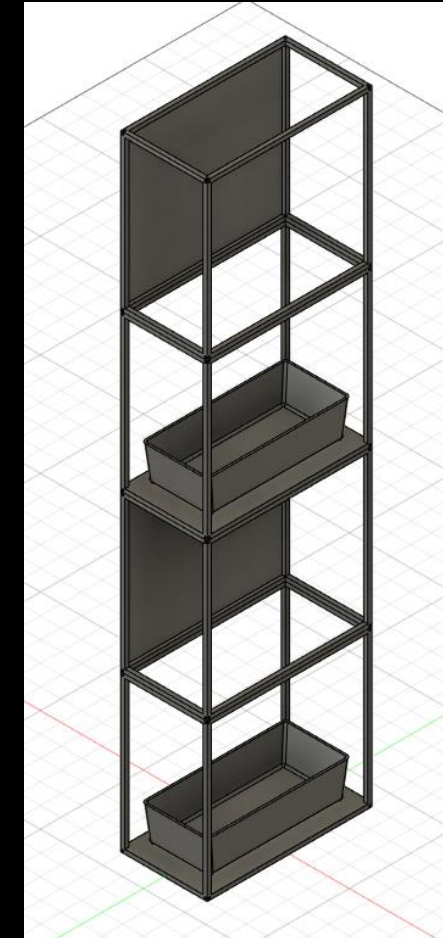
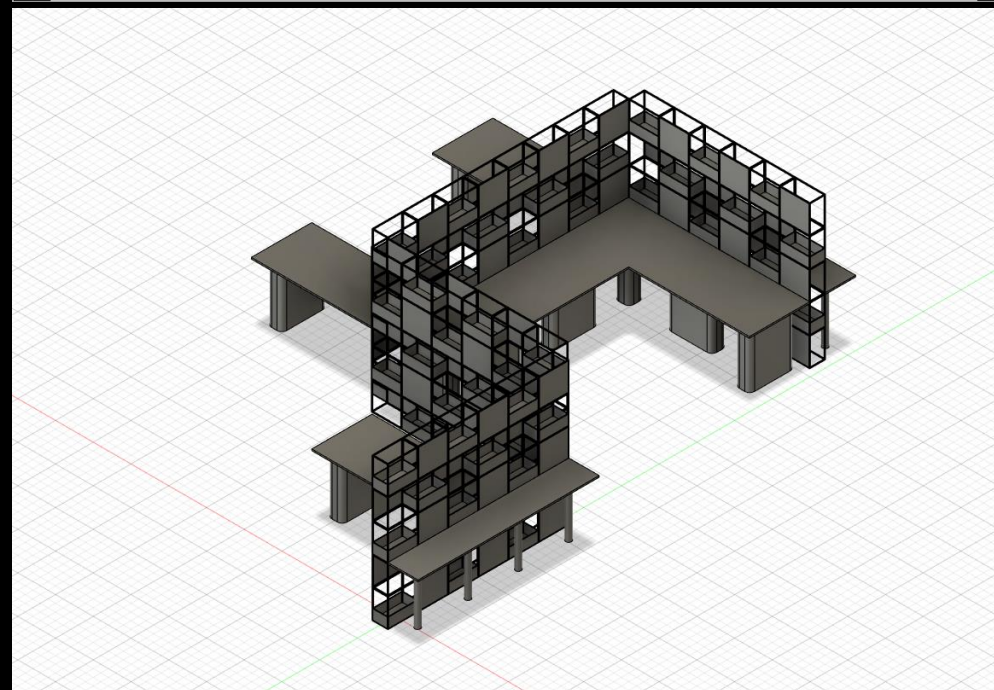
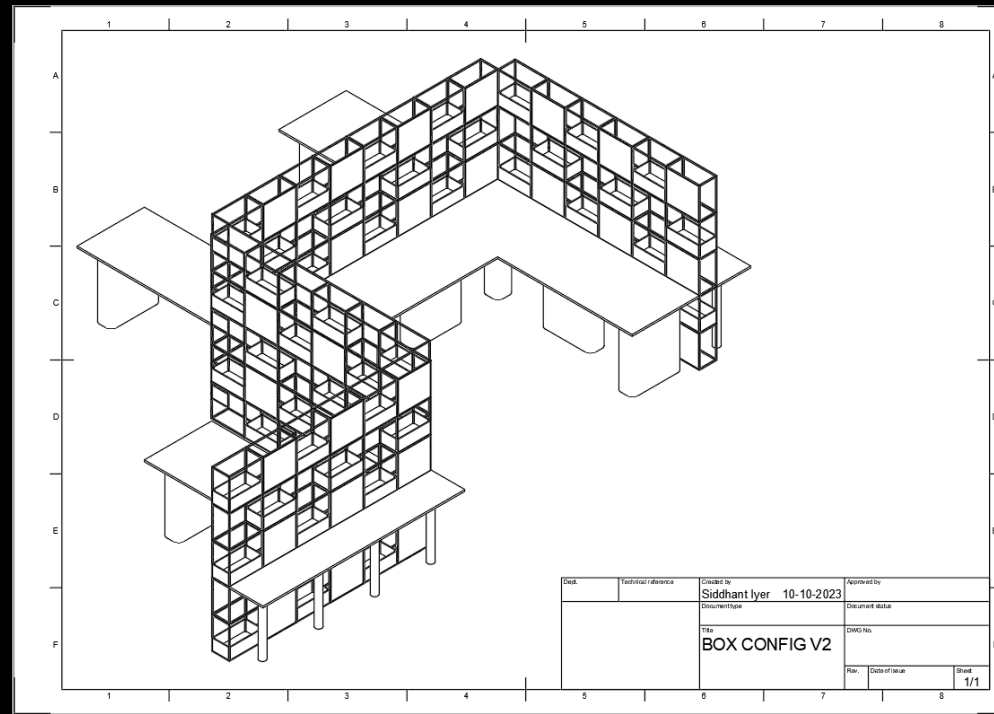
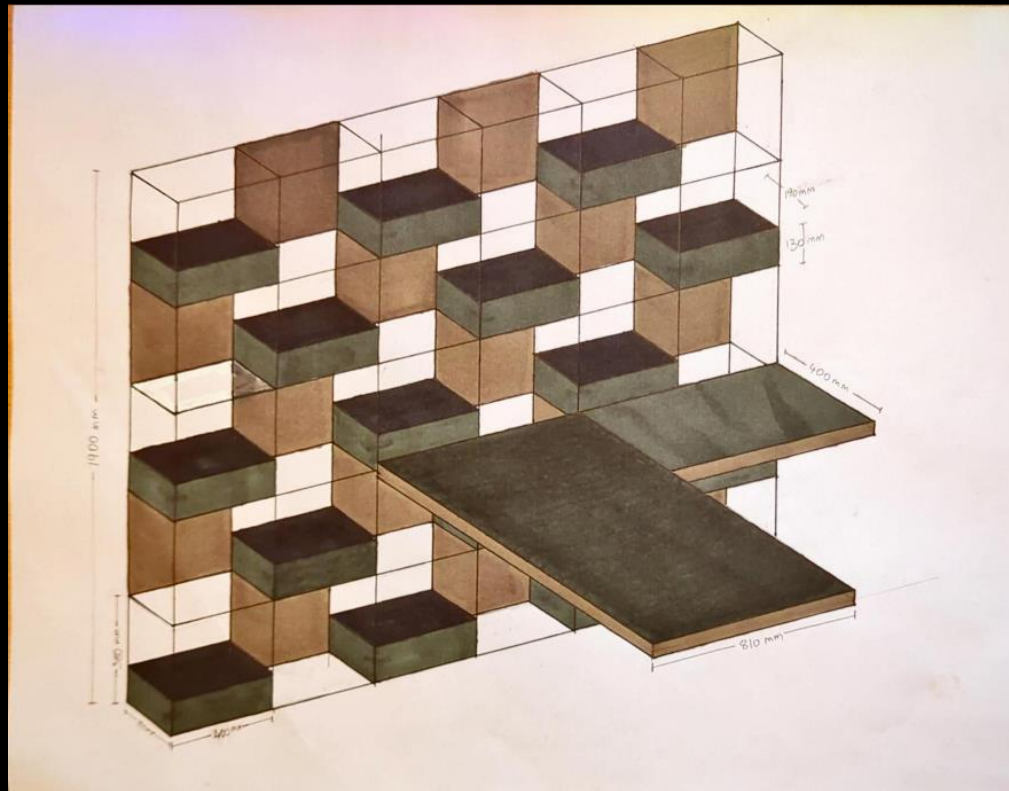


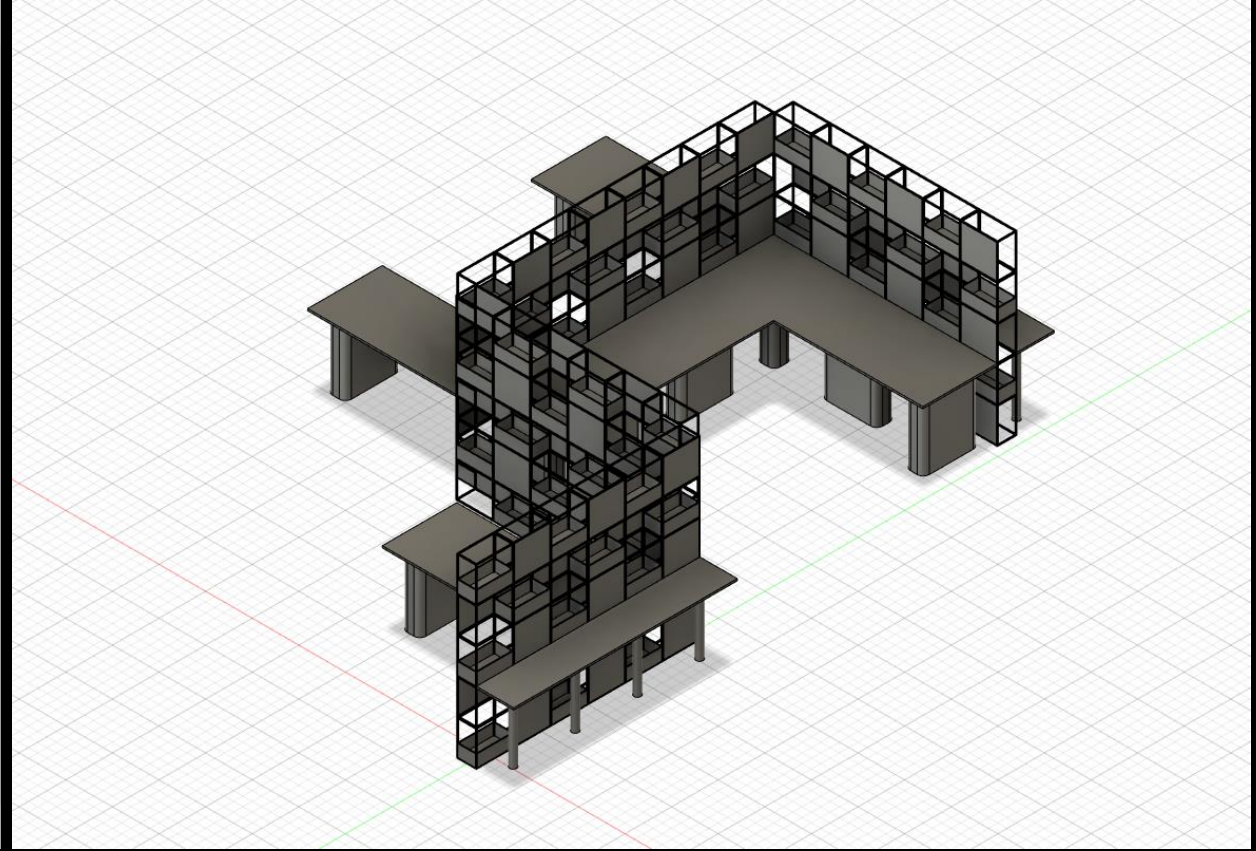
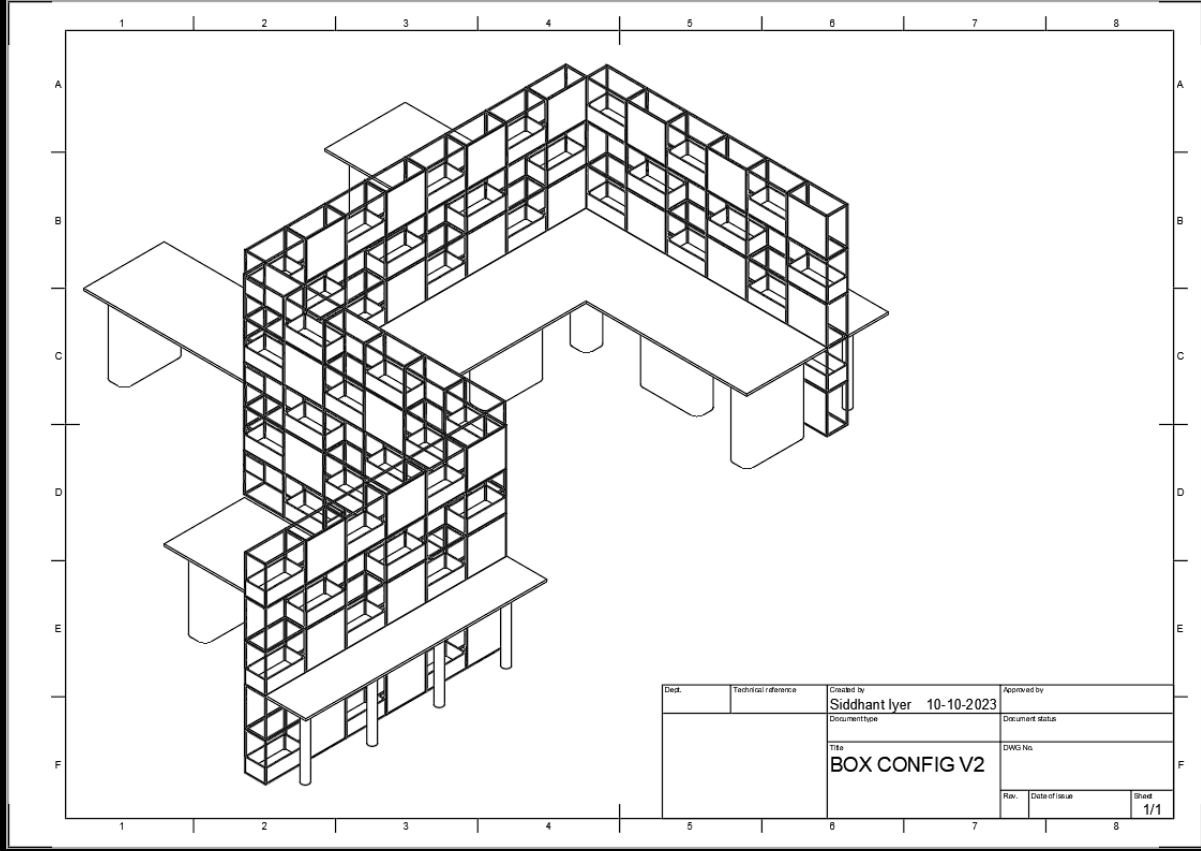
Final Concept Design

Assignment A2B

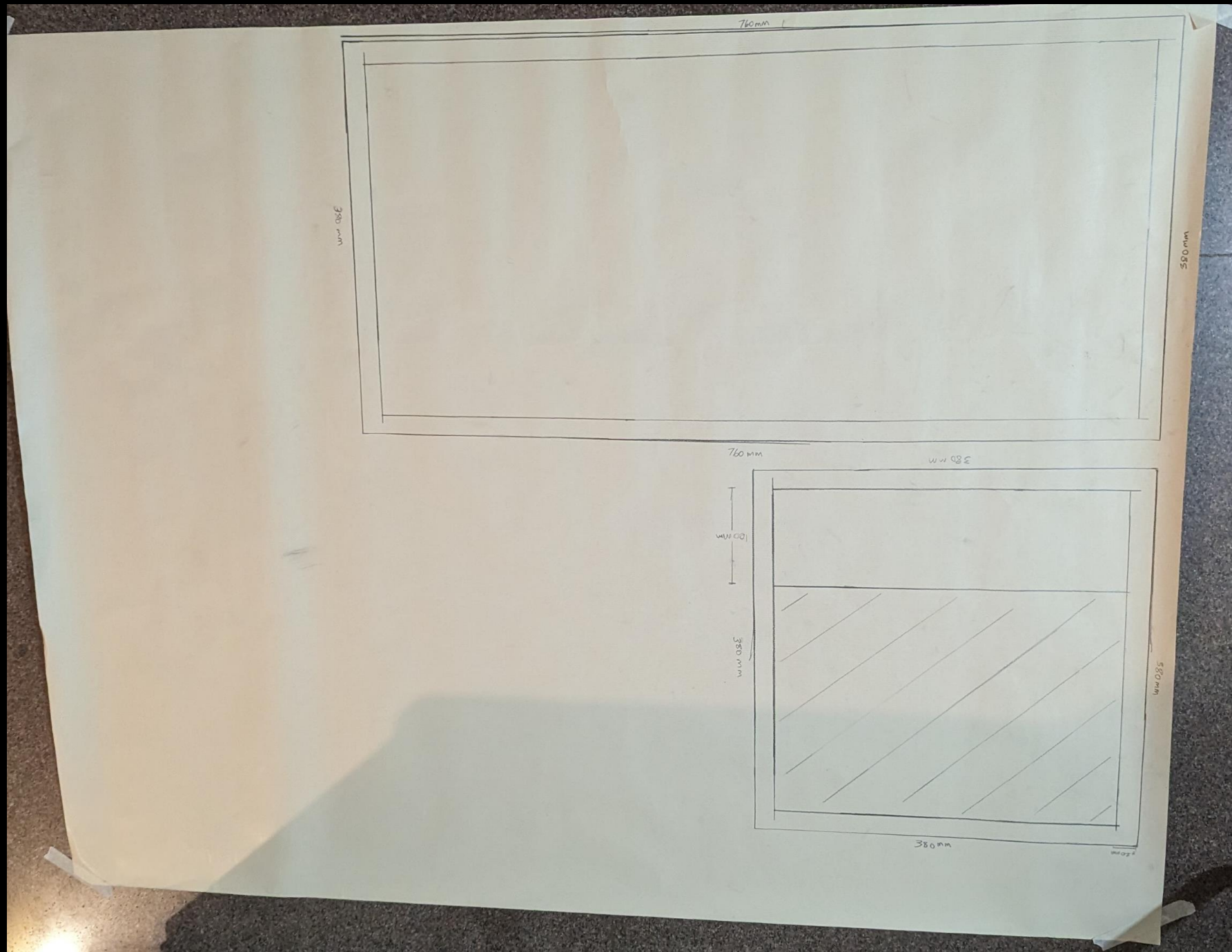
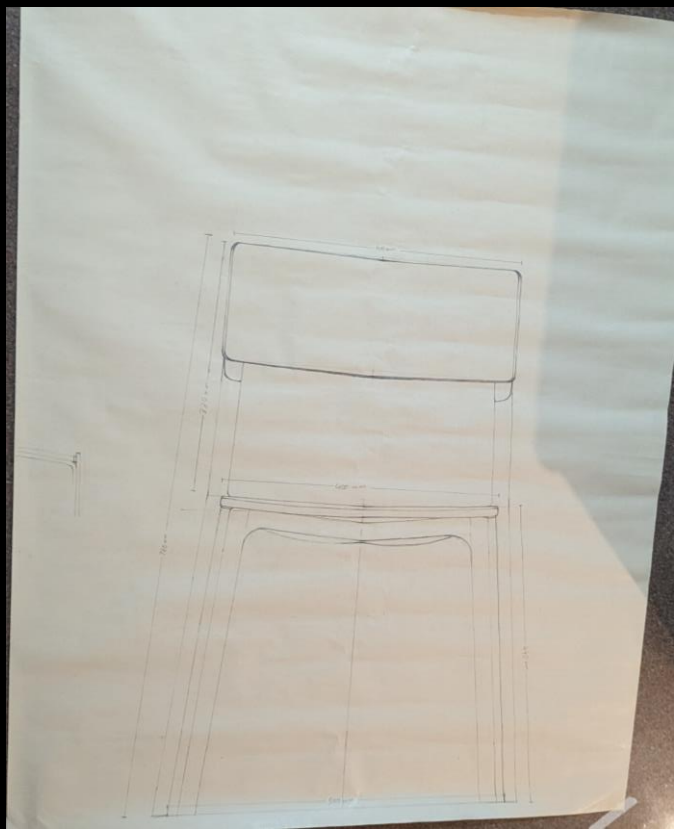
Initial Plan

To make a modular planter, which can be used as a partition to create secluded workspaces in different configurations.





1:1 Sketches

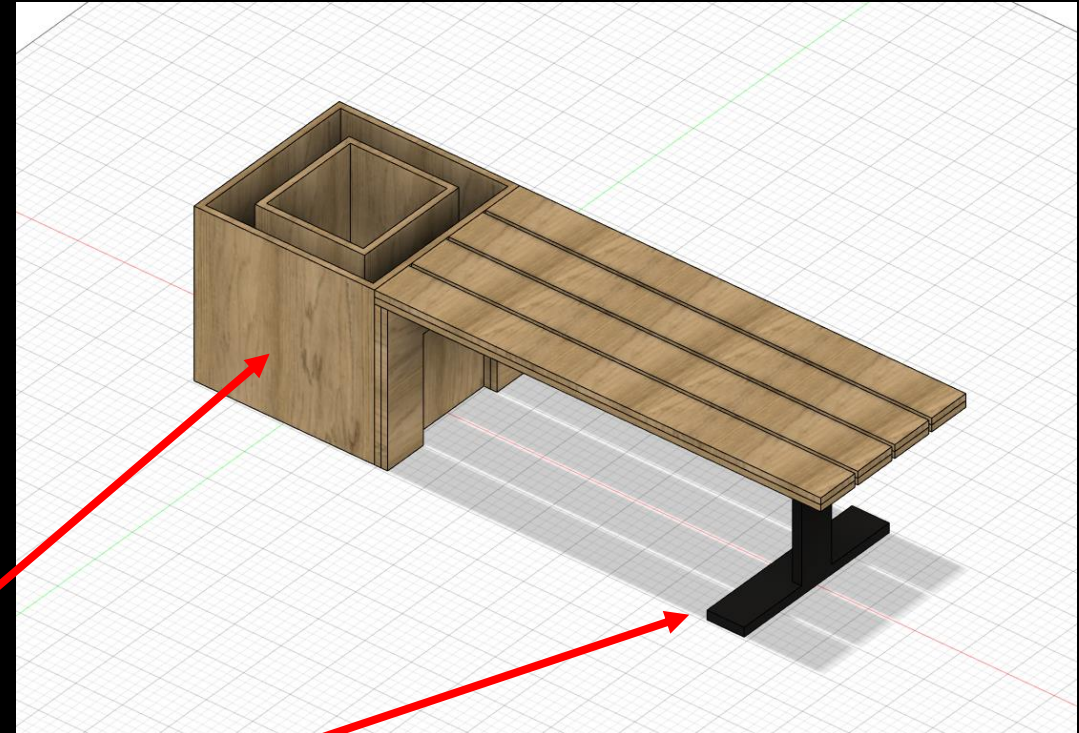
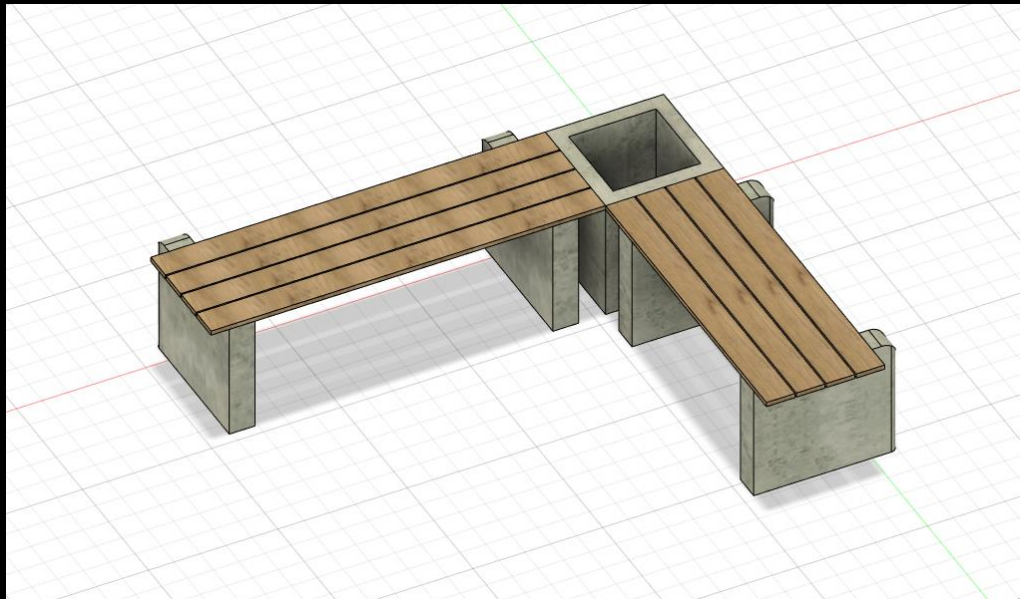


Physical Models



Change to the New Design

Due to the excessive material requirements and shortage of time, we decided to change our design midway and opt for making a simple bench, that has a planter attached to the side. This could also be doubled as storage. This design would serve as an excellent seating option for users that end come to the café that's being built next to our area of intervention.

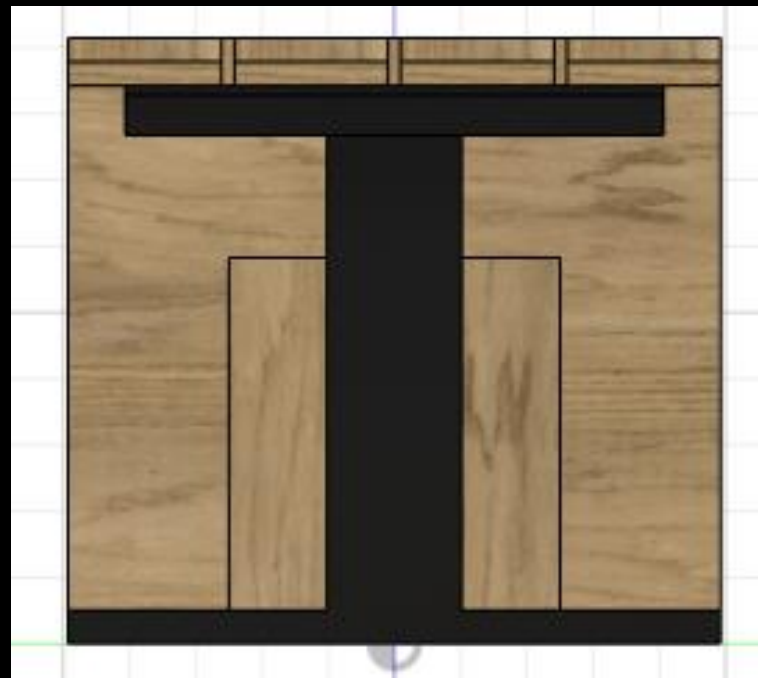
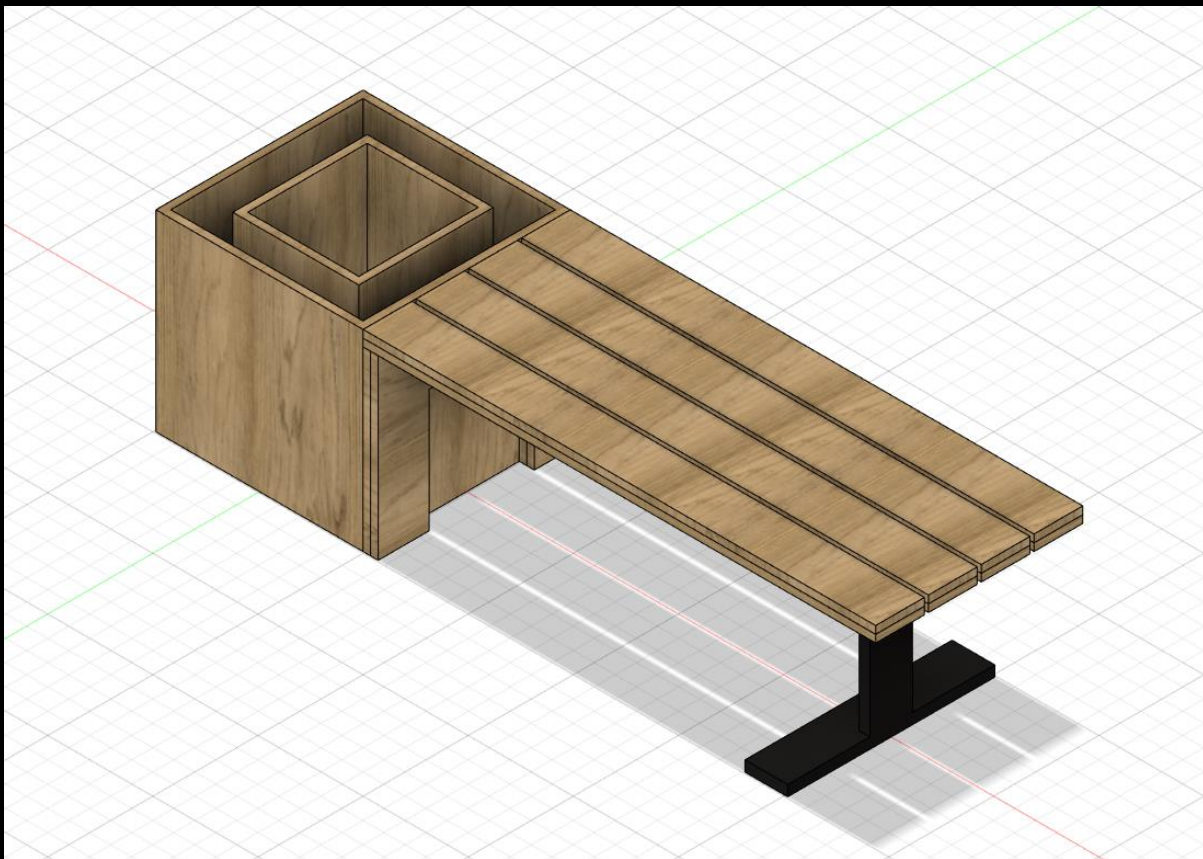


Plywood

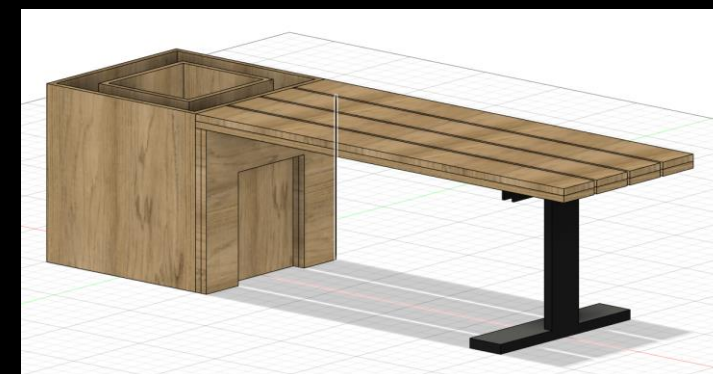
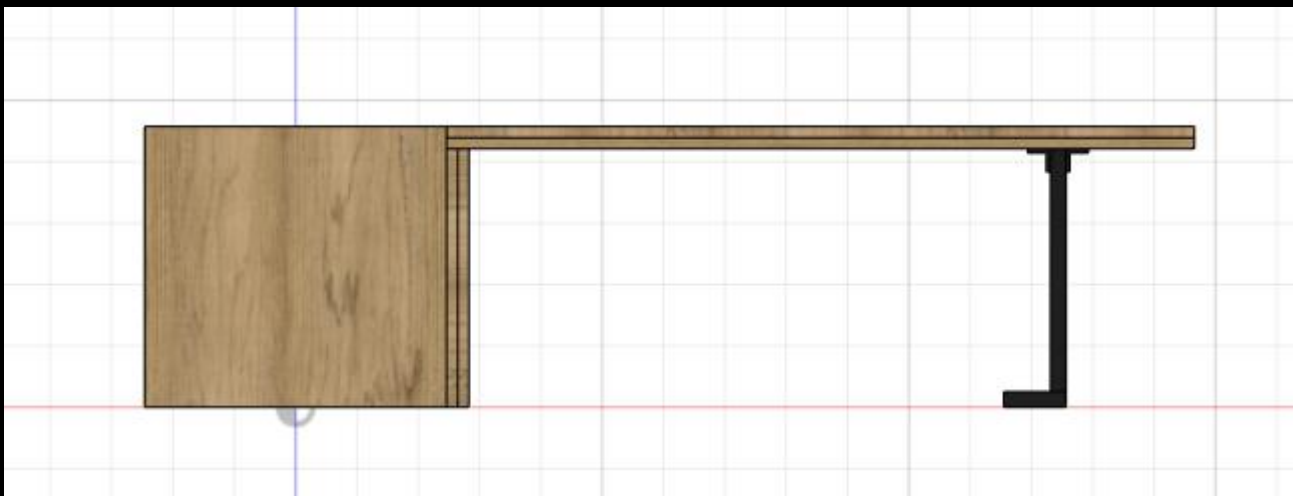
Metal Pipe

This New Design uses much less material as compared to the original design. Made using basic materials like Plywood, Metal Pipe, Screws and Wood glue

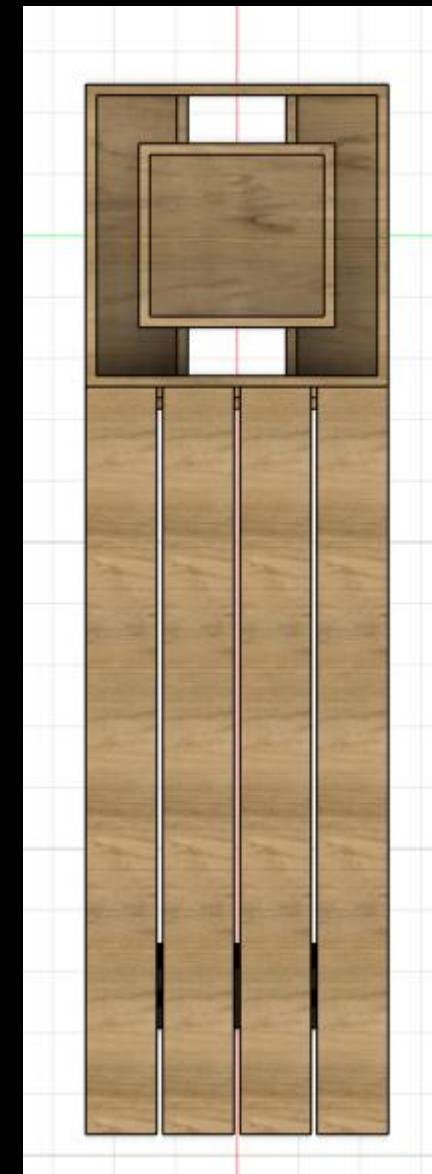
Inspiration for the final Design



Side View



Front View



Top View

Big picture or ‘the purpose’. How will your idea bring value to the community / institutional space? Who will benefit? One year down, how do you envision that space being used by your user/ community? Are you conscious of the resources that will go into the making of your intervention?

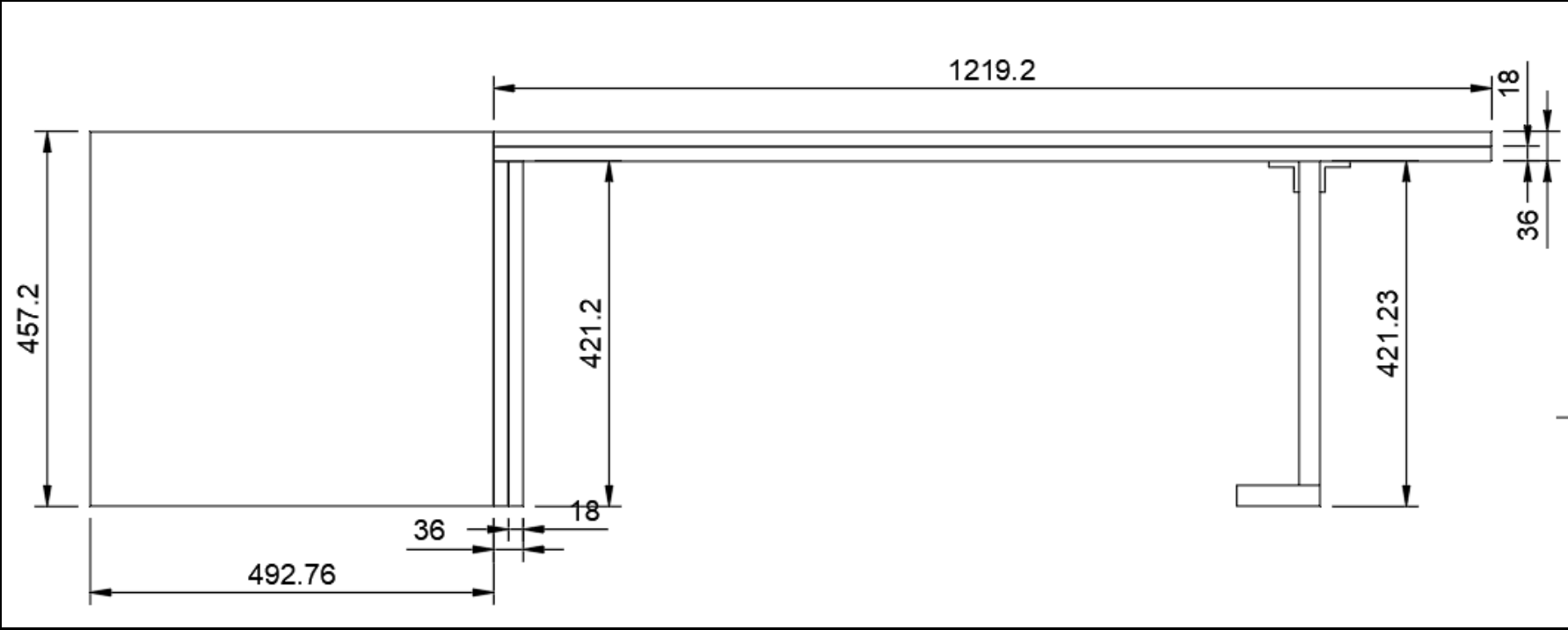
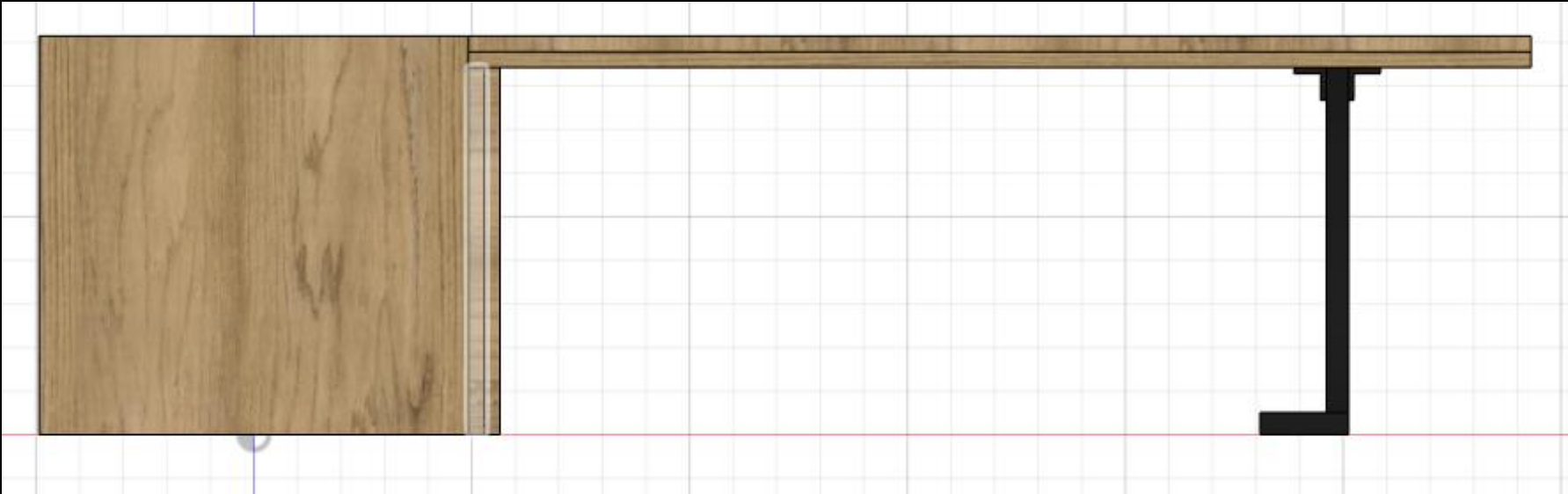
Our aim was to create a multifunctional piece of public furniture for a workshop, and café area that integrates storage, seating, aesthetics, and flora, while minimizing waste and boosting the energy of the space with minimalistic and industrial looks, while also incorporating plants. The furniture prioritizes sustainability, as quite a bit of the materials used are recycled or scrap materials sourced from around the campus. Also, careful planning has gone while cutting and using the materials, to keep waste minimum, all while keeping the design simple and cost-effective for easy replication. Finally, it improves the space by adding a simple, elegant, multipurpose, visually appealing, and long-lasting piece of furniture that boosts the targeted area.

This piece of furniture will primarily be used by the students that use the workshop areas, and also, the users that come to access the café, once it is operational. It serves as a seating area for both kinds of users mentioned above. Apart from this, the furniture also serves as a planter that can accommodate different size planters. This will be useful in making the target area more visually appealing, thus attracting more users to use the furniture. Additionally, this space can also be used as storage for users to store their belongings while using the workshop areas.

Orthographic Drawings (1:1 Scale)

Assignment A2B

All measurements are in mm

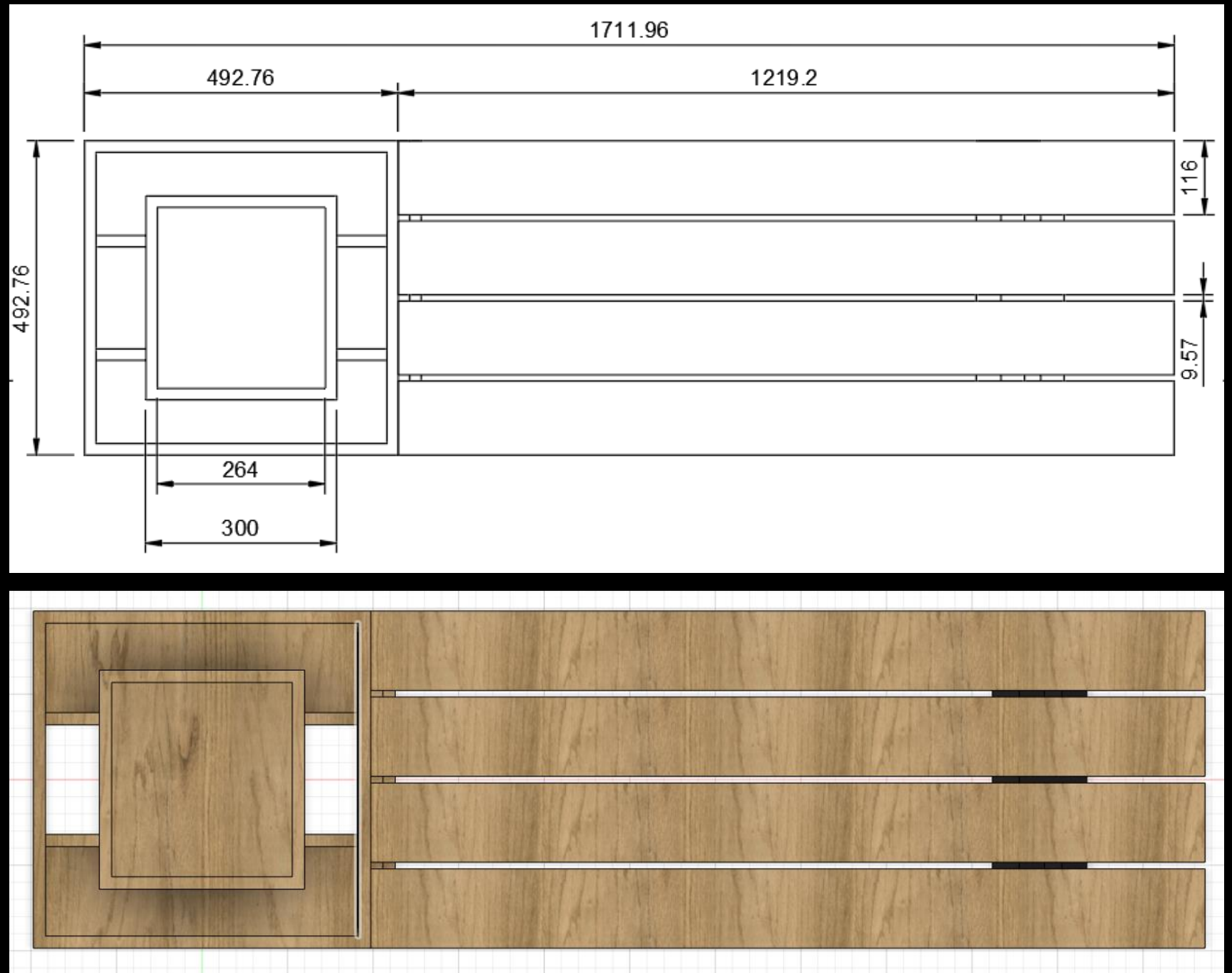


All measurements are in mm

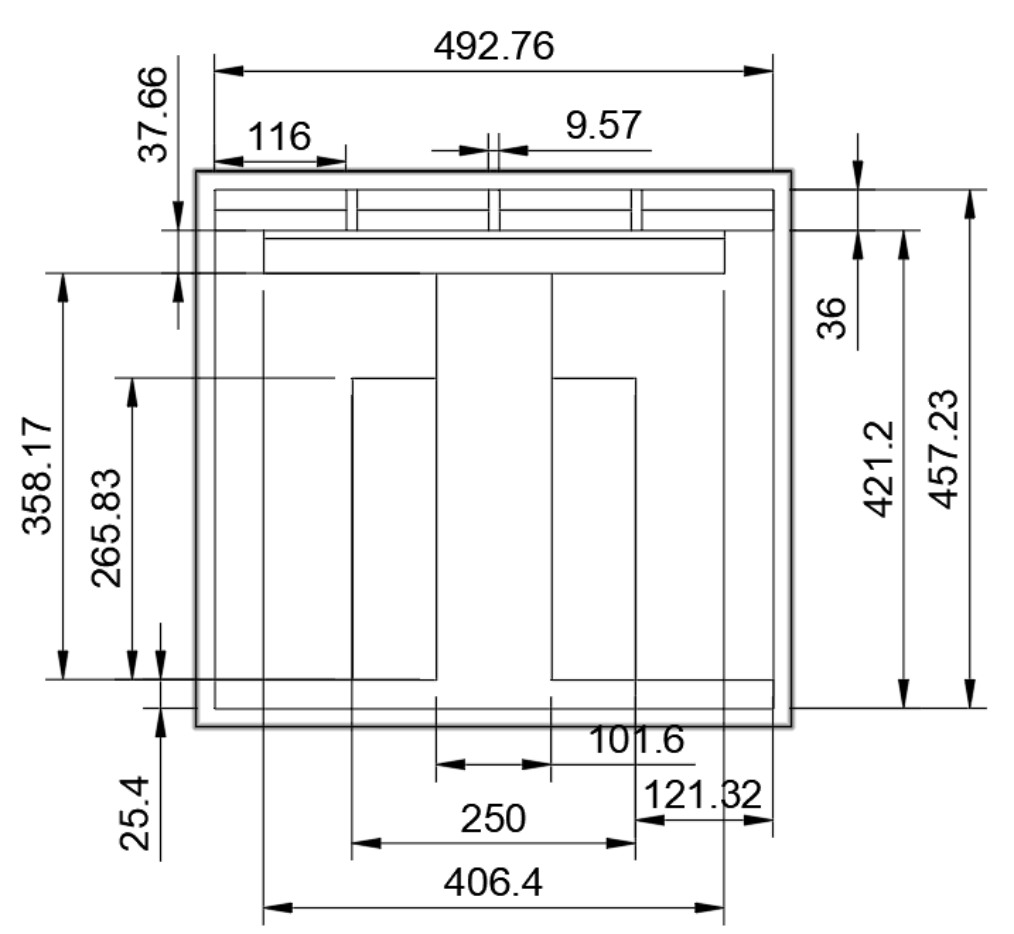
FRONT VIEW

TOP VIEW

All measurements are in mm



All measurements are in mm



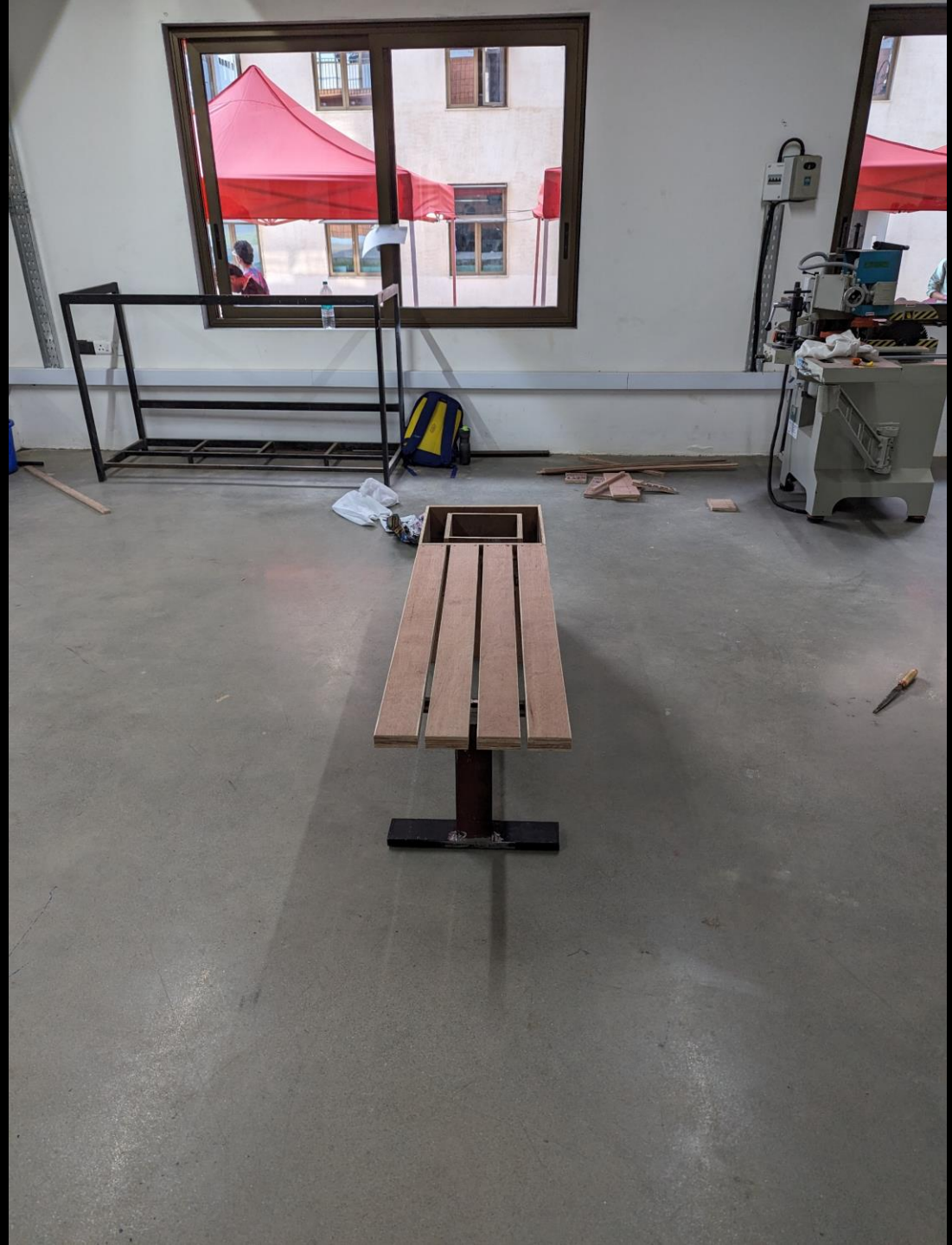
**SIDE
VIEW**

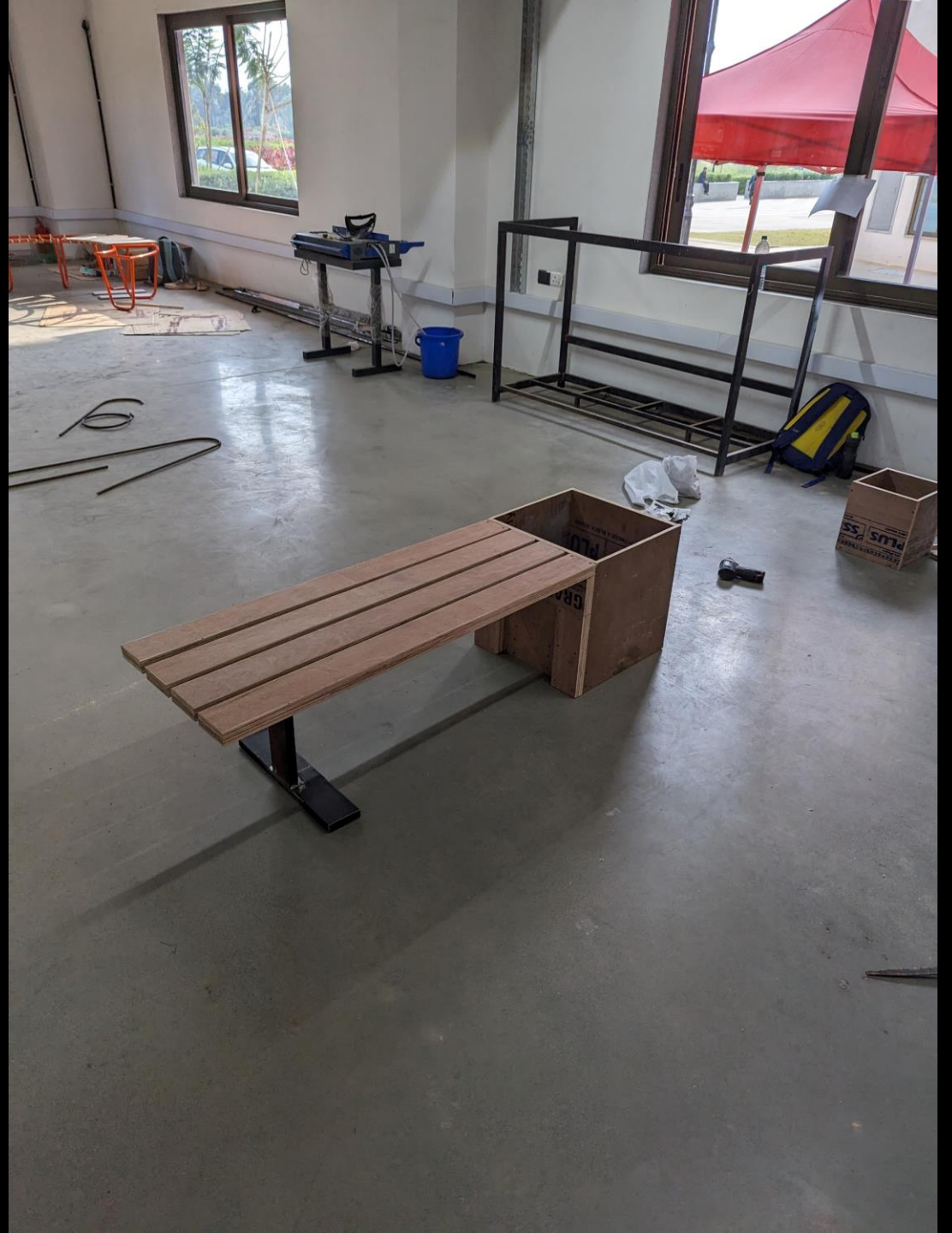
Assignment A3



Final Model

Assignment A3











Process Pictures and User validation

Assignment A3

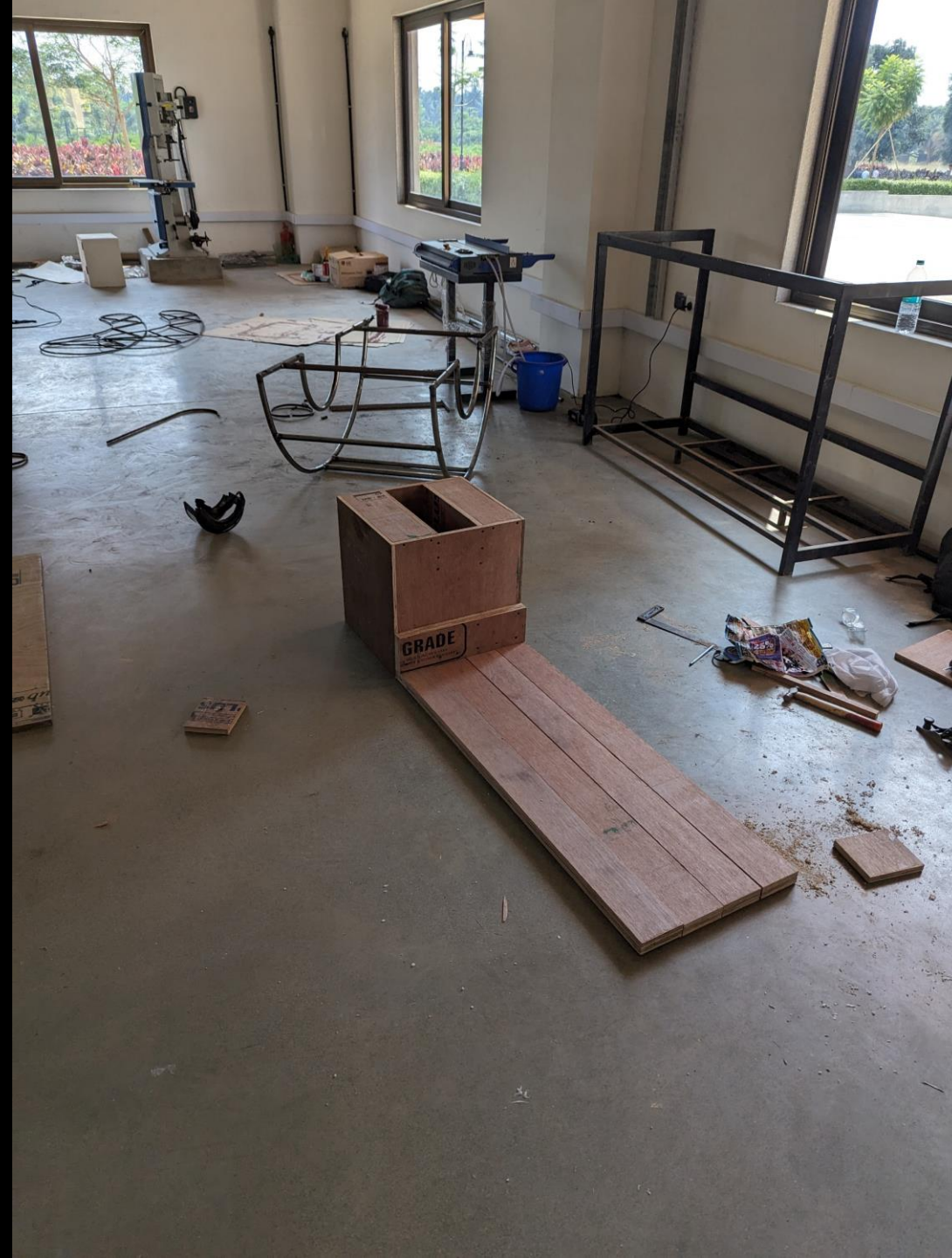


Planning and Ideating





Planter / Storage Box



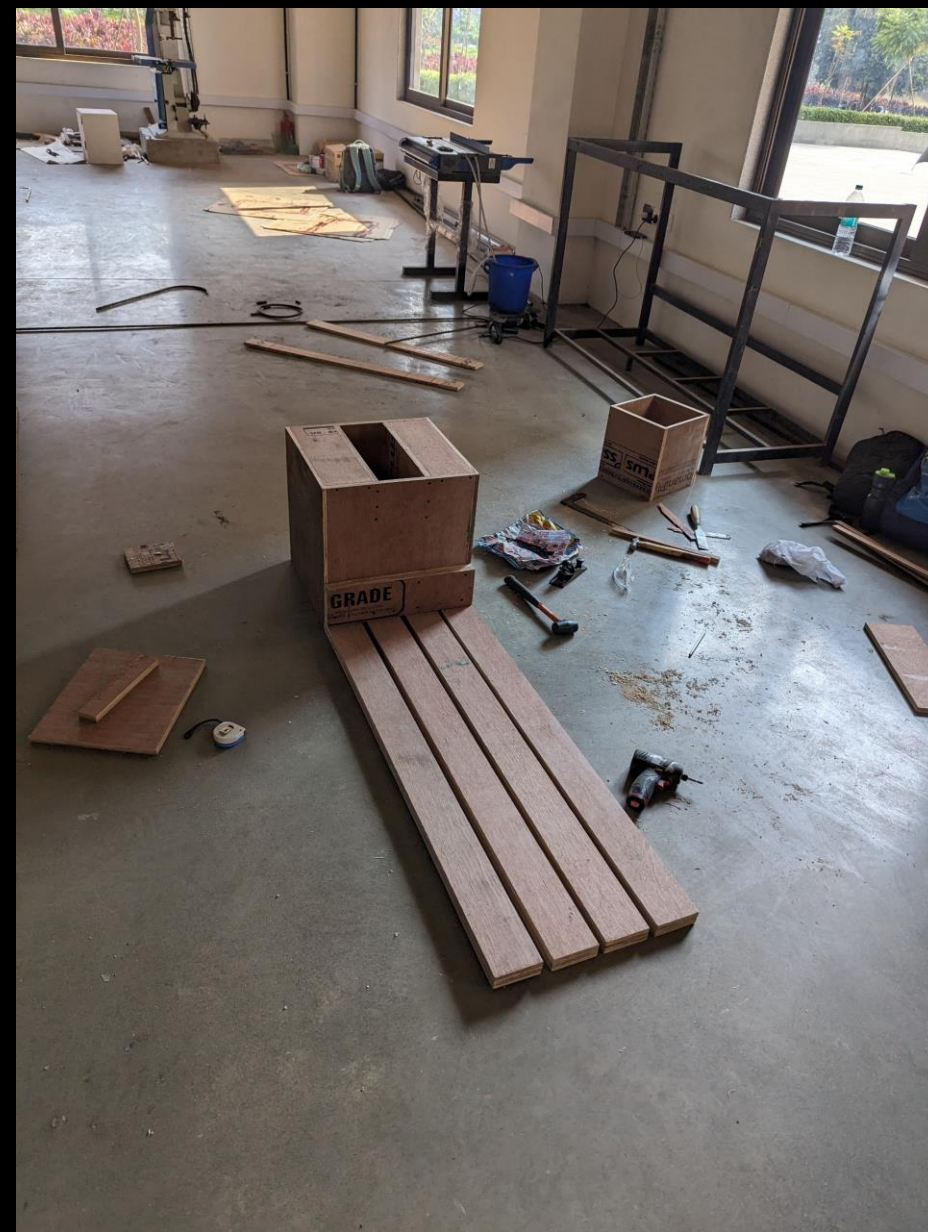
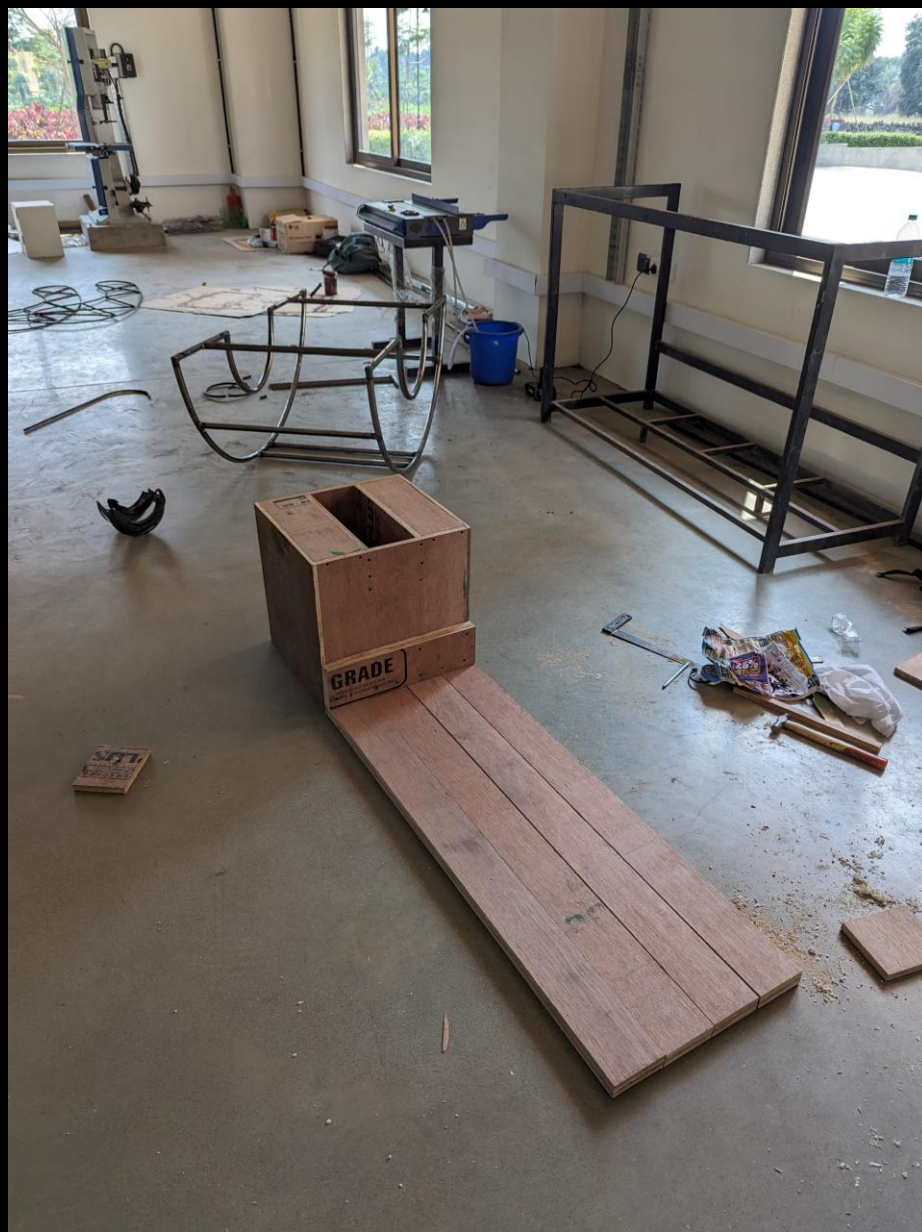
Measuring and
Cutting pieces of
Plywood for the
Seater / Bench part

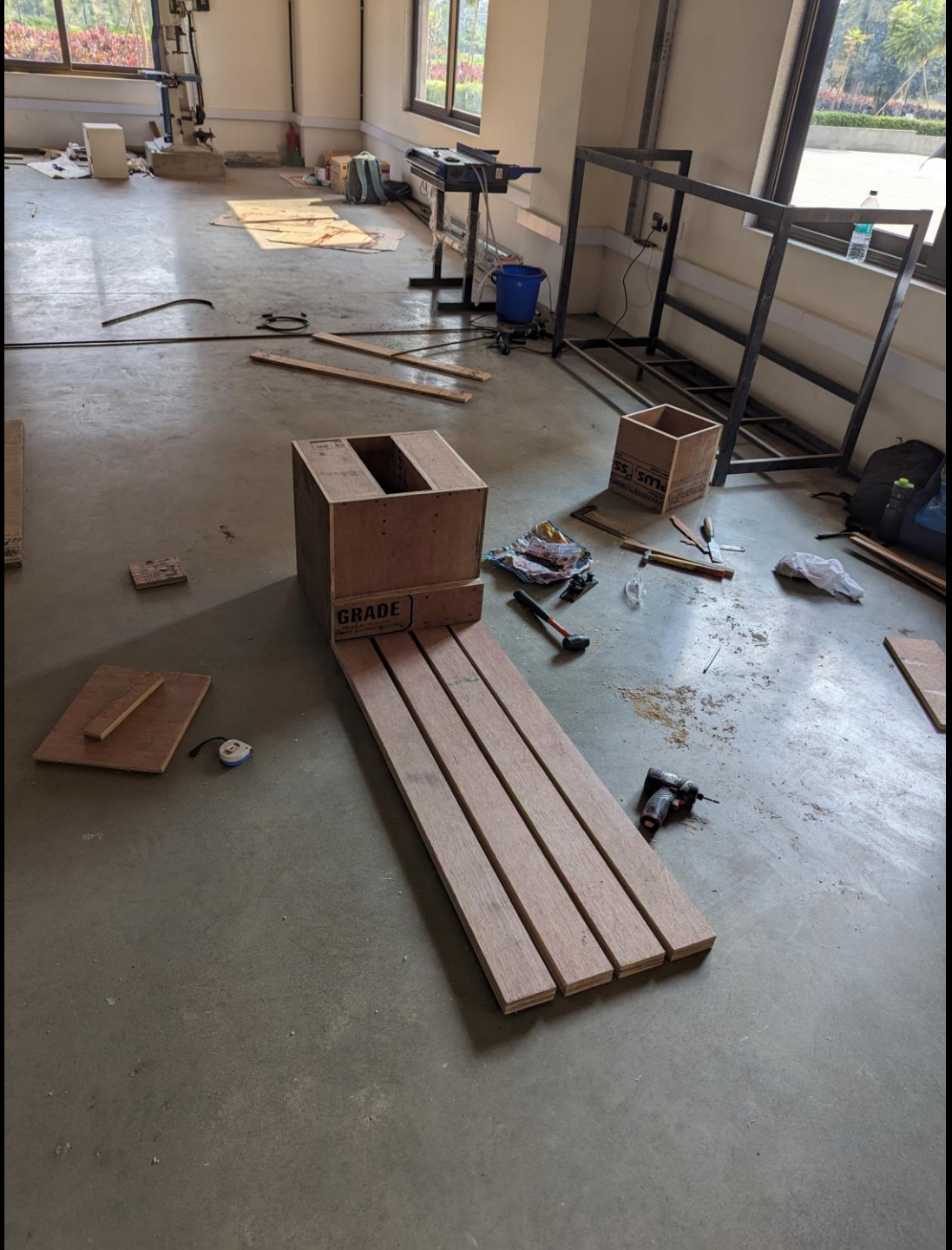




Cutting and gluing
pieces of Plywood
for the Seater /
Bench

Trimming the bench
/ seater pieces to
ger a better look

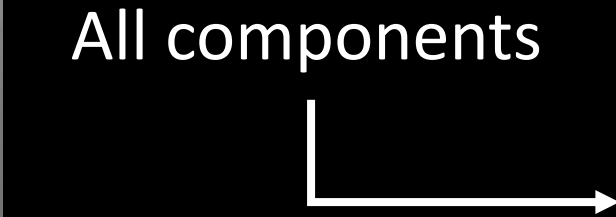




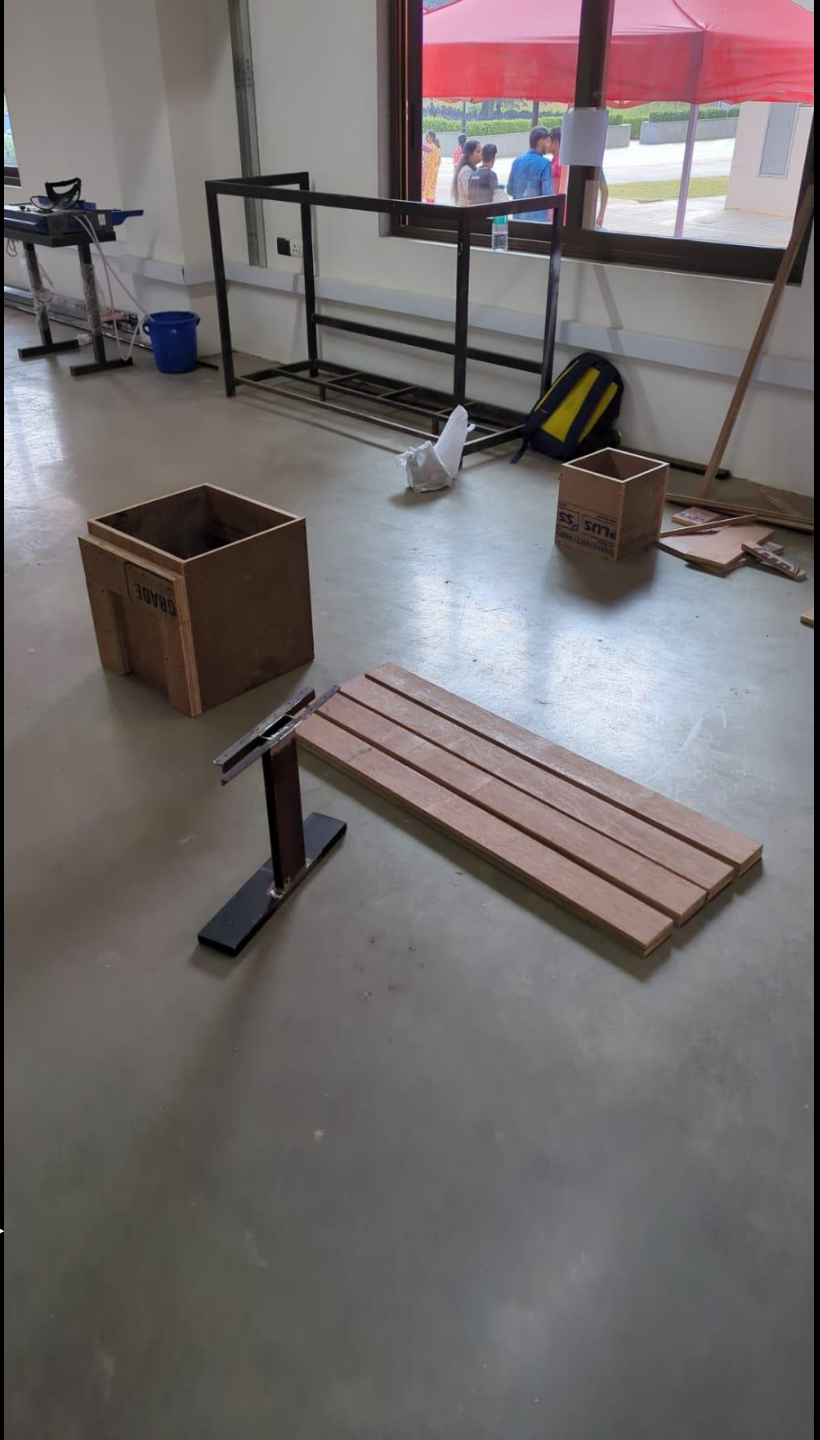
Dry fit check
for Wood
pieces

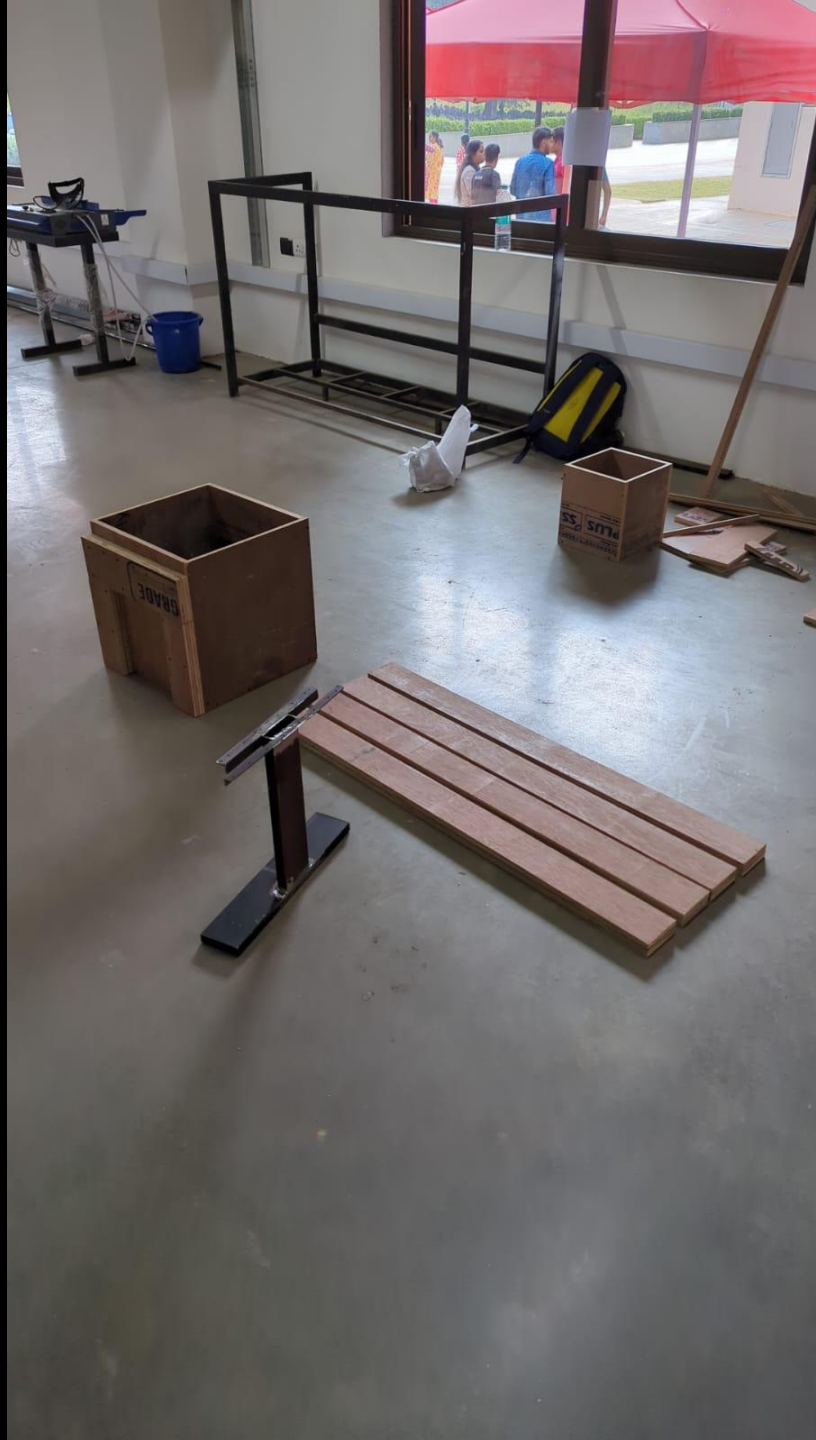


Metal Frame



All components





Final Assembly

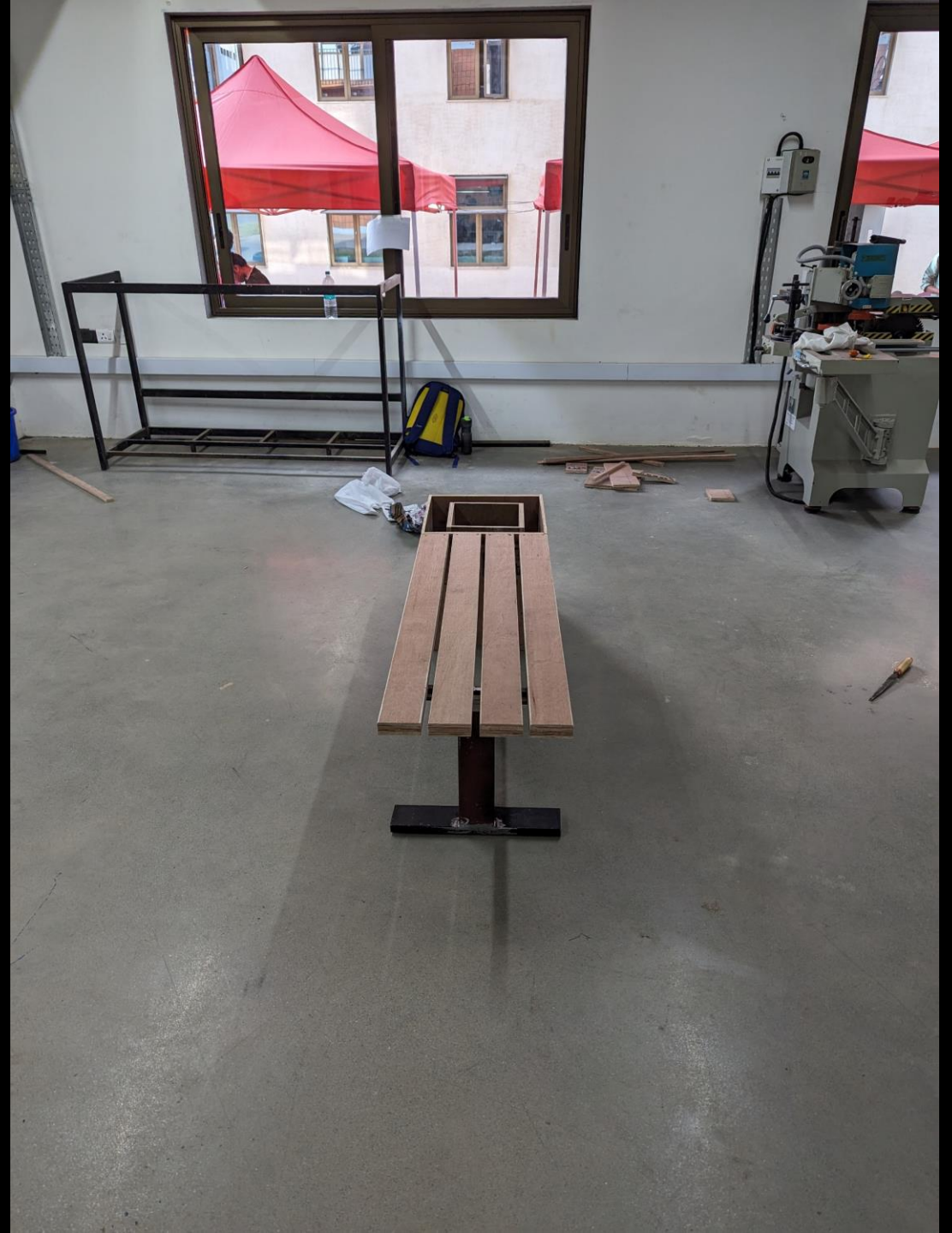
Final Furniture
And User Testing





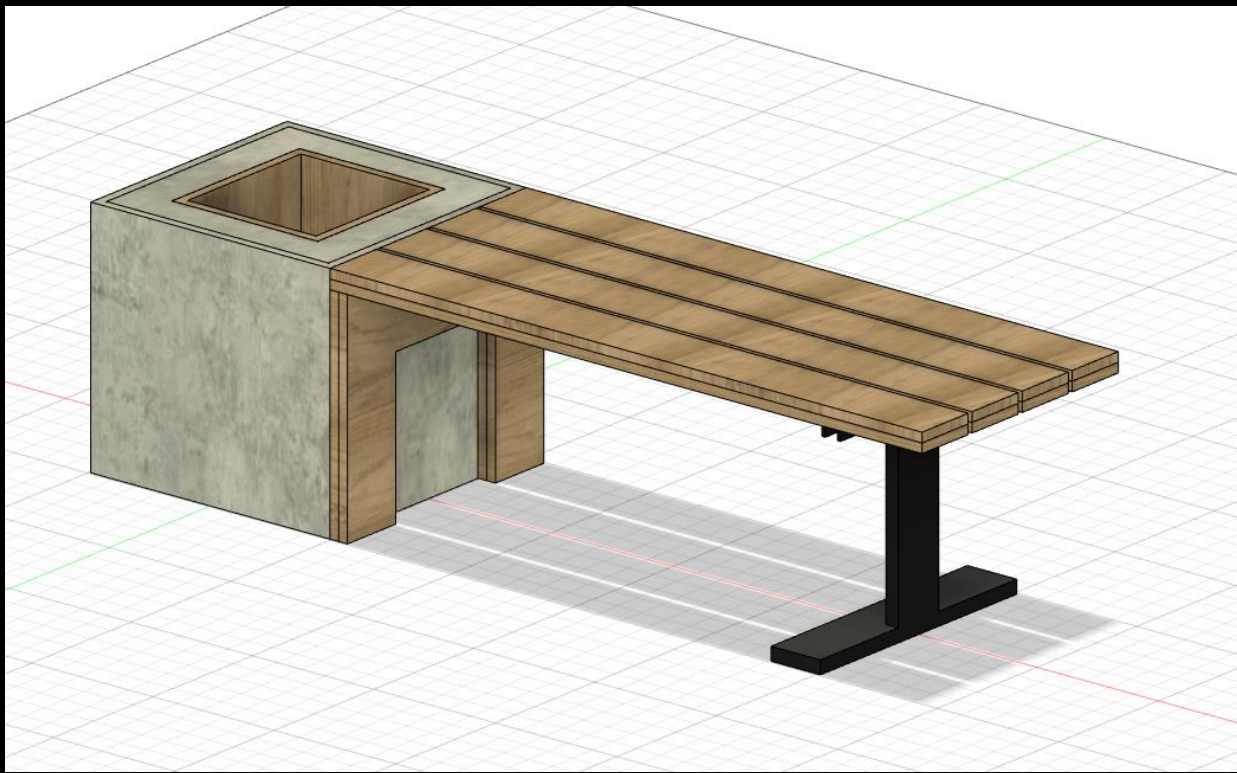






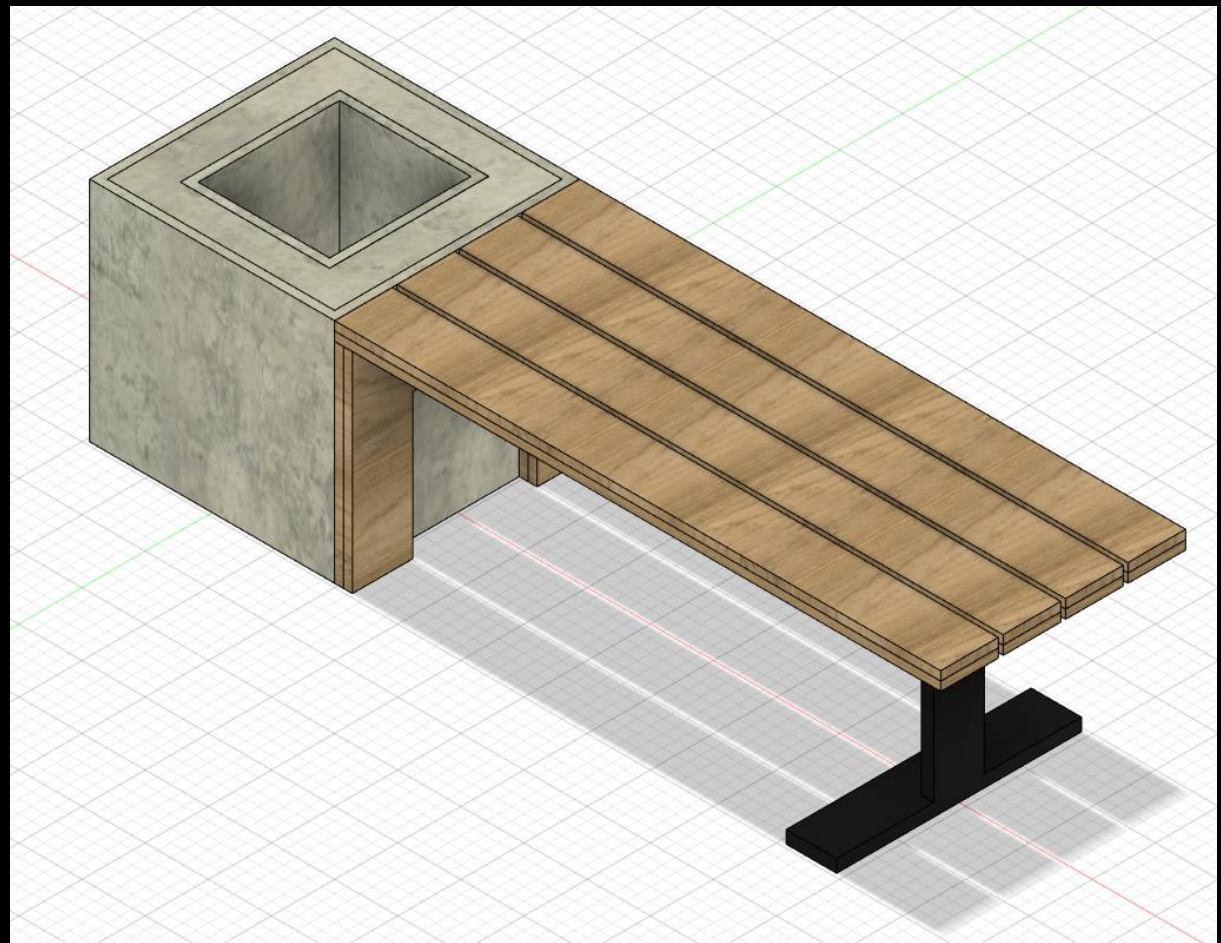
Alternate Finishes / Materials

Assignment A3

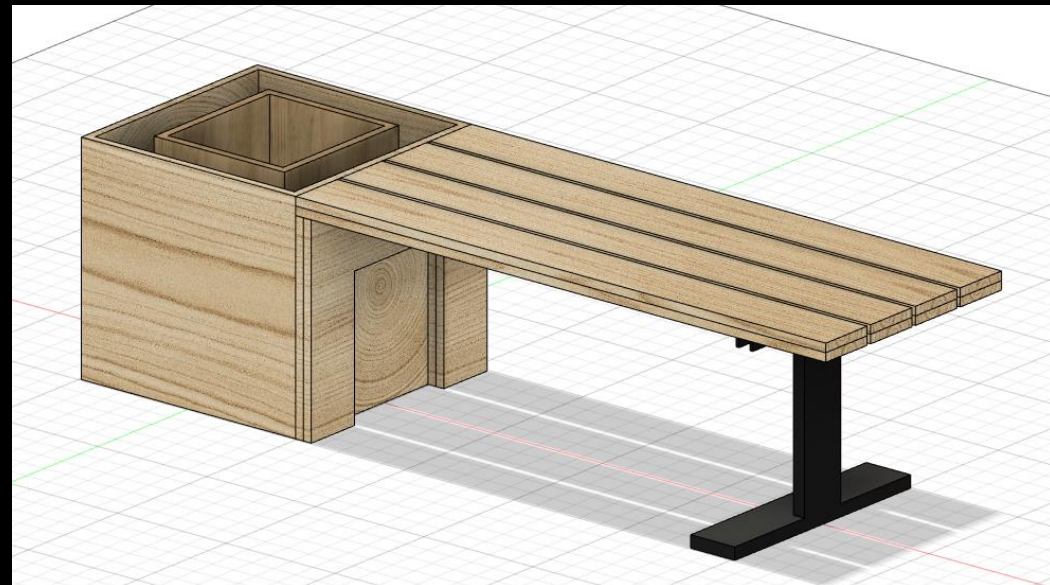
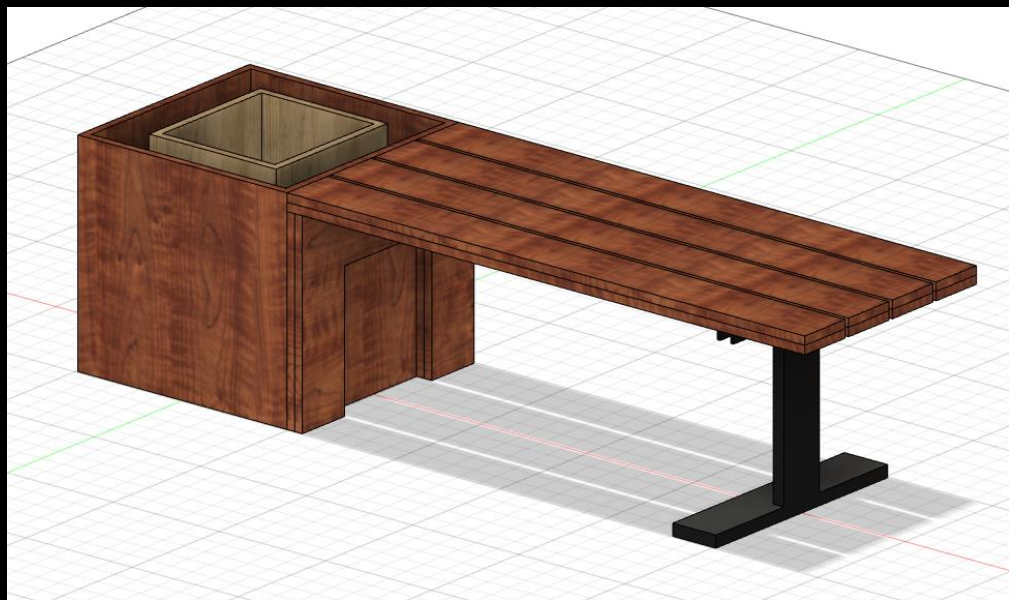


With Detachable wooden box inside

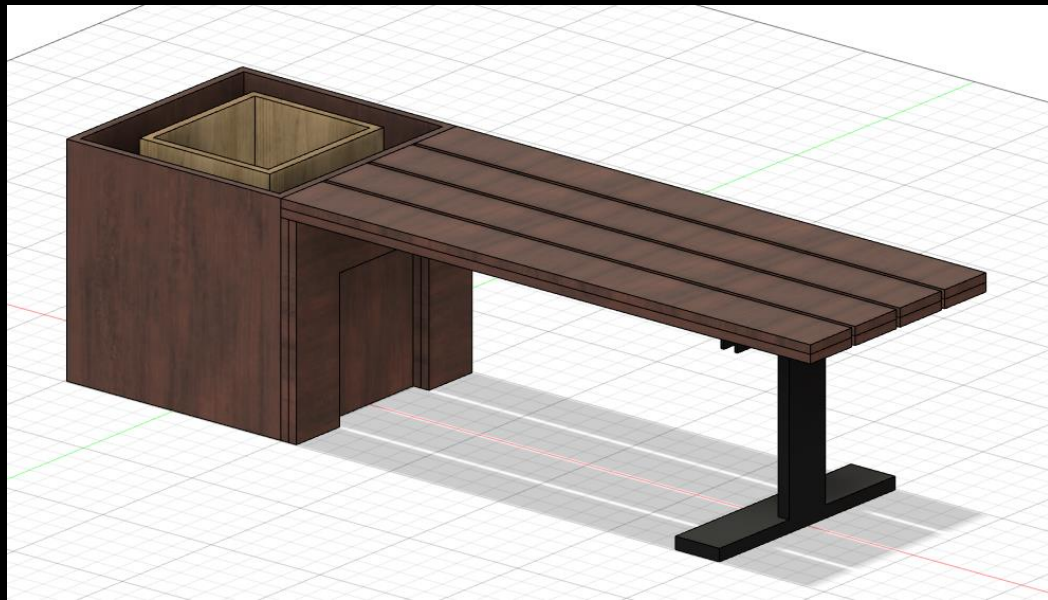
Without Detachable wooden box inside



Cement for the Planter



Different Wood Finishes



Final Reflection

Before starting, we had to decide what type of bench we wanted to create. We considered the purpose of the bench, where it would be placed, and the materials we would use. This initial planning stage taught me the importance of setting clear goals and having a vision for the project. It was a bit chaotic in the beginning, with us having to make multiple tweaks and modifications to our design, but in the end it was all worth it. Precision was key when measuring and cutting the wood. I discovered that even a minor mistake in measurements could have a significant impact on the final product's stability and appearance. It taught me the value of patience and accuracy in woodworking.

The assembly process involved using various woodworking techniques, such as mortise and tenon joints or dowels. I learned about the importance of proper joinery to ensure the bench's strength and longevity. It was a great opportunity to practice and improve my woodworking skills. Throughout the project, I encountered unexpected challenges, such as uneven cuts or gaps in joints. These obstacles taught me to be resourceful and come up with creative solutions. Problem-solving became an integral part of the bench-making process. As I completed the bench, I felt a deep sense of accomplishment. I had transformed raw materials into a functional and visually appealing piece of furniture. Overall, I was quite happy with what I could achieve in just a couple of days.

I wouldn't change much of the existing design of the bench itself, as I feel that it strikes a good balance between simple and eye-catching. One thing that I would change, however, is the type of wood that I decided to use. Instead of using plywood, I would use some form of hardwood, making the structure stronger. This would also help me in getting a better finish on the final furniture.